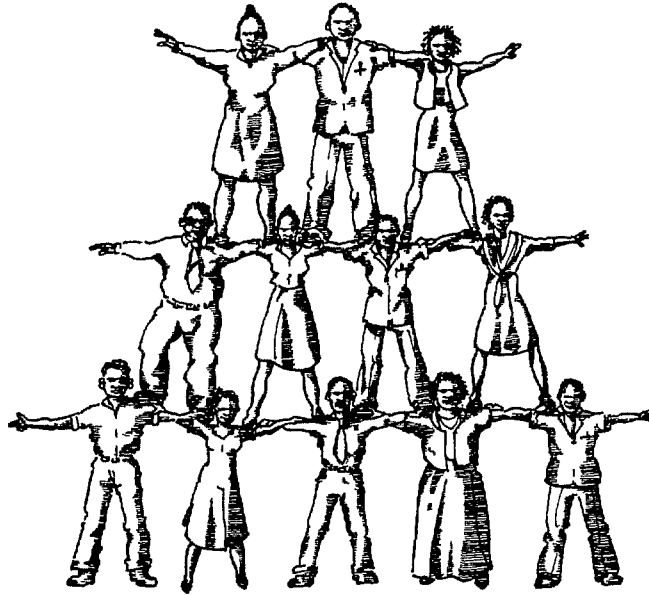


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A TRAINING MODULE

Strategic Planning

MARCH 1998



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Preface

The International Service for National Agricultural Research (ISNAR) is mandated to assist national agricultural research systems (NARS) in developing countries in strengthening their agricultural research management. Through its Training Unit and in collaboration with national agricultural research organizations (NAROs) and management development institutes (MDIs), ISNAR produces training modules in agricultural research management. These training modules provide “researchers-trainers” with both a training plan and materials designed to improve the knowledge, attitudes, and skills needed to manage agricultural research effectively.

The Agricultural Research Management Training (ARMT) Project aims at institutionalizing agricultural research management training in the Southern African Development Community (SADC) countries as well as improving the management capacity of research leaders. The current phase of the project, sponsored by the United States Agency for International Development (USAID), includes the development of a series of training modules on research management to facilitate the training of national trainers to ensure a sustainable capacity for training in the region.

Each draft training module comprises a curriculum, including learning objectives for each day’s activities, descriptions of the training approach, methods, and techniques, and master copies of handouts, worksheets, overhead transparencies, and other training media that can easily be reproduced for distribution among participants in the workshop. In addition, the training modules include evaluation forms and a recommended bibliography for use by the trainers.

Texts and exercises from the region and from other parts of the world were collected to create the training modules. Whenever possible, the training design team has acknowledged original sources. To ensure the relevance of the basic materials and cases to the region, this training module was designed in partnership with NARS and tested in a draft version during two week-long workshops in the SADC region.

The first week of these workshops brought together SADC trainers from MDIs and universities, and senior researchers from NAROs. ISNAR subject-matter and training specialists led the learning process and collected feedback from the participants to improve the training module. Feedback was incorporated and the module was further tested during the second week. The “new trainers,” the main users of this module, led the workshop for national program leaders and senior scientists. The module was further improved by the participants.

This is the resulting version of the module, which was tailored to SADC users through this process. The trainers are expected to use the module to facilitate planning and implementation of training/workshop programs in the region. The researchers are expected to use the module to provide their colleagues with the opportunity to analyze NAROs’ approaches and assess ways of improving them within their organizations. In addition, the researchers are expected to assist national trainers in implementing training events in their respective countries.

It is hoped that the trainers and researchers will adapt the module to respond to their specific needs and share the changes with the Eastern and Southern African Management Institute (ESAMI) and ISNAR as a contribution to improving the materials for the benefit of the region

ESAMI and ISNAR thank all the research management specialists, national trainers, and those who participated in designing, testing, and improving the module for their very valuable contributions

Dr Bonard L Mwape
Director General, ESAMI

Dr Stein W Bie
Director General, ISNAR

Acknowledgments

The designing, testing, and producing of the SADC/ESAMI/ISNAR training modules would not have been possible without the active participation and support of the ISNAR management, resource persons, and training team, the officers of SADC and the Southern Africa Co-ordinating Committee on Agricultural Research (SACCAR) in Gaborone, Botswana, and ESAMI/ISNAR officers in Arusha, Tanzania

ESAMI and ISNAR are very thankful to USAID, sponsor of this project. Special thanks go to Louise Setswhaelo, the manager of the ARMT Project based in Arusha, Tanzania

This training module has been developed for the SADC/ESAMI/ISNAR Agricultural Research Training Project. Fifteen sessions were adapted from Module 2, entitled "Strategic Planning in Agricultural Research Management," published by ISNAR and CIAT under the coordination of Douglas Horton and Vincent Zapata. The module was developed by Jairo E. Borges-Andrade, María Delia Escobar, Julio Palomino, Roberto Saldaña, José de Souza Silva (authors), with the advice of Rafael Posada.

Module 2, cited above, is part of a set of four modules that include "Monitoring and Evaluation." They were published in 1994 in collaboration with the Technical Centre for Agricultural and Rural Cooperation ACP-CEE (CTA), The Netherlands, the University of Brasilia, Brazil, the National Agricultural Research Fund (FONAIAP), Venezuela, the National Autonomous Institute for Agricultural Research (INIAP), Ecuador, the National Institute for Forestry and Agricultural Research (INIFAP), Mexico, the Brazilian Enterprise for Agricultural Research (EMBRAPA), Brazil, and the Train and Trainers Project (ISNAR-CIAT) agreement.

Many sessions of this "Strategic Planning" module are based on publications by Senior ISNAR Research Officers. The sessions also include documents published by (1) the Department of Management and Budget Program Development and Review Division in the State of Victoria, Australia (1986), and (2) (Water and Sanitation for Health Project), WASH the Technical Reports No. 37 and 49, Arlington, VA, USA, and other publications which are cited as footnotes and listed in the bibliography of this document.

Special thanks are due to Carlos Valverde and N'Guetta Bosso, both senior officers, ISNAR, for their guidance on the content. In particular, we are grateful to Carlos Valverde for his contributions to the content.

Carlos Valverde and N'Guetta Bosso led the testing phase of this training module during a regional (SADC) training of trainers workshop in 1996 in Swaziland, together with Zenete Peixoto França, training specialist.

Special thanks are due to the training team responsible for the initial design of the modules. This team was composed of Lisette Staal, ISNAR/ESAMI consultant and team leader, Robert Obura, Egerton University, Kenya, and ISNAR/ESAMI consultant, Mick Mwala, University of Zambia, and ISNAR/ESAMI consultant, and members of the ISNAR training team, composed of Zenete Peixoto França, Helen Hambly, Mirela Zoita, Jacobine Verhage, Richard Claase, André Schaareman, Fionnuala Hawes, and Albertine Huybrechts. ISNAR also thanks Robin Baur who edited this module.

Source of Material

This training module was developed for the SADC/ESAMI/ISNAR ARMT project. It comprises information from several ISNAR publications. Other sources are cited as footnotes and listed in the bibliography of this document.

Revision

The present version, entitled "Strategic Planning" has been revised to incorporate feedback from the participants of a five-day Training of Trainers (ToT) Workshop which was held in Swaziland from April 22-26, 1996.

Sponsor

This material was produced for the SADC/ESAMI/ISNAR ARMT Project, funded by USAID.

SADC/ESAMI/ISNAR

***Agricultural Research
Management Training Project***

SADC/ESAM/ISNAR Agricultural Research Management Training Project

Introduction

Agriculture continues to play a major role in the economy of the SADC countries (Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia, and Zimbabwe) by providing food, energy, and some income for the majority of the population and raw material for the growth and development of the manufacturing industries. However, environmental problems such as soil degradation, deforestation, and the severe drought of the recent past remain serious constraints on national development. At the same time, the increased demands for food (due to rapid population growth), raw materials, and improved technologies present new challenges to agricultural research.

The responsibility for coordinating research and training in agriculture and natural resources in attaining SADC's goal of food security is vested in the Southern Africa Co-ordinating Committee on Agricultural Research (SACCAR). Early in its formation (1984), SACCAR recognized that NARS could greatly enhance their efficiency and effectiveness in technology generation and delivery if their management could be improved. In particular, the planning and management of human, financial, physical, and agricultural resources could be improved as could the procedures for prioritizing research programs and linkages with policymakers and external sources of knowledge. The ARMT Project was conceived and developed in 1987 to address these concerns. The evaluation of Phase I in 1990 recommended that one way to make training sustainable was to institutionalize it in the region. The first step in this process was the integration of the project into a regional MDI, which was ESAMI. This was to be followed by institutional capacity building in the region, of which the present exercise of training module development is an integral part.

This project, which covers the period 1992–1996, is a collaborative venture among three partners: ESAMI, as the main executing agency, ISNAR, as a joint executing agency, and SACCAR, which provides the strategic regional perspective to the project.

The project is based in ESAMI's headquarters in Arusha, Tanzania. It is implemented through a network of SADC MDIs and individual experts from the region. This design aims to ensure adaptation and institutionalization of research management training.

Goal of the Project

The aim of the project is to *strengthen* the capacity of agricultural and natural resource policymakers and research managers in planning, organizing, and managing research systems to increase their efficiency and effectiveness in addressing the region's food problems.

Objectives of the Project

The objectives of the project are the following

- a to increase understanding among high-level officials on the role of research in promoting and sustaining agricultural development
- b to strengthen the capacity of national research leaders to plan, program, budget, and monitor research programs of relevance to national development goals
- c to foster human resource development in agricultural research management within the member countries
- d to build the skills of middle-level research administrators in the management of agricultural research activities
- e to work toward building a base for a sustained capacity in management training for agricultural research within SADC

Phase I laid the foundations for building specific skills and providing the knowledge and tools that helped SACCAR realize substantial progress in achieving its two main goals

- a increased cooperation in research on agriculture and natural resources
- b improvement in the capacities of individual countries to undertake carefully prioritized research and training projects

This in turn enabled SADC countries to make progress toward achieving important goals in

- a increased agricultural productivity
- b higher incomes and creation of employment in the rural areas

Phase II concentrates on the institutionalization and sustainability of the ARMT Project activities

Target Audience

The ARMT Project aims at training the following persons

- a **policymakers** boards of governors, agricultural research council members, planners, executive officers in NARS, permanent or principal secretaries, and those responsible for the long-range objectives of NARS
- b **senior research managers** senior managers and executives of the system, for example, directors general/directors and their assistants—those responsible for overseeing the implementation of policies
- c **middle-level research managers** research coordinators, station heads, those responsible for supervising research operations at research stations, laboratories, institutes, etc

The Modules

The ARMT Project strives to *institutionalize* and *sustain* management training within the SADC countries. The comprehensive action plan includes several training modules, which are to be used by ESAMI, MDIs, and NARS to implement workshops for training their local personnel. This will contribute to capacity building and, hence, sustainability and institutionalization of management training in the region. The modules aim to help MDIs and NARS develop their own capacity for gender-balanced, multidisciplinary in-service training.

Eight modules form the core of the ARMT Project.

- 1 Priority Setting for Agricultural Research Programs
- 2 Planning, Monitoring, and Evaluation of Research Projects
- 3 Information Management for Research
- 4 Scientific Writing and Presentation
- 5 Research Program Formulation
- 6 Financial Management in Research on Agriculture and NRM
- 7 Strategic Planning
- 8 Gender Analysis for Management of Research in Agriculture and Natural Resources

The Workshops

The modules provide the basis for trainers to prepare and deliver workshops. The majority of the modules are designed to run for five days. However, the training modules on Gender Analysis for Management of Research in Agriculture and Natural Resources and Information Management for Research are designed to run for four days and 10 days, respectively.

Overview of the Module

Strategic Planning

Overview of the Module

Strategic Planning

Introduction

Less than 10 years away from the year 2000, many public institutions still think that the only relevant factor affecting their work is the financial shortage reflected in their budgets and consequently, in their general performance and in the outcome of their activities. Unfortunately, in most developing countries, many agricultural research institutions also agree with this interpretation.

The turmoil, uncertainties, and breakthroughs of the 1990s have surprised and confused many institutions. As a result, institutions have developed without well-defined missions. Many lack external references that would help them understand the ongoing changes and their related forces. Adequate internal mechanisms to redefine a course of institutional development and to reorganize existing resources are also lacking. This is a time of crisis and most institutions do not understand the type of crisis they are facing. They are used to confronting isolated and well-defined crises such as a financial crisis, with budgetary or salary implications, a political crisis, with implications for program and project continuity, or an internal administrative crisis, with implications for institutional integration and operational processes. This is not a time of one crisis, but of many crises combined.

The current World Bank and International Monetary Fund (IMF) Structural Adjustment Programs (SAPs) being implemented in many African countries call for adjustments in many sectors of the economy. These SAPs have far-reaching effects on the performance of national agricultural research systems (NARS). They have provoked an unprecedented institutional, societal, and governmental search for new knowledge that will serve as a guide for development programs. This is one reason for which NARS must try to discover and formulate new points of reference for development.

In this period of world transition, many of the previous concepts, approaches, and models no longer function as a reference, and new concepts have not yet been clearly designed. This situation has characterized the nineties as the "decade of the search."

In the midst of this turbulence, many institutions in developing countries are discovering the importance of strategic planning. They are recognizing its relevance as a methodology that facilitates the identification of actions which can strengthen the organizational models and adjust to the needs and challenges of new national and international realities. This module is designed to introduce the main conceptual and methodological elements and instruments of *strategic planning* at the institutional and research program levels.

Objectives of the Workshop

At the end of the workshop, the participants will be able to do the following

- 1 Use the systems approach in their organizations
- 2 Explain the diagnosis, planning and implementation (DPI) paradigm to study NARS
- 3 Explain the process of strategic planning including external, organizational, gap analysis, and internal analysis
- 4 Explain institutional performance assessment
- 5 Formulate a vision and mission statement for a national agricultural research institution
- 6 Formulate objectives, policies and strategies
- 7 Discuss the role of leaders/managers in the management process
- 8 Explain the factors of success and failure in the process of institutionalization of planning and develop strategies

Duration

The workshop is designed for five days

Topics to Be Covered

- 1 Introduction
- 2 NARS the systems approach
- 3 Diagnosis, planning, and implementation
- 4 Conceptual framework for planning
- 5 Strategic planning
- 6 Management issues
- 7 External, organizational, and gap analysis
- 8 Institutional performance assessment
- 9 NARIs role in the future vision and mission formulation
- 10 Formulating objectives
- 11 Formulating policies
- 12 Formulating strategies
- 13 The management process role of leaders/managers
- 14 Institutionalization of strategic planning
- 15 Participant action plan approach (PAPA)

Target Audience

The workshop is intended for program leaders and senior scientists SADC/ESAMI/ISNAR strongly encourage a balanced selection of participants equally representing males and females

The workshop will have a maximum of 20 participants drawn from professionals of both public and private institutions, who are involved in the planning of agricultural research in SADC countries

Course participants may be highly heterogenous in their profession and gender balance (engineers, agriculturalists, sociologists, economists, etc), their administrative experience, and their level of studies These include the following categories

- heads of planning departments
- directors of NARS and regional experiment/research centers
- heads of research programs
- top management officials and researchers

Training Approach

This training module provides trainers with the information, specific activities, and materials they need to effectively plan and deliver a training program Because each trainer and each training situation is unique, planning is critical to the success of any program This module encourages participation and provides hands-on, problem-solving experiences and exercises

Applying the experiential learning cycle

This training approach is based on experiential learning theory (Kolb and Fry 1975, McCaffery 1986) and is participatory by design It is a learner-centered approach involving experience followed by a process of reviewing, reflecting, and applying what has been learned Participatory methods keep learners active in the learning process They are involving and interactive, and they encourage communication and group work They are action oriented and experience based

This experiential and participatory approach was chosen to enhance effective skill transfer, to facilitate conceptual and attitudinal development, and to encourage appropriate changes in participants' behavior The experiential learning cycle is especially useful for skill training because most of its techniques are designed to involve the participants in practicing the skill The experiential model helps people assume responsibility for their own learning because it asks them to reflect on their experience, draw conclusions, and identify applications Participants ground the lessons in their actual work environment by considering the question of what can or should be done differently as a result of this training experience

To be effective, this module must be applied in both the design and delivery stages of training The sessions, activities, and notes in this module present trainers with guidelines for reaching the training objectives by applying the experiential training methodology An understanding of the adult learner, the role of the trainer as a facilitator, and of the experiential learning cycle is important to this approach

The adult learner

Understanding the adult learner is critical to the success of this training approach The adult learner has particular needs (Knowles 1978, McCaffery 1986, Zemke and Zemke 1981) Adult learners need continual opportunities to identify their needs and recognize the relevance of their

learning in terms of their own lives. Adult learners need self-directed learning opportunities in which they can actively participate. They need to actively think, to do, to reflect on experiences to discuss with others, and to practice and learn new skills. The adult learner needs interactive communication with both the trainer and fellow learners, which is different from one-way teacher-to-student communication. The learner needs to continually reassess the question, "Where am I now and where do I want to go?"

The trainer

The role of trainer/facilitator is to manage or guide the training process rather than to manage the content of learning. Adult learners need to be able to share the responsibility for learning with the trainer. The experience of adult learners should be viewed and used as a rich resource in the learning environment and they should be encouraged to contribute to the learning environment whenever possible.

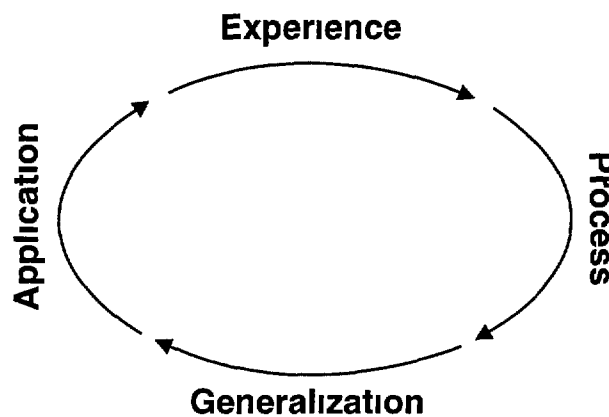
The experiential learning cycle¹

Experiential training or learning is a phrase often heard in the educational world. The strength of the approach is in the completeness of its cycle, which consists of four stages, each as important as the preceding or following one. The four stages are (1) experience, (2) process, (3) generalization, and (4) application.

The term "experiential" is often misused in practice. Experiential training seems to mean letting people participate in a presentation, having a question-and-answer session after a lecture, or a role play or case study without the subsequent steps of the model. The final stages are often left out of the design of the program. As a result, the power of experiential learning is significantly diminished or negated altogether.

The stages of the experiential learning cycle are outlined below.

Experiential Learning Cycle



Source: McCaffery (1986) and adapted from Kolb and Fry (1975)

Figure 1 Experiential learning cycle

¹ The section on the experiential learning cycle is adapted from USDA/OICD/ITD (no date) Agricultural trainer development Training of trainers Instructors manual and McCaffery J A 1986 Interdependent effectiveness A reconsideration of cross cultural orientation and training *International Journal of Intercultural Relations*

Experience The experience stage is the initial activity and data-producing part of the cycle. This phase is structured to enable participants to “do” something. “Doing” includes a range of activities, such as participating in a case study, role play, simulation or game, or listening to a lecture, watching a film or slide show, practicing a skill, or completing an exercise.

Process In this stage, participants reflect on the activity undertaken during the experience stage. They share their reactions in a structured way with other members of the group. They may speak individually, in small groups, or as a full training group. They discuss both their intellectual and attitudinal (cognitive and affective) reactions to the activities in which they have engaged. The trainer helps the participants to think critically about the experience and to verbalize their feelings and perceptions, and he or she draws attention to any recurrent themes or patterns which appear in the participants’ reactions. The trainer must also help the participants conceptualize their reflections so they can move toward drawing conclusions.

Generalization In the generalization stage, the participants form conclusions and generalizations that might be derived from, or stimulated by, the first two phases of the cycle. The trainer must help the participants think critically to draw conclusions that might apply generally or theoretically to “real life.” This stage is best symbolized by the following questions: “What did you learn from all this?” and “What more general meaning does this have for you?”

Application After participants have formed some generalizations, the trainer must guide the participants into the application stage. Drawing upon the insights and conclusions reached during the generalization stage (and previous stages), participants can begin to incorporate what they have learned into their lives by developing plans for more effective behavior in the future. Techniques used to facilitate the application stage can include action plans, reviewing each other’s action plans, formulating ideas for action, sharing action plans with the whole group, and identifying additional learning needs. The trainer assists during this process by helping participants to be as specific as possible.

Participant action plan approach

An integral aspect of the workshop is the ultimate application of the skills by the participants in the work environment. The participant action plan approach (PAPA) was developed by the United States Office of Personnel Management to help participants consider specific applications of lessons learned during training on their job sites. Participants commit themselves to action through a written plan developed at the end of the workshop. PAPA can help participants transfer what they learned in the workshop to their jobs, thus reaching the application stage of the experiential learning cycle.

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The Training Plan

How the Module Is Organized

INTRODUCTION

The module provides the trainer with all the information and materials required for planning and implementing a five-day workshop. It contains suggested activities that have been field tested, with instructions for trainers. The trainer is encouraged to draw on these ideas to devise tailor-made exercises appropriate for his or her specific training situation. The training plan section is organized in the following way:

- 1 Pre-workshop instructions
- 2 Tips for trainers
- 3 Daily training program—for each day this section provides
 - overview
 - schedule
 - checklist for trainers
 - instructions to trainers
 - summary of overheads
 - participant handouts
- 4 Overheads and reference materials are organized by day and session—these are located in the annex

MATERIALS

Overview Includes the day's learning objectives and a list of required participant handouts.

Schedule Includes suggested times. However, each trainer must consider the time frame based on the situation and participants, and revise as appropriate.

Checklist for trainers Helps the trainer collect and compile the materials required for each day.

Instructions to trainers Provides the trainer with specific information on the flow of the sessions and instructions on how to facilitate activities. A sample format of the "instructions to trainers" appears on the next page.

Participant handouts Handouts that the trainer distributes to the participants are numbered in order by day and by session. For example *Day 1/Session 1/Handout 1 (1 1 1)*.

Overheads A summary of the overheads used appears in reduced format at the end of each session. Full-size copies of the overheads are organized by day in the annex. Like the handouts, they are numbered by day and session *1 1 1 (i.e. Day 1/Session 1/Overhead 1)*. Overheads are available in **paper copies**.

Evaluation form (day five) A diskette with the text of the evaluation form in WordPerfect 5.1 is included and, if necessary, may be adjusted to meet your needs.

A Sample Format Instructions to Trainers

DAY ONE	Session 2 NARS The Systems Approach	
Instructions to Trainers		
SESSION 2	10 45 – 13 00 Session 2 NARS The Systems Approach	← The suggested time and title of each section
OBJECTIVE	By the end of this session the participants will be able to do the following <ul style="list-style-type: none"> • Use the systems approach in their organizations Use overhead 1 2 1 to present the session s objective	← The objectives are stated in terms of participants ability by the end of each session
PROCEDURE	Training techniques presentation trip around the tables	← Various training techniques employed during the session are listed
PRESENTATION	<i>(experience)</i> Give a a brief presentation on the systems approach Handout 1 2 1 is the basis for your presentation Overheads 1 2 2 through 1 2 10 support the presentation Distribute handout 1 2 1 (45 minutes)	← The stage of the experiential cycle is identified in italics
EXERCISE 2	Exercise 2 NARS The system approach (1 hour 30 minutes) <ol style="list-style-type: none"> 1 Distribute handouts 1 2 2 and 1 2 3 Handout 1 2 2 gives clear instructions for the exercise Go over the instructions with the participants step by step Ask if clarifications are needed (5 minutes) <p style="margin-left: 20px;">Phase 1 Group work</p> 2 Divide the participants into four groups and ask each group to elect a rapporteur 	← Each exercise is numbered chronologically The title for each exercise appears here Time Total time for an activity appears in parentheses

Tips for Trainers

INTRODUCTION

As a trainer, you are responsible for creating the learning environment and maintaining the flow of the workshop. You must be aware of the participants' needs and be sensitive to their concerns. Following are several tips to help you achieve a successful workshop.

TIPS FOR SUCCESS

Ten tips for your success as a trainer

- 1 Begin your working day by presenting
 - objectives
 - schedule

Make sure that the trainees are aware of what they are expected to learn each day.
- 2 Manage time wisely. Time is a motivating factor in training. If you slow down, the participants will lose interest and commitment.
- 3 Give brief presentations. Encourage your trainees to speak up and participate actively in discussions and exercises.
- 4 Follow the instructions of the proposed exercises
 - use different techniques
 - promote active participation
 - increase interest and level of motivation
- 5 Avoid "shortcuts" while working on topics. Keep the same level of interest while making presentations, doing exercises, and listening to reports. Remember that as a trainer you are responsible for the results of the five-day workshop.
- 6 Don't let your interest and willingness to teach diminish. Show care for the participants' learning and be patient!
- 7 Be an attentive and good listener. The participants expect you to value their ideas and to look at them while speaking. These positive attitudes increase your credibility with the participants.
- 8 Praise your trainees for their efforts and for good performance. This shows that you recognize their input.

and this consequently increases their level of motivation

- 9 Make sure that your trainees feel positive and that they are satisfied with the workshop Ask for their feedback at the end of each day
- 10 Be confident of your success as a trainer Go through the whole plan and be well prepared Let them see you are competent and self-confident

MANAGING GROUPS

Many of the exercises require the participants to work together in small groups and there must be a way to share the information with the rest of the workshop participants The most common way is to have group presentations You are responsible for managing the group activities and ensuring active participation The following tips will help

TIPS FOR FACILITATING GROUPS

Seven tips for facilitating group exercises

- 1 Be attentive to and supportive of the participants' needs in every situation
- 2 Help them to understand the steps they must take to accomplish all the tasks
- 3 Manage time effectively Be sure to remind participants of the time remaining Be firm! Keep to the schedule
- 4 Show interest and be willing to assist them at all times Circulate from group to group while they are working
- 5 Follow the entire process Remain in the classroom during all activities
- 6 Provide the groups with constructive feedback
- 7 Always summarize the major points made by the groups and relate them to the objectives of the session and exercise

Pre-workshop

Pre-workshop

Instructions to Trainers

INTRODUCTION

As a trainer, you are responsible for the preparation and management of the entire program. This requires pre-workshop actions. You must discuss the pre-workshop responsibilities with the workshop's sponsoring institutions. Some things that you must be sure to arrange are included in the following list. There may be several others. Pre-planning is essential to the success of your training workshop.

ACTIONS NEEDED

You must arrange for the following points *long before* the workshop starts:

- 1 In pre-workshop communications, be sure to inform the participants of any information they will require prior to arriving at the workshop. This can be accomplished by means of a pre-workshop letter. Consult with the sponsoring institutions for plans for pre-workshop communication with participants.
- 2 Arrange for appropriate officials to welcome the participants.
- 3 Compile a notebook for each participant. This notebook will be used by the participant to organize the training materials from each session. Before it is distributed at the workshop, each notebook should contain the following items:
 - welcome letter
 - workshop prospectus
 - tentative schedule (five days)
 - registration form

Samples of these items appear on the following pages:

- 4 Plan for implementing systematic activities. Prepare yourself to instruct participants during the opening session on the systematic activities of the workshop:
 - review of daily activities
 - daily PAPA exercise
 - daily brief evaluation

- 5 At the end of each day
 - Invite a volunteer to prepare and present a brief report the following morning, reviewing the day's activities and summarizing major lessons learned. Provide the volunteer with transparencies of the day's objectives to facilitate his/her presentation, which should be delivered in about 10 minutes.
 - Distribute the PAPA forms and invite the participants to list major skills from the day's activities which could be applied in their job environment. Request that they keep the PAPA forms in their own notebooks. You will ask them to review these forms during the last day when they fill out the action plan for the follow-up process.
 - Distribute the evaluation form and invite the participants to briefly evaluate the day's activities. Collect the forms and summarize the results to report back to them the following morning. Note that it is necessary to cluster the answers in the evening.
 - The participants should evaluate the diverse features of the day's activities. You should provide the participants with a copy and/or list of these on the overhead during the evaluation session.
- 6 Arrange for the certificates to be ready for distribution at the end of the workshop.

**WORKSHOP-SPECIFIC
REQUIREMENTS**

Some exercises in the workshop focus on the participants' institutes. Participants should come prepared to discuss their experiences.



Dear Participant,

Welcome to the Workshop on Strategic Planning, which has been organized by SADC/ESAMI/ISNAR

We hope you will enjoy the coming five days. Our aim is to help you to improve your skills to carry out the research program formulation process in your organization. Various subjects will be discussed. First we will consider the theoretical aspects and then you will be given practical work to do using up-to-date training techniques. All of the exercises will be reviewed and discussed by the participants.

We realize that strategic planning is not easy. There are ways to improve your knowledge and skills to facilitate your job performance. This workshop will give you a chance to examine your current activities related to program formulation, and suggest improvements or alternatives.

We wish you a pleasant and productive workshop.

Best regards,

SADC/ESAMI/ISNAR Trainers
on Strategic Planning



Strategic Planning Workshop Prospectus

Introduction

Less than 10 years away from the year 2000, many public institutions still think that the only relevant factor affecting their work is the financial shortage reflected in their budgets and, consequently, in their general performance and in the outcome of their activities. Unfortunately, in most developing countries, many agricultural research institutions also agree with this interpretation.

The turmoil, uncertainties, and breakthroughs of the 1990s have surprised and confused many institutions. As a result, institutions have developed without well-defined missions. Many lack external references that would help them understand the ongoing changes and their related forces. Adequate internal mechanisms to redefine a course of institutional development and to reorganize existing resources are also lacking. This is a time of crisis and most institutions do not understand the type of crisis they are facing. They are used to confronting isolated and well-defined crises such as a financial crisis, with budgetary or salary implications, a political crisis, with implications for program and project continuity, or an internal administrative crisis, with implications for institutional integration and operational processes. This is not a time of one crisis, but of many crises combined.

The current World Bank and International Monetary Fund (IMF) Structural Adjustment Programs (SAPs) being implemented in many African countries call for adjustments in many sectors of the economy. These SAPs have far-reaching effects on the performance of national agricultural research systems (NARS). They have provoked an unprecedented institutional, societal, and governmental search for new knowledge that will serve as a guide for development programs. This is one reason for which NARS must try to discover and formulate new points of reference for development.

In this period of world transition, many of the previous concepts, approaches, and models no longer function as a reference, and new concepts have not yet been clearly designed. This situation has characterized the nineties as the "decade of the search."

In the midst of this turbulence, many institutions in developing countries are discovering the importance of strategic planning. They are recognizing its relevance as a methodology that facilitates the identification of actions, which can strengthen the organizational models and adjust to the needs and challenges of new national and international realities. This module is designed to introduce the main conceptual and methodological elements and instruments of *strategic planning* at the institutional and research program levels.

Goal of the Workshop

To equip NARS chief executives and senior managers with tools to carry out strategic planning to ensure better management of agricultural research institutes.

Workshop Objectives

At the end of the workshop, the participants will be able to do the following:

- 1 Use the systems approach in their organizations
- 2 Explain the diagnosis, planning and implementation (DPI) paradigm to study NARS
- 3 Explain the process of strategic planning including external, organizational, gap analysis, and internal analysis
- 4 Explain institutional performance assessment
- 5 Formulate a vision and mission statement for a national agricultural research institution
- 6 Formulate objectives, policies and strategies
- 7 Discuss the role of leaders/managers in the management process
- 8 Explain the factors of success and failure in the process of institutionalization of planning and develop strategies

Duration of the Workshop

The workshop is designed for five days.

Workshop Format

The trainers will train a maximum of 20 scientists per training session in strategic planning. The workshop is designed to provide an interactive learning environment. Sessions generally include a brief presentation and participatory exercises. The participant action plan approach (PAPA) is integrated throughout the workshop to encourage participants to consider the application of newly acquired skills in their organizations.

Target Audience

The workshop is intended for program leaders and senior scientists SADC/ESAMI/ISNAR strongly encourage a balanced selection of participants, equally representing males and females

Expected Output

The expected outputs of the workshop are

- 1 improved skills among top and senior research managers on the development and implementation of strategic planning
- 2 improved commitment from agricultural research managers to work as a team toward designing strategic planning involving the entire staff of the organization
- 3 action plans designed by the participants to implement activities to institutionalize strategic planning in their respective organizations

Strategic Planning – Workshop Schedule

Day One	Day Two	Day Three	Day Four	Day Five
<p>08 30 – 09 00 <i>Welcome</i></p> <p>09 00 – 10 30 <i>Session 1 Introduction PAPA Exercise 1</i></p>	<p>08 30 – 09 00 <i>Opening of the Day s Activities</i></p> <p>09 00 – 10 30 <i>Session 5 Strategic Planning Exercise 5</i></p>	<p>08 30 – 09 00 <i>Opening of the Day s Activities</i></p> <p>09 00 – 10 30 <i>Session 8 Institutional Performace Assessment Exercise 8</i></p>	<p>08 30 – 09 00 <i>Opening of the Day s Activities</i></p> <p>09 00 – 10 30 <i>Session 10 Formulating Objectives Exercise 10</i></p>	<p>08 30 – 09 00 <i>Opening of the Day s Activities</i></p> <p>09 00 – 10 30 <i>Session 13 The Management Process Role of Leaders/Managers Exercise 13</i></p>
Tea/coffee break				
<p>10 45 – 13 00 <i>Session 2 NARS The Systems Approach Exercise 2</i></p>	<p>10 45 – 13 00 <i>Session 6 Management Issues Exercise 6</i></p>	<p>10 45 – 12 00 <i>Session 8 (Continued)</i></p> <p>12 00 – 13 00 <i>Session 9 NARIs Role in the Future Vison and Mission Formulation Exercise 9</i></p>	<p>10 45 – 13 00 <i>Session 11 Formulating Policies Exercise 11</i></p>	<p>10 45 – 11 45 <i>Session 13 (Continued)</i></p> <p>12 00 – 13 00 <i>Session 14 Institutionalization of Strategic Planning Exercise 14</i></p>
Lunch time				
<p>14 00 – 15 15 <i>Sesstion 3 Diagnosis Planning and Implementation Exercise 3</i></p>	<p>14 00 – 15 15 <i>Session 7 External Organizational and Gap Analysis Exercise 7</i></p>	<p>14 00 – 15 15 <i>Session 9 (Continued)</i></p>	<p>14 00 – 15 15 <i>Session 12 Formulating Strategies Exercise 12</i></p>	<p>14 00 – 14 45 <i>Session 14 (Continued)</i></p> <p>14 45 – 15 15 <i>Session 15 Participant Action Plan Approach (PAPA) and Workshop Evaluation</i></p>
Tea/coffee break				
<p>15 30 – 17 00 <i>Session 4 Conceptual Framework for Planning Exercise 4</i></p> <p>17 00 – 17 30 <i>Feedback on the Day s Activities and PAPA</i></p>	<p>15 30 – 17 00 <i>Session 7 (Continued)</i></p> <p>17 00 – 17 30 <i>Feedback on the Day s Activities and PAPA</i></p>	<p>15 30 – 17 00 <i>Session 9 (Continued)</i></p> <p>17 00 – 17 30 <i>Feedback on the Day s Activities and PAPA</i></p>	<p>15 30 – 17 00 <i>Session 12 (Continued)</i></p> <p>17 00 – 17 30 <i>Feedback on the Day s Activities and PAPA</i></p>	<p>15 30 – 16 30 <i>Session 15 (Continued)</i></p> <p>16 30 – 16 45 <i>Closure of the Workshop</i></p>

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SADC/ESAMI/ISNAR Workshop on Strategic Planning

Registration form

Instructions We would like your help in making this activity as beneficial to you as possible. In order to do this we request that you provide us with some information. Below you will find a number of questions relating to your background and expectations for the workshop. Most questions can be answered simply by placing a check in the appropriate space. Where a written answer is required please print your reply clearly in the space provided. Please consider your responses carefully and answer truthfully. Everything you say will be held in strictest confidence. The information will be used only to help us make our activities more responsive to your needs.

Last name		First name	
Function in this meeting	<input type="checkbox"/> Participant <input type="checkbox"/> Facilitator/presenter <input type="checkbox"/> Organizer <input type="checkbox"/> Observer <input type="checkbox"/> Other _____	Title	<input type="checkbox"/> Dr <input type="checkbox"/> Mr <input type="checkbox"/> Mrs <input type="checkbox"/> Ms <input type="checkbox"/> Ing <input type="checkbox"/> Other _____
			Gender
		Date of birth	m d y / / 19
Degree	<input type="checkbox"/> Diploma 19 <input type="checkbox"/> B Sc 19 <input type="checkbox"/> M Sc 19 <input type="checkbox"/> Ph D 19	Other degree	
		Year of other degree	19
Position (type)	<input type="checkbox"/> Policymaker <input type="checkbox"/> Senior manager <input type="checkbox"/> Middle manager <input type="checkbox"/> Researcher <input type="checkbox"/> Information specialist <input type="checkbox"/> Technician <input type="checkbox"/> Other _____	Position (type)	
		Department	
Institute			
Name of your immediate supervisor			
Your institute's address			
Telephone no / Email		Telex no / Fax no	
Expectations	Participants are requested to fill in the two items on the reverse side of this sheet		

<p>What particular topics would you like emphasized in this workshop?</p>	
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<p>What other management topics would you like to see covered in future events?</p>	
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DAY ONE

Strategic Planning

DAY ONE — Overview

Objectives

By the end of the day the participants will be able to do the following

- 1 Discuss the background, rationale, objectives, and schedule for the five-day workshop
- 2 Explain the use of the participant action plan approach (PAPA)
- 3 Identify the trainers and trainees
- 4 Use the systems approach in their organizations
- 5 Explain the diagnosis, planning, and implementation paradigm to study NARS
- 6 Present a synthesis of the strategic approach for research planning at the institutional and program levels

Participant Materials

Workshop notebook (includes welcome letter and workshop prospectus)

Handouts

- 1 1 1 Overview of Day One
- 1 1 2 Tentative Schedule of Day One
- 1 1 3 Participant Action Plan Approach (PAPA)
- 1 1 4 Interactive Exercise 1 Getting to Know Each Other and Our Expectations
- 1 1 5 Exercise 1 Worksheet—Phase 1
- 1 1 6 Exercise 1 Worksheet—Phase 2
- 1 2 1 National Agricultural Research Systems The Systems Approach (text)
- 1 2 2 Exercise 2 NARS The Systems Approach
- 1 2 3 Exercise 2 Worksheet
- 1 3 1 Diagnosis, Planning, and Implementation (text)
- 1 3 2 Exercise 3 Discussing Diagnosis, Planning, and Implementation
- 1 3 3 Exercise 3 Worksheet
- 1 4 1 Conceptual Framework for Planning (text)
- 1 4 2 Exercise 4 Discussing Conceptual Framework for Planning
- 1 4 3 Exercise 4 Worksheet
- 1 4 4 Strengths and Weaknesses of Day One
- 1 4 5 Guidelines to Provide Feedback on the Workshop
- 1 4 6 PAPA — First Stage

Strategic Planning

DAY ONE — Tentative Schedule

- 08 30 – 09 00 **Welcome**
- 09 00 – 10 30 **Session 1 Introduction to the Workshop**
– Workshop introduction, objectives, and schedule
– Overview of day one
– Introduction of PAPA
– Interactive exercise (1)
- 10 30 – 10 45 Tea/Coffee Break
- 10 45 – 13 00 **Session 2 NARS The Systems Approach**
(Presentation and exercise 2)

13:00 – 14:00 Lunch

- 14 00 – 15 15 **Session 3 Diagnosis, Planning, and Implementation**
(Presentation and exercise 3)
- 15 15 – 15 30 Tea/Coffee Break
- 15 30 – 17 00 **Session 4 Conceptual Framework for Planning**
(Presentation and exercise 4)
- 17 00 – 17 30 **Feedback on the Day's Activities and PAPA**
-

Strategic Planning

DAY ONE — Checklist for Trainers

Pre-workshop preparation

Compile a notebook for each participant. The participant will use the notebook throughout the workshop to organize the training materials. Before they are distributed each notebook should include the following: welcome letter, tentative five-day schedule, and workshop prospectus.

Handouts

	Yes ✓	No ✓
1 1 1 Overview of Day One	<input type="checkbox"/>	<input type="checkbox"/>
1 1 2 Tentative Schedule of Day One	<input type="checkbox"/>	<input type="checkbox"/>
1 1 3 Participant Action Plan Approach (PAPA)	<input type="checkbox"/>	<input type="checkbox"/>
1 1 4 Interactive Exercise 1 Getting to Know Each Other and Our Expectations	<input type="checkbox"/>	<input type="checkbox"/>
1 1 5 Exercise 1 Worksheet—Phase 1	<input type="checkbox"/>	<input type="checkbox"/>
1 1 6 Exercise 1 Worksheet—Phase 2	<input type="checkbox"/>	<input type="checkbox"/>
1 2 1 National Agricultural Research Systems The Systems Approach (text)	<input type="checkbox"/>	<input type="checkbox"/>
1 2 2 Exercise 2 NARS The Systems Approach	<input type="checkbox"/>	<input type="checkbox"/>
1 2 3 Exercise 2 Worksheet	<input type="checkbox"/>	<input type="checkbox"/>
1 3 1 Diagnosis, Planning, and Implementation (text)	<input type="checkbox"/>	<input type="checkbox"/>
1 3 2 Exercise 3 Discussing Diagnosis, Planning, and Implementation	<input type="checkbox"/>	<input type="checkbox"/>
1 3 3 Exercise 3 Worksheet	<input type="checkbox"/>	<input type="checkbox"/>
1 4 1 Conceptual Framework for Planning (text)	<input type="checkbox"/>	<input type="checkbox"/>
1 4 2 Exercise 4 Discussing Conceptual Framework for Planning	<input type="checkbox"/>	<input type="checkbox"/>
1 4 3 Exercise 4 Worksheet	<input type="checkbox"/>	<input type="checkbox"/>
1 4 4 Strengths and Weaknesses of Day One	<input type="checkbox"/>	<input type="checkbox"/>
1 4 5 Guidelines to Provide Feedback on the Workshop	<input type="checkbox"/>	<input type="checkbox"/>
1 4 6 PAPA—First Stage	<input type="checkbox"/>	<input type="checkbox"/>

Overheads

1 1 0 Workshop on Strategic Planning	<input type="checkbox"/>	<input type="checkbox"/>
1 1 1 Workshop Goal	<input type="checkbox"/>	<input type="checkbox"/>
1 1 2 Workshop Objectives	<input type="checkbox"/>	<input type="checkbox"/>
1 1 3 Expected Outputs	<input type="checkbox"/>	<input type="checkbox"/>
1 1 4 Objectives of Day One	<input type="checkbox"/>	<input type="checkbox"/>
1 1 5 Schedule of Day One	<input type="checkbox"/>	<input type="checkbox"/>
1 1 6 Participant Action Plan Approach	<input type="checkbox"/>	<input type="checkbox"/>
1 1 7 Why PAPA?	<input type="checkbox"/>	<input type="checkbox"/>
1 1 8 Uses of PAPA	<input type="checkbox"/>	<input type="checkbox"/>

	Yes ✓	No ✓
1 1 9 Steps in PAPA	<input type="checkbox"/>	<input type="checkbox"/>
1 1 10 In-Course Activities—Stage 1	<input type="checkbox"/>	<input type="checkbox"/>
1 1 11 In-Course Activities—Stage 2	<input type="checkbox"/>	<input type="checkbox"/>
1 1 12 Follow-up Activities	<input type="checkbox"/>	<input type="checkbox"/>
1 1 13 PAPA—First Stage	<input type="checkbox"/>	<input type="checkbox"/>
1 2 1 Objective of Session 2	<input type="checkbox"/>	<input type="checkbox"/>
1 2 2 NARS The System Approach	<input type="checkbox"/>	<input type="checkbox"/>
1 2 3 System	<input type="checkbox"/>	<input type="checkbox"/>
1 2 4 Defining a System Boundary	<input type="checkbox"/>	<input type="checkbox"/>
1 2 5 Conflicting Pressures on Social and Rational Systems	<input type="checkbox"/>	<input type="checkbox"/>
1 2 6 NARS as Open System	<input type="checkbox"/>	<input type="checkbox"/>
1 2 7 National Agricultural Research System	<input type="checkbox"/>	<input type="checkbox"/>
1 2 8 The Organizational Structure as an Open System Structure and Organization - Model (1a)	<input type="checkbox"/>	<input type="checkbox"/>
1 2 9 The Organizational Structure as an Open System Structure and Organization - Model (1b)	<input type="checkbox"/>	<input type="checkbox"/>
1 2 10 The Organizational Structure as an Open System Structure and Organization - Model (2)	<input type="checkbox"/>	<input type="checkbox"/>
1 3 1 Objective of Session 3	<input type="checkbox"/>	<input type="checkbox"/>
1 3 2 Institutional Change	<input type="checkbox"/>	<input type="checkbox"/>
1 3 3 Diagnosis	<input type="checkbox"/>	<input type="checkbox"/>
1 3 4 Planning	<input type="checkbox"/>	<input type="checkbox"/>
1 3 5 Implementation	<input type="checkbox"/>	<input type="checkbox"/>
1 3 6 DPI Paradigm	<input type="checkbox"/>	<input type="checkbox"/>
1 3 7 DPI Conceptual Framework for Strengthening NARI	<input type="checkbox"/>	<input type="checkbox"/>
1 3 8 Questions for Discussion	<input type="checkbox"/>	<input type="checkbox"/>
1 4 1 Objective of Session 4	<input type="checkbox"/>	<input type="checkbox"/>
1 4 2 Conceptual Framework for Planning	<input type="checkbox"/>	<input type="checkbox"/>
1 4 3 Definition of Planning for Agricultural Research	<input type="checkbox"/>	<input type="checkbox"/>
1 4 4 Six Characteristics of Planning	<input type="checkbox"/>	<input type="checkbox"/>
1 4 5 General Planning Principles	<input type="checkbox"/>	<input type="checkbox"/>
1 4 6 Specific Planning Principles	<input type="checkbox"/>	<input type="checkbox"/>
1 4 7 Organizational Planning Levels	<input type="checkbox"/>	<input type="checkbox"/>
1 4 8 Decision-Making Levels—Types of Planning	<input type="checkbox"/>	<input type="checkbox"/>
1 4 9 Relationships between Types of Planning	<input type="checkbox"/>	<input type="checkbox"/>
1 4 10 Contributions of the Strategic Approach	<input type="checkbox"/>	<input type="checkbox"/>
1 4 11 Implementation of Strategic Plan	<input type="checkbox"/>	<input type="checkbox"/>
1 4 12 Why Strategic Planning?	<input type="checkbox"/>	<input type="checkbox"/>
1 4 13 Strategic Intention in Planning	<input type="checkbox"/>	<input type="checkbox"/>
1 4 14 Agricultural Research Organization as a Production System	<input type="checkbox"/>	<input type="checkbox"/>
1 4 15 The General Logic of the Module	<input type="checkbox"/>	<input type="checkbox"/>
1 4 16 Essential Features of Planning	<input type="checkbox"/>	<input type="checkbox"/>
1 4 17 Advantages of Strategic Planning	<input type="checkbox"/>	<input type="checkbox"/>
1 4 18 Questions for Discussion	<input type="checkbox"/>	<input type="checkbox"/>

Materials

	Yes ✓	No ✓
● Overhead projector	<input type="checkbox"/>	<input type="checkbox"/>
● Projector screen	<input type="checkbox"/>	<input type="checkbox"/>
● Flipchart stands (minimum 2)	<input type="checkbox"/>	<input type="checkbox"/>
● Flipchart paper/pads (about 10 per day)	<input type="checkbox"/>	<input type="checkbox"/>
● Markers for writing on newsprint	<input type="checkbox"/>	<input type="checkbox"/>
● Markers for writing on transparencies	<input type="checkbox"/>	<input type="checkbox"/>
● Blank transparencies	<input type="checkbox"/>	<input type="checkbox"/>
● Stapler	<input type="checkbox"/>	<input type="checkbox"/>
● Tape (strong masking tape and regular tape)	<input type="checkbox"/>	<input type="checkbox"/>
● Push pins	<input type="checkbox"/>	<input type="checkbox"/>
● Glue	<input type="checkbox"/>	<input type="checkbox"/>
● Pencils/notepads/pens	<input type="checkbox"/>	<input type="checkbox"/>
● Pencil sharpeners	<input type="checkbox"/>	<input type="checkbox"/>
● Extension cords	<input type="checkbox"/>	<input type="checkbox"/>
● Certificates	<input type="checkbox"/>	<input type="checkbox"/>
● Photocopying facilities	<input type="checkbox"/>	<input type="checkbox"/>
● Spare bulbs for overhead projector	<input type="checkbox"/>	<input type="checkbox"/>
● Extra notepads and pens	<input type="checkbox"/>	<input type="checkbox"/>
● Scissors	<input type="checkbox"/>	<input type="checkbox"/>

DAY ONE

Welcome and Session 1 Introduction to the Workshop

Instructions to Trainers

PRE-SESSION

Distribute notebooks to participants. Make sure the cards are ready for exercise 1.

08 30 – 09 00 Welcome

SESSION 1

09 00 – 10 30 Session 1 Introduction to the Workshop

OBJECTIVES

By the end of this session, the participants will be able to do the following:

- Provide background and rationale for the workshop goals, general objectives, and expected outputs. The prospectus provides this information.
- Describe the schedule for the entire five days. A copy of the schedule is in their notebooks.
- List the objectives of day one. Copies of the objectives and schedule are distributed.
- Explain the use of the participant action plan approach (PAPA).
- Identify trainers and trainees.

PROCEDURE

Training techniques: presentation, PAPA, interactive exercise.

PRESENTATION

(experience) Give a brief presentation providing background and rationale for the workshop. State the goals, general objectives of the workshop, and expected outputs. Explain the five-day schedule of activities (a copy of the schedule is available in the participants' notebooks). Four overheads support the presentation: 1.1.0 through 1.1.3. At the end of the presentation, introduce the objectives and schedule of day one. Distribute handouts 1.1.1 and 1.1.2. Use overheads 1.1.4 and 1.1.5. Ask if clarification is needed (25 minutes).

PAPA

Introduction of the Participant Action Plan Approach (PAPA)

PRESENTATION

(experience) Introduce the participant action plan approach (PAPA) to the workshop participants using overheads 1.1.6 through 1.1.13. You will find the key points (listed below) and handout 1.1.3 the very useful. Distribute handout 1.1.3.

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Encourage the participants to begin formulating action ideas as the workshop progresses (15 minutes)

Five basic steps

PAPA requires that participants develop action plans at the end of the workshop. They will prepare a list of activities that they want to try when they return to their jobs. The plans are based on the workshop activities just experienced. After some time has elapsed (usually six months), the participants are contacted to evaluate which activities they have actually been able to implement. The five steps involved in carrying out this process are as follows:

Step 1 Planning for PAPA

In this step, the persons conducting the workshop determine the specific activities needed to apply PAPA, considering the available resources and the needs of the organizations involved. The trainers assign and schedule the tasks necessary to carry out the approach.

Step 2 In-course activities

This step consists of two stages. At the beginning of the workshop, trainers introduce participants to the idea of an action plan. They are asked to record, throughout the workshop, new ideas they may want to try when they return to their jobs.

At the end of the workshop, participants are asked to write an action plan. This is an edited list of new, workshop-related activities that they plan to try when they return to their jobs.

Step 3 Follow-up activities

At a planned time after the training (usually six months later), participants are interviewed or contacted by questionnaire. They are asked which of their planned activities they have been able to achieve up to that time, and what other activities they have attempted as a result of the workshop. Participants are also asked what effect their new activities have had on their work environment and what problems, if any, they encountered in trying them.

Step 4 Analysis and conclusions

In this step, the data collected during the follow-up are categorized and displayed to show the extent and type of change resulting from the implementation of the action plan. The information can be displayed in the form of descriptions of behavior change. It can be summarized numerically (e.g., how many of the participants changed in certain ways). It

can also be reported using a combination of narrative experience and numbers

Step 5 Report

The findings from the analysis, conclusions, and recommendations regarding the workshop are reported in a form that meets the information needs of the organizations involved. The format may be an oral report, but a written document is preferred.

Information that can be collected

PAPA gathers information about participants' behavioral changes on the job due to the workshop. Since the trainer asks questions during the follow-up, data can also be obtained on the following:

reaction—how well participants liked and accepted the workshop (viewed six months after its completion)

learning—the skills, knowledge, attitudes, etc., participants felt they acquired during the workshop

results—the impact the participants felt that the workshop had on their organization or work environment

Uses of PAPA

Participants commit themselves to action through a written plan developed at the end of workshop. They leave a copy of the plan with the trainer for follow-up purposes.

Participants know that someone will be asking about efforts they have made to implement the action plan. This can motivate them to actually try new activities on the job. Thus, PAPA can help participants transfer to their jobs what they learned in the workshop—PAPA becomes a part of the workshop itself.

Besides directly helping participants with the transfer of skills and knowledge, the action plan process can play a role in supervisor/subordinate discussions of workshop utilization. In working with employees after the workshop, supervisors can help them implement the action plans and thus encourage and support the transfer of learning to the job.

Resources needed to use PAPA

No complex skills or knowledge are required for using PAPA. It does not require previous evaluation experience. No statistical tests are employed in the analysis. If interviews are used to collect follow-up information, interviewing skills are needed. A general ability to synthesize data and draw logical conclusions is also important.

The major resource required is time, mainly time to collect the data about changed job behavior and time for analysis. However, the trainer can take shortcuts in using the approach and still produce valuable information about the workshop.

Reference

United States Office of Personnel Management (no date) *Assessing Changes in Job Behavior Due to Training: A Guide to the Participant Action Plan Approach*. Washington, D.C.: Productivity Research and Evaluation Division, United States Office of Personnel Management.

EXERCISE 1

Exercise 1. Getting to know each other and our expectations (45 minutes)

The objective of this exercise is to get to know each other better and to identify the participants' learning expectations for the workshop. This exercise allows for a comparison of the participants' expectations with the objectives proposed.

Phase 1 Individual work (15 minutes)

- 1 (*experience*) Distribute handout 1.1.4, 1.1.5, and 1.1.6. Handout 1.1.4 gives clear instructions for the interactive exercise. Go over the instructions step by step. Ask if any clarifications are needed. (5 minutes)
- 2 Ask the participants to work on the questions. (10 minutes)

Phase 2 Group work (15 minutes)

- 3 Divide the participants into four groups and ask each group to elect a rapporteur.
- 4 Invite the participants to introduce themselves to the group and share their responses. The rapporteur summarizes the group information to report to the audience. (10 minutes)

Phase 3 Reporting and discussion (15 minutes)

- 5 (*process, generalize*) Invite the rapporteurs to report their group's information.
- 6 (*process, generalize*) Compare the results of the presentations and provide feedback.
- 7 (*process*) Ask the participants how they felt doing this exercise. What have they learned about themselves and others?
- 8 (*process, generalize*) Discuss how this information/experience will be useful during the workshop.

- 9 Collect the questionnaires in order to compile the answers

CLOSURE

Closure (5 minutes)

- 1 (*application*) Ask the participants “What did you feel during the exercise?” and “How will you apply the lessons learned in your job as a result of this session?”
- 2 Make a transition to the next session

DAY ONE

Session 1 Summary of Overheads

Workshop on Strategic Planning

1 1 0

Workshop Goal

To equip NARS chief executives and senior managers with tools to carry out strategic planning to ensure better management of agricultural research institutes

1 1 1

Workshop Objectives

- Use the systems approach
- Explain the design, planning and implementation (DP) paradigm to study NARS
- Explain the process of strategic planning including external organization, organizationally and internally
- Explain institutional performance assessment
- Formulate vision and mission statement for agricultural research institution
- Formulate objective, policy and strategy
- Discuss the role of leadership in the management process
- Explain the factors of success and failure in the process of institutionalization of planning and development

1 1 2

Expected Outputs

- Improved skills of top and senior research managers in strategic planning
- Improved commitment from agricultural research managers to work as a team toward designing strategic planning involving the entire staff of the organization
- Action plans designed to implement activities to institutionalize strategic planning in your organizations

1 1 3

Objectives of Day One

- 1 Discuss the background, rationale, objectives and schedule of the five-day workshop
- 2 Explain the use of the participant action plan approach (PAPA)
- 3 Identify the trainers and trainees
- 4 Discuss the approach in your organizations
- 5 Explain the diagnosis, planning, and implementation paradigm to study NARS
- 6 Present synthesis of the strategic approach for research planning at institutional and organizational level

1 1 4

Schedule of Day One

08:30 - 09:00	Workshop
09:00 - 10:30	Session 1: Introduction to the Workshop
Tea/Coffee Break	
10:45 - 13:00	Session 2: NARS Training System Approach
Lunch	
14:00 - 15:15	Session 3: Diagnosis, Planning and Implementation
Tea/Coffee Break	
15:30 - 17:00	Session 4: Concept Framework Planning
17:00 - 17:30	Feedback on the Day's Activities and PAPA

1 1 5

Participant Action Plan Approach

1 1 6

Why PAPA?

Systematic and continuous planning of future activities by trainees as training evolves

Formal link between trainees and trainer for follow-up activities which skills have been used in the job?

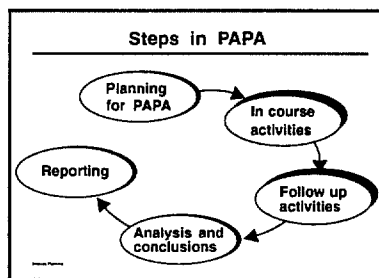
- Further involvement of trainees in improving the training material after training event

1 1 7

Uses of PAPA

- ☑ Assess the transfer of skill to work place
- ☑ Determine impact of change introduced
- ☑ Identify problems of implementation
- ☑ Decide how to modify the course
- ☑ Evaluate the most useful parts/quality of workshop

1 1 8



1 1 9

In Course Activities

Stage 1

Objectives

- understand the use of PAPA
- identify possible action ideas to be tried on the job

Procedure

Jot down action ideas during the training
use the handout provided
do it at end of last session each day
confer with other participants/trainers periodically

1 1 10

In Course Activities

Stage 2

Objectives

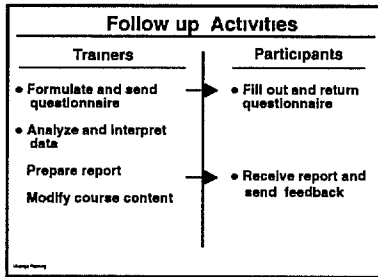
- develop action plan

Procedure

- prepare preliminary list of action items
- confer with partner
- finalize and prioritize list of action items
- report individual action plans
- make copy and submit to trainer

1 1 11

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1 1 12

PAPA Questionnaire First Stage Ideas for action items	
Date	_____
Workshop	_____
Date/Year	_____
Name	_____
Organization	_____
<small>What would you try when return work and research after based on what you learned in training workshop</small>	
_____	_____
_____	_____
_____	_____
_____	_____
<small>What are the training objectives, what you had during the workshop, feedback, interaction with participants and trainers, etc.</small>	
_____	_____
_____	_____
_____	_____

1 1 13

Special Notes to the Trainers

- 1 Make sure that the notebooks are ready for distribution. Remember that the notebooks are comprised of the following
 - welcome letter
 - workshop prospectus
 - tentative schedule
 - registration form
- 2 Make sure that the cards for the interactive exercise (handout 1.1.4) are cut out before session one starts.
- 3 Make sure that you staple all exercise instructions and worksheets together one day before the sessions.
- 4 Note that a diskette is enclosed in the module with the evaluation forms in WordPerfect 5.1 to use if necessary.

Handout — Overview of Day One

Strategic Planning

Objectives

By the end of the day the participants will be able to do the following

- 1 Discuss the background, rationale, objectives, and schedule for the five-day workshop
- 2 Explain the use of the participant action plan approach (PAPA)
- 3 Identify the trainers and trainees
- 4 Use the systems approach in their organizations
- 5 Explain the diagnosis, planning, and implementation paradigm to study NARS
- 6 Present a synthesis of the strategic approach for research planning at the institutional and program levels

Participant Materials

Workshop notebook (includes welcome letter and workshop prospectus)

Handouts

- 1 1 1 Overview of Day One
- 1 1 2 Tentative Schedule of Day One
- 1 1 3 Participant Action Plan Approach (PAPA)
- 1 1 4 Interactive Exercise 1 Getting to Know Each Other and Our Expectations
- 1 1 5 Exercise 1 Worksheet—Phase 1
- 1 1 6 Exercise 1 Worksheet—Phase 2
- 1 2 1 National Agricultural Research Systems The Systems Approach (text)
- 1 2 2 Exercise 2 NARS The Systems Approach
- 1 2 3 Exercise 2 Worksheet
- 1 3 1 Diagnosis, Planning, and Implementation (text)
- 1 3 2 Exercise 3 Discussing Diagnosis, Planning, and Implementation
- 1 3 3 Exercise 3 Worksheet
- 1 4 1 Conceptual Framework for Planning (text)
- 1 4 2 Exercise 4 Discussing Conceptual Framework for Planning
- 1 4 3 Exercise 4 Worksheet
- 1 4 4 Strengths and Weaknesses of Day One
- 1 4 5 Guidelines to Provide Feedback on the Workshop
- 1 4 6 PAPA — First Stage

Handout — Tentative Schedule of Day One

Strategic Planning

- 08 30 – 09 00 **Welcome**
- 09 00 – 10 30 **Session 1 Introduction to the Workshop**
– Workshop introduction, objectives, and schedule
– Overview of day one
– Introduction of PAPA
– Interactive exercise (1)
- 10 30 – 10 45 Tea/Coffee Break
- 10 45 – 13 00 **Session 2 NARS The Systems Approach**
(Presentation and exercise 2)

13:00 – 14:00 Lunch

- 14 00 – 15 15 **Session 3 Diagnosis, Planning, and Implementation**
(Presentation and exercise 3)
- 15 15 – 15 30 Tea/Coffee Break
- 15 30 – 17 00 **Session 4 Conceptual Framework for Planning**
(Presentation and exercise 4)
- 17 00 – 17 30 **Feedback on the Day's Activities and PAPA**
-

Participant Action Plan Approach (PAPA)

As part of this training, you will do an exercise designed to help you apply what you have learned. You may not find everything taught in the training appropriate to your specific situation. In some cases, you may want to adapt some of the materials to fit your particular job or work setting.

To do this, the participant action plan approach (PAPA) was developed by the United States Office of Personnel Management. PAPA is an easy-to-use method for determining how you changed your job behavior as a result of your attendance at a training course or program. The method generates data that enables the trainers to answer questions such as the following:

1. What happened on the job as a result of the training?
2. Are changes that occurred the ones intended by those providing the training?
3. What may have interfered with participants trying to use on the job what they learned in the training?

With the information from PAPA, trainers (as evaluators) can also decide if the training course should be modified, and in what ways. Managers can use the information to determine the worth of the training and make informed decisions about its future.

Workshop Activities

The method consists of two stages. At the beginning of the training you are introduced to the idea of an action plan and are asked to consider throughout the workshop tasks that you might want to do differently when you return to your job as a result of the training. Then, at the end of the training, you are asked to write an action plan. This is a list of new, workshop-related activities that you plan to try when you return to your job.

Follow-up Activities

At a scheduled time after the workshop (usually several months), you will be interviewed or contacted by questionnaire. You will be asked which of your planned activities you have been able to implement up to that time, and what other new activities you have attempted as a result of having attended the training. You will also be asked what effect your new activities have had on your work environment and what problems, if any, you encountered in trying them.

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Guidelines for Writing Action Items

The most important characteristic of an action item is that it is written so you — or someone else — *will know when it occurs*. One way to help achieve this is to use specific *action verbs*. The following is a list of such verbs:

Mental Skills		Physical Skills	Attitude
State	Discriminate	Execute	Choose
Name	Classify	Operate	Volunteer
Describe	Generate (solution)	Repair	Allow
Relate	Apply (rule)	Adjust	Recommend
Tell	Solve	Manipulate	Defend
Write	Derive	Handle	Endorse
Express	Prove	Manufacture	Cooperate
Recount	Analyze	Calibrate	Accept
	Evaluate	Remove	Decide
		Replace	Agree

As you are working on action items, ask yourself *Is the behavior described observable? Will it be obvious to me or others when it happens?*

The following are examples of action items *As a result of being in this training I plan to*

- 1 *Describe* this workshop to my superior within a week of returning to the job. As a result, my supervisor will know the contents of the training workshop, how I can apply what I learned to the job, and whether or not others in the organization will attend.
- 2 *Handle* every piece of paper only once to improve the management of my own time. Begin as soon as I am back on the job.
- 3 *Apply* the principles of performance analysis to the problem of incomplete or tardy case reviews in my research institute and request assistance from the training unit, as needed. As a result I will know whether training is required and/or if some other solution is appropriate. Begin within a month after returning.
- 4 *Talk* with my employees directly about a problem which arises, rather than avoiding a confrontation, discuss the situation in order to reach mutual understanding.
- 5 *Within* two weeks after I return, I will implement a _____ research management procedure/process in my research institute.

Implementing the Action Item

As you develop action items, *be sure to think of yourself in your actual job setting*, implementing the activity you have described

If you have an idea of *when* you will be able to begin implementing the action items, make a note of it. Three categories can be chosen: 1) as arises (you do not know when the opportunity to try this item will occur), 2) within two months, and 3) after two months.

You may find that you cannot try out your ideas exactly as you envisioned them, or that it is difficult to be specific. That is all right. It is still important to write out your *intent*, as a tentative plan, knowing you may have to modify it once you are back on the job. *Try to develop at least two or three action items.* One may not work, so it is handy to have others.

SECOND STAGE

ACTION PLAN

Date _____

Workshop Title SADC/ESAMI/ISNAR Workshop on Strategic Planning

Name _____

Organization _____

Action Items	Start to implement action plan (check if known)		
	Within 2 months	After 2 months	As arises
I plan to			

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Questions about Your Action Items

1 *Preliminary nature of plan*

- Were you specific in writing the action item?
- What will you need to do when you return to work to find out which actions are possible?

2 *Resources*

- Who would be carrying out the proposed action, or helping with it (formally or informally)?
- Are the skills for carrying it out available?
- How much time would this take?
- Are there special materials or equipment required?
- What is involved in obtaining them?
- Will you be using a tool, system, or aid from this training workshop?
- If so, how much adaptation is required?
- Is continual monitoring or follow-through required?
- If so, who will do it?

3 *Implementation*

- Do you have the authority to implement the action?
- If not, who does?
- How do you think you can go about getting approval?
- What do you think the degree of support is for your idea?
- Will you need to sell people on it?
- If so, who?

4 *Effects*

- Whom will this action affect?
- How will it affect them?
- Will anyone be the worse for the results?
- Will anyone be improved?
- What will be affected?

5 *Environment*

- What factors in the organizational environment might interfere with your doing this?
- What factors in the organization will support your effort?

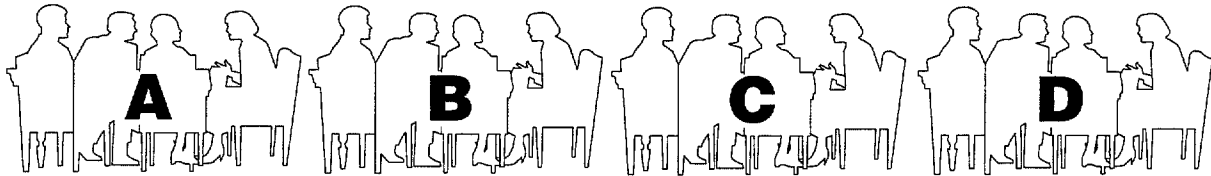
Exercise 1. Getting to know each other and our expectations (individual and group work)

Phase 1 Individual work (15 minutes)

- 1 We would like to get to know you better, learn about planning in your institution and your expectations about this workshop. Please briefly answer the questions on the attached worksheet, handout 1 1 5, and be prepared to share your answers in phase 2 of this exercise.

Phase 2 Group work (15 minutes)

- 2 Form four groups of participants, each electing a rapporteur.



- 3 Introduce yourself to the group members.
- 4 Share your responses with the group. You can use handout 1 1 6 to take notes during this phase.
- 5 The rapporteur summarizes the group's information to report to the audience.

Phase 3 Reporting and discussion (15 minutes)

- 6 The rapporteurs present their group's information.
- 7 The trainer compares the results of the presentations and provides feedback on the exercise.

Exercise 1. Worksheet

Phase 1 Individual work (15 minutes)

Your name _____

Your institution _____

Main responsibility at your present job _____

- research
- extension
- teaching
- management
- other

- What do you think is the principal planning problem in your institution?

- What do you expect to learn that would help you resolve these problems?

- What experience and training do you have in planning agricultural research that you think could be useful for other group members?

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DAY ONE

Session 2 NARS: The Systems Approach

Instructions to Trainers

SESSION 2

10 45 – 13 00 Session 2 NARS The Systems Approach

OBJECTIVE

By the end of this session, the participants will be able to do the following

- Use the systems approach in their organizations

Use overhead 1 2 1 to present the objective

PROCEDURE

Training techniques presentation, “trip around the tables”

PRESENTATION

(experience) Give a brief presentation on the systems approach Handout 1 2 1 is the basis for your presentation Overheads 1 2 2 through 1 2 10 support the presentation Distribute handout 1 2 1 (40 minutes)

EXERCISE 2

Exercise 2 NARS The systems approach (1 hour 30 minutes)

- 1 Distribute handouts 1 2 2 and 1 2 3 Handout 1 2 2 gives clear instructions for the exercise Go over the instructions with the participants step by step Ask if clarifications are needed (5 minutes)

Phase 1 Group work (25 minutes)

- 2 Divide the participants into four groups and ask each group to elect a rapporteur
- 3 *(experience)* As the groups work, circulate from group to group to check progress Clarify any concerns they may have while working Be sure to remind them of the time remaining
- 4 *(experience)* Groups review the material and, based on their own experience respond to the questions (25 minutes)

Phase 2 “Trip around the tables” (30 minutes)

- 5 *(experience process)* The rapporteurs make the “trip around the tables,” spending five minutes at each table discussing the responses (15 minutes)
- 6 *(process)* The rapporteurs return to their own groups and the groups revise their responses based on the input from the rapporteur’s “trip” The rapporteurs write the results on flipcharts for presentation (15 minutes)

Phase 3 Reporting and discussion (30 minutes)

- 7 The rapporteurs present the groups' results to the audience. Each rapporteur has five minutes to present (20 minutes)
- 8 Provide feedback on the results of the presentation and facilitate a short discussion (10 minutes)

CLOSURE

Closure (5 minutes)

- 1 (*application*) Ask the participants "What might you do differently in your job as a result of what you have learned?"
- 2 Make a transition to the next session

13 00 – 14 00 Lunch

DAY ONE

Session 2 Summary of Overheads

Objective of Session 2

- Use the systems approach in your organization

1 2 1

NARS The Systems Approach

- Introduction
- Definition
- Levels of systems
- Closed ↔ open systems
- NARIs as open systems
- Research institution as a production system
- Concept of NARS

1 2 2

System

- A set of organized interacting components seeking to achieve a common purpose
- A series of interrelated elements/parts/components that receive inputs from the environment, and process them to be transformed into products

1 2 3

Defining a System Boundary

- List all components that make up the system and circumscribe them
- List all flows across the boundary
- Identify all elements contributing to specific goals and include them within the boundary

1 2 4

Conflictive Pressures on Social and Rational Systems

1 2 5

NARS as Open System

Characteristics

- spatial boundary of action and scope
- two or more subsystems
- subsystems are interrelated and interdependent
- subsystems require inputs to produce outputs/products
- environment in which NARS operate determines the extent of their survival

1 2 6

National Agricultural Research System

A system comprising all those organizations of a country whatever their denomination or structure whose principal mission is to carry out agricultural research activities (promotion coordination execution) in the different fields of agricultural sciences

1 2 7

The Organization Structure of an Open System Model (1)

1 2 8

The Organization Structure of an Open System Model (1b)

1 2 9

The Organization Structure of an Open System Model (2)

1 2 10

National Agricultural Research Systems: The Systems Approach¹

Introduction

Before we present “strategic planning” as a methodology for the long-term planning of a national agricultural research system, from a *systems* perspective it is important to have a general view of the research institution system and its role and boundaries within the concept of a NARS

In the following sections, the use of strategic planning within general planning activities basically refers to the strategic management of processes at the institutional level. However, frequent reference will be made to its application at the program level.

The purpose of this section is to introduce some key concepts of systems and their use in approaching the understanding of the organizational makeup and management of research activities in the different countries.

The word “system” is derived from the Greek verb *sunistanai*, which originally meant “to cause to stand together.” Generally speaking, it has become popular in management. System thinking has evolved, it encompasses a large body of methods, tools, and principles, all aimed toward looking at the interrelations of forces and seeing them as part of a common process.

It has become essential to have a deeper understanding of the relationships and interactions of organizational units which, in one way or another, perform activities targeted toward a common goal.

System thinking is viewed by many as a powerful, problem-solving tool. Some believe it is more powerful as a language, augmenting and changing the ordinary ways we think and talk about complex issues (Senge et al. 1994). The tools of system thinking—causal loops diagrams, archetypes, and computer models—allow us to talk about interrelationships more easily, because they are based on the theory of feedback processes.

What is a system? There are many definitions but, in general, “a system is a set of organized interacting components seeking to achieve a common purpose.” “System” implies wholeness, completeness, and unifying parts of other subsystems to provide the optimum performance of a set of components.

The father of the general systems theory, a biologist named Ludwig von Bertalanffy (1920), concluded that “in order to understand an organized whole we must know the parts and the relationship between them.” The systems theory and systems thinking evolved as a need to unify principles in the natural and social sciences, and since then articles, books, and research documents on general systems theory have proliferated.

1 By Carlos Valverde Senior Officer 1997 The Hague The Netherlands ISNAR

Chester I. Barnard (1938) established a new approach to management. His was a more abstract systems approach which characterized all organizations as cooperative systems.²

Barnard's systems perspective has encouraged management and organizational theorists to study organizations as complex and dynamic wholes instead of as separate pieces. In other words, recognizing that all organizations are systems.

The Systems Approach

The systems concept developed rapidly after World War II. The complexity of warfare and defense systems led to a whole new thinking of strategic management and engineering design. Systems thinking has presented the field of management, in particular strategic planning, with an enormous challenge to identify all relevant parts of an organized activity and to discover how they interact.

The difficulties experienced in managing country-constricted economies and, in particular, individual institutions and those in the public agricultural sector, have led to the development and use of a *systems approach* to problem solving and design.

The systems approach uses the general systems theory³ as an interdisciplinary area of study, based on the assumption that everything is part of a larger interdependent arrangement. The systems approach to problem solving and design (structure and organization, strategic management, strategic planning, monitoring and control, management information systems, etc.), is more a qualitative guide than a quantitative one. Although it uses, as Maciarello, Burke, and Tilley put it, "an instructive way of thinking about managing modern organizations, rather than a collection of final answers."

The systems approach within the strategic management of organizations has evolved as a result of the convincing fact that by putting things together within an organization, the whole is greater than the sum of their parts.

Thanks to the influence of the systems approach, research institution managers now have a better appreciation for the importance of seeing of their institution as a whole, as well as a better appreciation for the NARS concept. For instance, open-system thinking does not permit the manager of a research center to deal with only one aspect of an organizational management spectrum, while ignoring other internal and external factors and realities. These could include such things as the new paradigms related to the environment, and the management of natural resources with both institutional constraints and financial constraints (i.e. new rules imposed by the open, free market economy and the existence of a global agricultural research system).

Levels of Systems

We cannot consider a country as just a collection of systems, as is the general assumption. We need to identify the systems for many purposes, e.g., for their analysis and further planning. The concept that a system has a boundary and works within a hierarchy of other systems becomes paramount in using the systems approach as a methodology in management sciences.

2 A cooperative system is a complex of physical, biological, personal, and social components which are in a specific systematic relationship by reason of the cooperation of two or more persons for at least one definite end.

3 Should be interpreted as the existence of a general theory that applies to all systems.

One of the more important steps in the use of the systems approach is the identification of system hierarchies, which makes it possible to focus on a particular system within the hierarchy of another system. The boundary of a system may exist physically or solely for analytical purposes.

To define a system in terms of its boundary (Murdock and Munson 1980)

- 1 List all the components that make up the system and circumscribe them. Everything within the circumscribed space is called the system, and everything outside it is called the environment.
- 2 List all flows across the boundary. Flows from the environment to the system are inputs. Flows from the system to the environment are outputs.
- 3 Identify all the elements that contribute to the specific goals of the system and include them within the boundary (if they are not already included).

Closed vs Open Systems

There is a well-known typology within the theory of systems, but we will not deal with it here. For our purposes, the concepts of closed and open systems are sufficient. Technically, an agricultural research system is either closed or open. A closed system is a self-sufficient entity, whereas an open system depends on its environment for survival. The management of a closed system is not the same as for an open one (see Figure 1). In practice, it is common to see both systems in place, and this could be called "partially open." Also, some systems are passively influenced by the environment, and others strongly react and adapt to it, these are called "nonadaptive" or "adaptive" agricultural research systems, accordingly.

Along the same lines, systems theory tells us that all agricultural research systems must be open systems because the survival of the organization depends on its interaction with the environment. According to this approach, no staff within an organization is an island nor is an organization or organizational subsystem an island.

For example, national research institutes such as KARI in Kenya and INIA in Uruguay are systems. They are part of larger systems—the countries' entire agricultural research systems. These systems also fall within larger regional or global systems.

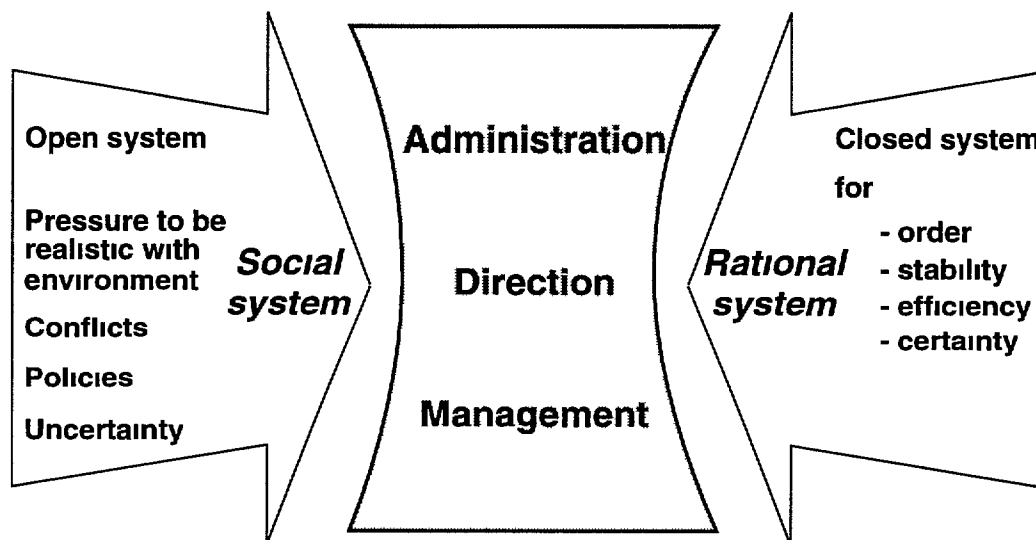


Figure 1 Conflicting pressures on social and rational systems

Following the above, the definition of what constitutes an agricultural research system within a particular country is paramount. It is a good start toward defining the level and hierarchy of the system to which strategic planning is to be applied.

Agricultural Research Institutions Open Systems

Following the systems approach, any agricultural research institution should be considered an open system. It should have the following general characteristics:

- a dimension with a spatial boundary of action and scope
- formed by two or more subsystems
- the subsystems are interrelated and interdependent
- subsystems require inputs to produce outputs/products which form the basis of their existence
- the environment in which the system works determines the extent of its survival

Agricultural research institutions are influenced by external factors. They are therefore dynamic and subject to change over time. There is a history of research organizations which have lost their credibility or failed as a result of being unable to cope and adjust their management and operation to the contingencies of their environment.

The Research Institution as a Production System

Any system can be seen as a production system. The CIPP model, developed in the USA for evaluating educational programs, can be used to analyze agricultural research systems.

CIPP refers to evaluation of the context, inputs, processes, and products. Using the CIPP model, an institution can be analyzed thus:

- The institution exists within a “context” (relevant environment) with its attendant needs, opportunities, and threats
- It needs certain “inputs” (different types of production, management, or financial resources) to carry out its activities
- It develops and carries out certain “processes” (research and other activities)
- It offers certain “products” (information, technology) to beneficiaries or users

From this perspective, an agricultural research institute can be visualized as a knowledge, technology, and service production system, as shown in Figure 2.

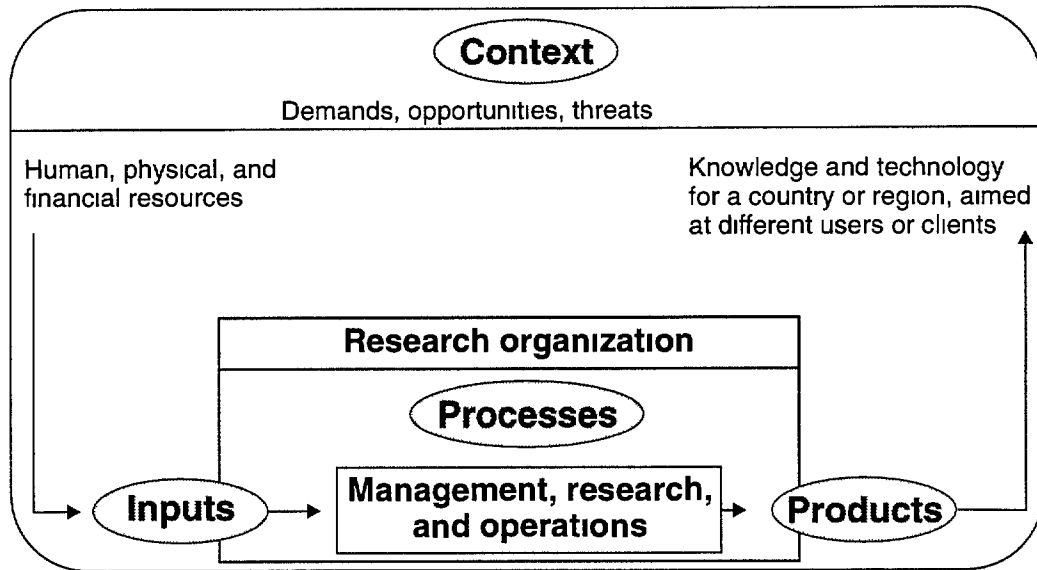


Figure 2 Agricultural research organizations as a production system

In the following sections, you will find the CIPP concept expressed as a model of a NARI or a NARS, and as a conceptual framework for planning using a systems approach

In general, taking into account the concept of inputs/outputs and the systems approach, any agricultural research entity can be presented as a system of processes (subsystems) The subsystems transform the inputs into products or outputs in the form of technologies, services, and knowledge (see Figure 3) The main idea is to present a conceptual pragmatic model, without forgetting that all agricultural research entities carry out complex activities in close relationship and interaction with their particular political, socioeconomic, and environmental circumstances

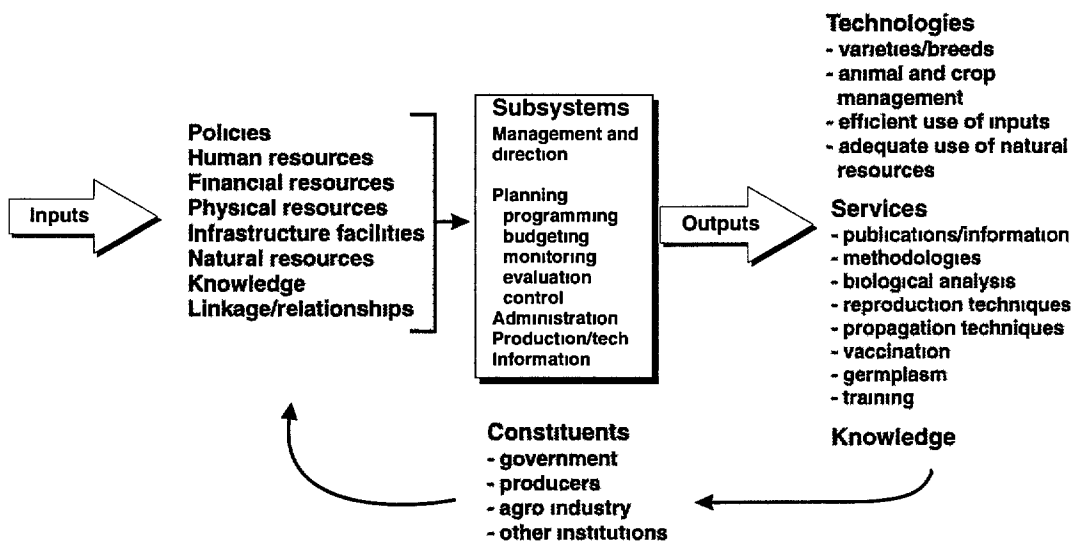


Figure 3 The organizational structure as an open system structure and organization—model

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A National Agricultural Research System (NARS)

Again, all organizations are systems, including all agricultural research organizations. In the systems approach, each system is absorbed by another system, thus the level of analysis determines the dimension of the system.

In its broadest context, the concept of a NARS has been defined by ISNAR as a system which comprises all those organizations of a country, whatever their denomination or structure, whose principal mission is to execute research activities in the different fields of agricultural sciences.

From a practical point of view, the NARS of any country comprises both organizations pertaining to the public and semi-public as well as to the private sectors. Although they adopt different juridical and legal frameworks, structural configurations, and ways of operating, their mandate, or part of their objectives, are aimed at rendering relevant producer-oriented technologies and services. These organizations include universities, NGOs, and private entities whose activities lie within the domain of agricultural research and the transfer of technology.

An organizational system can be generally assessed, analyzed, planned (e.g., strategic planning), and implemented at different levels: the individual who constitutes the basic unit of any organization, the group of organized individuals, as in a department which is comprised of individuals to work jointly on determined tasks, the center, experiment station, group of departments, or other organized units which, combined, accomplish determined tasks, the organization itself, which fulfills a determined mandate or objective at the national level, or the organizations plural which when grouped make up the highest level of analysis.

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Exercise 2. NARS: The systems approach ("trip around the tables" technique)

Phase 1 Group work (25 minutes)

- 1 Form four groups of participants, each electing a rapporteur



- 2 Discuss and respond to the question assigned to your group as noted below. Base your answers on your own experience. The rapporteur compiles the group's responses on the worksheet (handout 1 2 3)

Group assignments

- | | |
|---------|---|
| GROUP A | List the major advantages and disadvantages of the systems approach for national agricultural research institutions |
| GROUP B | List favorable conditions for a successful systems approach for agricultural research |
| GROUP C | Cite the constraints you face managing an open system for agricultural research in your country. How do you minimize and/or overcome these constraints? |
| GROUP D | List the most important personal attributes of a successful manager/leader of an agricultural research system |

Phase 2 "Trip around the tables" (30 minutes)

- 3 The rapporteurs begin the "trip around the tables." They present their group's inputs to the other tables and collect contributions to improve their own list of responses. The rapporteurs have five minutes to visit each table.
- 4 After visiting the three other tables, the rapporteurs go back to their own groups. They share the contributions collected during the "trip," and decide with the group on the responses. The rapporteurs write the results on flipcharts (15 minutes).

Phase 3 Reporting and discussion (30 minutes)

- 5 The rapporteurs present the groups' responses to the audience. Each rapporteur has approximately five minutes to present.
- 6 The trainer provides feedback on the presentations and facilitates a brief discussion.

DAY ONE

Session 3 Diagnosis, Planning, and Implementation

Instructions to Trainers

SESSION 3

14 00 – 15 15 Session 3 Diagnosis, Planning, and Implementation

OBJECTIVE

By the end of this session, the participants will be able to do the following

- Explain the diagnosis, planning, and implementation paradigm to study NARS

Use overhead 1 3 1 to explain the objective

PROCEDURE

Training techniques presentation, plenary discussion

PRESENTATION

(experience) Give a presentation on the DPI paradigm based on handout 1 3 1 Overheads 1 3 2 through 1 3 7 support the presentation Distribute handout 1 3 1 (40 minutes)

EXERCISE 3

Exercise 3 Discussing diagnosis, planning, and implementation (30 minutes)

- 1 Distribute handouts 1 3 2 and 1 3 3 Handout 1 3 2 gives instructions for the exercise Go over the instructions with the participants step by step Ask if clarifications are needed Emphasize participation and remind the participants of the time
- 2 *(process)* Open the discussion for comments to the entire group Display overhead 1 3 8 listing the main issues for discussion
- 3 *(process)* During the discussion, write key responses on a flipchart to reinforce their importance
- 4 *(generalize)* Summarize the discussion Highlight the issues raised regarding diagnosis, planning, and implementation and refer to the flipchart
- 5 Ask the participants questions such as “What did you learn?” to allow discussion of the process (10 minutes)

CLOSURE

Closure (5 minutes)

- 1 *(application)* Ask the participants “What might you do differently in your job as a result of what you have learned?”
- 2 Make a transition to the next session

15 15 – 15 30 Tea/Coffee Break

DAY ONE

Session 3 Summary of Overheads

Objective of Session 3

- Explain the diagnosis planning and implementation paradigm to study NARS

1 3 1

Institutional Change

The DPI paradigm

- Introduction
- Diagnosis
- Planning
- Implementation

1 3 2

Diagnosis

- Evaluate/assess the present institutional capability of the system
- Diagnose the main restrictions weaknesses strengths threats and opportunities
- Prepare options and recommend plan of action for strengthening the system

1 3 3

Planning

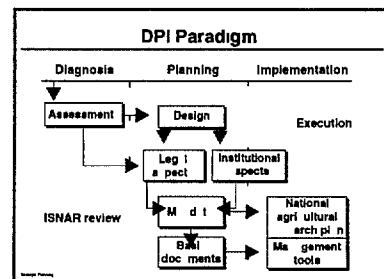
- Design the future system
- Prioritize and plan necessary steps to achieve the desired institutional changes

1 3 4

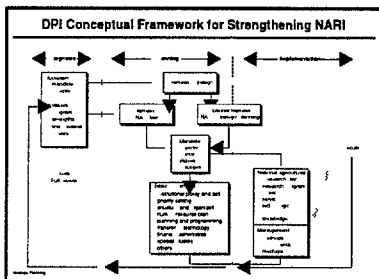
Implementation

- Execute the plan and monitor changes
- Evaluate results experience gained and feedback for improvement

1 3 5



1 3 6



1 3 7

Questions for Discussion

- 1 Have you used the DPI paradigm (or similar one) before?
- 2 State the strengths and weaknesses of the paradigm for farm work
- 3 How do you overcome/limit the weaknesses?
- 4 Do you have alternative paradigm or framework to recommend based on a successful experience?
- 5 What are the implicated issues of a relevant paradigm or framework to study NARS?

1 3 8

Diagnosis, Planning and Implementation¹

Introduction

In a restricted sense, to get a clearer picture of the role of planning in general and strategic planning as a fundamental methodology for long-term planning, it is vital to have some kind of path to follow to create changes in the management and administration of an agricultural research institution. The planning function must be considered as part of the overall process of the management of institutional change.

Several paradigms, approaches, and methodologies have been proposed to carry out this process. The approach chosen is basically in tune with the kind of activities performed by a particular institute. For example, ISNAR, which collaborates with different countries, has adopted the so-called DPI paradigm, or the process of diagnosis, planning, and implementation.

Under particular circumstances, an institute considering DPI can decide to concentrate on one of the three steps (diagnosis, planning, or implementation). But for a strategic planning exercise with good results, it is recommended that all the steps be carried out sequentially.

Diagnosis

The *diagnostic* phase starts with a diagnostic review of the NARS. The weaknesses, strengths, threats, and opportunities of the system are identified. A good diagnosis is like an x-ray of the system, by which the decision makers and planners can prioritize critical areas for intervention and change.

Several approaches and methodologies have been proposed to diagnose a research system. These include ISNAR's framework for NARS review, ATMS, INTERPAKS, and SCAP².

The framework for ISNAR's diagnosis includes the experience and synthesis of its work in over 50 developing countries. These reviews identify the constraints of the systems and critical areas for intervention. They also define a range of options and recommend a plan of action. The diagnosis, which uses a systems approach, evaluates the organizational and managerial processes within the research institutions, as well as the functioning of all their components.

Planning

The *planning* phase is vital in developing the renewed capacity of the institution. In many cases, a complete overhaul of the research system is essential to adapt it to the new political, socioeconomic, and environmental challenges being faced by NARS today.

Planning in general, and strategic planning in particular, play an important role in this phase. The main intention of the planning phase is to translate the recommendations of the diagnostic

1 By Carlos Valverde, Senior Officer, 1997, The Hague, The Netherlands, ISNAR.

2 For complete information on these approaches see *Methods for diagnosing research system constraints, Volume I: Diagnosing agricultural research constraints*, The Hague, The Netherlands, ISNAR, Edited by R.G. Echeverria.

phase into a coherent, specific, system-building design (some experts also call the planning phase the planning and design phase) The adjustment or modification of the institution's mandate, objectives, policies, strategies, values, and necessary plans will be developed through a strategic planning exercise This will provide the basis for institutional change within the NARS

The planning phase equips the decision makers of the NARS with the necessary plan(s), guidelines, methods, and tools for better negotiation with their governments and donors, which occurs in the next phase

Implementation

The *implementation* phase is perhaps the most difficult part of the whole process Often planning and implementation overlap The managers, administrators, and researchers of the NARS take the lead in this phase The main outcome of this phase is the institutionalization of the improved or renewed direction, administration, and management of the institute

Figure 1 depicts the framework of the DPI paradigm Figure 2 presents an actual example of the scheme of the paradigm used by ISNAR in strengthening a NARI

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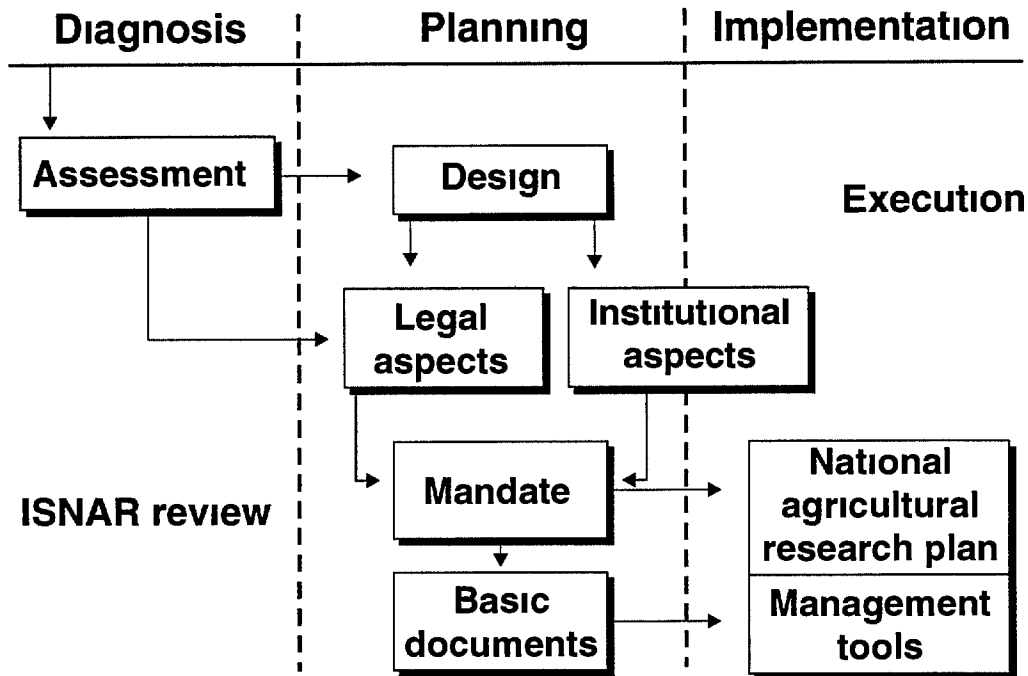


Figure 1 DPI paradigm

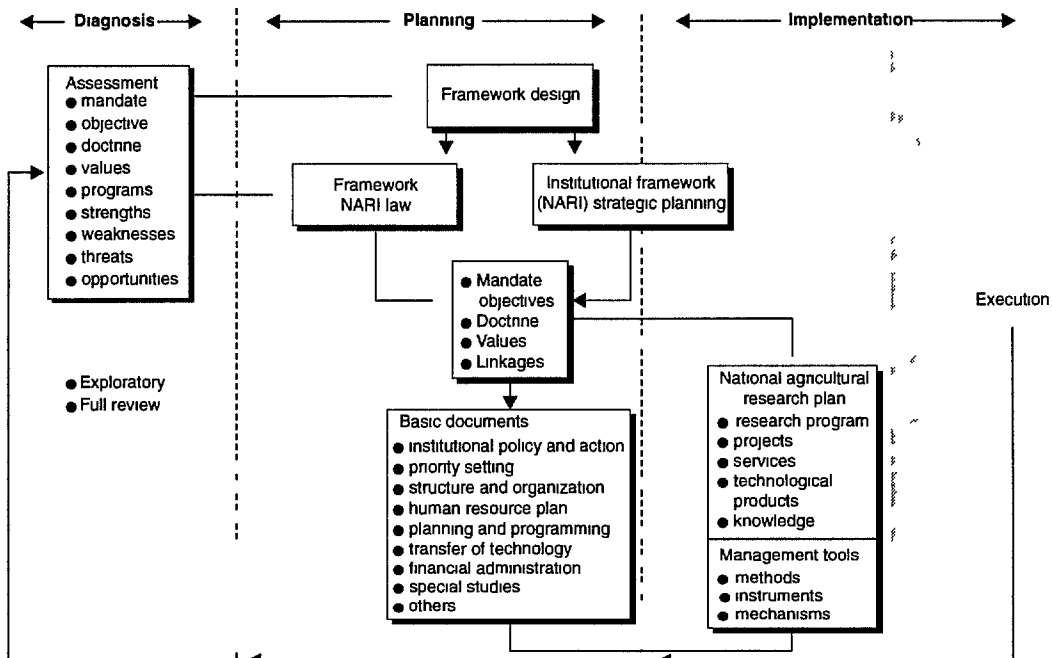


Figure 2 DPI conceptual framework used when strengthening a national agricultural research institute (NARI)

Exercise 3. Discussing diagnosis, planning, and implementation (plenary discussion)

- 1 The trainer facilitates a discussion on diagnosis, planning, and implementation. Share your experience with the group. You may want to use handout 1 3 3 to write down some comments.
- 2 Guiding questions for this plenary discussion are as follows (30 minutes)
 - Have you used the DPI paradigm (or a similar one) before?
 - State strengths and weaknesses of the paradigm or similar framework.
 - How do you overcome/minimize the weaknesses?
 - Do you have an alternative paradigm or framework to recommend based on a successful experience?
 - What are the anticipated results of a relevant paradigm or framework to study NARS?
- 3 The trainer summarizes the discussion, highlighting the issues raised and referring to the flipchart, and closes the session.

DAY ONE

Session 4 Conceptual Framework for Planning

Instructions to Trainer

SESSION 4

15 30 – 17:00 Session 4 Conceptual Framework for Planning

OBJECTIVE

By the end of this session, the participants will be able to do the following

- Present a synthesis of the strategic approach for research planning at the institutional and program levels

Use overhead 1 4 1 to present the objective

PROCEDURE

Training technique presentation, plenary discussion

PRESENTATION

(experience) Give a brief presentation focusing on the need for a conceptual framework for planning Use handout 1 4 1 as background information Use overheads 1 4 2 through 1 4 17 to support the presentation Distribute handout 1 4 1 (15 minutes)

EXERCISE 4

Exercise 4 Discussing conceptual framework for planning (1 hour 15 minutes)

- 1 Distribute handouts 1 4 2 and 1 4 3 Handout 1 4 2 gives instructions for the exercise Go over the instructions with the participants step by step Ask if clarifications are needed (5 minutes)

Phase 1 Individual exercise (25 minutes)

- 2 *(process)* Ask the participants to read handout 1 4 1 They can use handout 1 4 3 to write down some comments (25 minutes)

Phase 2 Plenary discussion (35 minutes)

- 3 *(process)* Open the group discussion Display overhead 1 4 18 listing the questions for discussion Facilitate discussion (10 minutes)
- 4 *(generalize)* Point out important lessons learned during this discussion (5 minutes)
- 5 *(application)* At the end of the exercise, ask the participants questions such as “What did you learn that you can apply in your organization?” List a few examples (10 minutes)

CLOSURE

Closure (5 minutes)

(application) Ask the participants to tell one of their neighbors “How he/she will apply the lessons learned in his/her job as result of this session?”

Make a transition to the last session

17 00 – 17 30 Feedback on the Day’s Activities and PAPA

OBJECTIVES

By the end of the session participants will be able to do the following

- Provide feedback on the day’s activities
- Consider possible actions they would like to implement in their own organizations

PROCEDURE

Training technique individual exercise

Highlight positive and negative points of the day Note areas that may need additional attention in the workshop Participants can write some strengths and weaknesses of this day on handout 1 4 4, and use handout 1 4 5 to facilitate their task (15 minutes)

PAPA

(application) Ask the participants to take some time to jot down some “action ideas” they may have for themselves as a result of today’s activities They can use handout 1 4 6 (15 minutes)

DAY ONE

Session 4 Summary of Overheads

Objective of Session 4

- Present a synthesis of the strategic approach for research planning at institutional and program levels

1 4 1

Conceptual Framework for Planning

- 1 Definition and characteristics
- 2 Principles
- 3 Planning levels types and products
- 4 Strategic approach to planning
- 5 Political dimension

1 4 2

Definition of Planning for Agricultural Research

A process to rationally combine organizational resources and activities to allow an institutional center program project, or activity to achieve certain objectives in a specific context or environment

1 4 3

Six Characteristics of Planning

- 1 Rational in selecting options
- 2 Coherent in setting objectives
- 3 Congruent objectives resources and policies
- 4 Strategic in reaching objectives
- 5 Forward-looking outlines for the preferred future
- 6 Structured elements for political viability of plan

1 4 4

General Planning Principles

- ▶ Planning takes precedence
- ▶ Objectives organized hierarchically
- ▶ Potential for transformation
- ▶ Efficiency and effectiveness

1 4 5

Specific Planning Principles

- ▶ Participative
- ▶ Coordinated
- ▶ Integrated (vertically and horizontally)
- ▶ Continuous

1 4 6

Organizational Planning Levels

Program level	System level
Project level	Institutional level
Activity level	Center/experiment station level
Researcher level	Program level

1 4 7

Decision Making Levels—Types of Planning

Strategic planning - top management	Diagnostic/prognostic process long term
Tactical planning - middle management	Organizational process medium term
Operational planning - operational management	Practical process short term

1 4 8

Relationships between Types of Planning

Relationships

Management level | Objectives | Type of plan | Time horizon

Top Middle Operational | Institutional Functional Operational | Strategic Tactical Operational | Long Medium Short

1 4 9

Contributions of the Strategic Approach

- ✓ Analysis of external environment
- ✓ Timely identification
- ✓ Goal setting
- ✓ Identification of needs
- ✓ Realistic objectives
- ✓ Consensus through participatory process
- ✓ Consideration of disciplinary procedures and multidisciplinary aspects
- ✓ Building of a culture
- ✓ Identification of intelligent investments
- ✓ Participatory management mechanism

1 4 10

Implementation of Strategic Plan

1 4 11

Why Strategic Planning?

Strategic planning in NARs emphasizes

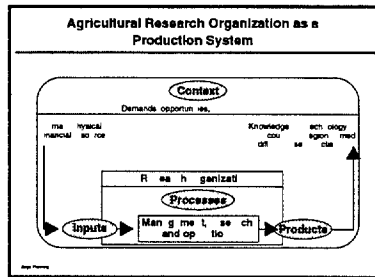
- ✓ Diagnosis of the environment
- ✓ Identification of clients beneficiaries and needs
- ✓ Consideration in characterization of the demand
- ✓ Consideration of required institutional products

1 4 12

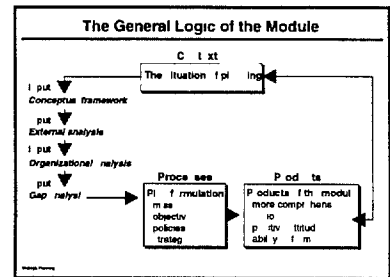
Strategic Intention in Planning

- Future vision
- Confidence in its usefulness
- Political will
- Political decision
- Political courage

1 4 13



1 4 14



1 4 15

Essential Features of Planning

Planning a process of thinking analysis and decision making that determines

- Who are the clients?
- What are we trying to achieve?
- What resources do we have?
- What challenges/constraints exist in our management environment?
- What action plan is resulting from analysis?

1 4 16

Advantages of Strategic Planning

- Greater purpose and direction for the whole agency
(design the future in a way that will benefit)
- Sharing of common goals by various component units
(develop the management approach)
- Creation of agency sensitive to external environment
- Identification of strategies to react to that environment

Provision of step-by-step process toward the future

1 4 17

Questions for Discussion

- Have you carried out a strategic planning process in your organization? What were the steps you took? How effective were they?
- Have you confronted any constraints in conducting strategic planning? How did you overcome them?
- What would you consider to be some advantages and disadvantages of conducting strategic planning in your organization?

1 4 18

Conceptual Framework for Planning¹

Planning has become a primary management function, as much for government as for research organizations. Planning allows people to organize resources and activities to achieve previously defined objectives, and to stay in tune with the needs and demands of the environment.

Definition, Philosophy, Principles, and Aspects of Planning

Planning is the process of coping with uncertainty by formulating future courses of action to achieve specific results. Planning enables human beings and institutions to achieve missions, goals, and objectives by providing pathways from a concept to reality.

The modern vision of planning is a mix of philosophical, technical, social, economic, and political concepts.

There are different methods and techniques, based on statistical projections, estimations, and assessments, to look into the future, in terms of objectives, goals, policies, and programs. Although there are many different definitions of planning, most include several of the six features below.

Six Characteristics of Planning

- 1 *rationality in the selection of options*
 - 2 *coherence in the formulation of objectives*
 - 3 *congruence among objectives, resources, and policies*
 - 4 *strategies for reaching the objectives*
 - 5 *outline of the preferred future*
 - 6 *elements for the political viability of the plan*
-

For the case of agricultural research, planning is understood as a process to rationally combine organizational resources and activities to allow an institution, center, program, or project to achieve certain objectives and results in a specific context or environment.

Planning has become a whole new “science” with applications for practically any human activity. Following are some common philosophical concepts of planning described by Oliveira (1992).

Minimum Satisfaction Philosophy Views planning as a tool to obtain the minimum satisfaction acceptable to the institution and its environment. Only organizations guided by a “logic of survival” opt for this philosophy, which doesn’t allow them to take advantage of many opportunities which present themselves.

Adaptation Philosophy Seeks to produce the changes needed to adjust an institution to its changing environment, especially in times of significant and rapid external changes. The emphasis is on the processes rather than on the products of planning. It assumes that a change process should train, motivate, and integrate the human talents of an organization at all levels.

Optimization Philosophy Optimizes the decision-making process by using quantitative models. This approach began with the development of high capacity computers. The main problem with this philosophy is that it doesn’t allow for qualitative variables or judgments, thus disregarding the intuition and creativity necessary to visualize and interpret oncoming trends.

The authors of this module believe that the most appropriate philosophy for planning is one which responds to the needs of the organization at a given moment and in a given political-institutional context. They do not recommend adhering to one specific planning philosophy.

¹ Extracted and adjusted from J. E. Borges Andrade, M. D. Escobar, J. Palomino, R. Saldanã, J. Souza Silva, 1995. Strategic planning in agricultural research management. Module 2 of the series *Training in planning, monitoring and evaluation for agricultural research management*. Cali, Colombia: ISNAR.

Agricultural research institutions will usually want to adopt a planning philosophy with the following characteristics

- flexibility to allow innovation and adaptation
- compatibility with the environment
- long-term commitment
- participation of institution's human resources
- multiple approaches
- decentralization of processes
- consistency with the prevailing management model
- congruence and integration of planning activities with monitoring and evaluation

Planning is carried out according to certain general and specific principles. According to Oliveira (1992), general planning principles include

- planning—should precede other activities, considering its potential for organizing and directing a course of action for the attainment of objectives
- objectives—should be organized in a hierarchical order
- transformation potential—recognizes the potential of planning to support the transformation of most other activities
- efficiency and effectiveness—assumes that planning must aim to maximize the relevance of activities and the value of results in relation to invested resources

According to the same author, more specific planning principles are

- participation—as a characteristic of strategic planning, participation emphasizes the importance of the process over the product, training, education, and motivation achieved in a participatory planning process can eventually become more important than the plan, program, or project itself
- coordination—recognizes the interdependence of institutional components and the activities
- vertical and horizontal integration—emphasizes the need to integrate both the different administrative units and the different management levels
- continuity—points out the long-term commitment of planning to the sustainability of the organization's activities

Planning is a complex process that involves several organizational components. Oliveira (1992) divides planning into five types, according to the focus of the activity. Planning can relate to the

- 1 ends
- 2 means
- 3 organization
- 4 resources
- 5 implementation and control

Planning Types and Products

A common problem in the discussion about types of planning is the supposed dichotomy between short- and long-term planning as if there were an irreconcilable difference between them. On the contrary, planning for the short- medium- and long-term should be interdependent.

The vision of the future in the strategic, long-term plan can only become reality if the tactical plans for the medium-term are derived from it, and the operational plans for the short-term are derived from the tactical plans. The future is built on the consistency amongst the three types of plans: the operational plans which are derived from the tactical plans, which, in turn, are obtained from the strategic plan.

“The future is built upon operational plans, appropriately derived from tactical plans, which, in turn, are adequately derived from the strategic plan. The consistency between the three types of plans is the base for the construction of the future.”

The types and products of planning are directly linking levels (Oliveira 1992). Every institution has three basic decision-making levels: (a) top management—the strategic level, (b) middle management—the tactical level, and (c) the operational level. Table 1 shows the associated

types of planning

Planning, in the broadest sense of the word, occurs at all levels. For example, researchers carry out project planning, and heads of experimental stations conduct operational and tactical planning. Therefore, even though the leadership for strategic planning is at the level of top management, in principle, all levels should participate in a top-to-bottom and bottom-to-top process.

These are the levels at which planning occurs in agricultural research in most countries:

- 1 system level—“system” refers to all organizations that carry out research in a country
- 2 institutional level—“institution” as an agricultural research entity
- 3 center level—“center” corresponds to a national or regional entity, or to an experimental station, which is part of an agricultural research institution
- 4 program level—“program” as a set of projects and activities of agricultural research, made up of a series of subprograms, projects, and activities, oriented to the achievement of the program’s objectives
- 5 project level—“project” as a set of interrelated activities with a common purpose
- 6 activity level—“activity” as the basic research unit, an experiment that forms part of a project is an example of a research activity

Table 1 Decision-making Levels and Types of Planning

Decision-making level	Type of planning	Characteristics
Top management strategic level strategic decisions	Strategic planning	Diagnostic and prognostic process that considers the institution as a whole as an open system and in relation to its environment Long term objectives goals policies priorities and strategies (5 15 years) which indicate the tactical planning More comprehensive with greater risks and less flexibility than tactical and operational planning
Middle management tactical level tactical decisions	Tactical planning	Organizational process that considers the subsystems of the institution Medium term objectives goals, policies, priorities, and strategies (1 5 years), derived from the strategic plan and oriented to the operational planning More comprehensive, with greater risks and less flexibility than operational planning
Operations operational level operational decisions	Operational planning	Practical process that considers the individual activities of each subsystem of the institution Short term objectives goals policies priorities and strategies (1 month to 1 year) derived from the tactical plan, to be implemented Not as comprehensive fewer risks

The Strategic Approach to Planning

“Strategic management” does not replace “traditional management” On the contrary, the strategic approach strengthens and modernizes existing management by providing a new direction

to its tactical and operational dimensions

In the past the concept of strategy was associated with military activities In the 1960s, the term was incorporated into the language of business In the 1970s, the strategic approach was introduced into management science The first to use the term “strategic management,” was H Igor Ansoff, of the University of San Diego Planning, according to the strategic approach, includes the vision, concepts, and methodology necessary to handle the complexity and changing dynamics of the environment

A more comprehensive vision of the strategic approach as applied to planning can be found in Pfeiffer, Goodstein, and Nolan (1985), David (1988), Rue and Holland (1989), Oliveira (1992), and Certo and Peter (1993) When applied to planning, the strategic approach directs managers’ attention to a number of issues Managers must conduct both an analysis of their organization’s external environment to identify opportunities and threats, as well as an internal analysis to identify the organization’s strengths and weaknesses This includes gap analysis to identify difficulties that the organization must overcome to advance toward a desired situation

Managers need to consider the importance of a system centered on the needs of clients, users, and partners, for research institutions, this means analyzing the situation of the users, their need for new technology, and their ability to adopt it, as a base for formulating research objectives They also need to conduct a review and formulation of the organization’s mission, its objectives, policies, and strategies This implies a consensus, which can be reached through a strategic planning exercise All parties involved should participate in the search for a consensus, both within the institution (top management, middle management, and researchers) as well as clients, users,

beneficiaries, and partners This consensus is very important to obtain the political support and the necessary resources and commitment to put the plan into action

The need for long-term commitment must also be examined, as well as the challenges posed by a socially, economically, politically, and technologically complex environment To deal with the complexity of the environment interdisciplinary approaches and multidimensional perspectives should be considered

Managers need to then mobilize intelligence and creativity to promote continuous change and construct a "strategic culture" with the ability to adapt to rapidly changing conditions "Intelligent investments" can be made, for example, in the training and development of human resources within the organization

Finally, the strategic approach directs managers' attention toward participatory management models and processes, and mechanisms that allow agricultural research clients, users, and partners to participate in defining and assessing policies and priorities

The strategic approach has great potential to improve the planning of agricultural research Research institutions produce knowledge, information, and technologies, which often have a relatively limited market demand They are "public goods" which have great value for society but which cannot be patented or sold

Strategic planning in agricultural research emphasizes the diagnosis of the environment and the clear identification of the needs of clients, beneficiaries, and users It seeks consensus in the characterization of the demand and, therefore, in what will be the institutional products, to ensure that these products are actually required by users

Strategic planning emphasizes the need to identify changes in the environment, not just in terms of the current situation, but also with special interest in the longer term This is of particular significance for research institutions, because their activities must always try to be on the frontiers of knowledge and to be oriented toward future needs

In the field of agricultural research, change is frequent and rapid Innovation may affect many production sectors If institutions, particularly those in developing countries, do not take part in this rapid process of innovation, they will produce obsolete technologies and lose credibility and importance in society Strategic planning can help institutions adapt to changes, prepare for the future, and improve their sustainability and overall competence

Decentralization from National to Regional Levels

The institutional structure of agricultural research in Latin America is in a process of transformation In the past, centralized organizations predominated, in which the national institutes were responsible for planning and carrying out all research The planning unit was usually the national program for an animal or plant species (e.g. the national rice program) The national program dictated the operational policies to the regional offices, such as the regional research centers and experimental stations

Today, however, the modernization of governments is characterized by decentralization, opening the path to regional planning, which is usually assigned to the regional research center This new structure poses a question To what extent can planning be carried out in the central offices of the national institutes without limiting the autonomy of the regional centers? The answer becomes even more complex when other actors such as the private sector and universities, enter the scene This question does not have a definite answer because the field of action of each of the players has not yet been defined However, as a working hypothesis, the framework as seen in Table 2 can be suggested

Table 2 Framework for Levels of Planning Research

Authority	Level of Planning	Instruments and/or environments
National system	<ul style="list-style-type: none"> ● Global policies ● National strategy 	<ul style="list-style-type: none"> ● Market trends ● Scientific and technological trends
National institute	<ul style="list-style-type: none"> ● Broad strategic areas 	<ul style="list-style-type: none"> ● National budget ● Macro policies ● Sectoral policies ● Institutional policies
Regional systems	<ul style="list-style-type: none"> ● Specific areas 	<ul style="list-style-type: none"> ● Programs ● Projects

Agricultural research planning at the national system level should include analyses of major international trends in the market (demand) and in science and technology (supply). The strategic research areas in which the country has a relative advantage can be converted into a comparative advantage through the development of human resources. There should be a clear relationship between macro and sectoral policies.

The national institute should be responsible for planning the broad strategic areas—to formulate norms on financial resource distribution, regional priorities, training, and infrastructure investment. For example, if the national system has identified organic agriculture as a priority for exports, the national institute should identify the strategic areas for implementing this type of agriculture, such as the biological control of pests and plant diseases.

The regional centers should carry out operational planning by designing appropriate programs and projects. An example would be an entomology program with projects for identifying and solving specific pest problems.

The Political Dimensions of Planning

Although planning potentially strengthens the management of agricultural research institutions, without the political-institutional support of top and middle management, the activity becomes sterile.

An integrated system of planning, monitoring, and evaluation (PM&E) works as a kind of “circulatory system” for strategic information, feeding the management of decision making at all levels. In the long run, one of the most revealing indicators of the success of PM&E is the degree to which top management has supported it.

Only when top management is conscious and convinced of the critical importance of PM&E can it offer all its potential to institutional sustainability and competition.

“An integrated system of PM&E works as a kind of ‘circulatory system’ for management information, feeding decision making at all levels.”

The argument in favor of an integrated system of PM&E goes beyond simple political support. Since this sequence tries to demonstrate the need to introduce the strategic approach to planning, the agreement is that it requires the formulation of a “strategic intention” (de Souza 1993).

Components of “strategic intention in planning”

- future vision
 - confidence of its usefulness
 - political support
 - political decision
-

The strategic intention is a combination of the following

- *vision* of the future for planning oriented by the strategic approach
- *confidence* that the strategic approach applied to planning will strengthen management
- *political will* to transform the vision into reality
- *political decision* to put the strategic approach to planning into practice
- *political courage* to face inevitable risks

The strategic approach in planning, per se, does not work miracles. It is necessary for top and middle management to be convinced of its potential. This means that the strategic approach has two dimensions, an instrumental and a behavioral one. The instrumental dimension includes conceptual and methodological elements and instruments. The behavioral dimension is essential for building the "strategic intention" necessary for success.

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Exercise 4. Discussing conceptual framework for planning (plenary discussion)

- 1 The trainer facilitates a discussion on the conceptual framework for planning. Share your experience with the group. You may want to use handout 1 4 3 to write down some comments.
- 2 Guiding questions for this plenary discussion are as follows (35 minutes)
 - Have you carried out a strategic planning process in your organization? What were the steps you took? How effective were they?
 - Have you confronted any constraints in conducting strategic planning? How did you overcome them?
 - What would you consider to be some advantages and disadvantages of conducting strategic planning in your organization?
- 3 The trainer summarizes the discussion, highlighting the issues raised and referring to the flipchart, and closes the session.

Strengths and Weaknesses

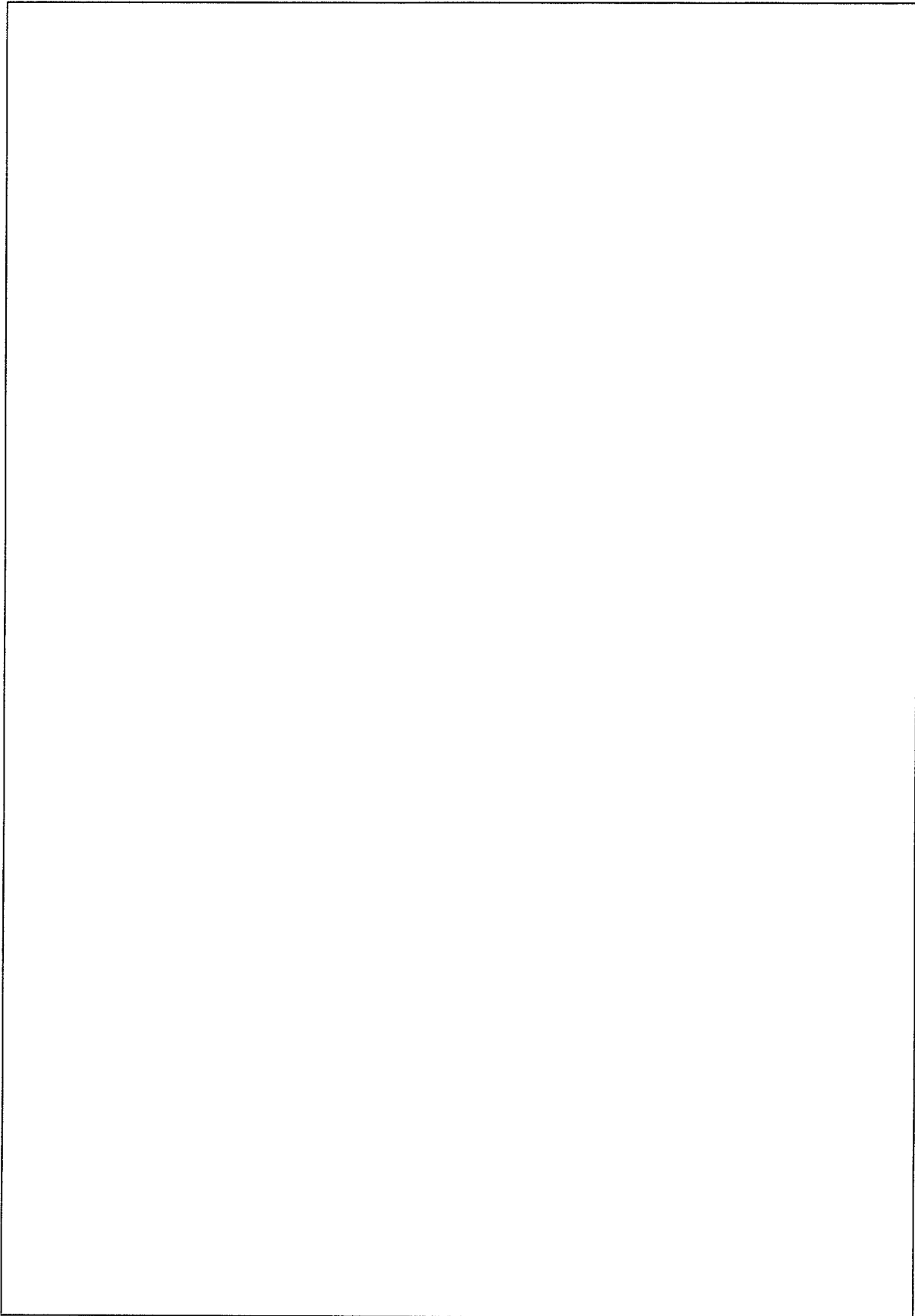
- Please list what you consider to be three strengths of day one

1
2
3

- Please list what you consider to be three weaknesses of day one

1
2
3

- **Suggestions for improvements**



Guidelines to Provide Feedback on the Workshop

1 The Module

Content

- usefulness/relevance
- amount of information

Structure

- sequence
- duration
- balance between trainers' and trainees' participation
- instructions to trainers
- visual aids
- handouts, exercises
- extra readings
- PAPA
- evaluation

2 Process training techniques and direction

- usefulness/relevance/effectiveness
- group interaction
- clarity of questions/exercise instructions
- opening and closure of the days

3 Trainers', facilitators', and trainees' performance

- presentation/communication skills
- interaction/effective participation
- punctuality/interest/commitment/willingness to facilitate learning/willingness to participate
- other attitudes

4 Logistical support

- organization
- accuracy
- punctuality
- willingness to assist participants
- services provided in general

5 **Workshop environment**

- physical (training facilities, training material, hotel facilities in general)
- psychological (personal feelings such as self-motivation, interest, satisfaction, self-achievement)
- social (development of friendship, relaxed, comfortable among participants, etc)

6 **Workshop results/outputs**

- personal and professional assessment
- recommendations

7 **General comments**

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FIRST STAGE

PAPA - ideas for action items

Date _____

Workshop title SADC/ESAMI/ISNAR Workshop on Strategic Planning

Date/Venue _____

Name _____

Organization _____

Ideas I would like to try when I return to work at my research institute, based on what I have learned in this training workshop

Note You can use the workshop objectives what you learn during the workshop the handouts conversations with participants and trainers etc to come up with ideas

DAY TWO

Strategic Planning

DAY TWO — Overview

Objectives

By the end of the day the participants will be able to do the following

- 1 Explain the process of strategic planning by listing the steps and discussing their importance to the process
- 2 Discuss critical issues in the management of planning
- 3 Explain external, organizational, and gap analysis
- 4 Demonstrate an internal analysis of an institution
- 5 Identify and categorize the gaps

Handouts

- 2 5 1 Overview of Day Two
- 2 5 2 Tentative Schedule of Day Two
- 2 5 3 A Guide to Strategic Planning A Conceptual Model (text)
- 2 5 4 Exercise 5 How to Conduct Strategic Planning Studying a Conceptual Model
- 2 5 5 Exercise 5 Worksheet
- 2 6 1 Exercise 6 How to Approach Critical Issues in the Management of Planning
- 2 6 2 Exercise 6 Worksheet
- 2 6 3 Management Issues (text)
- 2 7 1 External Analysis (text)
- 2 7 2 Organizational Analysis (text)
- 2 7 3 Gap Analysis (text)
- 2 7 4 Exercise 7 External, Organizational, and Gap Analysis
- 2 7 5 Exercise 7 Worksheet Identification of Trends, Opportunities, and Threats
- 2 7 6 Exercise 7 Worksheet Identification of Institutional Strengths in Relation to the External Environment
- 2 7 7 Exercise 7 Worksheet Identification of Institutional Weaknesses in Relation to the External Environment
- 2 7 8 Exercise 7 Worksheet Identifying, Analyzing, and Priority Setting for Gaps
- 2 7 9 Strengths and Weaknesses of Day Two
- 2 7 10 Guidelines to Provide Feedback on the Workshop
- 2 7 11 PAPA—First Stage

Strategic Planning

DAY TWO — Tentative Schedule

08 30 – 09 00 **Opening of the Day's Activities**

09 00 – 10 30 **Session 5 Strategic Planning**
(Exercise 5)

10 30 – 10 45 Tea/Coffee Break

10 45 – 13 00 **Session 6 Management Issues**
(Exercise 6)

13:00 – 14:00 Lunch

14 00 – 15 15 **Session 7 External, Organizational, and Gap Analysis**
(Presentation and exercise 7)

15 15 – 15 30 Tea/Coffee Break

15 30 – 17 00 **Session 7 (Continued)**

17 00 – 17 30 **Feedback on the Day's Activities and PAPA**

Strategic Planning

DAY TWO — Checklist for Trainers

Handouts

	Yes ✓	No ✓
2 5 1 Overview of Day Two	<input type="checkbox"/>	<input type="checkbox"/>
2 5 2 Tentative Schedule of Day Two	<input type="checkbox"/>	<input type="checkbox"/>
2 5 3 A Guide to Strategic Planning A Conceptual Model (text)	<input type="checkbox"/>	<input type="checkbox"/>
2 5 4 Exercise 5 How to Conduct Strategic Planning Studying a Conceptual Model	<input type="checkbox"/>	<input type="checkbox"/>
2 5 5 Exercise 5 Worksheet	<input type="checkbox"/>	<input type="checkbox"/>
2 6 1 Exercise 6 How to Approach Critical Issues in the Management of Planning?	<input type="checkbox"/>	<input type="checkbox"/>
2 6 2 Exercise 6 Worksheet	<input type="checkbox"/>	<input type="checkbox"/>
2 6 3 Management Issues (text)	<input type="checkbox"/>	<input type="checkbox"/>
2 7 1 External Analysis (text)	<input type="checkbox"/>	<input type="checkbox"/>
2 7 2 Organizational Analysis (text)	<input type="checkbox"/>	<input type="checkbox"/>
2 7 3 Gap Analysis (text)	<input type="checkbox"/>	<input type="checkbox"/>
2 7 4 Exercise 7 External, Organizational, and Gap Analysis	<input type="checkbox"/>	<input type="checkbox"/>
2 7 5 Exercise 7 Worksheet Identification of Trends, Opportunities, and Threats	<input type="checkbox"/>	<input type="checkbox"/>
2 7 6 Exercise 7 Worksheet Identification of Institutional Strengths in Relation to the External Environment	<input type="checkbox"/>	<input type="checkbox"/>
2 7 7 Exercise 7 Worksheet Identification of Institutional Weaknesses in Relation to the External Environment	<input type="checkbox"/>	<input type="checkbox"/>
2 7 8 Exercise Worksheet Identifying, Analyzing, and Priority Setting for Gaps	<input type="checkbox"/>	<input type="checkbox"/>
2 7 9 Strengths and Weaknesses of Day Two	<input type="checkbox"/>	<input type="checkbox"/>
2 7 10 Guidelines to Provide Feedback on the Workshop	<input type="checkbox"/>	<input type="checkbox"/>
2 7 11 PAPA—First Stage	<input type="checkbox"/>	<input type="checkbox"/>

Overheads

2 5 1 Objectives of Day Two	<input type="checkbox"/>	<input type="checkbox"/>
2 5 2 Schedule of Day Two	<input type="checkbox"/>	<input type="checkbox"/>
2 5 3 Objective of Session 5	<input type="checkbox"/>	<input type="checkbox"/>
2 5 4 What Is Strategic Planning?	<input type="checkbox"/>	<input type="checkbox"/>
2 5 5 Strategic Planning—Major Characteristics	<input type="checkbox"/>	<input type="checkbox"/>
2 5 6 Strategic Planning Process—Flow Chart	<input type="checkbox"/>	<input type="checkbox"/>
2 5 7 Strategic Planning Process—Conceptual Model	<input type="checkbox"/>	<input type="checkbox"/>
2 5 8 Strategic Planning Process—Six Steps	<input type="checkbox"/>	<input type="checkbox"/>
2 5 9 Step 1 Diagnosis/Analysis	<input type="checkbox"/>	<input type="checkbox"/>
2 5 10 Step 2 Establishment of a Vision	<input type="checkbox"/>	<input type="checkbox"/>
2 5 11 Step 3 Identification of Gaps	<input type="checkbox"/>	<input type="checkbox"/>
2 5 12 Step 4 Definition of Strategic Change	<input type="checkbox"/>	<input type="checkbox"/>

	Yes ✓	No ✓
2 5 13 Step 5 Determination of Changes and Mechanisms	<input type="checkbox"/>	<input type="checkbox"/>
2 5 14 Effectiveness of a Strategic Planning Process	<input type="checkbox"/>	<input type="checkbox"/>
2 6 1 Objective of Session 6	<input type="checkbox"/>	<input type="checkbox"/>
2 7 1 Objectives of Session 7	<input type="checkbox"/>	<input type="checkbox"/>
2 7 2 External Analysis	<input type="checkbox"/>	<input type="checkbox"/>
2 7 3 Prospective Analysis	<input type="checkbox"/>	<input type="checkbox"/>
2 7 4 Purposes of External Analysis	<input type="checkbox"/>	<input type="checkbox"/>
2 7 5 Methodologies for External Analysis	<input type="checkbox"/>	<input type="checkbox"/>
2 7 6 Relevant External Environment	<input type="checkbox"/>	<input type="checkbox"/>
2 7 7 Critical External Factor	<input type="checkbox"/>	<input type="checkbox"/>
2 7 8 Threat	<input type="checkbox"/>	<input type="checkbox"/>
2 7 9 Interdisciplinary Coordinating Committee	<input type="checkbox"/>	<input type="checkbox"/>
2 7 10 Methodology for Prospective External Analysis	<input type="checkbox"/>	<input type="checkbox"/>
2 7 11 Summary Steps in External Analysis	<input type="checkbox"/>	<input type="checkbox"/>
2 7 12 Organizational Analysis	<input type="checkbox"/>	<input type="checkbox"/>
2 7 13 Methodology for Organizational Analysis	<input type="checkbox"/>	<input type="checkbox"/>
2 7 14 Steps in Organizational Analysis	<input type="checkbox"/>	<input type="checkbox"/>
2 7 15 Organizational Inputs	<input type="checkbox"/>	<input type="checkbox"/>
2 7 16 Analyzing Organizational Inputs	<input type="checkbox"/>	<input type="checkbox"/>
2 7 17 Gap Analysis	<input type="checkbox"/>	<input type="checkbox"/>
2 7 18 Definition of Gap Analysis	<input type="checkbox"/>	<input type="checkbox"/>
2 7 19 Gap Analysis Should Answer	<input type="checkbox"/>	<input type="checkbox"/>
2 7 20 Gaps	<input type="checkbox"/>	<input type="checkbox"/>
2 7 21 Gap Identification and Analysis	<input type="checkbox"/>	<input type="checkbox"/>
2 7 22 Format for Identifying, Analyzing, and Priority Setting	<input type="checkbox"/>	<input type="checkbox"/>
2 7 23 Process of Generating Information to Formulate a Strategic Plan	<input type="checkbox"/>	<input type="checkbox"/>
2 7 24 Sample Result Exercise 7 Identification of Trends, Opportunities, and Threats	<input type="checkbox"/>	<input type="checkbox"/>
2 7 25 Sample Result Exercise 7 Identification of Institutional Strengths in Relation to the External Environment	<input type="checkbox"/>	<input type="checkbox"/>
2 7 26 Sample Result Exercise 7 Identification of Institutional Weaknesses in Relation to the External Environment	<input type="checkbox"/>	<input type="checkbox"/>
2 7 27 Sample Result Exercise 7 Identifying, Analyzing, and Priority Setting for Gaps	<input type="checkbox"/>	<input type="checkbox"/>

Materials

● Overhead projector	<input type="checkbox"/>	<input type="checkbox"/>
● Projector screen	<input type="checkbox"/>	<input type="checkbox"/>
● Flipchart stands (minimum 2)	<input type="checkbox"/>	<input type="checkbox"/>
● Flipchart paper/pads (about 10 per day)	<input type="checkbox"/>	<input type="checkbox"/>
● Markers for writing on newsprint	<input type="checkbox"/>	<input type="checkbox"/>
● Markers for writing on transparencies	<input type="checkbox"/>	<input type="checkbox"/>
● Blank transparencies	<input type="checkbox"/>	<input type="checkbox"/>

	Yes ✓	No ✓
● Stapler	<input type="checkbox"/>	<input type="checkbox"/>
● Tape (strong masking tape and regular tape)	<input type="checkbox"/>	<input type="checkbox"/>
● Push pins	<input type="checkbox"/>	<input type="checkbox"/>
● Glue	<input type="checkbox"/>	<input type="checkbox"/>
● Pencils/notepads/pens	<input type="checkbox"/>	<input type="checkbox"/>
● Pencil sharpeners	<input type="checkbox"/>	<input type="checkbox"/>
● Extension cords	<input type="checkbox"/>	<input type="checkbox"/>
● Certificates	<input type="checkbox"/>	<input type="checkbox"/>
● Photocopying facilities	<input type="checkbox"/>	<input type="checkbox"/>
● Spare bulbs for overhead projector	<input type="checkbox"/>	<input type="checkbox"/>
● Extra notepads and pens	<input type="checkbox"/>	<input type="checkbox"/>
● Scissors	<input type="checkbox"/>	<input type="checkbox"/>

DAY TWO

Session 5 Strategic Planning

Instructions to Trainers

PRE-SESSION

08 30 – 09 00 Opening of the Day's Activities

- Review of the previous day's activities
- Summary of the evaluation of the previous day
- Overview of the day's activities

OBJECTIVES

By the end of this pre-session, the participants will be able to do the following

- Assess the progress of the workshop
- Summarize the objectives and agenda for the day's activities

OPENING

Invite a volunteer to review the previous day's activities (10 minutes)

Summarize the evaluation of the previous day (10 minutes)

Distribute the overview and the schedule for day two to the participants (handouts 2 5 1 and 2 5 2) Review the objectives and schedule using overheads 2 5 1 and 2 5 2 Ask if clarifications are needed (10 minutes)

SESSION 5

09 00 – 10 30 Session 5 Strategic Planning

OBJECTIVE

By the end of this session, the participants will be able to do the following

- Explain the process of strategic planning by listing the steps and discussing their importance to the process

Use overhead 2 5 3 to present the objective

PROCEDURE

Training technique group work

EXERCISE 5

Exercise 5 How to conduct strategic planning Studying a conceptual model (1 hour 25 minutes)

- 1 Distribute handouts 2 5 4 and 2 5 5 Handout 2 5 4 gives clear instructions for the exercise Go over the instructions with the participants step by step Ask if any clarifications are needed (5 minutes)

Phase 1 Group work (40 minutes)

- 2 Divide the participants into three groups Remember that all groups will read the introductory part of the

handout 2 5 3 Groups then read the part of the material assigned to them (20 minutes)

- 3 (*experience*) Each group works to prepare their presentation. As they work, circulate from group to group to check progress. Clarify any concerns they may have while working. Be sure to remind them of the time remaining (20 minutes)

Phase 2 Reporting and discussion (40 minutes)

- 4 (*experience, process*) Each group has five minutes to present their results. After all presentations, ten minutes are available to discuss the group's presentation. Remain on time (30 minutes)

- 5 (*process*) At the end of the exercise, comment on the group's responses and provide feedback on the content of the presentations. Reinforce the major points of this session, by presenting briefly the overheads 2 5 4 through 2 5 14 (10 minutes)

CLOSURE

Closure (5 minutes)

- 1 (*application*) Ask volunteers to list three major things they learned from this exercise
- 2 Make a transition to the next session

10 30 – 10 45 Tea/Coffee Break

DAY TWO

Session 5 Summary of Overheads

Objectives of Day Two

- 1 Explain the process of strategic planning
- 2 Discuss critical issues in the management of planning
- 3 Explain external organizational and gap analysis
- 4 Demonstrate an internal analysis of an institution
- 5 Identify and categorize the gaps

2 5 1

Schedule of Day Two

08 30	09 00	Op i g 1 th Day Activit
09 00	10 30	Se io 5 Str t gic Planni g Tea/Coffee Break
10 45	13 00	Se io 8 Managee l Issue Lunch
14 00	15 15	Se io 7 Ext Al O ganizational nd Gap A lysis a/Coffee Break
15 30	17 00	Se io 7 (Conti d)
17 00	17 30	Feedback the Day A ctivit and PAPA

2 5 2

Objective of Session 5

- Explain the process of strategic planning by listing the steps and discussing their importance to the process

2 5 3

What Is Strategic Planning?

The process by which the most desirable future vision is developed for an organization

2 5 4

Strategic Planning—Major Characteristics

- oriented toward future achievement (long term)
- takes into account political socioeconomic and legal circumstances organization a strengths weaknesses threats and opportunities
- directed toward the clients of the organization

2 5 5

Strategic Planning Process

2 5 6

Strategic Planning — Conceptual Model

2 5 7

Strategic Planning Process—Six Steps

- 1 Diagnosis/analysis
- 2 Establishment of a vision
- 3 Identification of gaps
- 4 Definition of strategic change
- 5 Determination of changes and mechanisms
- 6 Implementation

2 5 8

Step 1 Diagnosis/Analysis

- Formation of an ad hoc committee
- Diagnosis of government policies future technological tendencies and opportunities
- Analysis of organization s current situation

2 5 9

Step 2 Establishment of a Vision

Purpose to achieve ideal future and create strong sense of organization-wide vision

Includ es

- Identification of client d th l needs
- Development of fut mand t / bjectiv
- Identification of future valu
- Form latio of env d m lio
- Identification/ stitio f fut ch
- All ti n of priorit
- Form lio of tr t g i t p i tie
- Formulation of products/ rvl

2 5 10

Step 3 Identification of Gaps

Pu po t analyze g pa that resulted from comparison between current situation and future vision

- Must yield clear panorama of di cr pa le in m nd to objectiv v l strategies priorities
- S t f d t l f o g izati n l change

2 5 11

Step 4 Definition of Strategic Change

- F mulation of th strategy of h ng
- Fo mulation f th de led structure and organization
- Defi ition f the objecti str i g i o p r tio of m l n functio l

2 5 12

105

DAY TWO

Session 5 Summary of Overheads

Step 5 Determination of Changes and Mechanisms

- Clear description of mechanisms to perform periodic monitoring and evaluation of strategic plan
- Definition of the design location implementation and operation of the planning unit

Page Name

2513

Effectiveness of a Strategic Planning Process

Depends on

- support from top management
- participation from clients stakeholders
- clear communication strategy and mechanisms
- adequate time to develop the process

Page Name

2514

Handout – Overview of Day Two

Strategic Planning

Objectives

By the end of the day the participants will be able to do the following

- 1 Explain the process of strategic planning by listing the steps and discussing their importance to the process
- 2 Discuss critical issues in the management of planning
- 3 Explain external, organizational, and gap analysis
- 4 Demonstrate an internal analysis of an institution
- 5 Identify and categorize the gaps

Handouts

- 2 5 1 Overview of Day Two
- 2 5 2 Tentative Schedule of Day Two
- 2 5 3 A Guide to Strategic Planning A Conceptual Model (text)
- 2 5 4 Exercise 5 How to Conduct Strategic Planning Studying a Conceptual Model
- 2 5 5 Exercise 5 Worksheet
- 2 6 1 Exercise 6 How to Approach Critical Issues in the Management of Planning
- 2 6 2 Exercise 6 Worksheet
- 2 6 3 Management Issues (text)
- 2 7 1 External Analysis (text)
- 2 7 2 Organizational Analysis (text)
- 2 7 3 Gap Analysis (text)
- 2 7 4 Exercise 7 External, Organizational, and Gap Analysis
- 2 7 5 Exercise 7 Worksheet Identification of Trends, Opportunities, and Threats
- 2 7 6 Exercise 7 Worksheet Identification of Institutional Strengths in Relation to the External Environment
- 2 7 7 Exercise 7 Worksheet Identification of Institutional Weaknesses in Relation to the External Environment
- 2 7 8 Exercise 7 Worksheet Identifying, Analyzing, and Priority Setting for Gaps
- 2 7 9 Strengths and Weaknesses of Day Two
- 2 7 10 Guidelines to Provide Feedback on the Workshop
- 2 7 11 PAPA—First Stage

Handout — Tentative Schedule of Day Two

Strategic Planning

08 30 – 09 00 **Opening of the Day's Activities**

09 00 – 10 30 **Session 5 Strategic Planning**
(Exercise 5)

10 30 – 10 45 Tea/Coffee Break

10 45 – 13 00 **Session 6 Management Issues**
(Exercise 6)

13:00 – 14:00 Lunch

14 00 – 15 15 **Session 7 External, Organizational, and Gap Analysis**
(Presentation and exercise 7)

15 15 – 15 30 Tea/Coffee Break

15 30 – 17 00 **Session 7 (Continued)**

17 00 – 17 30 **Feedback on the Day's Activities and PAPA**

A Guide to Strategic Planning: A Conceptual Model¹

A conceptual strategic planning model was first developed as a guideline tool for our training and service support to the Ministry of Agriculture and Fisheries' research establishment in the Republic of Uruguay, which, in 1996, embarked on a major modernization process. This resulted in the creation of a new decentralized, semi-autonomous research entity, the Instituto Nacional de Investigación Agropecuaria del Uruguay.

The present revised version in English includes the benefits gained as a result of the application of these guidelines in Uruguay and NARS of other countries.

In line with the concept of technology for development, most managers of developing country NARS/NAROs are seeking ways to more effectively use and distribute the scarce resources at their disposal. In this way they can contribute more efficiently to the agricultural development of their countries. The increasing use of strategic planning as a managerial tool is helping research institutions to make better use of these resources. It also helps them to better position themselves within the context of their country's development plans.

What Is Strategic Planning?

Strategic planning is the process by which the most desirable future vision is developed for an organization. It takes into account an organization's political, socioeconomic, and legal circumstances, its strengths, weaknesses (restrictions), and threats (difficulties), its opportunities,² and the ways in which it can turn a future vision into reality. It is an intellectually participative, valuable exercise that can visualize the chain of causes and effects within an institution, and their influence on the future decisions of its management.

Strategic planning is

- always oriented toward an organization's desired future achievements (long-term)
- developed by taking into account an organization's political, socioeconomic, and legal circumstances, as well as its strengths, weaknesses, threats, and opportunities
- aimed at a goal and how to reach it, the reason for the goal, and the strategy of the action for attaining it, is clearly expressed in the fact that it determines action and nothing else
- directed toward the client(s) of the organization—defines the best position for the organization within the socioeconomic environment
- a way to implicitly contrive various elements of direction and management—in particular, vision, mission, objectives, structure and organization—and relate them to strategies
- a means to determine a comprehensive program of necessary changes and adjustments within the organization, institutional administration, and management

1 By Carlos Valverde, Senior Officer, 1997, The Hague, The Netherlands, ISNAR.

2 The analysis of the strengths, weaknesses, opportunities, and threats facing an institution are sometimes referred to as the SWOT analysis.

- flexible and dynamic—a process that incorporates the experiences gained, and must be reviewed when opportune and necessary

The Conceptual Model

To define the future status of an organization compared to its present state, strategic planning must start from scratch. Through this process, the kind(s) of strategies needed to change from the present situation to the preferred one can be determined.

There are many models for strategic planning, however, all share basic steps. The conceptual model, which research institutes can use to develop their strategic planning process, is illustrated in Figures 1 and 2. The first figure shows six essential steps to be followed in the strategic planning process: 1) diagnosis/analysis, 2) future vision, 3) gap analysis, 4) definition of the strategic change, 5) change and mechanisms to implement the strategies, and 6) implementation.

For purposes of analysis and the rational development of the conceptual model, the first five steps of the strategic planning process can be broken down still further. Figure 2 depicts the same conceptual model as Figure 1, disaggregated to facilitate the operation of the process. Such a breakdown also allows the required, intervening inputs to be differentiated in the most analytical form.

All the disaggregated steps are important and must be taken into account for the strategic planning process to be successful. In most institutions, many of these steps and the required inputs have already been analyzed, defined, and documented, or are in an advanced stage of preparation and development. However, it is still necessary to rationalize and synthesize some of the existing “loose” inputs.

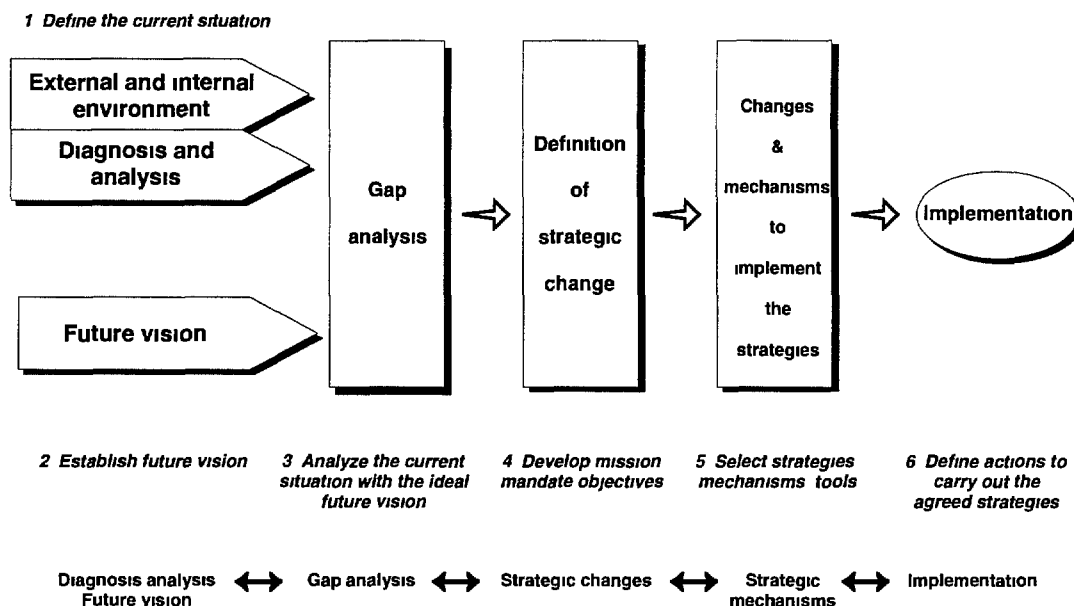


Figure 1 Strategic planning process

Throughout the strategic planning process, emphasis and attention should be focused on the *future* of the institution. In this sense, the term “strategy” refers to operational activities to be carried out according to a plan, to enable the institution to achieve the objectives for which it

was established. However, these activities can change in the future, and may differ radically from the ones currently being carried out.

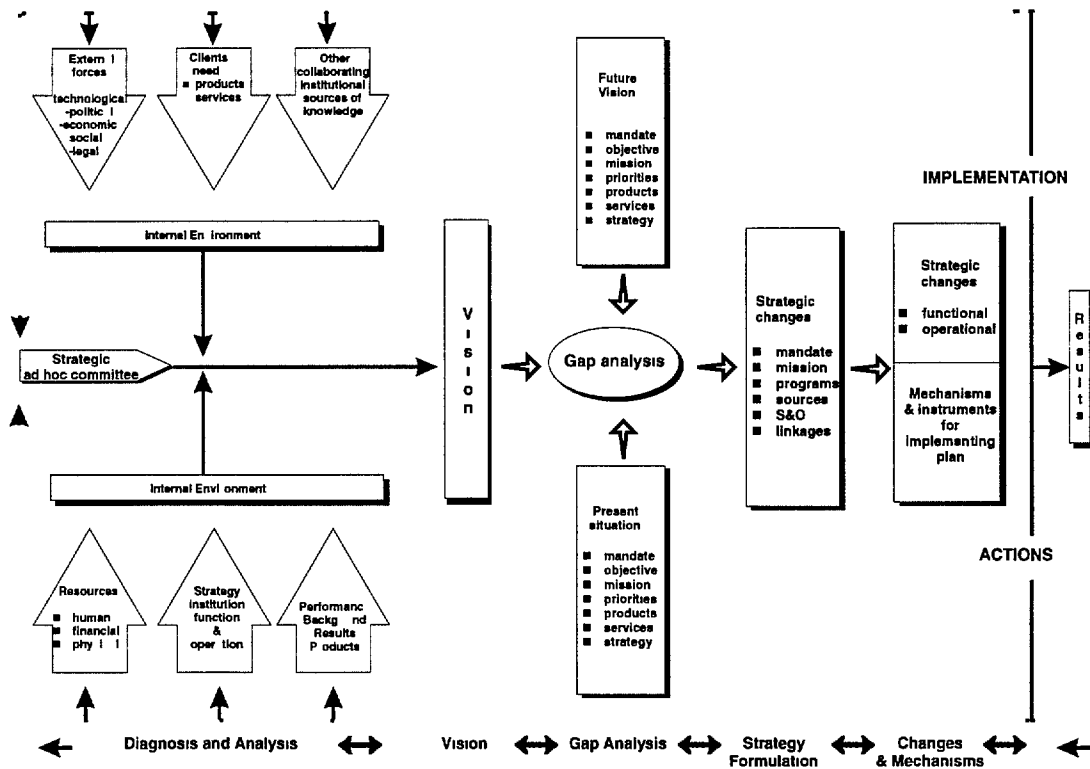


Figure 2 Strategic planning Conceptual model

The following is a detailed description of the disaggregated steps of Figure 2

Step 1 Diagnosis/analysis

Formation of an ad hoc committee

If no specific, institutionalized unit in charge of carrying out strategic functions exists besides the organization’s management team, it is advisable to form an ad hoc committee. The mission of such a committee is to conduct the strategic planning process and act in an advisory capacity to the organization’s decision makers.

The composition of the ad hoc committee should depend on the scale, scope, and circumstances of the organization. It should be appropriately internalized and institutionalized to carry out its function and activities. In a NARO, for example, it could comprise a Director General/Manager, Director/Chief of Planning, Director of Research/Technical Director, Experiment Station Directors, or Project Leaders, as necessary³. The committee should be assisted by specialized staff from within or outside the organization.

The committee should have one or two days’ training in strategic planning, the logic of the conceptual model, and the steps to be followed. The committee’s first task would then be the production of a document, an “institutional strategic policy and action.” Later, this important

3 In NARS the composition of the ad hoc committee should include the decision makers of the entity and the key stakeholders.

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document can be used as a basic outline for developing the organization's national agricultural research plan. The committee should then establish a framework of activities, as well as a detailed program for conducting the process.

In some cases, instead of having an ad hoc committee, it would be advisable to institutionalize the process as a function of the planning unit.⁴ The aim is to ensure dynamic continuity, adequate monitoring and assessment, and future adjustment, if necessary.

Diagnosis of government policies and future technological tendencies and opportunities

It is vital to recognize that all research institutions receive their mandates from their respective governments, and that they are given concrete objectives. Therefore, an institution must develop its policies and action strategies within the framework of the development plans of its government. The legal aspects, policies, and strategies must be analyzed carefully to determine the complementarity of activities with the country's socioeconomic development plan.

This fundamental phase of analysis should clearly define the degree and level of concordance between (a) the government's development, agricultural, and transfer of technology policies, and (b) the activities of the institution or organization that must carry them out. In an initial planning stage, the analysis could indicate conflict in some areas between the macro and organizational levels. In such a case, these areas should be identified, analyzed further, and later justified with solid information and convincing arguments. All the principal research bodies of a country must be able to demonstrate how their activities can contribute to the country's development. In this respect, they must act as government advisory bodies in areas related to the agricultural research of the country.

However, a country's research organizations can no longer be conceived as existing solely within the boundaries of a NARO or a NARS. Rather, they should be perceived as part of a regional and global research agenda. Therefore, a diagnosis of the technological trends and opportunities within the international scientific and technological environment is particularly important to an agricultural research institution. This diagnosis would facilitate the proper definition of the organization's mandate, mission, and objectives, and its future position within national boundaries or beyond. Examples of technological trends could be biotechnology, modern communication technologies, computer technology breakthroughs, or new experimental and technological developments and their design.

Also of particular importance is the recognition and knowledge of the activities of other agricultural institutions, such as universities, NGOs, and the private sector. The work of international centers (e.g., CGIARS, IARCS), foreign universities, and other national systems should also not be overlooked. Attention should be paid to a number of issues, including areas of mutual interest, the degree of development of the other institutions, whether they are competitive or complementary in an open market environment, which types of relationships and linkages should be promoted in the future and to what degree, and how inter-institutional interactions and foreseen strategic alliances should be carried out.

Organizations should identify—from a technological viewpoint—internal or external sources of knowledge which relate to the environment in which the organization's changes will develop.

4 See handout 5 14 1 Institutionalization of Strategic Planning Session 14

The relevance of such knowledge sources to the institution's future activities should then be determined

An adequate diagnosis of the scientific technological environment is vital for deciding the scale and scope of the research activities to be carried out⁵ It is important to note whether the research should be basic, strategic, applied, or adaptive Also essential is deciding how to systemize and complement efforts in the agricultural technological development of the country

Analysis of the organization's current situation – its mandate, objectives, mission, etc – and the values that guide it

The main objective of this phase of Step 1 is to carry out a review and analysis of the organization's mandate, objectives, mission, strategies, strengths, weaknesses, and threats from a strategic point of view⁶ The purpose of generating this information is twofold (1) to gather information and data on the weaknesses, strengths, threats, and opportunities of the organization (this will serve as a starting point for developing and implementing the future strategy), and (2) to design and plan the organization's future mandate, mission, and strategy within the boundaries established by the future vision

It is to be hoped that the status of the organization's current guiding values is already known If not, a review of the organizational values should be conducted at this time It is essential to determine the current values before deciding to keep, adjust, or change the institutional mission for the future

The diagnosis and identification of the institutional values, which are embedded within the institution's culture, requires determining the personal values of the staff Issues of trust, respect, dignity, commitment, integrity, accountability, etc are extremely important because they play a pivotal role in managerial decisions and the attainment of the mandate and objectives of any organization

To study personal values, the use of questionnaires, surveys, and interviews is required Experience has shown that the participation of a consultant or other external, specialized expert could be valuable in this phase

Step 2: Establishment of a vision by detailing an ideal future

The purpose of this step is fundamental to the whole process and its results The main objective is to achieve an ideal future and create a strong sense of vision for the organization⁷ The main role of the vision is to develop a dream to which all the researchers, higher echelons, and supporting employees can subscribe and direct their efforts The idea is to challenge the brains, expertise, and creativity of the staff so that the organization can excel through its end products

-
- 5 *Scale* is defined as the institutionalized research capacity of a national system It is a combination of a system's human and financial resources its knowledge base and its infrastructure *Scope* refers to the research agenda of a system including the set of research topics and objectives to which the national institutions are committed *Scope* has two dimensions—the range of research programs meaning the commodities topics etc covered and the level of research meaning whether it is strategic applied adaptive or basic Matching the scope of research with the scale of available resources is a key strategic management challenge
 - 6 Self reviews and evaluations or institutional reviews and evaluations conducted by NARS or ISNAR serve this purpose very well They are fundamental valuable inputs to the strategic process
 - 7 A *vision* is a statement that portrays the future desired attributes for an organization It differs from a *mission* which provides a concise guide to decision making in management

and services⁸

The establishment of a vision requires that the organization's management and ad hoc committee have a strong knowledge of major environmental trends and clients' future technological needs. A vision of future scientific and technological breakthroughs, and the responding institutional direction and criteria, is extremely important.

Some questions that could be asked when defining the ideal future are

- What will the organization be like in five, ten, or fifteen years' time?
- Who will be the main clients and what will be their needs?
- How will the organization fit within global thinking?
- What will the linkages be with the outside world?
- What will the organization's values be?
- What type of staff will it have, and what will their qualifications be?
- How will the organization be perceived by its staff? By the research community? By its clients?

Many other questions could be asked, depending on the nature, scale, and scope of the research of the ideal future organization.

Identification of the clients and their needs

Basically, the institution's mandate and objectives should imply who its clients are. However, in strategic planning, priority clients should be precisely identified. Those who benefit most from the products and services generated by the research organization should be clarified (e.g., the producer, the extension service, the countries, etc., who benefit from the enrichment of the institution's scientific knowledge). When referring to the agricultural producer as a direct client, it is necessary to determine *which* type of producer is being referred to: agricultural, livestock, fisheries, forestry, a specific producer, or all producers. It is paramount to define whether the immediate client is a large, medium, or small producer. It is also necessary to be consistent with the nature of their organization, whether it be individual, associated, cooperative, or any other associated form.

Each client has different needs. The institution must identify these needs to determine how they should be met through its research products and activities. The knowledge and identification of the client is primordial when defining the environment in which the institution will work. The need often arises to analyze the degree of responsibility assumed by the institution in terms of its clients, not only in relation to the food produced for domestic consumption, but also to agricultural products for export.

In terms of strategic planning, it is important for the ad hoc committee to interact constantly with the institution's clients. In practice, this exercise is convenient and necessary to analyze the institution's technical and economical capacity to produce the technologies that satisfy the clients' needs and demands.

⁸ In some situations it is to the advantage of the process to begin with the vision of the desired future to ensure the relevance of the analysis of the current situation.

Development of the organization's future mandate and objectives

An organization's mandate provides a focal point for the entire planning process. It is really the "specification" of the assignments, power, and delegation granted to an organization—the *raison d'être*. It is what the organization is required to do with the authorization to act. A precise definition of the mandate is extremely important to determine the objectives, policies, strategies, and plans to be followed.

When defining the mandate, avoid an overly narrow interpretation of the organization's main thrust. The focus should be on providing adequate technologies and services to satisfy the clients' needs.

The process should begin with an analytical examination of the desired future mandate and objectives of the organization. For example, it is important to define whether the institution will focus only on research, or research and extension, or research and development. Will it only cover crops, or crops and livestock, or crops, livestock, and forestry? Will it include research on natural resources? Which types of crops, animals, etc.?

Decentralized and autonomous institutes work under a legal administrative framework, which the ad hoc committee must use as a basis for examining the mandate and objectives. The implications of modifications must be taken into account. The political, economic, social, and legal parameters and strengths within which an organization has to fulfill its mandate should be clarified. What would be the relevance of the mandate? What would be the advantage or disadvantage of modifying the mandate and objectives? What would be the costs, as opposed to the benefits, that could be achieved by the change?

Identification of the organization's future values

These are the values that will guide and shape the organizational culture. In this phase, the basis is established for the institution's mandate and mission.

Institutional values are often related to the organization's image, both inside and outside its environment. Future guiding values must be explicit. Examples could be

- focus on the producer as the center of the research process
- scientific, technological, and service excellence
- institutional integrity
- a sense of collaboration with other organizations

The identified values must frame the tasks of the organization. It is recommended that the central values be established first, so that they may serve as a framework for the secondary values. Ensuring that there is no conflict between the overall values of the organization and those at the level of any of its components or activities is fundamental.

Organizational values should also reflect staff values. Any exception must be clearly explicit. Besides being part of the institution's mission, the values must also serve to define or shape the overall policies and action strategies of the organization.

Formulation of the organization's revised mission

All the previous activities must be taken into account when formulating an institution's new or future mission.⁹ This will constitute an important baseline and guide for the future of the entire organization. It must accurately capture the organization's mandate, objectives, values, principal elements of its policy (main clients), and strategy.

In the case of a research organization that already has a law indicating its mandate and objectives the key elements of the values, policy, and strategy that will constitute its future essence should be summarized in a few words

The management of an institution must ensure that its members and clients reach a consensus on the mission. It is therefore important, that in defining the components of the mission, there is maximum participation by the members of the entire organization and agricultural research system, and their stakeholders

Identification and justification of major future areas of research

According to its vision, mandate, and mission, an organization's major strategic areas of research should be identified and justified. To facilitate this phase of Step 2, the level of disaggregation to be introduced within the research activities should be defined (programmatic view of the research plan programs, projects, activities) Should the activities be grouped by crops, agroforestry, disciplines, systems, a combination of these, or other categories? Should they be local, national, regional, or international?

This breakdown is very important and useful for further steps in the organization's planning and budgeting process. It provides the organization with the necessary flexibility to define specific strategies that can be adjusted to each case. For example, a national program directed, administered, and managed according to crops could be similar to that of a national program organized by discipline, or the organization could be a combination of both. The definition of a matrix that specifies the programmatic disaggregation units of the main research activities is vital at this stage. It further facilitates the tactical and operational levels of planning.

The decision making regarding the programmatic disaggregation of the major areas of research should not be based upon the nature of the existing, current structural organizations and units. This is extremely important, since the aim is to detect and make the necessary adjustments or changes to the structure and organization *as deemed necessary*. The organization should be adjusted to operate according to the nature (scale and scope) of its main activities. Likewise, the prioritization and nature of the research should not be adjusted according to the structure and organization currently in place.

Again, in this step, the main lines of research and their objectives¹⁰ should be categorized within larger groups of activities, always bearing in mind the institution's external environment. The category of the clients, their technological needs, the existing facilities, and the products and services to be offered through the planned research activities should all be taken into account. The outputs should be defined in detail, and the manner in which the institution will produce and deliver them to its clients should be determined.

Allocation of priorities

The priority of each product and line of research is indicated¹¹ by its relative order of importance. And, within each product or line of research, priority must also be given to the activities to be

9 For our purposes the *mission* is defined as the statement of the principle or group of principles upon which the institution bases its policies and actions. The values, objectives, policies, and strategies that frame the internal and external activities of the institution constitute the main body of any institutional mission. A mission statement is short, clear, and concise. It contains the basic purpose or philosophy of the organization. It is sometimes called the doctrine of the organization.

10 An *objective* is a statement describing the intended results and outputs of a particular line of research.

11 There is a plethora of econometric methods to set research priorities, ranging from simple ones, such as the use of scoring methods, to the most sophisticated economic surplus methods and mathematical programming models (Alton, Norton).

carried out according to the research options for resolving a specific problem. Prioritizing is therefore carried out at two levels. The main objective of all priority-setting exercises is to place at the disposal of management—and for planning in general (especially strategic and tactical planning)—the technical arguments and rationale needed to define and categorize the products, areas, and lines of research to be carried out by the institute as an integral part of its mandate and mission. The exercise of setting priorities also determines the level of financial and human resources to be allocated and assigned.

Within each line of research, the most pertinent topics related to the respective clients' problems must be explicitly defined. Based on this, the correct alternative must be chosen in order to develop the technology best suited to the clients' socioeconomic conditions. The active participation of the researchers in the definition of the scientific approaches and technological alternatives, in terms of time and cost, is fundamental in this process.

Formulation of strategies for different priority lines of research

For each priority line of research, policies¹² and strategies¹³ for achieving their objectives must be identified and outlined. In establishing strategies for an ideal future, it is a good practice to contemplate as many strategic alternatives as possible, seeking options, not objectives. A range of available strategies within the research organization or elsewhere should be considered. They should then be filtered accordingly.

Tactical organizational questions which will arise through the identification of suitable policies and strategies might include the following:

- Will the research administration and management activities be centralized or decentralized at the institutional level?
- Will the research be basic, adaptive, applied, strategic or all of these?
- Will the research agenda be the entire responsibility of the institute or will it be carried out with the participation of another institution?
- What will be the level and degree of collaboration or cooperation? With whom?
- Will the program be local, regional, national, or international?

Formulation of the types of products and services to be provided

In this phase of Step 2, the organization should establish a more detailed definition and presentation of the technological products and services resulting from the determined research activities. How the institution will produce, supply, and deliver these outputs to its clients must also be determined.

It is important to mention that the technology and services to be supplied through the different programs and projects must fit the time lapse applicable to the strategic planning in question.

and Parody 1995)

12 A *policy* is a formal general guide to decision making and behavior intended to stimulate and support actions geared toward an objective. A policy is not per se an action but rather a guideline that emphasizes the internal environment of the organization.

13 A *strategy* is a logical decision to take an appropriate course of action establishing key priorities to achieve an agreed objective. Strategies are specific—they express tasks and focus on few objectives.

Step 3 Identification of the gaps between desired future actions versus currently existing ones

The purpose of the gap analysis¹⁴ step is to analyze the gaps that have resulted from the comparison between the current action strategy and the one designed for the future vision. The comparative analysis must yield a concrete, clear panorama of any discrepancies, in terms of the mandate, objectives, values, strategies, and program priorities, as well as the degree of change required to move the organization in a determined direction. It sets the foundation for the organizational changes that will take place within what organizational management strategists call “the process of institutional change.”

Step 4 Definition of the strategic change

Formulation of the strategy of change from the present to the future

Strategy statements should be clear, avoiding ambiguities and vagueness. The exercise in this step creates a special chemistry: all the elements of the previous steps should be combined at an operational strategy level. The alternatives, by means of which the institutional changes are introduced, should be clearly expressed. One of a manager’s implicit tasks is to implement change. This entails developing a specific strategy to overcome resistance and to choose the appropriate methods of doing so.

The development and preparation of a new strategic plan should include the management of change, not only with regard to institutional management and administration aspects but, also, other strategic operational changes. For example, these could include the following:

- structure and organization (governance, adjustments, modifications, changes)
- values and institutional culture
- leadership and style of management and operation
- planning mechanisms
- scale and scope of the research program
- transfer of technology mechanisms and management
- management and planning of human resources
- financial management
- information and communication
- facilities
- links with the environment

The above are not all the areas to be considered, but they are the most important. Often during the process, other areas may be identified, according to the level of change.

In approaching an organizational change situation, managers explicitly or implicitly make strategic choices regarding the speed of the effort, the amount of preplanning, the involvement of others, and the relative emphasis they will give to different approaches. Successful change efforts seem to be those in which these choices are both internally consistent and fit some key situational variables (Kotter and Schlesinger 1979).

14 A gap analysis consists of identifying missing links to define the actions needed to enhance institutional sustainability in the medium to long term.

The determination of the best alternative for action presupposes the inclusion of the financial factor within the analysis. This aspect plays a critical role, with regard to the most cost-effective alternative and the feasibility of any future changes.

Formulation of the desired structure and organization, and definition of the objectives, strategies, and operation of the main functional areas of the organization

This phase of Step 4 deals with defining strategies that correspond to the functional and support areas of the organization. Some functional areas within research organizations need careful analysis because of their characteristics and specifications (see “Analysis of the organization’s current situation”). The analysis serves to clearly define the role of the function within the organization, and the linkages, mechanisms, and strategies required to fulfill its commitments. The functional areas referred to could include

- direction/management/administration
- human resources
- financial resources
- planning
- monitoring and evaluation
- linkages
- information and communication
- support services, i.e. purchasing, budget, supplies, maintenance, computer services, etc.

These key areas have a significant influence on the products and services generated, adapted, or applied by the research organization, whether quantitatively or qualitatively.

The specific strategies of the functional and operational areas also reflect many of the changes that will have to be introduced in the organizational structure of the institute. In addition, they reflect the definition of the consequences, in terms of the human and financial resources needed, for their future implementation.

Step 5 Determination of the changes and mechanisms necessary to implement the strategies

As previously mentioned, strategic planning is a flexible, dynamic, continuous process that must be constantly sustained by the experiences gained by the institution. Periodic monitoring and evaluation of the strategic plan, therefore, will always be a constant preoccupation in the comprehensive planning of the organization (planning affects all downstream management functions). The strategic plan should include a clear description of the mechanisms to be used to document the experiences, and how they should be used to define and implement any corrections.

The design, location, implementation, and operation of the planning unit—whether it is a separate entity or a subsystem of the organization—must be defined as part of the institutional structure and organizational changes. The planning unit must contribute to the definition of monitoring and evaluation of the devised strategic plan, which should be sharply defined by both the results desired by all levels of the organization, as well as the execution of the institution’s plan, programs, and research projects.

General Comments

When conducting strategic planning exercises, some important tips should be followed to ensure that the process and its products are of real significance and value to the research organization

- The whole exercise must be properly supported—from the beginning—by the highest echelons of the research organization. In cases where the research setup depends upon a higher echelon, such as the Ministry of Agriculture or other sector, the strategic planning exercise must have the political support of the Minister of Agriculture or other sectoral minister.
- Avoid a situation where the top official of the organization dominates the process and the decision making.
- During the strategic planning process, avoid any kind of rumor or gossip, which can be destructive. The best remedy is to establish and agree on a communication strategy, which would basically be a plan to communicate the results of the ongoing activities as quickly as possible. It should be remembered that strategic planning activities should involve the interaction and participation of all affected by their results.
- Allow adequate time for the process to fully develop the policies and strategies required for a comprehensive strategy document. Bear in mind that the effort will drive the organization for anything between five, ten, or fifteen years.
- Do not ignore reasonable contributions from the staff, management, clients, or other stakeholders of the organization, nor their aspirations.

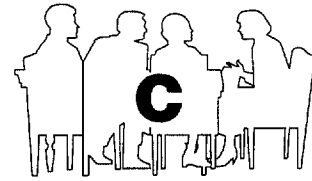
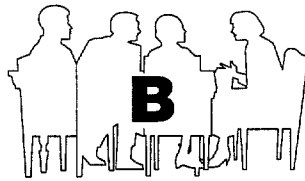
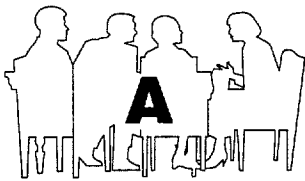
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Exercise 5. How to conduct strategic planning: Studying a conceptual model (role playing)

Phase 1 Group work (35 minutes)

- 1 Form three groups All groups read the introductory part of handout 2 5 3, “A Guide to Strategic Planning ”



- 2 Each group reads a section from handout 2 5 3 (25 minutes), as follows
GROUP A “What Is Strategic Planning?” and “The Conceptual Model” and Step 1 (from page 145 to page 149)
GROUP B Step 2 (from page 149 to page 153)
GROUP C Step 3, 4, 5, and “General Comments” (from page 153 to page 155)
- 3 Each group selects one or more members who will play the role of a trainer and give a presentation on the sections read All group members participate in the preparation of the presentation Be concise Be sure to consider the following elements during preparation
 - **presentation design** (introduction, body, conclusions)
 - **presentation delivery** (keep on time, make eye contact, face the audience, make sure your voice is audible)
 - **design of visuals** (visuals should be easy to read by the audience and should have titles)
 - **use of visuals** (presenter talks to the audience while proceeding smoothly from one visual to next)

Phase 2 Reporting and discussion (40 minutes)

- 4 Each group has five minutes to give their presentation After all presentations, ten minutes are available to discuss the results (30 minutes)
- 5 The trainer will then provide feedback on the content of the presentations and the process of this exercise He/she closes the session by making a brief presentation emphasizing the major elements of this session (10 minutes)

DAY TWO

Session 6 Management Issues

SESSION 6

OBJECTIVES

Instructions to Trainers

10 45 – 13 00 Session 6 Management Issues

By the end of this session, the participants will be able to do the following

- Discuss critical issues in the management of planning

Use overhead 2 6 1 to present the objective

PROCEDURE

Training technique “trip around the tables”

EXERCISE 6

Exercise 6 How to approach critical issues in the management of planning (2 hours 10 minutes)

NOTE Do not distribute handout 2 6 3 until the exercise has been entirely completed by the participants Handout 2 6 3 provides possible answers to the questions of this exercise It aims to reinforce learning

- 1 Distribute handouts 2 6 1 and 2 6 2 Handout 2 6 1 gives clear instructions for the exercise Go over the instructions with the participants step by step Ask if any clarifications are needed Emphasize and remind the participants about the time (10 minutes)

Phase 1 Group work (25 minutes)

- 2 Divide the participants into four groups and ask each group to elect a rapporteur (5 minutes)
- 3 (*experience, process*) Groups discuss the set of questions assigned to their group (20 minutes)
- 4 (*experience*) As the groups work, circulate from group to group to check progress Also clarify any concerns they may have while working Be sure to keep the groups aware of the time remaining for this exercise

Phase 2 “Trip around the tables” (40 minutes)

- 5 The rapporteurs make the “trip around the tables,” spending five minutes at each table (15 minutes)
- 6 After visiting the three other tables, the rapporteurs return to their own group and share the contributions collected during the “trip” The groups revise their statements based on the input the rapporteurs report and a group decision is held (15 minutes)

- 7 The rapporteurs write the results on a flipchart for presentation (10 minutes)

Phase 3 Reporting and discussion (55 minutes)

- 8 The rapporteurs present their group's results to the audience. Each rapporteur has about five minutes to present. Facilitate a brief discussion (25 minutes)
- 9 (*process*) Distribute handout 2.6.3. Invite volunteers to read the questions and answers one by one. Briefly discuss similarities and differences between the text responses and the groups' results. Reinforce lessons learned from this exercise.
- 10 (*process, generalize*) At the end of this exercise, provide feedback on the content of the presentations. Ask questions such as "How did you feel doing this exercise?" and "What did you learn?" to allow discussion of the process.

CLOSURE

Closure (5 minutes)

- 1 (*application*) Ask the participants "What might you do differently as a result of what you have learned?"
- 2 Make a transition to the next session.

13 00 – 14 00 Lunch

DAY TWO

Session 6 Summary of Overheads

Objective of Session 6
<ul style="list-style-type: none">• Discuss critical issues in the management of planning

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Exercise 6. How to approach critical issues in the management of planning ("trip around the tables" technique)

Phase 1 Group work (25 minutes)

- 1 Form four groups of participants, each group electing a rapporteur



- 2 Each group works on the set of questions assigned to them as follows (20 minutes)

GROUP A Stakeholder focus "Strategic planning encourages agency management to seek out and respond to stakeholders' needs, and relieves it of a traditional presumption with regulation and control "

- How can an agency begin to find out what its stakeholders want?
- How far should an agency commit itself, resource-wise, to obtaining this information?

GROUP B Cultural considerations "Considerable change in attitudes and work processes among agency staff at all levels will be required if the government is to establish clearer lines of accountability within agencies "

- Is it reasonable to expect resistance at all levels of the organization to changes identified in strategic planning?
- Power bases may be threatened How can one secure the cooperation of those whose jobs may be at stake?
- Can organizations change without trauma and disaster?

GROUP C Communication "A strategic planning process should open up new channels of communication "

- What role does strategic planning play in improving an agency's internal communications?
- Is personal communication affected?

GROUP D Information systems "In developing strategic planning an agency may need to simultaneously develop new information systems "

- How can an organization cope if its present information systems are inadequate or non-existent?
- How can an agency evaluate its information needs and determine priorities?

- 3 The rapporteurs compile the groups' inputs on the worksheet (handout 2 6 2)

Phase 2 Trip around the tables (40 minutes)

- 4 The rapporteurs begin their "trip around the tables" They have five minutes to visit each table They present their group's inputs and collect contributions to improve their list of responses (15 minutes)
- 5 After visiting the three other tables, the rapporteurs return to their own group to share the contributions collected during the "trip" and decide on the best answers (15 minutes)
- 6 The rapporteurs write the results on the flipchart and prepare to present their group's results (10 minutes)

Phase 3 Reporting and discussion (55 minutes)

- 7 The rapporteurs present the results to the audience Five minutes are available for each presentation
- 8 The trainer analyzes the responses, after which you will be invited to participate in a discussion
- 9 The trainer provides feedback on the content of the presentations and closes the session

Management Issues¹

Note Do not distribute this handout until the exercise has been completed by the participants

In the management of planning, there are critical issues and questions which all agencies face. Although these guidelines do not attempt to offer a single prescription for strategic planning, they do examine the most likely concerns and offer some resolution to them. These concerns are covered under the following headings:

- stakeholder focus
- cultural considerations
- communication
- information systems

Stakeholder Focus

Strategic planning encourages an organization's management to seek out and respond to stakeholder needs, and relieves it of a traditional preoccupation with regulation and control.

How can an agency begin to find out what its stakeholders want?

There are a variety of ways to find out stakeholders' needs. These include:

- the use of one's staff to go out and meet with the agency's external stakeholders in a selective, but perhaps informal way
- the use of surveys, such as market research, consumer attitude surveys, perceptions of quality of service, and so on
- the use of consultative processes, such as reviews with interest groups and calling for submissions
- the use of consultants to conduct interviews and research

Of particular interest to an agency should be its principle stakeholders in the community: its clients. Quality client information is a critical component of strategic planning.

In designing consultation processes, however, it is important to consider that stakeholder expectations may be raised as a result. A new level of demand, for services which the agency cannot meet, may be established. The consultation process requires careful management if such problems are to be avoided.

How far should an agency commit itself, resource-wise, to obtaining this information?

1 Extracted and adapted from State of Victoria Department of Management and Budget Program Development and Review Division, 1986. Corporate planning in Victorian government: Concepts and techniques. Australia: State of Victoria.

An agency should commit a significant amount of its planning resources to this part of the planning effort. But, ultimately it depends on the agency and the “business” it is in. It may be useful to set some percentage of the organization’s planning dollars for this task.

Cultural Considerations

Considerable change in attitudes and work processes among agency staff at all levels will be required if the government is to establish clearer lines of accountability within agencies.

Is it reasonable to expect resistance at all levels of the organization to changes identified in strategic planning?

It may be that such resistance can be lessened if the planning and change process is well managed. The agency may ask itself the following questions:

- Is there a real need for the planning effort, and has this need been identified, recognized, and agreed to by staff?
- Have people’s difficulties with the planning process been dealt with? For example
 - Have they been “burned” before by change?
 - Is strategic planning perhaps seen as yet another “fad”?
 - Are there genuine difficulties which have not been resolved, for example, how valid is it for an agency to develop objectives?
- Have the benefits of strategic planning been demonstrated effectively? Has the effort toward this reflected management conviction and commitment to the process and to change?

While consultation processes, if well managed, can help lessen the resistance to change, they do not necessarily eliminate it. Paying attention to the causes of resistance and creating actions to redress them can be the result of effective consultation processes.

Power bases may be threatened. How can one secure the cooperation of those whose jobs may be at stake?

Job redesign, counselling, retraining, and appropriate discussions about redeployment are all ways for securing cooperation.

Can organizations change without trauma and disaster?

The change process itself should be managed, and this requires effective communication and consultation throughout the process of change. High levels of stress can be created in staff due to uncertainty and insecurity about the future. Such stress can be counter-productive, and can be lessened by appropriate communication and consultation.

Communication

A strategic planning process should open up new channels of communication.

What role does strategic planning play in improving an agency’s internal communications?

Planning processes can encourage agency staff to engage more openly in discussions about common goals and methods. Through task forces and conferences there may be more cross-divisional talk. Through consultation, staff may feel greatly relieved that “at last, management is listening to them.” There is an opportunity in strategic planning to engage the expertise and

wisdom of many people throughout the agency and, through this, to enhance the quality of working life within it

Is personal communication affected?

Personal communication can be expanded. One's network is extended, and one's range of understanding about the agency can be enhanced through strategic planning processes. There are dangers, however, of over-complexity, excessive analysis, use of jargon, and over-reliance on formal procedures and methods, when common sense and good judgment would suffice.

Information Systems

In developing strategic planning an agency may need to develop new information systems simultaneously.

How can an organization cope if its present information systems are inadequate or non-existent?

The quality of information systems and data bases will vary among agencies. Strategic planning will place new demands on the need for information and will initiate development in this area. The ability to monitor performance will be determined by the quality of information systems. Both strategic planning and the information base will develop as the agency learns to use strategic planning. Careful information systems planning will be required until precise needs are known.

How can an agency evaluate its information needs and determine priorities?

The two areas develop together. Information systems should cover human resource management, program budgeting and monitoring, financial planning, market analyses, and so on. The location and integration of data bases, the methods for processing and accessing data, and the technology used will need to be carefully managed in the development process. Some data bases will be agency-owned, and others will reside elsewhere, to be accessed continuously, ad hoc or on contractual arrangement. The value of historical information and future-oriented information also needs to be assessed. One important component of information systems design is defining managers' actual needs for information to make decisions.

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DAY TWO

Session 7 External, Organizational, and Gap Analysis

Instructions to Trainers

SESSION 7

14 00 – 15 15 Session 7 External, Organizational, and Gap Analysis

15 15 – 15 30 Tea/Coffee Break

15 30 – 17 00 Session 7 (Continued)

OBJECTIVES

By the end of this session, the participants will be able to do the following

- Explain external, organizational, and gap analysis
- Demonstrate an internal analysis of an institution
- Identify and categorize the gaps

Use overhead 2 7 1 to present the objectives

PROCEDURE

Training techniques presentation, modified “trip around the tables”

PRESENTATION

(*experience*) Give a brief presentation focusing on external, organizational, and gap analysis. Twenty-two overheads support the presentation 2 7 2 through 2 7 23. At the end of the presentation, distribute handouts 2 7 1, 2 7 2, and 2 7 3. Be sure to ask participants if they have any comments or questions, or if they need clarification. (25 minutes)

EXERCISE 7

Exercise 7 External, organizational, and gap analysis
(2 hours 15 minutes)

- 1 Distribute handouts 2 7 4 through 2 7 8. Handout 2 7 4 gives clear instructions for the exercise. Go over the instructions with the participants step by step. Ask if clarification is needed. (10 minutes)

Phase 1 Group work (1 hour 10 minutes)

- 2 Divide the participants into four groups and ask each group to elect a rapporteur
- 3 Groups read, discuss, and respond to the questions assigned to them. Be sure that all participants understand that groups A and C will work on identification of gaps for the national institution and groups B and D will work on identification of gaps for the national biotechnology program

- 4 (*experience, process*) As the groups work, circulate from group to group to check progress. Clarify any concerns they may have while working. Be sure to remind them of the time remaining in this exercise.
- 5 (*experience*) Invite the rapporteurs to make the “trip around the tables.” Note that the rapporteurs of group A and B will not visit group C and D. The rapporteurs visit the other tables to share and collect information to improve their group results. Remain on time (10 minutes).
- 6 (*process*) Rapporteurs return to their own group and discuss the information and/or inputs collected during the “trip.” The rapporteurs write the group results on a flipchart for presentation (10 minutes).

Phase 2 Reporting and discussion (55 minutes)

- 7 (*process*) The rapporteurs present their group’s results to the audience. Each rapporteur has five minutes to present. Be aware that groups A-C and B-D will report similar contents. Take advantage of this to make a comparative study of these responses and to promote learning (20 minutes).
- 8 Remember to present the *sample* possible result of this exercise. Use overheads 2.7.24, 2.7.25, 2.7.26, and 2.7.27, and summarize the lessons learned. Invite the groups to participate in a discussion (30 minutes).
- 9 (*process, generalize*) Provide feedback on the content of the presentations. Ask the participants questions, such as “How did you feel doing this exercise?” and “What did you learn?” to allow discussion of the process (5 minutes).

CLOSURE

Closure (5 minutes)

- 1 (*application*) Ask the participants to tell one of their neighbors two things they might do differently in their job as a result of what they have learned. Ask volunteers to give examples.
- 2 Make a transition to the next session.

17 00 – 17 30 Feedback on the Day’s Activities and PAPA

OBJECTIVES

By the end of this session, participants will be able to do the following:

- Provide feedback on the day’s activities

- Consider possible actions they would like to implement in their own organizations

PROCEDURE

Training technique individual exercise

Highlight positive and negative points of the day Note areas that may need additional attention in the workshop Participants can describe some strengths and weaknesses of this day on handouts 2 7 9 and use handout 2 7 10 to facilitate their task (15 minutes)

PAPA

(application) Ask the participants to take some time to jot down some “action ideas” they may have for themselves as a result of today’s activities They can use handout 2 7 11 (15 minutes)

Sample Result

Exercise 7. Identification of trends, opportunities, and threats

Critical factors	Trends	Opportunities	Threats
1 State funding	Dropping in percentage	Donors' offers for new areas of research	
2 Private sector	Assumes role of financier and executor		Lower funding, competing for human resources
3 Research model	No new contributions to traditional plant breeding	Opening new areas of research	
4 Scientists and researchers	Outdated techniques and knowledge		Lack of appropriate human resources

Sample Result

Exercise 7. Identification of institutional strengths in relation to the external environment

	Strengths that allow institution to take advantage of opportunities	Strengths that protect institution from threats
A Inputs 1 Infrastructure		All investments are complementary, the private sector would have to begin from almost nothing
B Processes 1 Research model	Biotechnology can create new inputs for traditional plant breeding, e.g. new gene combinations	
C Products 1 Sustainability 2 Technologies	Private people, for specific groups, such as small farmers	This technology is a "public good" that the private sector will not want to fund

Sample Result

Exercise 7. Identification of institutional weaknesses in relation to the external environment

	Weaknesses that prevent institution from taking advantage of opportunities	Weaknesses that do not protect institution from threats
A Inputs 1 Human resources		
B Processes 1 Centralization	Biotechnology can create new inputs for traditional plant breeding, e g new gene combinations	At the regional level, competitors emerge who have more clearly defined the clientele and their needs
C Products 1 Varieties 2 Technologies	They do not incorporate achievement in other disciplines, such as biotechnology	They are not developed in a participatory way with the procedures

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Table 1 Identifying, Analyzing, and Priority Setting for Gaps

1 Description (A) *Training program to bring scientists and researchers up to date, and make them more aware of new research techniques and disciplines*

2 Classification (B)

Input X
 Process
 Product

3 Characterization (C)

Weakness for facing a threat
 Strength for facing a threat
 Strength for taking advantage of an opportunity
 Weakness for taking advantage of an opportunity X

4 Type of risk faced (D)

Present institutional sustainability X
 Adaption to future environmental conditions
 Changes in the institutional environment (innovation)

5 Demand of institutional resources (E)

	low	medium	high
Financial	<u> </u>	<u> </u>	<u> X </u>
Human	<u> </u>	<u> X </u>	<u> </u>
Infrastructure	<u> </u>	<u> </u>	<u> </u>
Others _____	<u> </u>	<u> </u>	<u> </u>

6 Possibility of external negotiation (F)

High X
 Medium
 Low

Notes

- A In the description be brief and use precise terms that permit identification of the activity to be carried out
- B Relate a gap to its highest classification. For example, in introducing a product that requires new processes and inputs mark it as a product
- C Mark the appropriate main objective to be achieved
- D Mark the type of risk one hopes to reduce by eliminating this gap
- E Estimate the resources needed for implementing the action in relation to the available resources and the needs caused by other gaps
- F This refers to external negotiations the institution would have to carry out to implement the proposed activities

DAY TWO

Session 7 Summary of Overheads

Objectives of Session 7

- Explain external organizational and gap analysis of an institution
- Demonstrate an internal analysis of an institution
- Identify and categorize the gaps

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External Analysis

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Prospective Analysis

- Involves monitoring interpreting and evaluating the relevant external environment
- Identifies the probable future in order to build a desired future
- Identifies trends to guide policy formulation and design effective strategies

273

Purposes of External Analysis

- Study relationships between the institution and its environment in terms of opportunities and threats
- Provide capacity to respond to critical questions from the external environment
- Explore future conditions of the institution & external environment
- Identify and prioritize emerging problems and design strategies to handle each one
- Build a vision of the future

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Methodologies for External Analysis

There is no universal methodology but a combination of concepts and methods suiting specific conditions of the NARIs

Qualitative Brainstorming pooling of experts judgment Delphi techniques and scenario building

Quantitative Structural analysis cross-impact matrix dynamic models risk forecasting and trend extrapolation

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Relevant External Environment

A multidimensional (sociocultural economic political legal and technological) combination of general or operational elements (forces aspects events facts, and actors) directly affecting present or future activities of the institution

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Critical External Factor

Any element (*force event fact or actor*) that can directly affect the institution's general performance or the performance of some of its activities

Should be considered in the external analysis

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Threat

Any element or circumstance that can become a disadvantage risk, or danger for the performance of any of the institution's most important activities

Threats must be recognized to avoid them or to reduce their impact

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Interdisciplinary Coordinating Committee

- ◆ Should be appointed before formulating strategic plan
- ◆ Requires political will to support financially—enough funds to carry out process politically—consultation from top management logically—adequate materials, equipment, personnel technically—ability to consult external experts

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Methodology for Prospective External Analysis

Step Strategic	Step Strategic
Identify the external environment	Identify and evaluate the external environment
Identify the critical external factors	Identify and evaluate opportunities and threats
Identify key sources of information on the external environment	

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Summary Steps in External Analysis

Process

- 1 Define the external environment
- 2 Identify critical external factors
- 3 Select key sources of information
- 4 Identify trends of critical factors

Product

5 Identify and evaluate opportunities and threats

2711

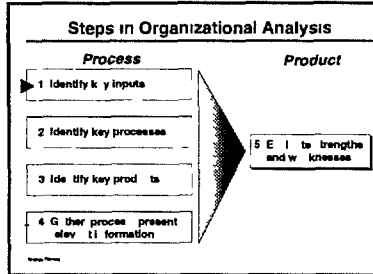
Organizational Analysis

2712

Methodology for Organizational Analysis

- 1 Identify aspects to be analyzed
- 2 Define information needed
- 3 Decide who will gather the information
- 4 Determine how to gather and process the information
- 5 Plan how to present results and conclusions

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Organizational Inputs

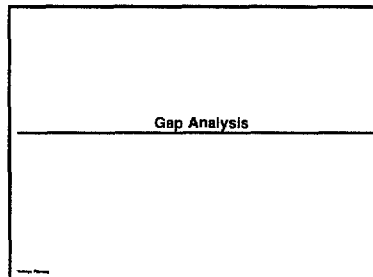
All financial physical and human resources used in the institution's operations whether in management research or technology transfer

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Analyzing Organizational Inputs

- 1 What inputs are to be evaluated?
- 2 Who can/should provide the information?
- 3 Which are the indispensable inputs?
- 4 Which are the complementary inputs?
- 5 What do the complementary inputs contribute?
- 6 What is the availability of each input?
- 7 What is the quality of each input?

2716



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Definition of Gap Analysis

An approach to define actions needed to enhance institutional sustainability in the medium and long term

2718

Gap Analysis Should Answer

What changes should be made in the inputs and internal processes to be able to offer the products or services that the clients will need in the next five to ten years?

2719

Gaps

Differences between

- present and desired products
- existing inputs and the ones needed
- current processes and ones still to be introduced

2720

Gap Identification and Analysis

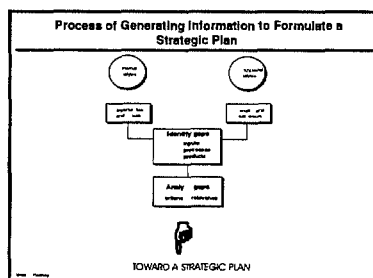
Major steps

- 1 Form a committee that is responsible for carrying out gap identification and analysis
- 2 Discuss in detail the relations among opportunities threats strengths and weaknesses
- 3 Produce a list of gaps ordered in terms of relevance
- 4 Make results known internally

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Format for Identifying Analyzing and Priority Setting for Gaps

2722



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Sample Result
Exercise 7 Identification of Trends Opportunities and Threats

Critical fact	Trends	Opportunities	Threats
State building	Dropping percentages	Disseminate for new research	Lower building, considering for human resources
Private sector	Insufficient role transfer and research	Opening new areas research	
Research model	No new contributions traditional model		
Scientists and researchers	Outdated institutions and knowledge		Lack appropriate human resources

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Sample Result
Exercise 7 Identifying Strengths in Relation to External Environment

	Strength that is a challenge	Strength that is an opportunity	Strength that is a threat
Inputs: Infrastructure			All investments are not always profitable. Some require time to begin to see an ROI.
Processes: Research and Development	Technology can create new products, but it also breeds new competitors.		
Products: Intellectual Property	Private equity for growth groups. High in start-up costs.	The technology public good. The private sector will not invest.	

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Sample Result
Exercise 7 Identifying Weaknesses in Relation to External Environment

	Weaknesses that prevent the firm from having a competitive edge	Weaknesses that do not prevent the firm from competing
Inputs: Human Resources		
Processes: Capabilities	Discontinuity in the market. High learning curve. New entrants.	Do not understand the market. Do not have clearly defined the market and their needs.
Products: Vertical Integration	They do not incorporate subsequent stages, such as distribution.	They are not developed with the participants.

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Sample Result
Exercise 7 Identifying Analysis and Priority Setting for Gaps

Category	Analysis	Priority Setting
Inputs	Infrastructure, Human Resources	High
Processes	Research and Development, Capabilities	Medium
Products	Intellectual Property	Low

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External Analysis¹

The future doesn't exist, it is constructed by society and its institutions (de Souza 1993)

Once a "strategic intention" has been formulated, an institution builds its future by implementing short-, medium-, and long-term policies and strategies. The definition of policies, strategies, and actions requires an intensive and organized effort, using information, creativity, and long-term commitment. This stems from the prospective analysis of the external environment (David 1988, Rue and Holland 1989, Sastoque 1991, Oliveira 1992, and Certo and Peter 1993)

Conceptualization

A prospective analysis is not a magic set of tools for fortune-telling. Prospective analysis tries to identify the "probable future" in order to build a "desired future." There isn't just one future, but rather a multitude of possible futures, none of which is guaranteed. The analysis is less for making predictions than for understanding the changing nature of the environment, on the basis of which an institution will have to build its future. It serves to identify trends to guide policy formulation and design effective strategies (de Souza 1993)

Prospective analysis of the external environment involves monitoring, interpreting, and evaluating the relevant external environment. These permit identification of present and potential opportunities and threats that can influence the institution's ability to achieve its objectives (Certo and Peter 1993)

Although identifying these factors does not guarantee success, the analysis allows the institution to be an active protagonist in building its own future, and reduces risks and uncertainty in the process. For this reason, at the institutional level, top management is the principal client of prospective context analysis.

External analysis should be carried out within the existing integrated planning, monitoring, and evaluation (PM&E) system of the institution. If the PM&E system is not functioning as an integrated and flexible system, the institution will need to make the necessary changes to permit it to operate at all levels of management.

External analysis has several purposes and functions (Oliveira 1992, Certo and Peter 1993). The following are examples of purposes:

- To study the relationships between the institution and its environment, in terms of present and potential opportunities and threats that will affect its performance and relative position.
- To provide top management with the capacity to respond to critical questions from the external environment.
- To explore future conditions of the institution's external environment, to include them in the decision-making process.
- To identify emerging problems that may be relevant to the institution, determine which will become priorities, and design the strategies to handle each one.
- To build a vision of the future for the institution, based on signs given by the emerging realities in the environment, which in turn reveal the forces that will shape the future.

The following are examples of the functions of an external analysis:

¹ Extracted and adjusted from J E Borges-Andrade, M D Escobar, J Palomino, R Saldanã, J Souza Silva. 1995. Strategic planning in agricultural research management. Module 2 of the series *Training in planning, monitoring and evaluation for agricultural research management*. Cali, Colombia: ISNAR.

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- In the specific theme-oriented function the analysis is carried out in a selective and restricted way for a particular objective. It may be directed to one special aspect of a center, institution program, or project. Its interest would be limited to those directly involved with that theme or area.
- The PM&E-oriented function mainly actualizes and strengthens the integrated system of PM&E and, therefore, the management process of an institution center, program, or project. This is the most complete form of context analysis, and it is of interest to all the groups of an institution center, program, or project.

To fulfill these and other purposes and functions, external analysis requires a combination of methods and techniques to capture the complex, multidimensional reality of the institution's external environment.

Methodologies for External Analysis Ideally, prospective studies should evolve from a "predictive mode," i.e., one that tends to occur, to the "exploratory mode," i.e., one that can occur, to the "normative mode," i.e., one that must occur in the desired situation (de Souza 1993). Since prospective studies that cover all these "modes" are costly, most institutions adapt methods to carry out the analysis at lower cost.

There are several techniques for carrying out an external analysis, including qualitative techniques such as brainstorming, pooling experts' judgments, Delphi techniques, and scenario building. The most frequently used quantitative techniques are the "structural analysis," "cross-impact matrix," "dynamic models," "risk forecasting," and "trend extrapolation" (David 1988, and Sastoque 1991). Different authors and institutions have used different approaches for prospective analysis of the external environment (Rue and Holland 1989, Oliveira 1992, and Certo and Peter 1993). There is no universal methodology, since institutions differ in size, nature of activities, internal organization, philosophy, and management models.

The approach presented here assumes a shortage of funds—a reality for most of the agricultural research institutions in Latin America and the Caribbean. The combination of concepts, methods, and tools is designed to allow any institution or program to carry out analyses without having to make large investments or call on the help of experts.

Before developing the methodology, a number of key terms must be defined.

Every institute or program is part of a *general external environment* and an *operational external environment*. Both external environments are multi-dimensional; the principal dimensions are sociocultural, economic, political, legal, and technical. The general external environment is the macro environment that affects an institution, no matter what sort of research it performs. At this level, events are beyond the control of the institution. The sociocultural, political, economic, and technological changes occurring worldwide are examples.

The operational external environment is the environment in which, and for which, the institution develops its activities. It directly influences the institution. And although the operational environment is beyond the institution's direct control, the institution does have a greater chance of exercising some control here than over other aspects of the external environment.

Every institution or program shares the same general external environment, but each one is influenced by a different operational external environment. They may share certain elements, but they will never be identical.

The combination of elements (forces, aspects, events, facts, and actors) of the general and operational environments which have the greatest potential for directly affecting the present or future activities of the institution makes up the *relevant external environment*. The relevant external environment is composed of many actors: present and potential clients, users, partners, and competitors (regional, national, or international).

Any element (force, event, fact, or actor) that can directly affect the institution's general performance or the performance of some of its activities is a *critical factor* which should be considered in the external analysis

An *opportunity* is any element or circumstance that, although not under the direct control of the institution, can contribute to any of its most important activities. In this sense, any element from the external environment that can somehow benefit the institution should be considered an opportunity. Opportunities should be exploited strategically.

A *threat* is any element that can become a disadvantage/risk/danger for the performance of any of the institution's most important activities. Any element (force, event, fact, or actor) of the relevant external environment that can partially or totally interfere with the institution's general performance, or that of any of its activities, should be seen as a threat. Threats must be recognized, to avoid them or to reduce their impact.

The methodology for prospective external analysis consists of five steps: three fall under "strategic diagnosis" and two under "strategic prognosis" (see Table 1).

Table 1 Methodology for Prospective External Analysis

Steps—Strategic diagnosis	Steps—Strategic prognosis
1 Identify the relevant external environment	4 Identify and evaluate the trend for each critical factor chosen
2 Identify the critical external factors in hierarchical order	5 Identify and evaluate opportunities and threats
3 Identify key sources of information for each critical factor	

Following are suggestions for carrying out each of the steps of the external analysis of an institution or program.

The coordination group and the external consultants

Before formulating a strategic plan for a program or institution, top management should appoint an interdisciplinary coordinating committee. This requires the political will to support the committee financially, politically, logistically, and technically. Financially, the committee needs enough funds to carry out the whole process. Politically, it must be able to count on direct participation from top management at all times. Logistically, it must have all the materials, instruments, basic equipment (e.g., computers, software, etc.), and necessary personnel (e.g., secretaries, assistants) to assure the completion of the job. Technically, the committee should be able to use external consultants (experts in management and strategic planning) when necessary. If called upon, the consultants should not do the work for the group, but train to be able to form

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their own plans independently. External consultants are also helpful for guiding and providing support in critical moments of the process.

Steps for strategic diagnosis

Step 1 Identify the relevant external environment In the sociocultural dimension, the coordinating committee should identify the social aspects, indicators, and variables that best characterize the society, country, and/or region of the institution or program. The group should concentrate on the aspects most strongly related to the institution's direct activities.

In the *general economic dimension*, the coordinating committee should identify (a) patterns of availability, distribution, and use of the financial resources in the general external environment, (b) national economic, fiscal, and monetary policies of the economic blocs and more developed countries of interest to the program, (c) national and international marketing trends for inputs and products, natural or processed, (d) consumption patterns of the internal and external market, (e) inflation, interest, and tax rates, (f) government budget deficits, (g) key factors of importation and exportation, and (h) the key values, principles, and premises that are affecting or will make up the "international paradigm" and the "national development model." The institute must discuss and select the most important economic aspects to be considered for its particular case.

In the *political dimension*, the coordinating committee must consider the political elements and aspects that can support or limit the general performance of any of the most important activities of the institution: relevant rules and policies, as well as political-ideological trends of the federal and/or state (provincial, departmental), and/or municipal government, e.g. conservative, progressive, etc.

In the *legal dimension*, the coordinating committee should consider the laws and legislation that affect (a) agroindustry, especially farming, livestock, fishing, and forestry, (b) the development of science and technology in general, and (c) the development of agricultural research in particular.

In the *technological dimension*, the coordinating committee should consider (a) the technological forces that drive agroindustrial development, (b) the enhancing and limiting factors for national technological development, and (c) the technological paradigms that are emerging in the country and in the world.

The operational external environment must be analyzed primarily in terms of the most relevant actors: regional, national, and international clients, users, partners, and competitors—present and potential. The committee should ask such critical questions as: Who are they? How many are there? Where are they? What do they do/produce? What do they need? What are their major problems or challenges? In what productive chain and at which technological level are they? How are they positioned? How are they organized and represented? What are the markets for their interests? What are their present and future expectations?

In the characterization of the relevant external environment for an institution or program, three factors are equally important: (a) the public, private, and non-governmental segments, (b) the "eco-regional" approach at any government level, and (c) the division and interdependence of the public powers at the federal, state (departmental or provincial), and municipal levels.

Table 2 shows a chart for recording the main elements that characterize the relevant external environment of an institution or program.

Step 2 Define the order of importance of critical external factors In Step 1, the coordinating committee identifies most of the factors that make up the relevant external environment of the institution. In Step 2, the group must concentrate on which of those factors identified should be chosen as critically important in the general performance of the institute. No matter how many factors are chosen in Step 1, in Step 2, the committee must conduct consecutive selection exercises until the final list contains no more than 20 critical external factors. Table 3 facilitates the recording of the most critical factors (in order of importance).

Step 3 Choose the key sources of information The coordinating committee should now identify and select the key sources of information for each of the critical external factors selected in Step 2. The sources can be, for example, periodicals, documents, government plans, programs and projects, recent books that analyze or synthesize for diagnosis or prognosis, events such as conferences and seminars, experts/specialists/managers/business people, or academic, political, and social leaders.

Table 2 Chart for Recording the Main Characteristics of the Relevant External Environment

Main dimensions of the relevant external environment	Critical factors of the external environment
<i>General external environment</i>	
● sociocultural dimension	
● economic dimension	
● political dimension	
● legal dimension	
● technological dimension	
<i>Operational external environment</i>	
● clients	
● users	
● partners	
● competitors	

Consulting these sources should have three key objectives: (a) to confirm the relevance of each external factor, (b) to explore the trend of each external factor, and (c) to explore whether the combination of each factor and its respective trend translates into an opportunity or threat for the institution. The committee should divide the work, so that each member can carry out consultations individually. Table 4 helps committee members to record the key sources of information for each critical external factor.

Step 4 Identify and evaluate the trends of the critical external factors After consulting the most relevant sources of information for each external critical factor, the coordinating committee should make a systematic, collective effort to identify and evaluate the trends of each of the factors. The group should (a) identify the trends, and (b) evaluate whether their effects will be shown in the short, medium, or long term.

Table 5 facilitates recording the most relevant trends. In the first column, the critical factors are recorded in order of the importance defined in Step 2. In the second column, the trends corresponding to these factors are recorded. In the three columns on the right, a check under S (short term), M (medium term), or L (long term) indicates when the trend will begin. This step helps to evaluate the relative importance of the trends.

Step 5 Identify and evaluate opportunities and threats From these trends, the coordinating committee can identify and evaluate the opportunities or threats represented. Each trend can represent more than one opportunity or threat, so these should be listed in order of importance according to the presumed degree of real or potential impact (low, medium, or high).

In Table 6, the critical factors are listed, in order of importance, in the first column and their corresponding trends in the second column. In the third and fourth columns, LI (low impact), MI (medium impact), or HI (high impact) should be entered to indicate the importance of the

Table 3 Chart for Recording the External Critical Factors Chosen in Order of Importance

Critical external factors (in order of importance)	Explanation/justification
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	

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Table 4 Chart for Recording the Key Sources of Information for the Critical Factors

Critical external factors	Key sources/information
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	

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Table 5 Chart for Recording the Trends of the Critical Factors

Critical external factors	Trends	S	M	L
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

Table 6 Chart for Recording Opportunities and Threats Represented by the Trends of the Critical Factors

Critical factors	Trends	Opportunities	Threats
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

LSO

opportunity or threat (Impact here refers to the effect of each external trend on the organization or program in question)

This will help evaluate the relative importance of the opportunities and threats, considering that those of high impact deserve more attention than those of low impact This chart is very important for the later “gap analysis,” when the committee needs to compare the opportunities and threats of the relevant external environment with the strengths and weaknesses of the institution

After carrying out these five steps for the external analysis (Figure 1) the committee is ready to carry out the ‘organizational analysis’ where the internal strengths and weaknesses of the institution or program will be identified and evaluated in relation to the opportunities and threats identified in the relative external environment A comparison of these elements will eventually enable the “gap analysis ”

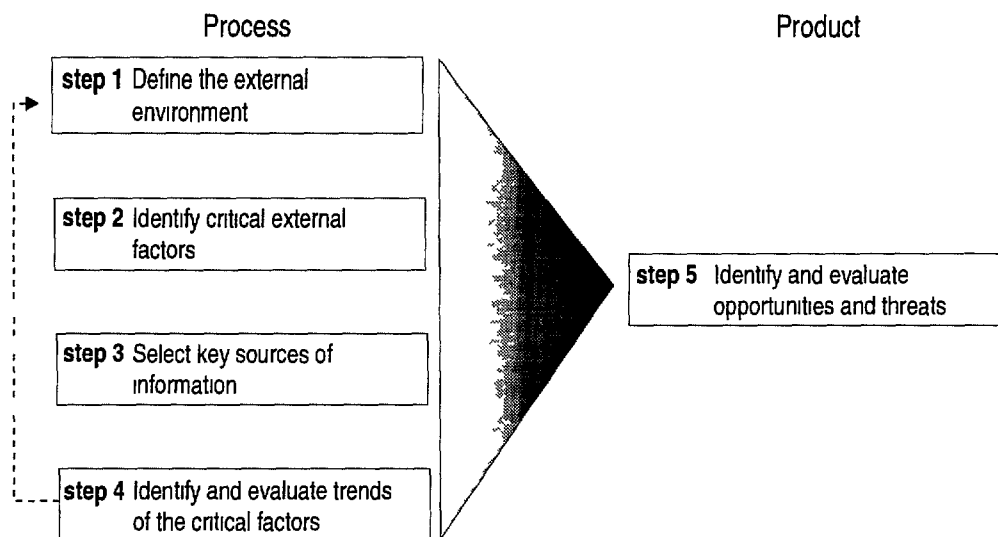


Figure 1 Steps in external analysis

Organizational Analysis¹

Organizational analysis is an internal assessment of the institution, to identify its strengths and weaknesses in relation to the objectives of agricultural research. This assessment should be as analytical as possible, for example, by comparing the institution with others. In Latin America, with the emergence of new public and private agricultural research institutions, this exercise acquires great relevance within the context of the strategic planning approach.

Through an appropriate organizational analysis, an institution should be able to identify its position with its clients. For example, after an internal analysis, a national research institution might find that its most important clients are small, landless farmers, or, conversely, commercial producers.

The methodology for organizational analysis involves a sequence of steps, summarized in the following list:

- 1 Identify the aspects to be analyzed
- 2 Define the information needed
- 3 Decide who will gather the information
- 4 Determine how the information will be gathered and processed
- 5 Plan how to present the results and conclusions

Agricultural research institutions are knowledge-producing organizations. Therefore, the most relevant aspects to be analyzed are those related to the inputs used and the processes carried out in the management of human and financial resources, and the management of research and the transfer or extension of technology.

Relevant Organizational Inputs

All financial, physical, and human resources used in the institution's operations—whether in management, research, or technology transfer—can be defined as organizational inputs. What might be a relevant organizational input for one area may not be

for another area. For example, a good accounting system is relevant for management, and could be for research if projects account for costs.

The analysis of relevant inputs includes those inputs that are currently available as well as those that are not. If the institution wants to diversify its funding sources by offering its research services to the private sector, an accounting package which permits the accounting of costs by project is a relative organizational input, whether available or not.

The relevant organizational inputs are identified and placed in order of importance relative to the achievement of the desired objective. They can be classified in two broad groups: indispensable and complementary.

Indispensable organizational inputs are those which are essential for achieving the objectives. For example, without specialized professional equipment, it is impossible to cultivate bacteria. It would be useful, but not essential, to have a microcomputer for processing the information. In this case, the microcomputer would be a complementary input.

It is very important to distinguish between these two kinds of inputs in the internal organizational analysis. Complementary inputs might contribute to an "ideal" situation that is out of the

¹ Extracted and adjusted from J. E. Borges Andrade, M. D. Escobar, J. Palomino, R. Saldanã, J. Souza Silva. 1995. Strategic planning in agricultural research management. Module 2 of the series *Training in planning, monitoring and evaluation for agricultural research management*. Cali, Colombia: ISNAR.

institution's budget range. On the other hand, these inputs can constitute a relative advantage. A microcomputer for each project may be a luxury the institution cannot afford, but sharing one computer would facilitate the rapid presentation of results, which might prove attractive to donor financing.

For this reason, in the process of identifying and prioritizing the inputs, a key factor is those who provide and those who process the information. Later in this section, the possible groups of people to anticipate in organizational analysis will be described.

Once the organizational inputs have been identified, the next step is to assess their quality. An available input may not be of sufficient quality. This is particularly true in the case of human resources; even very experienced researchers may not be up-to-date in the application of a certain methodology.

Following are the key questions for identifying and prioritizing organizational inputs:

1. What product or function is to be evaluated?
2. Who can/should provide the information?
3. Which are the indispensable inputs?
4. Which are the complementary inputs?
5. What do the complementary inputs contribute?
6. What is the availability of each input?
7. What is the quality of each input?

Relevant Organizational Processes

A relevant organizational process can be defined as an action or set of actions through which the institution transforms its inputs into outputs (for example, knowledge or technology).

In the analysis of organizational processes, special attention should be given to decision making in its different stages. Some critical processes include:

1. choosing, training, and stimulating human resources
2. obtaining and managing funds
3. quality control
4. planning, monitoring, and evaluation of research activities
5. needs assessment and responsiveness to clients

The human input is the most important input in research. For this reason, the selecting, training, and motivating of researchers should be carefully studied. Close attention also needs to be paid to the acquisition and management of financial resources, as these are increasingly scarce in most organizations today.

Quality control is the basis of the success of any service provider, especially those that offer knowledge. The concept of quality in modern management goes beyond the attractive presentation of the product. Today, aspects such as performance, concern for the environment, and cost control are also considered.

Pressing needs to improve the focus and impact of research organizations are resulting in greater emphasis on planning, monitoring, and evaluation. Likewise, in the highly competitive current market—in which monopolies are increasingly rare—client satisfaction has gained great importance. This is significant for organizations that generate knowledge, because sometimes the client

has no basis for identifying the product he hopes to receive. In this case producers must guide him in his decision, perhaps even share the risk with him.

Within each process the most important aspects to be included are related to supervision, execution, functioning, and possible improvement. Following are the key questions that should be answered during the analysis of an organizational process:

- 1 Who supervises the process?
- 2 Who carries out the process?
- 3 How well does the process work?
- 4 How could the process be improved?

Products

The last phase of organizational analysis is the analysis of the products generated by the institution. It is necessary to identify the different products resulting both from scientific progress and from the application of technologies already tested elsewhere.

The following classification, while not exhaustive, can help identify the main categories of products resulting from agricultural research:

- 1 finished products
 - seeds and improved varieties
 - animal breeds with specific characteristics
 - machinery and equipment
 - chemical and organic inputs
- 2 products related to knowledge on
 - management of crops and production systems
 - animal management and sanitary control
 - natural resource management and preservation
- 3 Intermediate products that contribute to scientific progress
 - identification of sources of disease resistance
 - development of new methods or processes
 - maintenance and classification of germplasm

Gathering, Processing, and Presenting the Information

To facilitate gathering the relevant information for organizational analysis, both at the "input" and "process" level, a committee should be formed. It should consist of people with a profound knowledge of the institution, highly regarded by both peers and superiors. This committee could be called the "Institution Expert Committee." Its main function is to identify information needs for the analysis.

The expert committee could form a smaller subcommittee for gathering and integrating the data. It could also form a subcommittee for analyzing the information and presenting the results.

It is necessary to remember that organizational analysis is fundamentally an internal exercise in which all relevant parties should participate. The results should be distributed widely, so that relevant changes or additions can be discussed and suggested. The quality and effectiveness of the following steps of organizational analysis depend on a high level of participation in generating information and distributing analyses and results (see Figure 1).

Strengths

Strengths refer to the characteristics of the inputs, processes and products which allow the institution to take advantage of the opportunities, or which protect it from the threats coming from the context. For example, it is a strength to have researchers trained in plant pathology in programs dedicated to socially important issues such as unsolved plant diseases.

This definition of strength tends to be a static concept. In reality, organizational strengths are derived mainly from decision making at the management level, in terms of the allocation of resources. A proper allocation of internal resources allows the institution to interact most effectively with the market. It also permits the acquisition of inputs and implementing processes, and the generation of the products that the clients need. This can generate income, thereby starting the cycle over again. In addition, an appropriate allocation of funds allows the institution to develop internal strengths that protect it from threats or utilize external opportunities.

Organizational strengths can be analyzed in terms of what an institution can do that others cannot. Organizational strengths are only strengths in comparison with the market and possible competitors. In terms of inputs, it may be the availability of highly specialized personnel, in terms of process, it may be the speed with which a research theme is identified and the respective project is put into action. Finally, in terms of product, organizational strengths are every aspect of quality control. In all the preceding examples, a good allocation of resources permits finding, maintaining, or building a strength.

When gathering information about the strengths of an institution, it is useful to distinguish between the strengths that support the institution, permitting it to take advantage of opportunities and the strengths that defend the institution from threats. Similarly, it is necessary to distinguish the strengths that come from the availability of inputs, from the structure of the processes, or from the characteristics of the products (see Table 1).

Table 1 Identification of Institutional Strengths in Relation to the External Environment

	Strengths that allow the institution to take advantage of opportunities	Strengths that protect the institution from threats
A Inputs		
1		
2		
3		
B Processes		
1		
2		
3		
C Products		
1		
2		
3		

Weaknesses

Organizational weaknesses refer to all the characteristics of inputs, processes, and products that do not help the institution to make use of opportunities or do not protect it from threats coming from the external environment. An example of an organizational weakness would be having a strong program for improving grain varieties when the country decides to open grain importation and abandon local production.

As with strengths, weaknesses must be evaluated dynamically Using the previous example with a small investment, researchers could receive training which could create an opportunity to export grain varieties

Financial resources can be directed toward reducing the biggest organizational weaknesses The policy of reducing weaknesses has two goals first, maintaining the institution's position in the market, which can be a short-term objective, and second, stimulating institutional development and growth, which can be a long-term objective The allocation of resources should first concentrate on eliminating weaknesses that are a high risk for institutional sustainability, then concentrate on strengthening those that will favor long-term development This gives "intelligent investments" greater relevance within the strategic approach

Table 2 Identification of Institutional Weaknesses in Relation to the External Environment

	Weaknesses that prevent the institution from taking advantage of opportunities	Strengths that do not protect the institution from threats
A Inputs 1 2 3		
B Processes 1 2 3		
C Products 1 2 3		

Organizational weaknesses should also be classified in terms of those that do not support the institution in using opportunities and those that do not protect it from threats A second dimension for the classification of weaknesses is related to organizational inputs, processes, and products Table 2 is a guide for gathering information about organizational weaknesses

As many staff as possible should participate in identifying strengths and weaknesses This methodology allows each administrative or research unit to analyze its own strengths and weaknesses, and to suggest those of other units Figure 1 shows the steps of the process After the process has been completed the information should be carefully checked by the units to identify mistakes or omissions

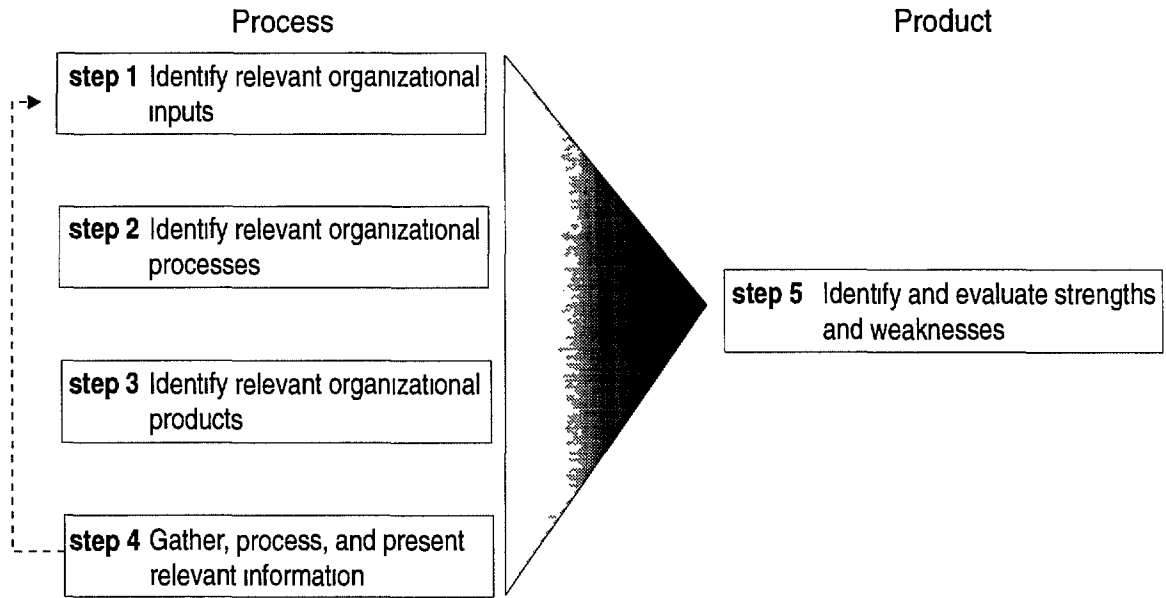


Figure 1 Steps in organizational analysis

Gap Analysis¹

The first two sections of this sequence (handout 2.7.1 and 2.7.2) presented concepts and methods for identifying (1) threats and opportunities related to the external environment and (2) strengths and weaknesses derived from the internal structure and organization

This section presents a framework for defining a desired future state of the institution, and actions to be taken to move toward it. As specified in "Organizational Analysis," the objective is to identify the changes within the institution, the inputs, processes, and products of the institution, and how to implement them to arrive at the desired future state in a given period of time. Gap analysis is an approach to define actions needed to enhance institutional sustainability in the medium and long term. Gap analysis should answer this question:

What changes should be made in the inputs and internal processes to be able to offer the products or services that the client will need in the next five to ten years?

Once these changes are identified, management must make the necessary decisions for the institution to benefit from the analyses of the organization and its context. Decision making is an essential phase and forms part of institutional policy, to be dealt with in a later session.

Definition of Gaps

Gaps are differences between present and desired products, between existing inputs and needed ones, and between current processes and ones still to be introduced. Some examples follow:

Product gap An agricultural research institution specializes in the development of genetic materials to improve yield. It may find that government policies now promote the export of tropical fruit, so that within five years, it must offer low-cost techniques for quarantine control to pass the barriers imposed by fruit-importing countries.

Process gap Upper-income consumers prefer foods that are not chemically contaminated. A beef production improvement program analyzes beef by color, texture, and length of fiber, but now it must also detect toxic residuals from drugs applied to prevent disease.

Input gap A program to investigate the introduction of improved pastures finds difficulties in funding because it does not have an analysis component to measure the impact on the region's natural resources. It will probably be necessary to hire a biologist to fill this gap.

These are examples that can occur at different levels of the research, institution, program, or project. Gaps should also be identified at different administrative levels, such as experimental stations, regional centers, central offices, etc. This explains the need for employees of all levels to participate in gap identification.

Identification and analysis

The quality of gap identification and analysis depends on the quality of prior organizational and environmental analyses. If institutional strengths and weaknesses are related to environmental opportunities and threats in these analyses, gap analysis becomes more meaningful and easier.

These three analyses (organizational, environmental, gap) have been presented separately for the sake of clarity, but they can actually be carried out together as one exercise, in which the information flows throughout all steps.

¹ Extracted and adjusted from J. E. Borges-Andrade, M. D. Escobar, J. Palomino, R. Saldanã, J. Souza Silva. 1995. Strategic planning in agricultural research management. Module 2 of the series *Training in planning, monitoring and evaluation for agricultural research management*. Cali, Colombia: ISNAR.

Gap identification and analysis follows four steps

- 1 Form a committee that is responsible for carrying out gap identification and analysis
- 2 Discuss in detail the relations among opportunities threats, strengths and weaknesses
- 3 Produce a list of gaps ordered in terms of relevance
- 4 Make results known internally

Ideally, the composition of this committee should be the same as that of the groups which carried out the organizational analysis—that is, those who know more about internal operations and structure. To ensure that sessions are productive, this group should be relatively small. However, since gap identification covers different management and operational levels of an institution, the appropriate actors may be invited when detailed information is required. The committee should discuss the existing relations between the threats and opportunities identified in the external environment, and the corresponding strengths and weaknesses at the internal organizational level. The objective of the discussions should be to clearly determine the activities to arrive at the desired institutional situation. Since the committee is not a decision-making body, its recommendations should clearly establish the institutional and budgeting implications that implementation would have. For example, strengthening a program could lead to the redefinition of the position of the program director, giving him greater autonomy in budgeting and thus including him in management. The better these implications are explained, the more people will accept the recommendations of the committee.

The following step is to produce a list of gaps in order of relevance, which helps to distinguish necessary actions from recommended actions. At this point, the priorities for the allocation of funds will be under discussion. Conflicts of interest can arise within the institution, which makes it advisable to negotiate the recommendations, arriving at an agreement by consensus. If this is not done, the directors may encounter resistance in implementing the recommendations.

The next step is the distribution of the results among staff. This should be a continuous process, carried out as the gaps are identified. The feedback that the committee receives will serve for reformulating proposals or identifying alternative procedures.

Up to this point, the emphasis has been on internal negotiation. But gaps and proposals for action must have the frame of reference of the institution's external capacity for negotiation. A typical example is the rigidity of the budget with respect to funding from the national treasury. Other aspects have to do with limitations in changing specific objectives, contracting and handling personnel, regional coverage, etc.

Criteria of Hierarchy

To establish criteria for setting priorities among existing gaps, one should remember the general objective of this three-part environmental, organizational, and gap analysis exercise: the sustainability and development of the institution. For this reason, establishing a hierarchy among gaps means looking more closely at the problem of risks.

Intuitively, the first and greatest effort is put into reducing or, if possible, eliminating the risks to the institution's sustainability or survival. These risks materialize as a loss of credibility with farmers and the public at large.

The second category of risks is one which could emerge as a result of future developments in the institutional environment. The information comes from the trends observed in the variables that affect this environment. However, unlike the first category of risks, it is impossible to foresee the evolution of a situation. Decisions therefore must be more cautious, aimed at improving the institution's flexibility to modifications in the demand for products or services offered.

The third category of risks involves the possibility that the institution will alter its business environment through innovations. These could include a new product, process, input, or combination thereof. Uncertainty in the case of innovations is greater.

In agricultural research institutions, the main restrictions for closing gaps are lack of human and financial resources. If both types of resources are relatively scarce, the institution should concentrate its efforts on the first category of gaps, i.e. those that jeopardize the institution's sustainability. If resources are relatively sufficient, it is better to find a strategy that combines activities covering the three risk categories.

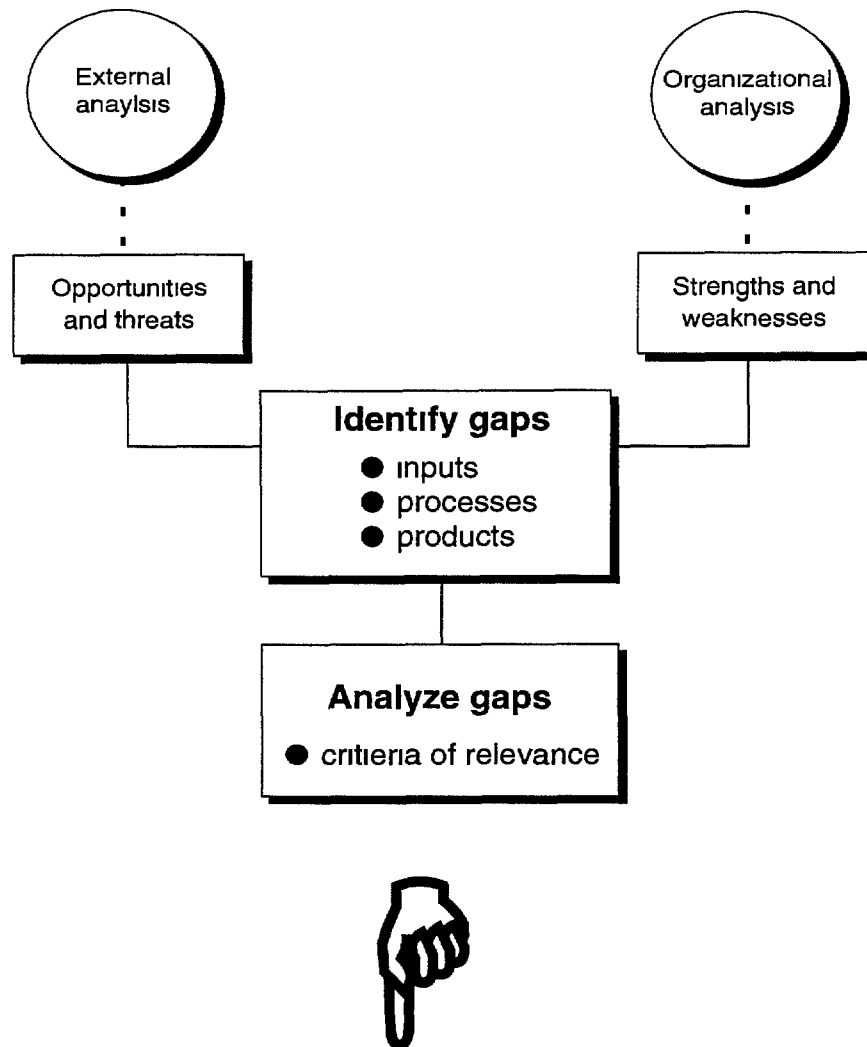
Table 1 suggests a format for processing information related to identifying, analyzing, and priority setting for gaps. Points 2 through 6 provide a useful exercise in classifying gaps in numerical terms.

Table 1 Format for Identifying, Analyzing, and Priority Setting for Gaps

1 Description (A) <i>Training program to bring scientists and researchers up to date, and make them more aware of new research techniques and disciplines</i>			

2 Classification (B)			
Input	_____		
Process	_____		
Product	_____		
3 Characterization (C)			
Weakness for facing a threat	_____		
Strength for facing a threat	_____		
Strength for taking advantage of an opportunity	_____		
Weakness for taking advantage of an opportunity	_____		
4 Type of risk faced (D)			
Present institutional sustainability	_____		
Adaption to future environmental conditions	_____		
Changes in the institutional environment (innovation)	_____		
5 Demand of institutional resources (E)			
		low	medium
Financial	_____	_____	_____
Human	_____	_____	_____
Infrastructure	_____	_____	_____
Others _____	_____	_____	_____
6 Possibility of external negotiation (F)			
High	_____		
Medium	_____		
Low	_____		
Notes			
A In the description be brief and use precise terms that permit identification of the activity to be carried out			
B Relate a gap to its highest classification. For example, in introducing a product that requires new processes and inputs, mark it as a product.			
C Mark the appropriate main objective to be achieved.			
D Mark the type of risk one hopes to reduce by eliminating this gap.			
E Estimate the resources needed for implementing the action, in relation to the available resources and the needs caused by other gaps.			
F This refers to external negotiations the institution would have to carry out to implement the proposed activities.			

An institution has one major reason for carrying out the three types of analysis given in this sequence to generate objective, reliable information with which to construct a strategic plan. Figure 1 shows how these three analyses are related.



TOWARD A STRATEGIC PLAN

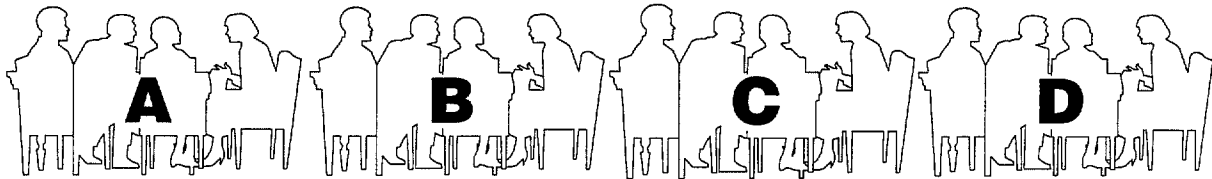
Figure 1 Process of generating information to formulate a strategic plan

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Exercise 7. External, organizational, and gap analysis (modified “trip around the tables” technique)

Phase 1 Group work (1 hour 10 minutes)

- 1 Form four groups of participants, each electing a rapporteur



- 2 All participants read handouts 2 7 1, 2 7 2, and 2 7 3, and briefly discuss them with the group members (10 minutes)
- 3 Analyze your own environment and come to a consensus to complete handouts 2 7 5, 2 7 6, 2 7 7, and 2 7 8 as assigned below (35 minutes)

GROUP A and C

- Identify the gaps for a national institution

GROUP B and D

- Identify the gaps for a national biotechnology program

- 4 The rapporteurs compile the groups' inputs on the worksheets (5 minutes)
- 5 Rapporteurs of group A and B switch tables. The rapporteurs of group C and D do the same. They present their group's inputs and collect contributions to improve their responses (10 minutes)
- 6 The rapporteurs return to their own group. They share the contributions collected during the “trip” and decide on the major responses to the assigned questions (10 minutes)

Phase 2 Reporting and discussion (55 minutes)

- 7 The rapporteurs write the results on the flipchart and present them to the audience. Each rapporteur has about five minutes to present (20 minutes)
- 8 The trainer will make a comparative analysis of the responses, after which you will be invited to participate in a discussion (30 minutes)
- 9 The trainer will invite you to provide feedback on the content and process of this exercise (5 minutes)

Exercise 7. Worksheet

Identification of trends, opportunities, and threats

Critical factors	Trends	Opportunities	Threats
1			
2			
3			
4			
5			
6			
7			
8			
9			
10.			

Exercise 7. Worksheet

Identification of institutional strengths in relation to the external environment

	Strengths that allow the institution to take advantage of opportunities	Strengths that protect the institution from threats
A Inputs 1 2 3		
B Processes 1 2 3		
C Products 1 2 3		

Exercise 7. Worksheet

Identification of institutional weaknesses in relation to the external environment

	Weaknesses that prevent the institution from taking advantage of opportunities	Weaknesses that do not protect institution from threats
A Inputs 1 2 3		
B Processes 1 2 3		
C Products 1 2 3		

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Exercise 7. Worksheet

Identifying, analyzing, and priority setting for gaps

1 Description (A) *Training program to bring scientists and researchers up to date and make them more aware of new research techniques and disciplines*

2 Classification (B)

Input _____

Process _____

Product _____

3 Characterization (C)

Weakness for facing a threat _____

Strength for facing a threat _____

Strength for taking advantage of an opportunity _____

Weakness for taking advantage of an opportunity _____

4 Type of risk faced (D)

Present institutional sustainability _____

Adaption to future environmental conditions _____

Changes in the institutional environment (innovation) _____

5 Demand of institutional resources (E)

	low	medium	high
Financial	_____	_____	_____
Human	_____	_____	_____
Infrastructure	_____	_____	_____
Others _____	_____	_____	_____

6 Possibility of external negotiation (F)

High _____

Medium _____

Low _____

Notes

- A In the description be brief and use precise terms that permit identification of the activity to be carried out
- B Relate a gap to its highest classification For example in introducing a product that requires new processes and inputs mark it as a product
- C Mark the appropriate main objective to be achieved
- D Mark the type of risk one hopes to reduce by eliminating this gap
- E Estimate the resources needed for implementing the action in relation to the available resources and the needs caused by other gaps
- F This refers to external negotiations the institution would have to carry out to implement the proposed activities

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Strengths and Weaknesses

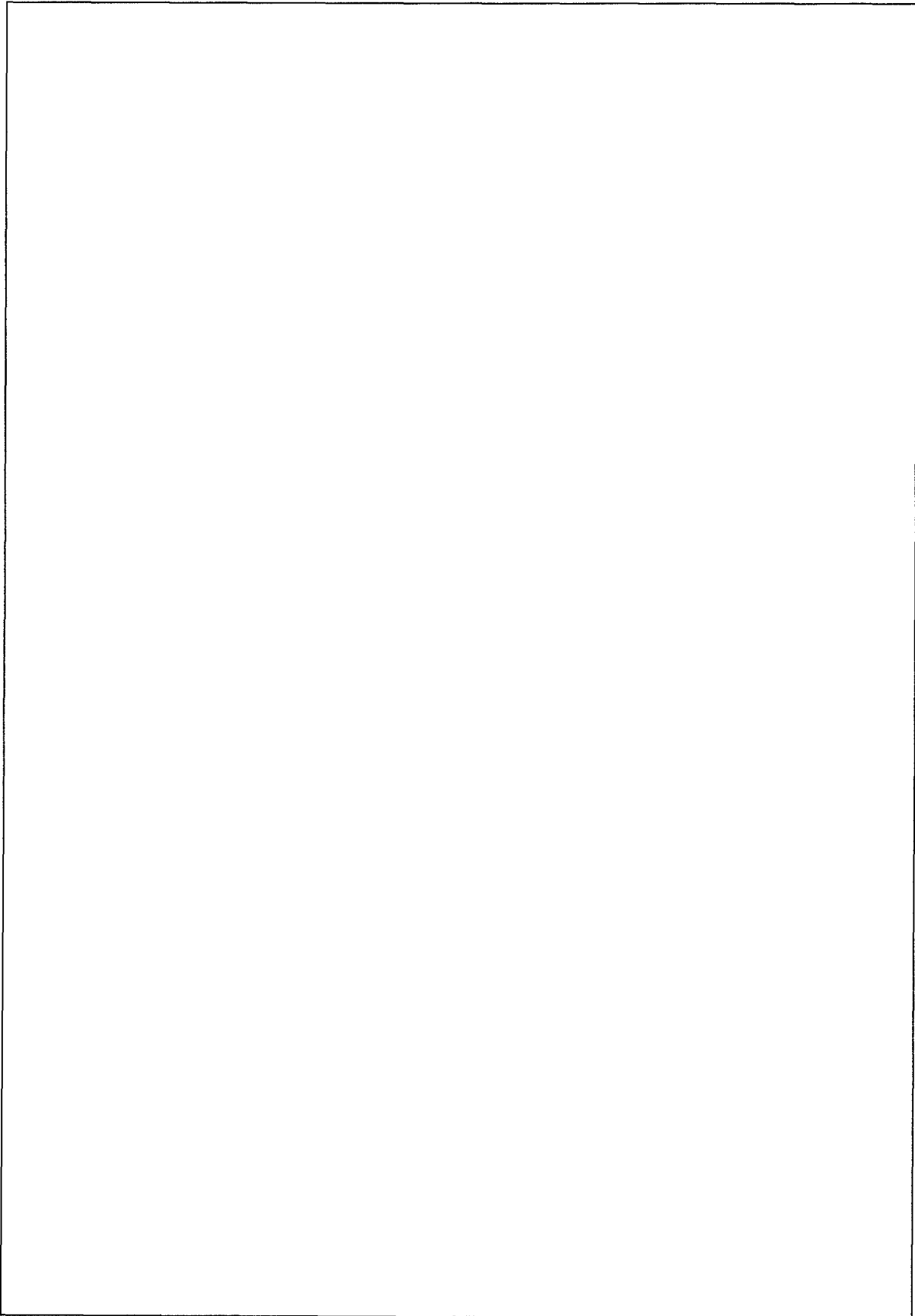
- Please list what you consider to be three strengths of day two

1
2
3

- Please list what you consider to be three weaknesses of day two

1
2
3

- **Suggestions for improvements**



Guidelines to Provide Feedback on the Workshop

1 The Module

Content

- usefulness/relevance
- amount of information

Structure

- sequence
- duration
- balance between trainers' and trainees' participation
- instructions to trainers
- visual aids
- handouts, exercises
- extra readings
- PAPA
- evaluation

2 Process training techniques and direction

- usefulness/relevance/effectiveness
- group interaction
- clarity of questions/exercise instructions
- opening and closure of the days

3 Trainers', facilitators', and trainees' performance

- presentation/communication skills
- interaction/effective participation
- punctuality/interest/commitment/willingness to facilitate learning/willingness to participate
- other attitudes

4 Logistical support

- organization
- accuracy
- punctuality
- willingness to assist participants
- services provided in general

5 Workshop environment

- physical (training facilities, training material, hotel facilities in general)
- psychological (personal feelings such as self-motivation, interest, satisfaction, self-achievement)
- social (development of friendship, relaxed, comfortable among participants, etc)

6 Workshop results/outputs

- personal and professional assessment
- recommendations

7 General comments

FIRST STAGE

PAPA - ideas for action items

Date _____

Workshop title SADC/ESAMI/ISNAR Workshop on Strategic Planning

Date/Venue _____

Name _____

Organization _____

Ideas I would like to try when I return to work at my research institute, based on what I have learned in this training workshop

Note You can use the workshop objectives what you learn during the workshop the handouts conversations with participants and trainers etc to come up with ideas

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DAY THREE

Strategic Planning

DAY THREE — Overview

Objectives

By the end of the day the participants will be able to do the following

- 1 Explain institutional performance assessment
- 2 Discuss the concepts of vision and mission
- 3 Formulate a vision and mission statement for a national agricultural research institution

Handouts

- 3 8 1 Overview of Day Three
- 3 8 2 Tentative Schedule of Day Three
- 3 8 3 Institutional Performance Assessment (text)
- 3 8 4 Institutional Assessment An Overview of the Process (text)
- 3 8 5 Exercise 8 Institutional Performance Assessment
- 3 8 6 Exercise 8 Group A Organizational Autonomy
- 3 8 7 Exercise 8 Group A Leadership
- 3 8 8 Exercise 8 Group B Management and Administration
- 3 8 9 Exercise 8 Group B Commercial Orientation
- 3 8 10 Exercise 8 Group C Consumer Orientation
- 3 8 11 Exercise 8 Group C Technical Capability
- 3 8 12 Exercise 8 Group D Developing and Maintaining Staff
- 3 8 13 Exercise 8 Group D Organizational Culture
- 3 8 14 Exercise 8 Group D Interactions with Key External Institutions
- 3 9 1 NARIs Role in the Future Vision and Mission Formulation (text)
- 3 9 2 Formulating the Mission (text)
- 3 9 3 Concepts of Vision and Mission (summary)
- 3 9 4 Exercise 9 NARIs Role in the Future Vision and Mission Formulation
- 3 9 5 Exercise 9 Worksheet (Part I)
- 3 9 6 Exercise 9 Worksheet (Part II)
- 3 9 7 Strengths and Weaknesses of Day Three
- 3 9 8 Guidelines to Provide Feedback on the Workshop
- 3 9 9 PAPA—First stage

Strategic Planning

DAY THREE — Tentative Schedule

- 08 30 – 09 00 **Opening of the Day's Activities**
- 09 00 – 10 30 **Session 8 Institutional Performance Assessment**
(Presentation and exercise 8)
- 10 30 – 10 45 Tea/Coffee Break
- 10 45 – 12 00 **Session 8 (Continued)**
- 12 00 – 13 00 **Session 9 NARIs Role in the Future Vision and Mission Formulation**
(Presentation and exercise 9)

13:00 – 14:00 Lunch

- 14 00 – 15 15 **Session 9 (Continued)**
- 15 15 – 15 30 Tea/Coffee Break
- 15 30 – 17 00 **Session 9 (Continued)**
- 17 00 – 17 30 **Feedback on the Day's Activities and PAPA**
-

Strategic Planning

DAY THREE — Checklist for Trainers

Handouts

	Yes ✓	No ✓
3 8 1 Overview of Day Three	<input type="checkbox"/>	<input type="checkbox"/>
3 8 2 Tentative Schedule of Day Three	<input type="checkbox"/>	<input type="checkbox"/>
3 8 3 Institutional Performance Assessment (text)	<input type="checkbox"/>	<input type="checkbox"/>
3 8 4 Institutional Assessment An Overview of the Process (text)	<input type="checkbox"/>	<input type="checkbox"/>
3 8 5 Exercise 8 Institutional Performance Assessment	<input type="checkbox"/>	<input type="checkbox"/>
3 8 6 Exercise 8 Group A Organizational Autonomy	<input type="checkbox"/>	<input type="checkbox"/>
3 8 7 Exercise 8 Group A Leadership	<input type="checkbox"/>	<input type="checkbox"/>
3 8 8 Exercise 8 Group B Management and Administration	<input type="checkbox"/>	<input type="checkbox"/>
3 8 9 Exercise 8 Group B Commercial Orientation	<input type="checkbox"/>	<input type="checkbox"/>
3 8 10 Exercise 8 Group C Consumer Orientation	<input type="checkbox"/>	<input type="checkbox"/>
3 8 11 Exercise 8 Group C Technical Capability	<input type="checkbox"/>	<input type="checkbox"/>
3 8 12 Exercise 8 Group D Developing and Maintaining Staff	<input type="checkbox"/>	<input type="checkbox"/>
3 8 13 Exercise 8 Group D Organizational Culture	<input type="checkbox"/>	<input type="checkbox"/>
3 8 14 Exercise 8 Group D Interactions with Key External Institutions	<input type="checkbox"/>	<input type="checkbox"/>
3 9 1 NARIs Role in the Future Vision and Mission Formulation (text)	<input type="checkbox"/>	<input type="checkbox"/>
3 9 2 Formulating the Mission (text)	<input type="checkbox"/>	<input type="checkbox"/>
3 9 3 Concepts of Vision and Mission (summary)	<input type="checkbox"/>	<input type="checkbox"/>
3 9 4 Exercise 9 NARIs Role in the Future Vision and Mission Formulation	<input type="checkbox"/>	<input type="checkbox"/>
3 9 5 Exercise 9 Worksheet (Part I)	<input type="checkbox"/>	<input type="checkbox"/>
3 9 6 Exercise 9 Worksheet (Part II)	<input type="checkbox"/>	<input type="checkbox"/>
3 9 7 Strengths and Weaknesses of Day Three	<input type="checkbox"/>	<input type="checkbox"/>
3 9 8 Guidelines to Provide Feedback on the Workshop	<input type="checkbox"/>	<input type="checkbox"/>
3 9 9 PAPA—First Stage	<input type="checkbox"/>	<input type="checkbox"/>

Overheads

3 8 1 Objectives of Day Three	<input type="checkbox"/>	<input type="checkbox"/>
3 8 2 Schedule of Day Three	<input type="checkbox"/>	<input type="checkbox"/>
3 8 3 Objective of Session 8	<input type="checkbox"/>	<input type="checkbox"/>
3 8 4 Institutional Performance Assessment	<input type="checkbox"/>	<input type="checkbox"/>
3 8 5 Performance Category	<input type="checkbox"/>	<input type="checkbox"/>
3 8 6 Performance Categories for Institutional Assessment	<input type="checkbox"/>	<input type="checkbox"/>
3 8 7 Organizational Autonomy	<input type="checkbox"/>	<input type="checkbox"/>
3 8 8 Leadership	<input type="checkbox"/>	<input type="checkbox"/>
3 8 9 Effective Management	<input type="checkbox"/>	<input type="checkbox"/>

	Yes ✓	No ✓
3 8 10 Key Administration	<input type="checkbox"/>	<input type="checkbox"/>
3 8 11 Commercial Orientation	<input type="checkbox"/>	<input type="checkbox"/>
3 8 12 Consumer Orientation	<input type="checkbox"/>	<input type="checkbox"/>
3 8 13 Organizational Culture	<input type="checkbox"/>	<input type="checkbox"/>
3 8 14 Interactions with Key External Institutions	<input type="checkbox"/>	<input type="checkbox"/>
3 8 15 Example of Performance Category Indicators (I)	<input type="checkbox"/>	<input type="checkbox"/>
3 8 16 Example of Performance Category Indicators (II)	<input type="checkbox"/>	<input type="checkbox"/>
3 9 1 Objectives of Session 9	<input type="checkbox"/>	<input type="checkbox"/>
3 9 2 Vision and Mission	<input type="checkbox"/>	<input type="checkbox"/>
3 9 3 Vision	<input type="checkbox"/>	<input type="checkbox"/>
3 9 4 Visioning	<input type="checkbox"/>	<input type="checkbox"/>
3 9 5 The Essence of Successful Organizational Visioning	<input type="checkbox"/>	<input type="checkbox"/>
3 9 6 Why Should Organizations Develop a Vision?	<input type="checkbox"/>	<input type="checkbox"/>
3 9 7 Formulating the Vision	<input type="checkbox"/>	<input type="checkbox"/>
3 9 8 A Planning Comparison	<input type="checkbox"/>	<input type="checkbox"/>
3 9 9 Mission and Mission Statement	<input type="checkbox"/>	<input type="checkbox"/>
3 9 10 Name Isn't Everything	<input type="checkbox"/>	<input type="checkbox"/>
3 9 11 Components of a Mission Statement	<input type="checkbox"/>	<input type="checkbox"/>
3 9 12 Questions to Answer in the Mission Statement	<input type="checkbox"/>	<input type="checkbox"/>
3 9 13 Analysis	<input type="checkbox"/>	<input type="checkbox"/>
3 9 14 Hierarchical Classification of EMBRAPA's Objectives	<input type="checkbox"/>	<input type="checkbox"/>

Materials

● Overhead projector	<input type="checkbox"/>	<input type="checkbox"/>
● Projector screen	<input type="checkbox"/>	<input type="checkbox"/>
● Flipchart stands (minimum 2)	<input type="checkbox"/>	<input type="checkbox"/>
● Flipchart paper/pads (about 10 per day)	<input type="checkbox"/>	<input type="checkbox"/>
● Markers for writing on newsprint	<input type="checkbox"/>	<input type="checkbox"/>
● Markers for writing on transparencies	<input type="checkbox"/>	<input type="checkbox"/>
● Blank transparencies	<input type="checkbox"/>	<input type="checkbox"/>
● Stapler	<input type="checkbox"/>	<input type="checkbox"/>
● Tape (strong masking tape and regular tape)	<input type="checkbox"/>	<input type="checkbox"/>
● Push pins	<input type="checkbox"/>	<input type="checkbox"/>
● Glue	<input type="checkbox"/>	<input type="checkbox"/>
● Pencils/notepads/pens	<input type="checkbox"/>	<input type="checkbox"/>
● Pencil sharpeners	<input type="checkbox"/>	<input type="checkbox"/>
● Extension cords	<input type="checkbox"/>	<input type="checkbox"/>
● Certificates	<input type="checkbox"/>	<input type="checkbox"/>
● Photocopying facilities	<input type="checkbox"/>	<input type="checkbox"/>
● Spare bulbs for overhead projector	<input type="checkbox"/>	<input type="checkbox"/>

- Extra notepads and pens
- Scissors

Yes	No
✓	✓
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

DAY THREE

Session 8 Institutional Performance Assessment

Instructions to Trainers

PRE-SESSION

08 30 – 09 00 Opening of the Day's Activities

- Review of the previous day's activities
- Summary of the evaluation of the previous day
- Overview of the day's activities

OBJECTIVES

By the end of this pre-session, the participants will be able to do the following

- Assess the progress of the workshop
- Summarize the objectives and agenda for the day's activities

OPENING

Invite a volunteer to review the previous day's activities (10 minutes)

Summarize the evaluation of the previous day (10 minutes)

Distribute the overview and the schedule for day three to the participants (handouts 3 8 1 and 3 8 2) Review the objectives and schedule, using overheads 3 8 1 and 3 8 2 Ask if clarifications are needed (10 minutes)

SESSION 8

09 00 – 10 30 Session 8 Institutional Performance Assessment

10 30 – 10 45 Tea/Coffee Break

10 45 – 12 00 Session 8 (Continued)

OBJECTIVE

By the end of this session the participants will be able to do the following

- Explain institutional performance assessment

Use overhead 3 8 3 to present the objective

PROCEDURE

Training techniques presentation, group process

PRESENTATION

(experience) Give a brief presentation focusing on institutional performance assessment Use handouts 3 8 3 and 3 8 4 as background information for the presentation Overheads 3 8 4 through 3 8 16 support the presentation Distribute handouts 3 8 3 and 3 8 4 (15 minutes)

EXERCISE 8

Exercise 8 Institutional performance assessment (2 hours 25 minutes)

- 1 Distribute handout 3 8 5 to all the participants. Invite a volunteer to read handout 3 8 5 aloud. This gives clear instruction for the exercise. Go over the instructions step by step. Emphasize and remind the participants about the time. Ask if any clarifications are needed (5 minutes)

Phase 1 Group work (1 hour 20 minutes)

- 2 (*experience*) Divide the participants into four groups and ask each group to elect a rapporteur. Note that the groups will read handouts 3 8 3 and 3 8 4. Each group then receives different handouts for the exercise. Distribute the handouts to the groups as follows (20 minutes)

- Group A

 - handout 3 8 6 - Organizational Autonomy

 - handout 3 8 7 - Leadership

- Group B

 - handout 3 8 8 - Management and Administration

 - handout 3 8 9 - Commercial Orientation

- Group C

 - handout 3 8 10 - Consumer Orientation

 - handout 3 8 11 - Technical Capability

- Group D

 - handout 3 8 12 - Developing and Maintaining Staff

 - handout 3 8 13 - Organizational Culture

 - handout 3 8 14 - Interactions with Key External Institutions

- 3 (*experience*) As the groups work, circulate from group to group to check their progress. Clarify any concerns they may have while working. Be sure to remind them of the time remaining in the exercise (60 minutes)

Phase 2 Reporting and discussion (60 minutes)

- 4 (*process, generalize*) The rapporteurs present their group's results to the audience. Each rapporteur has approximately five minutes to present. Address specific

issues, such as leadership, and promote discussion after each presentation. Comment on the results, highlighting lessons learned regarding performance assessment.

5 (*process, generalize*) Ask the participants questions such as “How did you feel doing this exercise?” and “What did you learn?” to facilitate discussion of the process.

CLOSURE

1 (*application*) Ask the participants “What might you do differently in your job as a result of what you have learned?” (5 minutes)

2 Make a transition to the next session.

DAY THREE

Session 8 Summary of Overheads

Objectives of Day Three

- 1 Explain institutional performance assessment
- 2 Discuss concepts of vision and mission
- 3 Formulate a vision and mission statement for a national agricultural research institution

3 8 1

Schedule of Day Three

08:30	09:00	Opening the Day' Activities
09:00	10:30	Session 8 Institutional Performance Assessment
Tea/Coffee Break		
10:45	12:00	Session 9 (Continued)
12:00	13:00	Session 9 NAR) Ref: The F I V I I nd Mission Formulation
Lunch		
14:00	15:15	Session 9 (Continued)
Tea/Coffee Break		
15:30	17:00	Session 9 (Continued)
17:00	17:30	Feedback on Day's Activities and PAPA

3 8 2

Objective of Session 8

- Explain Institutional performance assessment

3 8 3

Institutional Performance Assessment

- An essential element to determine the degree of achievement of the objectives set in the strategic and operational planning stages
- Deals with the quality of management conditions established and management processes that occur

3 8 4

Performance Category

- Set of related skills, procedures and capabilities which define a particular area of institutional function or performance
- Describes a generalization or pattern of performance which can be observed or verified through research

3 8 5

Performance Categories for Institutional Assessment

- 1 Organizational autonomy
- 2 Leadership
- 3 Management and administration
- 4 Commercial orientation
- 5 Consumer orientation
- 6 Technical capability
- 7 Developing and maintaining staff
- 8 Organizational culture
- 9 Interactions with key external institutions

3 8 6

Organizational Autonomy

- Degree of independence from governmental and regulatory agencies
- Power to make decisions on important matters
- Adequate level of autonomy—prerequisite for success of institutions

3 8 7

Leadership

Effective leadership is necessary and important at all levels of an organization

- Provide vision and mission
- Provide general direction
- Establish and have good communication channels
- Engage staff in the mission building
- Inspire and motivate
- Demonstrate firm and dedicated
- Show commitment and leadership
- Demonstrate competence and leadership
- Live the mission and vision
- Set positive example (role model)
- Encourage problem-solving and innovation

3 8 8

Effective Management

Management organizes people and resources to accomplish work of the institution

Good Managers

- have a clear sense of goals and priorities
- are aware of operational details
- systematically plan, implement, monitor
- coordinate and control activities
- decentralize and delegate
- develop teamwork, cooperation and good communication
- set and use performance indicators and standards to evaluate performance

3 8 9

Key Administration

Administration provides clear policies and procedures to regulate and guide actions of management

Organizations need effective subsystems for

- personnel
- budget
- accounting
- financial management
- procurement of supplies and services
- management information system
- communication
- technology and information

3 8 10

Commercial Orientation

Concern for

- cost effectiveness
- value for money
- operating efficiency
- quality control
- clear and auditable financial records
- budget control
- tariff structure

3 8 11

Consumer Orientation

- Primary function—serving consumers
- Client/consumer awareness—important factor in all decisions and actions
- Create means for effective interaction with consumers
- Quick response to complaints and suggestions from consumers
- Build and project a positive image of the institution

3 8 12

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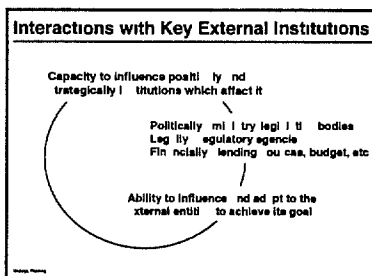
DAY THREE

Session 8 Summary of Overheads

Organizational Culture

- Set of values and norms which inform and guide everyday actions
- Pattern of shared beliefs and assumptions which translate into observable behavior
- How organizations deal with change or conflicts
- Acceptance of innovation and support of positive developments OR resistance to change at the cost of overall organizational health
- Sense of pride in belonging to the organization
- Facilities look clean, well maintained and attractive

3 8 13



3 8 14

Example of Performance Category Indicators (I)

Performance indicators, measures and standards

1. **Indicator:** oriented towards producing work towards meeting goal

Measure:

1	2	3	4	5
Very low	Low	Medium	High	Very high

Standard:
To be set internally or externally and is relative

3 8 15

Example of Performance Category Indicators (II)

Performance indicators, measures and standards

2. **Indicator:** Shows sense of dynamism and energy in everyday contact with others

Measure: } As in the previous overhead

Standard: }

3 8 16

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Handout – Overview of Day Three

Strategic Planning

Objectives

By the end of the day the participants will be able to do the following

- 1 Explain institutional performance assessment
- 2 Discuss the concepts of vision and mission
- 3 Formulate a vision and mission statement for a national agricultural research institution

Handouts

- 3 8 1 Overview of Day Three
- 3 8 2 Tentative Schedule of Day Three
- 3 8 3 Institutional Performance Assessment (text)
- 3 8 4 Institutional Assessment An Overview of the Process (text)
- 3 8 5 Exercise 8 Institutional Performance Assessment
- 3 8 6 Exercise 8 Group A Organizational Autonomy
- 3 8 7 Exercise 8 Group A Leadership
- 3 8 8 Exercise 8 Group B Management and Administration
- 3 8 9 Exercise 8 Group B Commercial Orientation
- 3 8 10 Exercise 8 Group C Consumer Orientation
- 3 8 11 Exercise 8 Group C Technical Capability
- 3 8 12 Exercise 8 Group D Developing and Maintaining Staff
- 3 8 13 Exercise 8 Group D Organizational Culture
- 3 8 14 Exercise 8 Group D Interactions with Key External Institutions
- 3 9 1 NARIs Role in the Future Vision and Mission Formulation (text)
- 3 9 2 Formulating the Mission (text)
- 3 9 3 Concepts of Vision and Mission (summary)
- 3 9 4 Exercise 9 NARIs Role in the Future Vision and Mission Formulation
- 3 9 5 Exercise 9 Worksheet (Part I)
- 3 9 6 Exercise 9 Worksheet (Part II)
- 3 9 7 Strengths and Weaknesses of Day Three
- 3 9 8 Guidelines to Provide Feedback on the Workshop
- 3 9 9 PAPA—First stage

Handout — Tentative Schedule of Day Three

Strategic Planning

- 08 30 – 09 00 **Opening of the Day's Activities**
- 09 00 – 10 30 **Session 8 Institutional Performance Assessment**
(Presentation and exercise 8)
- 10 30 – 10 45 Tea/Coffee Break
- 10 45 – 12 00 **Session 8 (Continued)**
- 12 00 – 13 00 **Session 9 NARIs Role in the Future Vision and Mission Formulation**
(Presentation and exercise 9)
-

13:00 – 14:00 Lunch

- 14 00 – 15 15 **Session 9 (Continued)**
- 15 15 – 15 30 Tea/Coffee Break
- 15 30 – 17 00 **Session 9 (Continued)**
- 17 00 – 17 30 **Feedback on the Day's Activities and PAPA**
-

Institutional Performance Assessment

Introduction

Performance assessment is an essential element in the determination of the degree of achievement of the objectives set in the strategic and operational planning stages

Performance assessment of institutions, organizations or, agencies deals with the quality of the management conditions established or available, and the management processes that occur continuously in the organizations as they conduct their business. In this case, the NARS and its directorate and associated organizations constitute the institutions for which the performance is being assessed

Performance of the NARS is based on the outputs delivered and the impacts generated. But performance also needs to be evaluated in terms of the objectives and targets set at the planning stage and during operation

Performance of the individual institutions is a critical determinant of the performance of the NARS as a whole

Performance Categories¹

A performance category is a set of related skills, procedures, and capabilities which define a particular area of institutional function or performance. It describes a generalization or pattern of performance, which can be observed or verified through research. For purposes of institutional assessment, a performance category is a major area of enquiry, such as the following

- organizational autonomy
- leadership
- management and administration
- commercial orientation
- consumer orientation
- technical capability
- developing and maintaining staff
- organizational culture
- interactions with key external institutions

Description of Performance Categories

Organizational autonomy

Organizational autonomy reflects an organization's degree of freedom and independence to conduct its affairs and meet its responsibilities with minimum interference and control by other entities. The organization maintains the authority to make decisions on important matters: budget, revenues, hiring levels, pay and incentives, control of personnel, institutional policies, and so on

¹ Extracted from Cullivan D et al 1988 Guidelines for institutional assessment—Water and waste water institutions Water and Sanitation for Health Project (WASH) Technical Report No 37 Arlington VA USA Water and Sanitation for Health Project

Leadership

The ability to inspire others to understand the institution's mission, to commit themselves toward that mission, and to work toward its fulfillment. Leadership goes well beyond proficiency in management skills. An institution needs effective leadership at many different levels to perform its functions in a competent manner.

Effective leaders serve as positive role models, motivate managers and staff, and help transform the institution by making it active, energetic, and visionary, and by ensuring that the sum of its parts is greater than the whole.

Management and administration

Management is organizing people and resources to accomplish the work of the institution. Effective management is demonstrated by the capacity to get the most out of the resources available (human and other) in a deliberate or planned manner. Good managers have a clear sense of goals and priorities, they know who to rely on to get a job done and how to delegate to them the means to do so, they are aware of operational details, they monitor activities and follow-up consistently. An effective management climate is characterized by teamwork, cooperation, and good communication among the staff.

The counterpart to management skills is the existence and use of key administrative systems. These are the policies and procedures which regulate and guide the actions of management. The mature organization has designed or evolved effective subsystems such as personnel, budget, accounting, financial management, commercial procurement, and management information systems.

Commercial orientation

Commercial orientation is the degree to which actions in an institution are driven by cost effectiveness and operating efficiency. This orientation can be viewed at policy and operational levels, both of which are important.

Commercial orientation is important at the policy level, even if significant revenues are routinely derived through subsidies. Subsidies, if any, should be identified and tied to specific areas for which the controlling authority has taken a political decision to subsidize, rather than provide a blanket subsidy. Operationally, everyday activities are guided by quality standards and by constant attention to cost factors—achieving the best value for money spent.

Consumer orientation

Consumer orientation is organizing and directing the services of an institution toward the consumers or end-users. Staff of an effective institution see serving consumers as their primary function. All activities, all programs, all innovations are directed toward greater efficiency, effectiveness, and equity in service to the consumer. Staff at every level are aware of this consumer orientation and see it as a positive influence over their important daily operational decisions and actions.

Effective institutions have workable means whereby consumers can interact with them. These may include emergency outlets or "hot lines," clearly identified channels for the arbitration of disputed bills or service, means for interested consumers to make suggestions to influence overall policy, and so on. Where consumerism is absent, appropriate, politically acceptable means are employed to attain an effective level of consumer protection in the institution.

Technical capability

Technical capability is the measure of the institution's competence in conducting the technical work required to carry out the responsibilities of the institution. Most of this technical work is performed directly by skilled, qualified employees, but outside specialists (such as contractors), whose work is supervised by the institution's staff, may be used where appropriate.

Developing and maintaining staff

Developing and maintaining staff include those activities geared toward recruiting staff, providing skills for job performance and professional growth, and providing adequate job satisfaction, wages, and benefits to retain competent personnel

Effective institutions develop and maintain their personnel so that there is a minimum of unwanted turnover. This can be accomplished through formal and informal training, apprenticeships, and rotation. In addition to a regular process of skills transfer, effective institutions maintain staff by providing sufficient incentives, compensation, employee benefits, and promotion opportunities. Institutions that develop and maintain staff believe that people are their most important asset. There is a constant emphasis on learning.

Organizational culture

Organizational culture is the set of values and norms which inform and guide everyday actions in an institution. The culture forms a pattern of shared beliefs and assumptions, which translate into observable behavior.

An organization's culture is conveyed in a number of intended and unintended ways. Although often unstated, cultural beliefs, behaviors, and assumptions serve as powerful means for defining and justifying organizational operations—either in positive or negative ways.

Another factor in organizational culture is how the institution deals with change or crisis. When a major change is introduced (e.g. new technology, organizational restructuring, new leadership), people are often required to alter the way they operate. It is important to know how the organization responds to new systems or personnel. Does it realign its forces positively to support innovation? Or is it highly resistant to change? The answer is an indication of the overall organizational health.

The organization with a positive culture has a clear sense of mission and identity. People take pride in belonging to the group and enjoy a sense of history of the organization, which is passed on from old to new employees.

Interactions with key external institutions

The organization's capacity to influence positively and strategically those institutions which affect its financial, political, and legal ability to perform forms the essence of this category.

Many entities in the external environment affect and influence the performance of an agency or organization. These include political (parent ministry and legislative bodies), financial (lending sources and budget/finance ministry), and regulatory (state/provincial government agencies) entities. An effective organization has the ability to influence and adapt to these external entities to achieve its goals. This is accomplished by anticipating activities which might affect the institution and establishing strategies to deal with them.

Performance Indicators

Performance indicators are a set of specific, measurable behaviors or procedures related to a performance category which, when analyzed together, indicate the degree to which competence standards are met in the performance category. By observing the successful performance of currently operating institutions, the performance indicators can be determined. Examples of performance indicators are provided in Exercise 8.

Institutional Assessment: An Overview of the Process¹

The Process of Institutional Assessment Procedures

The major steps in institutional performance assessment are shown in Table 1. It is the sponsor's task to carry out steps 1 through 3 prior to the arrival of the assessment team. The results of these steps need to be communicated to the team and built into their scope of work. The team carries out steps 4 through 6.

All the information that can be found should be assembled. Less information/data collection may present a false picture in the final assessment.

Steps 7 and 8 of the model are design/implementation steps and, as such, go beyond the scope of the institutional assessment model. They are included here to show the sequence and relationship between institutional assessment and improvement activities.

The remainder of this section is intended to provide an overview of each of the steps outlined above. In the rest of the document, the focus will be mainly on the steps involved in institutional assessment (steps 4, 5, and 6).

Step 1 Assess output measures

This step is a preparatory work phase designed to determine whether there is a need for institutional assessment. In this pre-assessment step, one way to determine the effectiveness of the institution without looking inside is to examine its product or output. This can be done by determining a series of output measures and comparing performance against these measures. If the comparison of output measures against performance suggests problems, then it becomes necessary to look inside the institution to see what might be causing the problems. In this context, "looking inside the institution" is the institutional assessment.

The assumption here is that, given a world with limited resources, planners need to conduct an initial assessment of external indicators to gauge the present level of institutional effectiveness. If the level appears to be satisfactory, then a decision may be made to use the available resources to assist other institutions or institutional clusters that may be more in need of assistance. Such a determination can be made by evaluating data provided by the institution, according to a series of output measures (e.g., debt-equity ratio).

Once this pre-assessment step has been completed, a go/no go decision needs to be made. This kind of decision will never be simple, as it will be based on a blend of output measures, many of which have different standards depending on which part of the world a particular institution is located in. The data may have to be interpreted in a comparative manner (i.e., How do other similar institutions in this country or geographic area compare? Is this the institution which can best benefit by an institutional assessment activity?) Of course, if a major infusion of funds is being considered for a particular project, then it makes sense to do an institutional assessment in order to make the best use of any concomitant institutional strengthening activities.

1 Extracted from Cullivan D et al 1988 Guidelines for institutional assessment—Water and waste water institutions Water and Sanitation for Health Project (WASH) Technical Report No. 37 Arlington VA USA Water and Sanitation for Health Project

Table 1 Major Steps in Institutional Performance Assessment		
Step	Task	Party Responsible
1 Assess output measures	<ul style="list-style-type: none"> - Initial discussions with institutional leadership/idea promotion Preliminary data collection of output measures Analysis of outputs Determine need for institutional assessment - Make go/no go decision 	Sponsor/donor
2 Reach agreement with institution	<p>Explain process in detail to decision makers and achieve agreement and clarity on expectations of end products</p> <ul style="list-style-type: none"> - Discuss mission of the institutional assessment team and agree on goals and scope - Develop written scope of work - Determine team composition 	Sponsor/donor
3 Prepare institution for team entry	<p>Discuss arrangements with key managers in institutions and form review committee with concurrence from top</p> <p>Make arrangements for team's entry meeting with top management</p>	Sponsor/donor
4 Collect data	<ul style="list-style-type: none"> - Team meets with top management and review committee to begin process and clarify scope of assessment work - Use a variety of methods interview, observation, job audits, literature review, survey instruments Take diagonal "slice" of organization 	Team
5 Analyze data	<p>Independent analysis by each team member</p> <p>Team analysis</p> <ul style="list-style-type: none"> - Look for major patterns and themes - Share initial analysis with organizational review committee/leadership 	Team
6 Diagnose strengths and weaknesses	<ul style="list-style-type: none"> - Compare patterns/themes against performance - Prepare written profile (detailed) <p>Present analysis to appropriate decision makers and organization</p>	Team
Post-Analysis Next Steps		
7 Design project or development activity	<ul style="list-style-type: none"> - Plan with client institution needed - Project or improvement activities based upon diagnosis, priority problems, and resources 	Sponsor/donor
8 Implement institutional strengthening activity	<p>Implement such activities as proposed and agreed upon</p>	Sponsor/institution/consultant as needed

Note "sponsor" is the donor/lender agency which funds the institutional assessment activity, "team" is the outside assessment team, "institution" is the NARS organization being assessed "Organization" and "institution" are used interchangeably

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During this phase, it will be necessary for the sponsor of the assessment to enter into a preliminary discussion with the institution to obtain the necessary information. Indications of interest by the institution in this activity should be determined at this point. Assuming that a decision has been made to do an institutional assessment, the next step is for the assessment team to enter into a dialogue which will determine and explain the scope of work to the organization and further determine if it is possible to conduct the activity.

Step 2 Reach agreement with institution

Given the preliminary interest demonstrated by the institution, the next step is to discuss the institutional assessment in detail with key management and obtain a commitment to proceed. Decision makers in a particular institution may agree to an assessment process for any number of reasons. It is essential that they enter into this activity as willing and understanding partners. Benefits and expected outcomes should be explained. In developing these agreements with the organization, every effort should be made to make it a truly collaborative effort. This often requires some give and take.

Decision makers will need to understand that the assessment team will require access to a broad range of institutional information and staff. A scope of work should be written and agreed to by the management. At the same time, specific requirements for team leadership should be determined. Discussions and arrangements to secure the proper team and team leader should be made with the appropriate headquarters of the sponsoring agency.

There are certain skills and knowledge which all team members must have in order to carry out the assignment. These include experience and/or demonstrated skills in

- data-gathering techniques, especially interviewing
- development perspective/project development
- cross-cultural sensitivity

A minimum of three persons is required for an in-depth assessment. For larger institutions, four may be necessary, for smaller institutions or rapid assessments, two persons may be adequate. The combined skills of the team should include the following subject areas and background, represented at a professional level of experience:

- organizational/institutional development and training
- economic and financial skills

Additional or useful skills on the team include social and beneficiary analysis, stores and supplies, evaluation of development projects, policy analysis, management sciences, and health experience.

Step 3 Prepare the institution for team entry

At this point, there is an agreement in principle between the sponsor and the institution to proceed. During the preliminary talks, the focus was on a general understanding of the process of institutional assessment, the benefits to all concerned parties, and the ultimate end product. The next step is to reach specific arrangements and detailed understandings, to ensure that the activity is managed smoothly and the team is able to conduct an intensive activity in a relatively short time. It is important that key officials understand the specific commitments required of them at this point.

Some specific procedures need to be clarified and agreed upon. These include (at least) the following:

- Who will be performing the institutional assessment work and when?
- Who is the team leader?
- What are the performance categories and indicators being used?
- What assistance is the institution expected to provide?

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- What time period will it require?
- What checkpoints are there?
- When will data be shared and with whom?
- What results will be shared with people from the institution who participate in the process?

These questions will be answered at a meeting with all the major interested parties (who may serve on a review committee, set up during the assessment to review and guide the team's work) It is useful to follow up this meeting with a short, written confirmation of agreements about key issues

Step 4 Collect data

Institutional assessment activities can best be carried out by a multidisciplinary team The team will use a variety of data collection methods, including interviewing, observation, job audits, literature review, and simple surveys Data can be gathered from a diagonal cross-section of the institution by examining different levels of the organization as well as different departments Knowledgeable institutional "insiders" can be key in the planning for this stage, as they can help define these diagonal slices In addition, the data collection phase needs to be designed to provide sufficient information about each of the performance categories

The most difficult task for the institutional assessment team at this point, especially if it is very experienced, is to avoid premature judgments (e.g., "Oh yes, this is just like ") Such preliminary judgments should not be shared among team members as they go about the data collection process The data must be allowed to emerge, and must not be evaluated too quickly or forced into preconceived categories during this phase

Giving instant advice while gathering data is another temptation to be avoided This, of course, however well intended, defeats the whole process of institutional assessment and turns it into individualized expert consulting

Data collection may take anywhere from one to three weeks, depending on the size of the team and the complexity of the institution

Step 5 Analyze data

After the data is collected, an analysis phase begins The first step in this process requires that each team member conduct an analysis individually In doing this, one sifts through the data looking for significant patterns and themes The team members then come together to share their individual analyses and to develop some shared patterns and themes This approach normally generates a substantial amount of significant data Important patterns generally emerge in the early team meetings

At this point, the results of the initial data analysis can be shared with key decision makers within the institution Their reactions and comments may help to strengthen and clarify the initial data analysis It also helps to keep them involved at important phases of the process

Step 6 Diagnose strengths and weaknesses

Once the data analysis is reasonably complete, the patterns and themes which emerged are sorted and placed under the relevant performance categories The team then analyzes the data for evidence to support high and low performance for each indicator After considering all the indicators in each category, the team arrives at an overall assessment for each one The output of this process is intended to provide a clear diagnosis of strengths and weaknesses within each area, as well as an overall diagnostic comparison among the various performance categories This is the output of the institutional assessment process, it should serve as a clear map for future action to help the institution build upon its strengths and improve upon its weaknesses

This final diagnostic step should be done with key decision makers (possibly the review committee) in the institution. The best forum for sharing the results is in a face-to-face meeting near the end of the institutional assessment process. Reactions and contributions by key staff may contribute to some final adjustments of the diagnosis and can help clear up ambiguities.

The analysis and diagnostic steps can take from three to six days, depending on the number of team members and the complexity of the organization.

Steps 7 and 8 Design and implement improvements

These particular steps occur after the institutional assessment has been completed and, as such, they go beyond the scope of this document. They are included here only to point out the relationship between diagnosis, design, and project improvement activities. Using the diagnosis which emerges from this process allows for a much more focused approach to institutional strengthening. It helps avoid projects in which design and project activities are undertaken without adequate diagnosis, and which result in relatively parochial or ineffective improvement designs.

Managing the Relationship with the Institution

The importance of the relationship with the institution is clear from the description of the steps above. Beginning that relationship and managing it well are critical to the implementation of an effective institutional assessment process. The purpose of this section is to provide practical suggestions which will help an assessment team manage the relationship with the institution being assessed. If followed, these suggested actions will help ensure a relationship with the institution which is as productive as possible.

Institutional assessment needs to be seen by everyone involved as a positive and beneficial force, something that will contribute to the health and productivity of the institution. All too often the words "assessment" or "evaluation" have taken on negative connotations, the words imply future criticism of the institution's managers and the results are not used. When the relationship between the assessment team and the institution is not well managed, resistance is encountered. In addition, the validity of the results may be questionable. There are some actions that can be taken to avoid this situation and to set up a positive and collaborative relationship between the assessment team and institution.

There are four stages for managing the relationship with the institution being assessed: (1) reaching initial agreement, (2) entry, (3) maintaining the relationship, and (4) sharing results and closure. What follows are some practical guidelines under each stage.

Reaching initial agreement

Reaching initial understanding and agreement is a difficult task, fraught with the possibility of miscommunication. This is especially true in a development context, where within the reason for the assessment may be a condition for another development activity which the key stakeholders in the institution "really" want. To complicate things further, the assessment team may come from a different country or countries, making face-to-face communication difficult. Here are some suggestions:

- Be sure to complete carefully the first three steps of the above outline, and reach a clear set of understandings and agreements with institutional decision makers (even if the existing management style of for the top person is to decide everything)
- If possible have the assessment team leader talk directly (by telephone or as part of another in-country trip) to the institution's director. This initial discussion should address or reaffirm many of the issues discussed above.
- Some form of written communication should follow the oral agreements made between the institution and the sponsor, described above in steps 2 and 3 of the assessment procedures.

Entry

The entry strategy for the assessment team involves an initial meeting between the team and the institution's director (should be set up by the sponsor in step 3 of the procedures) The strategic planning review committee may be present at this meeting or not depending upon the management style of the director The output of this meeting is intended to be a confirmation of the purpose, procedures, and expected product of the institutional assessment Ideally, if the team is skillful at entering the institution and managing the subsequent relationship, it will also lead to real collaboration in the process

The initial meeting between the team and the institution's top management should cover the following

- Reiterate the overall purpose of the institutional assessment, its general benefits, the performance categories to be used, and what the ultimate product might look like and for what purpose it will be used for
- Introduce the team members and the role they play in the process
- Explain the purposes of the different data-gathering approaches what each is meant to accomplish, and why
- Indicate that it is best to start the data-gathering process by interviewing the director and other key stakeholders, ideally, this could be done shortly after the initial meeting
- Agree on a couple of checkpoints during the two weeks when the assessment team (or team leader) can have short meetings with the director to verify and follow-up information obtained
- Solicit the director's input on what kind of assessment information would be particularly helpful for the institution at this time, given what the institutional assessment process is and is not able to produce
- Agree on what results are to be shared with whom and the form of the presentation (oral review and written summary)
- Agree on when the final meeting with the director will take place

Maintaining the relationship

To maintain the relationship

- Carry out the checkpoint meetings as agreed to in the first meeting, or as needed
- Meet informally with the director and other key stakeholders This could include informal lunches, staying on at the end of the workday to allow easy initiation of discussions about "how it's going," perhaps an evening dinner or engagement

Sharing results and closure

Closure normally occurs after the data have been gathered, analyzed, and an initial diagnosis occurs First, a meeting with the director needs to be scheduled where the results are reviewed and reactions are sought Then, it is recommended that a final group meeting be held with the director and key stakeholders to discuss the initial results of the institutional assessment process That meeting should cover the following

- Summary debriefing about the institutional assessment process This should include a review of the original purpose, some information about which procedures were actually used, some census data (what comprised the actual diagonal slice of the organization, how many people were interviewed, what documents were read, etc), some comments about the level of cooperation, and sharing of the initial data analysis and diagnosis

- Sufficient time should be allowed for questions and answers, and discussion. The assessment team should be careful to document this discussion, since issues raised may lead directly to a clarification or alteration of the diagnosis.
- Agreement on what kind of follow-up (written product or meetings with the sponsor) the director can expect as a result of the institutional assessment and when it will occur.
- Appropriate expressions of gratitude.

Methods for Data Collection

There are four primary data-gathering techniques that are particularly appropriate for this institutional assessment model: interviewing, pen and pencil survey, literature review, and observation. Using a combination of all four techniques should provide a reasonably complete picture of the institution. Other techniques, such as simply spending time “shadowing” managers or observing a particular job in depth (sometimes called “job audits”), are also useful if time allows.

Although it is methodologically desirable to use all the techniques, it may not be possible to do so in a particular institutional assessment. Decisions on which techniques are to be used need to be made, based on the institutional context being examined.

What follows is a brief description of each of the four primary data-gathering techniques.

Interviewing

Approximately two-thirds of the information collected will probably come from interviews. Interviewing is a very powerful data-gathering technique. It allows the interviewer to search for meaning and value from the perspective of the institutional informants. Unclear items can be followed up immediately, and reactions and ideas need not be pre-categorized (such as they are in survey questionnaires). Intangibles—such as the tone of the information given, body language, reactions to questions, and the pace of the office routine—can be considered as observations along with the interviews. Interviewing is labor intensive and demands skills which are often assumed and underestimated.

In terms of sample size, everyone in a particular institution does not need to be interviewed. Rather, it is important to interview a diagonal and representative cross-section of personnel from all the major functions. Interviews should be scheduled at ninety-minute intervals, even though they may not last that long. Time in the overall schedule needs to be left open, so additional interviews can be scheduled later when the team is more familiar with the institution.

It is suggested that the interview be divided into two parts. After the introduction, the first part should be general in nature, allowing the respondents to volunteer information without being led in any way by the interviewer. The second part should be specific, probing for information about the different performance categories that does not emerge from the general questions but is important. The following is a general interview approach which can be used:

- a State the purpose and rationale for the interview. Include some information about how the data is going to be used.

Example “We are currently involved in collecting data to assess how effectively (name of institution) is operating. Ultimately, the results of the process will help direct activities to make the institution perform better. The data from all the interviews will eventually be put together, if many people say the same things, it will provide a pattern. We will not identify who contributed which idea during our interviews. Any questions?”

- b Move to the general portion of the interview.

Example “What do you see that is operating effectively about (this institution)?” “Why is it effective?”

Use only general questions like this, following up with, "What are some other ways it is effective?" or "What are some other signs?"

Use a lot of follow-up questions or probes and help people to be as specific as possible on key points. For example, if someone says that communication works really well, ask them for a specific recent example, once given, ask the person to take you through that particular example. What happened first? Next? Who did what? What was the significance of that? and so on.

Repeat a similar sequence for "ineffective" factors.

c Move to the specific part of interview.

Ask questions to gather information related to each of the performance areas which has not yet emerged. Some respondents may have little to say about some of the categories, but will have a great deal of information about a specific functional area of the institution or department (e.g., the chief accountant/finance officer will probably know more about finance or billing systems).

Pen and pencil survey

Either before the institutional assessment begins or during the data-gathering stage, it may become clear that it is desirable to have quantifiable data in certain categories. For example, opinions may need to be sampled across a larger sample of people than time permits through interviewing. Simple survey instruments can be designed to access this data. Usually, keeping such instruments to one page or less is desirable in terms of achieving a reasonable response rate.

Also, some organizations have survey data from previous management development or project planning activities. This data should be reviewed and used as appropriate. The numbers that result from survey work can sometimes be used to confirm patterns that emerge from the more qualitative methods described above.

Literature review

If prior studies have been conducted, documents are especially good sources of information. Manpower studies, legal and financial documents, organization charts, plant designs, and specifications will all provide good sources of basic data. Many of these should have been collected during the review of institutional output measures in the pre-assessment phase.

Observation

Field trips to inspect project sites, research plots, animals, and regional operations (if appropriate) are important to get a balanced view of an institution's operations. Frequently, operations and resources are overly centralized. Field staff are often excellent sources of information about what is happening in the central office (from the standpoint of the workers).

Additionally, observations during interviews, in the halls, at public service offices, and at random moments will provide information on such intangibles as attitudes toward the public, appearance of the physical plant, and interactions among the staff.

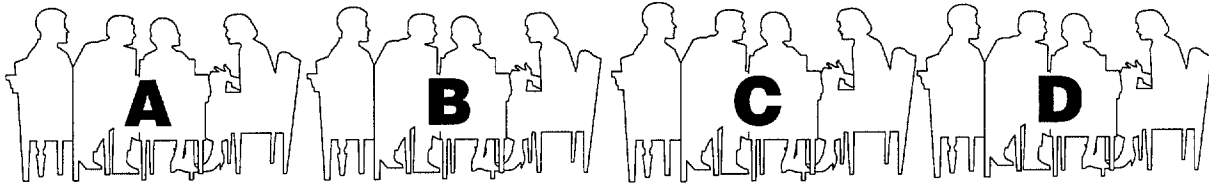
Another form of observation is the "job audit." This consists of considering the functions of a particular job in depth and comparing it to the written job description. It includes interviewing staff to determine how clearly they see their roles and responsibilities in relation to the organization and other jobs, units, and functions.

Finally, it is extremely helpful if some of these techniques can be used to gather direct data about the institution from outside observers, such as contractors, financial lending institutions, other relevant government institutions, and representatives of the public. Interviewing "outsiders" seems to be the most easily accepted technique. It is good to begin raising requests for outside data collection with the assessment team's internal counterparts (those who are helping with the planning) early in the data-gathering stage. This should allow ample time to set up outside contacts.

Exercise 8. Institutional performance assessment (group exercise)

Phase 1 Group work (1 hour 20 minutes)

- 1 Form four groups, each electing a rapporteur



- 2 Read handouts 3 8 3 and 3 8 4 (20 minutes)
- 3 All groups work on the following two questions on performance categories (15 minutes)
 - a) List in order of priority the three performance categories which you consider to be relevant in the institutional assessment of NARS. Select the categories from the nine that were presented in handout 3 8 3
 - b) Suggest any other performance category that you consider to be important and that should be added to the existing list of nine presented to you, in order to assist the assessment of NARS
- 4 The groups work on performance categories from different handouts as outlined below
 - Group A** handout 3 8 6 - Organizational Autonomy
handout 3 8 7 - Leadership
 - Group B** handout 3 8 8 - Management and Administration
handout 3 8 9 - Commercial Orientation
 - Group C** handout 3 8 10 - Consumer Orientation
handout 3 8 11 - Technical Capability
 - Group D** handout 3 8 12 - Developing and Maintaining Staff
handout 3 8 13 - Organizational Culture
handout 3 8 14 - Interactions with Key External Institutions
- 5 Select, in order of priority, two performance indicators from the long list of indicators given for each of the allotted performance categories. Use the two performance indicators in the assessment of NARS. Use the following five-point scale for measurement (40 minutes)

1 _____ 2 _____ 3 _____ 4 _____ 5
Very Low Low Medium High Very high

- 6 The rapporteurs write the results of the exercise on flipcharts in the following format (5 minutes)

Example

Performance category Leadership

<i>Performance indicators selected (in order of priority)</i>	<i>Measure</i>
10	Very High
8	High

Phase 2 Reporting and discussion (60 minutes)

- 7 The rapporteurs present their group's results to the audience using the flipcharts. Each rapporteur has five minutes to present.
- 8 After each group has given its presentation, the trainer will initiate a discussion on the subject.

Exercise 8. Group A: Organizational Autonomy

Definition

Organizational autonomy is the institution's degree of independence from the national government or other governmental or regulatory bodies. While not unrestrained, this independence must exist to the extent that the institution is able to conduct its affairs and meet its responsibilities in an effective manner, with minimum interference and controls by other entities.

Effective organizational autonomy is characterized by the power to make decisions about the following important matters: budget, revenues, hiring levels, pay and incentives, control of personnel, institutional policies, planning and construction of projects, and organizational goals.

An adequate level of autonomy is a prerequisite to the success of institutions in this sector.

Indicators of high performance

1	Sets own organizational policies and goals, and changes them as necessary to provide guidance and direction in achieving the objectives of the institution	Very low	Medium	Very high
2	Develops strategies to achieve organizational goals	Very low	Medium	Very high
3	Conducts studies as necessary and carries out long-term planning to meet the expected demands on the institution, approves and acts on such studies and plans, including the construction of recommended facilities	Very low	Medium	Very high
4	Prepares annual capital and operating budgets consistent with needs and available revenues, is successful in obtaining approval for the budgets	Very low	Medium	Very high
5	Establishes and implements tariffs and service charges sufficient to meet costs	Very low	Medium	Very high
6	Maintains control over all revenues generated and collected	Very low	Medium	Very high

7	Establishes and maintains staffing levels sufficient to meet needs			
	Very low	Medium	Very high	
8	Employs, discharges, disciplines, and promotes personnel within established and approved guidelines adequate to institutional needs			
	Very low	Medium	Very high	
9	Establishes levels of employee compensation, including salaries and benefits, sufficient to attract and retain capable staff			
	Very low	Medium	Very high	
10	Determines own organizational structure, including roles and responsibilities of major divisions			
	Very low	Medium	Very high	

Exercise 8. Group A: Leadership

Definition

Leadership is the ability to inspire others to understand the institution's mission, to commit themselves to that mission, and to work toward its fulfillment. It goes well beyond proficiency in management skills. To perform its functions in a competent manner, an institution in any sector needs to have effective leadership at many different levels.

Effective leaders serve as positive role models. They provide motivation for managers and staff to perform their functions in often difficult and sometimes apparently unrewarding contexts. Effective leaders help transform the institution by making it active, energetic, and visionary and by ensuring that the sum of the parts is greater than the whole. In effective institutions, such leadership does not reside only with the top manager. Elements can be seen at various levels of the organization, from the foreman level to the general manager level, although they may differ slightly in characteristics.

The indicators below are generally written from the perspective of a generic leader who can be at any level of the organization.

Indicators of high performance

- | | | | | |
|---|--|----------|--------|-----------|
| 1 | Provides clear sense of mission, articulates mission, involves people in the mission so that they have a sense of ownership of the mission, gets people excited about the mission, believing in it | Very low | Medium | Very high |
| 2 | Acts as a positive role model (e.g., honest, hard working, balances people-needs with organizational needs, is enthusiastic) | Very low | Medium | Very high |
| 3 | Has a sufficient level of operational knowledge to inspire trust | Very low | Medium | Very high |
| 4 | Works hard and works overtime as required, gets out in the field or visits other offices, is visible to the rank and file | Very low | Medium | Very high |
| 5 | Demonstrates competence, is visibly interested in work | Very low | Medium | Very high |

6	Is oriented toward producing results which move work toward meeting goals	Very low	Medium	Very high
7	Identifies clear performance standards and is strict but fair, give positive and negative feedback where due, disciplines where necessary based on performance	Very low	Medium	Very high
8	Listens as well as instructs	Very low	Medium	Very high
9	Is active, has "we can do it" attitude, assertively makes decisions, moves things	Very low	Medium	Very high
10	Maintains sense of balance between future vision and everyday operational matters ("keeping his nose to the grindstone and his eyes to the hills")	Very low	Medium	Very high
11	Demonstrates personal integrity (i.e. does not claim false overtime, take money, or cut corners for personal gain), instills sense of integrity in others	Very low	Medium	Very high
12	Shows sense of dynamism and energy in everyday contact with others	Very low	Medium	Very high
13	Sets positive problem-solving environment (i.e., creates a sense that uncovering problems is desirable and that creative approaches to their solution are effective)	Very low	Medium	Very high
14	Continuously guides technical staff to ensure that the levels of technology used by the institution are those which are most suitable in terms of simplicity of operation and maintenance, monitors activities in this regard	Very low	Medium	Very high

Exercise 8. Group B: Management and Administration

Definition

Management is organizing people and resources to accomplish the work of the institution. Effective management is demonstrated by the capacity to get the most out of the resources available (human and other) in a deliberate or planned manner. Good managers have a clear sense of goals and priorities, they know who to rely on to get a job done and how to delegate to them the means to do so. Effective managers are aware of operational details, they monitor activities and follow-up consistently. An effective management climate is characterized by teamwork, cooperation, and good communication among the staff.

The counterpart to management skills is the existence and use of key administrative systems. These are the policies and procedures which regulate and guide the actions of management. The mature organization has designed or evolved effective subsystems such as personnel, budget, accounting, financial management, commercial procurement, and management information systems.

Indicators of high performance

Management

- | | | | | |
|---|--|----------|--------|-----------|
| 1 | Managers have a clear sense of their own and others' roles and responsibilities. They communicate roles and expectations clearly to others, and involve them in the process of defining their roles and responsibilities. | Very low | Medium | Very high |
| 2 | The mission of the organization is clear and understood by all managers. | Very low | Medium | Very high |
| 3 | When asked, staff are able to clearly describe their responsibilities. | Very low | Medium | Very high |
| 4 | Managers know how to plan and delegate to accomplish tasks (tasks are allocated to the right people). Work planning is done with staff involvement. People have a free hand to perform their work and are supported in doing so. | Very low | Medium | Very high |

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5	Managers regularly set goals with staff and have a sense of priorities Goals are limited and realistic and mesh with organizational mission and priorities	Very low	Medium	Very high
6	Departmental/organizational objectives are clear and understood at all levels	Very low	Medium	Very high
7	People are held accountable for getting work done	Very low	Medium	Very high
8	Follow-through on task assignments is performed consistently	Very low	Medium	Very high
9	There is good communication within and among all levels, information is shared openly	Very low	Medium	Very high
10	Managers set and use performance indicators (standards) to evaluate work performance They are understood at the appropriate levels	Very low	Medium	Very high
11	Management maintains a climate of teamwork and cooperation among the staff	Very low	Medium	Very high
12	Communication flows freely within and among departments at all levels	Very low	Medium	Very high
13	Managers at all levels use and are well informed about the administrative systems	Very low	Medium	Very high

Administrative

14	Administrative systems for the following functions have been developed and are regularly used (Note rate each system for effectiveness) a) budgeting	Very low	Medium	Very high
----	--	----------	--------	-----------

b) commercial

Very low	Medium	Very high
----------	--------	-----------

c) accounting

Very low	Medium	Very high
----------	--------	-----------

d) procurement

Very low	Medium	Very high
----------	--------	-----------

e) management information

Very low	Medium	Very high
----------	--------	-----------

f) personnel

Very low	Medium	Very high
----------	--------	-----------

g) maintenance management system

Very low	Medium	Very high
----------	--------	-----------

h) stores, supplies, and inventory control

Very low	Medium	Very high
----------	--------	-----------

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Exercise 8. Group B: Commercial Orientation

Definition

Commercial orientation is the degree to which actions in an institution are driven by cost effectiveness and operating efficiency. The performance of an institution's functions should be guided and disciplined by a strategy to achieve financial self-sufficiency at an appropriate stage of growth. This orientation can be viewed at operational and policy levels, both of which are important. At the policy level, commercially oriented institutions annually structure and stage investments, expenditures, and revenues to achieve financial equilibrium.

At the operational level, everyday activities are guided by quality standards and by constant attention to cost factors. The institution strives to establish a reputation as a financially well-run business in the eyes of the outside community in order to obtain financial support for growth and to maximize financial and operating autonomy.

Indicators of high performance

1	Maintains yearly balance between expenditures and revenues. Revenues may be partly drawn from subsidies, which are phased out according to a planned schedule.	Very low	Medium	Very high
2	Maintains economic and financial feasibility for its projects and other institutional activities.	Very low	Medium	Very high
3	Staff actions throughout the institution are guided by cost effectiveness as well as quality standards.	Very low	Medium	Very high
4	Takes into account cost effectiveness when individuals and groups plan and organize work.	Very low	Medium	Very high
5	Monitors expenditures against approved budgets.	Very low	Medium	Very high

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6 Maintains attitude of consumer orientation throughout the institution and is responsive to client needs and requests

Very low Medium Very high

7 Maintains clear, auditable financial records

Very low Medium Very high

8 Staff espouses a commercial orientation and thinks of their service function as a business

Very low Medium Very high

Exercise 8. Group C: Consumer Orientation

Definition

Consumer orientation is organizing and directing the services of an institution toward consumers. Staff of an effective institution see serving consumers as their primary function. All activities, all programs, all innovations are directed toward greater efficiency, effectiveness, and equity in service to the consumer. Staff at every level are aware of this consumer orientation and see it as a positive influence over their important daily operational decisions and actions.

Effective institutions have workable means whereby consumers can interact with them. These may include emergency outlets or "hotlines," clearly identified channels for the arbitration of disputed bills or service, means for interested consumers to make suggestions to influence overall policy, and so on. Creative and cost-effective ways are sought to inform and educate the public. Where consumerism is absent, appropriate, politically acceptable means are employed to attain an effective level of consumer protection in the institution.

Indicators of high performance

- | | | | | |
|---|--|----------|--------|-----------|
| 1 | Staff at every level demonstrate that they are oriented toward serving consumers, when observed, their decisions and actions are clearly driven by what is best for the consumer | Very low | Medium | Very high |
| 2 | There are identifiable mechanisms for consumers to interact with key areas of the institution over important matters (e.g., emergency hotline, bill disputes, service problems) | Very low | Medium | Very high |
| 3 | There is clear evidence that the institution responds to complaints, emergencies, and suggestions which consumers make | Very low | Medium | Very high |
| 4 | There are identifiable, ongoing, and effective measures to educate consumers about institutional services and requirements | Very low | Medium | Very high |
| 5 | The institution makes efforts to invite and evoke an effective level of consumer participation (e.g., consumers bring concerns/complaints to the institution) | Very low | Medium | Very high |

6 There are concerted efforts made to project a positive image of the institution to consumers

Very low Medium Very high

7 The level of complaints from the public is relatively low

Very low Medium Very high

Exercise 8. Group C: Technical Capability

Definition

Technical capability is the measure of the institution's competence in conducting the technical work required to carry out the responsibilities of the institution. Most of this technical work is performed directly by skilled, qualified employees, but outside specialists, whose work is supervised by the institution's staff, may be used where appropriate.

Indicators of high performance

1	Consistently makes sound technical decisions and effectively serves management by conducting technical studies and planning as requested	Very low	Medium	Very high
2	Ensures effective control of the quality of the end product and all other technical operations	Very low	Medium	Very high
3	Successfully completes projects which meet intended objectives in a timely and economical manner	Very low	Medium	Very high
4	Ensures that technical tasks at all levels are completed properly	Very low	Medium	Very high
5	Develops and maintains staff with adequate technical skills to perform needed services, promotes broader knowledge of aspects of technology beyond the individual's specific areas of expertise	Very low	Medium	Very high
6	Uses or adapts technology which is suitable for the specific needs of the institution, and avoids temptation to use more exciting but inappropriate technologies learned by staff who were trained in other settings	Very low	Medium	Very high

7	Maintains levels of in-house technical skills adequate for routine technical responsibilities, and subcontracts to outside specialists those tasks which are either beyond the institution's own capabilities or necessary to meet peak needs	Very low	Medium	Very high
8	Conducts practical research and experiments to improve existing uses of technology for local conditions and needs	Very low	Medium	Very high
9	Technical information is routinely shared among planning, design, and construction units to ensure smooth technical coordination	Very low	Medium	Very high
10	Technical staff members demonstrate a strong interest in technical learning and keep up with new information in the field	Very low	Medium	Very high

Exercise 8. Group D: Developing and Maintaining Staff

Definition

Developing and maintaining staff include those activities directed toward recruiting staff, providing skills for job performance and professional growth, and providing adequate job satisfaction, and wages and benefits to retain competent personnel

Effective institutions develop and maintain their personnel so that there is a minimum of unwanted turnover. This can be accomplished through formal and informal training, apprenticeships, and job rotation. In addition to a regular process of skill transfer, effective institutions maintain staff by providing sufficient incentives, compensation, employee benefits, and promotion opportunities. Institutions that develop and maintain staff believe that people are their most important asset. There is a constant emphasis on learning.

Indicators of high performance

- 1 Mechanisms exist and are utilized to promote skill transfer
 - a Organized skill transfer training programs (such as seminars or demonstrations) are designed and used to meet institutional goals

Very low	Medium	Very high
----------	--------	-----------
 - b There is an informal process (such as internship) to effectively transfer skills

Very low	Medium	Very high
----------	--------	-----------
- 2 A clear process for determining skill needs exists and is the basis for designing training programs

Very low	Medium	Very high
----------	--------	-----------
- 3 Managers are actively involved in skill transfer and training, as supervisors or through delivery of courses

Very low	Medium	Very high
----------	--------	-----------
- 4 Personnel express an interest in learning new ways of doing things

Very low	Medium	Very high
----------	--------	-----------

- 5 A system exists for developing competent managers and supervisors
-
- Very low Medium Very high
- 6 The institution provides adequate incentives to maintain staff
- a Salary levels are adequate to maintain personnel
-
- Very low Medium Very high
- b The institution provides opportunities for social support (e g , social centers and sports clubs)
-
- Vey low Medium Very high
- c Employee benefits (pension, vacation time, sick leave, insurance) are an important part of the overall compensation package and, together with salaries, provide adequate incentives to maintain staff
-
- Very low Medium Very high
- d Employee turnover is at an acceptably low level
-
- Very low Medium Very high
- 7 A clear system exists for hiring qualified personnel and disciplining or firing personnel when necessary
-
- Very low Medium Very high
- 8 Employees demonstrate good morals and openly state that the institution is a good place to work
-
- Very low Medium Very high
- 9 Active systems are in place for providing ongoing formal and informal feedback to personnel about job performance
-
- Very low Medium Very high
- 10 Employees feel involved in and informed about the institution's activities
-
- Very low Medium Very high

Exercise 8. Group D: Organizational Culture

Definition

Organizational culture is the set of values and norms which inform and guide everyday actions in an institution. The culture forms a pattern of shared beliefs and assumptions, which translate into observable behavior.

An organization's culture is conveyed in a number of intended and unintended ways. Although often unstated, cultural beliefs, behaviors, and assumptions serve as powerful means for defining and justifying organizational operations—either in positive or negative ways. This will sometimes be expressed by introductory explanations given by staff with the message “this is what we are about here.” It will be unintentionally expressed in the tone of the message (excited, bored, harassed, organized). It will also be expressed unintentionally in the appearance of the facilities. Are they clean, well maintained, or in a shambles?

Another factor in organizational culture is how the institution deals with change or crisis. When a major change is introduced (e.g. new technology, organizational restructuring, a new billing system, new leadership or influential staff), people are often required to alter the way they operate. It is important to know how the organization responds to new systems or personnel. Does it refuse to change, pretend to change, change superficially, change only for a short term or in a distorted fashion, or does it realign its forces positively to support innovation? An unhealthy organizational culture will be highly resistant to any change, forces will line up to protect narrow self-interests (such as petty bureaucratic authority) at the cost of the health of the overall organization.

The organization with a positive culture has a clear sense of mission and identity. This is often expressed by a majority of the employees in the form of “legends about the organization” or messages about “who we are.” This often takes the form of a sense of pride in belonging to the group and a sense of the history of the organization, which is passed on from old to new employees.

Indicators of high performance

- | | | | | |
|---|--|--------|--|-----------|
| 1 | An observable team spirit exists among the staff | | | |
| | Very low | Medium | | Very high |
| 2 | People express a sense of ownership and pride about working that is communicated by such statements as “this is a good place to work.” | | | |
| | Very low | Medium | | Very high |

- | | | | | |
|---|--|----------|--------|-----------|
| 3 | Employees are able to articulate the history and legends of the organization in positive ways | Very low | Medium | Very high |
| 4 | Continuity in the organizational culture is maintained (even with staff turnover at high or low organizational levels) | Very low | Medium | Very high |
| 5 | Staff place a value on maintaining the physical plant (offices, treatment plants, grounds) of the organization Facilities look clean, well maintained, and attractive | Very low | Medium | Very high |
| 6 | Power and status are defined as something the entire organization shares in varying degrees, especially the status associated with doing a good job | Very low | Medium | Very high |
| 7 | Sub-groups and alliances within the organization serve as a positive means of informal communication and a rallying point during periods of crisis, or to support healthy change | Very low | Medium | Very high |

Exercise 8.

Group D: Interactions with Key External Institutions

Definition

The organization's capacity to influence positively and strategically those institutions which affect its financial, political, and legal ability to perform forms the essence of this category. Many entities in the external environment affect and influence the performance of an institution. These include political (parent ministry and legislative bodies), financial (lending sources and budget/finance ministry), and regulatory (municipal government, state government, health ministry) entities. An effective organization has the ability to influence and adapt to these external entities to achieve its goals. This is accomplished by anticipating activities which might affect the institution and establishing strategies to deal with them.

Indicators of high performance

- | | | | | |
|---|---|----------|--------|-----------|
| 1 | Top management stays well informed about external policy, financial, and regulatory issues and actions | Very low | Medium | Very high |
| 2 | Management maintains direct contact with the key individuals in all important external entities | Very low | Medium | Very high |
| 3 | Specific strategies are formulated to influence policies, legislation, and other activities to obtain necessary approvals and resources | Very low | Medium | Very high |
| 4 | Programs are developed to influence the public in support of institutional goals | Very low | Medium | Very high |
| 5 | Management adapts creatively to obstacles (e.g. supplements inadequate salaries with other kinds of incentives) | Very low | Medium | Very high |

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DAY THREE

Session 9 NARIs Role in the Future: Vision and Mission Formulation

SESSION 9

Instructions to Trainers

12 00 – 13 00 Session 9 NARIs Role in the Future Vision and Mission Formulation

13 00 – 14 00 Lunch

14 00 – 15 15 Session 9 (Continued)

15 15 – 15 00 Tea/Coffee Break

15 30 – 17 00 Session 9 (Continued)

OBJECTIVES

By the end of this session, the participants will be able to do the following

- Discuss the concepts of vision and mission
- Formulate a vision and mission statement for a national agricultural research institution

Use overhead 3 9 1 to present the objectives

PROCEDURE

Training techniques presentation, “trip around the tables”

PRESENTATION

Give a brief presentation focusing on vision and mission formulation Use handouts 3 9 1, 3 9 2, and 3 9 3 as background information for the presentation Overheads 3 9 2 through 3 9 14 support the presentation Distribute handouts 3 9 1, 3 9 2, and 3 9 3 (20 minutes)

EXERCISE 9

Exercise 9 NARIs role in the future Vision and mission formulation (3 hours 20 minutes)

- 1 (*experience*) Distribute handouts 3 9 4, 3 9 5, and 3 9 6 Handout 3 9 4 gives clear instructions for the exercise Go over the instructions with the participants step by step Emphasize and remind the participants about the time Ask if clarifications are needed (5 minutes)

Part I Redefining NARIs role (1 hour 55 minutes)

Phase 1 Group work (55 minutes)

- 2 Divide the participants into four groups and ask each group to elect a rapporteur (5 minutes)
- 3 Invite the groups to pretend they all belong to the same organization Participants discuss the question assigned to their group (50 minutes)

- 4 (*experience*) As the groups work, circulate from group to group to check progress. Also, clarify any concerns they may have while working. Be sure to remind them of the time remaining in the exercise. Keeping the groups on time is critical to the success of this exercise. Be sure to signal for the rapporteurs to switch tables at the same time. Be strict.

Phase 2 Trip around the tables (35 minutes)

- 5 The rapporteurs make the “trip around the tables,” spending five minutes at each table (15 minutes)
- 6 The rapporteurs return to their own group, and the group revises their statements based on the input from the rapporteur’s “trip.” The rapporteurs write the results on a flipchart for presentation (20 minutes)

Phase 3 Reporting and discussion (25 minutes)

- 7 The rapporteurs present their group’s results to the audience. Each rapporteur has approximately five minutes to present (20 minutes)
- 8 The trainer provides feedback on the content of Part I and invites the participants to work on Part II (5 minutes)

Part II Formulating vision and mission statements for NARIs (1 hour 20 minutes)

- 9 The same groups discuss and prepare vision and mission statements, taking into account the responses of Phase 1 (35 minutes)
- 10 (*experience*) Remind the participants to review handouts 3.9.1, 3.9.2, and 3.9.3 before writing the statements
- 11 (*experience, process*) The rapporteurs present the statements (2 separate flipcharts)
- 12 (*process and generalize*) Invite the participants to discuss, select, or reformulate one vision and one mission statement as a group. You write the final agreed statements on the flipchart and display them on the wall until the end of the workshop. They will be used to develop the next steps of the strategic planning (40 minutes)
- 13 (*process, generalize*) At the end of the exercise, provide feedback on the content of this session. Ask the participants questions such as “How did you feel doing this exercise?” and “What did you learn?” to facilitate discussion of the process (5 minutes)

CLOSURE

Closure (5 minutes)

- 1 (*application*) Ask the participants “What might you do differently as a result of what you have learned?”
- 2 Make a transition to the last session

17 00 – 17 30 Feedback on the Day’s Activities and PAPA

OBJECTIVES

By the end of this session participants will be able to do the following

- Provide feedback on the day’s activities
- Consider possible actions they would like to implement in their own organizations

PROCEDURE

Training techniques individual exercise

Highlight positive and negative points of the day Note areas that may need additional attention in the workshop Participants can describe some strengths and weaknesses of the day on handout 3 9 7 and use 3 9 8 to facilitate their task (15 minutes)

PAPA

(*application*) Ask the participants to take some time to jot down some “action ideas” they may have for themselves as a result of today’s activities They can use handout 3 9 9 (15 minutes)

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DAY THREE

Session 9 Summary of Overheads

Objectives of Session 9

- Discuss the concepts of vision and mission
- Formulate a vision and mission statement for a national agricultural research institution

3 9 1

Vision and Mission

- What is a vision?
- Need for a vision
- Formulation of the mission
- Methodology
- Terminology

3 9 2

Vision

- an idea that portrays future attributes desired for the organization
- attempts to establish the ideal future of a NARI

3 9 3

Visioning is a deep voyage into the heart and soul of an organization

3 9 4

The essence of successful organizational visioning is a commitment to rethinking and reviewing the organization

3 9 5

Why Should Organizations Develop a Vision?

Visions

- Inspire and motivate
- provide direction and foster success
- are essential to the future of the organization

3 9 6

Formulating the Vision

What will

- the purposes of the NARI be?
- the organization be like in 10-15 years time?
- the major products and services be?
- the shared values of the NARI be?

3 9 7

A Planning Comparison

STRATEGIC PLANS	VISIONS
Appeal to mind	Appeal to heart and spirit
Rational	Intuitive
Literary	Holistic
Reaction to trend	Desire to be unique or at
Focus on directions	Focus on end state
Show how to get there	Unclear how to get there
Walk forward to the future	Work backward from the future
Cool, bureaucratic language	Hot, poetic language
Secret	Public
Pull people	Draw people

3 9 8

Mission and Mission Statement

Mission
is the purpose of an institution (in widest sense)

Mission statement

- short, clear and concise
- states the major purpose
- gives the most comprehensive reason justifying the institution's existence

3 9 9

Name Isn't Everything

Center for Radioactive Isotopes and the Biosphere

The name of an organization is not enough to express its wishes and communicate them to others

Needed a mission statement

3 9 10

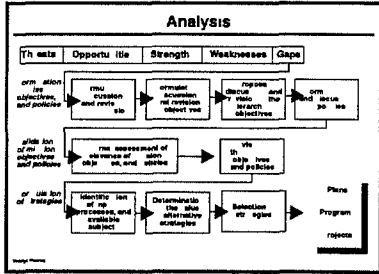
Components of a Mission Statement

3 9 11

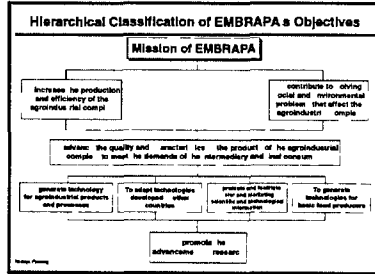
Questions to Answer in the Mission Statement

- What is the business of the NARI?
- What are the main products/services?
- Who are the relevant clients?
- What are the organization's research approaches?
- What are the values, beliefs, and aspirations?
- What is the organization's attitude to its sustainability?
- What are the key strengths and advantages?
- What image would the organization like to have?
- What motivates and inspires the organization?

3 9 12



3913



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NARIs Role in the Future: Vision and Mission Formulation¹

Developing a Vision

People with “vision” have big ideas, something like dreams, even if they don’t know how to attain them. Those without a vision for the future—or for whatever they do—cannot achieve much. Because it is through visions that we realize our dreams.

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An anecdote illustrates

Three brick masons were busy at their trade working side by side when along came a curious tourist. ‘What are you doing?’ the traveler asked. ‘Laying bricks,’ the first mason shot back. ‘What does it look like?’

Undaunted, the traveler repeated his question. ‘What are you doing?’ he asked the second mason. ‘Building a wall,’ the dutiful worker replied.

And what about you?’ the traveler asked again. ‘What are you doing?’

‘Me?’ The third mason looked up and a slight smile crossed his face. ‘I’m building a cathedral.’

One can see clearly from this simple story that two of the masons had a different view of the purpose for laying the brick. But one of them—the third one—had a vision of creating a cathedral. All of us are like the three masons. We, too, must have a dream or a vision. How we get there is to be sorted out after we know what we want.

How to “Vision”

In typical management in the 1960s and before, chief executives hardly projected what their companies would look like in the future—say in 10, 20, or even 30 years. Later, “management by objectives” and “strategic planning” came into vogue. Both proved valuable, but they relied too much on facts and opinions from top management. Such a method did not generate enthusiasm among employees. Instead, many saw this as an alien opinion being forced on them.

However, recently, many organizations have developed a way of reflecting what they would like to be in the future. This is a dream of the future organization, its setup and products.

“Visioning is a deep voyage into the heart and soul of an organization,” explains visioning consultant Michael Doyle. “In short, the essence of successful organizational visioning is a commitment to rethinking and reviewing the organization. Ultimately, the process empowers members to achieve and the organization to reach its full potential.”

All employees are involved in visioning. They see the organization as “ours” and not “theirs.” So they get involved in visioning in the quest for creating a successful organization in the future.

¹ Adapted from B. Darraugh (editor), 1991. How to develop a vision. INFO LINE. Practical guidelines for training and development professionals. Issue 107. Alexandria, VA, USA: American Society for Training and Development.

What Is a Vision?

Unlike prior methods of organizational planning, visioning begins with the future, not the present. It focuses on the end state, not the means of getting there. The description of that exciting, ideal end-state is called a *vision*.

“A vision is not a plan,” explains Doyle. “You might have a vision of what you want to create, but you don’t know how to get there. If you know how to get there, it’s no longer a vision, but a plan.”

In other words, a plan is like a road map showing the routes from Point A to Point B. But a vision shows you where you really want to be. You can almost feel you are already there even though you may still be far away. Doyle’s message is to feast on the vision first, then worry about the method of achieving the vision. A vision pictures the organization as you’d like it to be five to ten years from now: corporate image, values, employee satisfaction, markets, and products or services. Visions focus on organizational strengths and uniqueness. Visions are flexible; they can adapt to changing ideas, technology, and circumstances.

Finally, visions are grand and exciting; they inspire and challenge the organization and its members. “Little visions are not worth committing 10 years of your life to create,” says Doyle.

Echoing Doyle, British research consultant Charlotte Villiers defines a vision as “an ideal picture of what the company could be if it fulfilled all its potential and all the human potential of its staff.” She continues, “It has to be something that everyone can understand intuitively, take pride in, and work towards. If it genuinely meets these demanding criteria, it can be the most powerful single influence on a company’s destiny.”

Levels of Visioning

The visioning process can extend well beyond organizational planning. “Visions are holographic,” Doyle says. “They can happen at multiple levels—personal, departmental, corporate, even community visions.”

Personal visioning can help individuals accomplish specific results or create an overall life purpose based on personal values and ideals. At the management level, visioning can be valuable in building teams and in developing departmental morale. Corporations and associations can almost always benefit from visioning—either to start, revitalize, or improve business. Finally, communities can work together to create a vision of what they’d like to become or how they’d like to meet future challenges. A good example for the last type of visioning reveals itself in participatory rural appraisal (PRA), where communities envision what they would like and then do it. Note that they “vision” first then find the means or route to achieve that vision.

“It’s important that individuals develop an image for themselves,” says Doyle, “but it’s more effective to start with a corporate or community vision, because people can be ennobled by seeing the part they can play within the organization.”

On the other hand, Doyle adds, a corporate vision can show individuals roles they don’t want to take on. “That’s great, too,” he explains. “It gives them a way to get out gracefully.”

Need for a Vision

Nearly every visioning expert can suggest a long list of reasons why organizations should develop a vision. Most fit into one of three categories: inspiration and motivation, direction and fostering success, or essential to the future of the organization.

Visions inspire and motivate

Purely analytical planning tactics appeal only to the mind, but visions capture the imagination and therefore create a sense of ownership, commitment, and energy among employees, increasing performance and productivity

“Most people want to commit to something they can believe in,” Doyle explains “They want to say, ‘I’d be proud to spend the next five to ten years creating that—that’s worth going for’ ”

“The point of the vision,” agrees Charlotte Villiers, “is that it gets right to the heart of people’s real motivation as individuals It unlocks people’s self-directed energy, draws them into using their own talents and initiative, and makes the old management tasks of supervision and control largely irrelevant ”

Visions provide direction and foster success

VISIONS help in directing individuals and their organizations, building positive expectations for success, and reducing fears of failure Because a visionary organization knows what its ideal future looks like, it can better recognize and seize opportunities leading to it

VISIONS also promote an innovative spirit that attracts both the customers and top-notch employees necessary to build a great company, according to John C Shaw, author of *The Service Focus*

Villiers concurs “Vision is the factor that lies at the core of the successful company’s inventiveness and creative thinking ” It is clear that for organizations to succeed, they must have a vision, a vision that appeals to the employees and hence ensures success for the future

Visions are essential to the organization of the future

Enormous changes, brought about by structural adjustment programs (SAPs) in business and society, are forcing corporate leaders to restructure organizations in order to survive Traditional hierarchical organizations are being replaced by “flattened” management patterns, built around information systems, teams, and networks

Prompted by these changes, organizational visioning is gradually becoming the basis of all management processes Some observers predict visionary leadership, rather than management skills, will soon characterize effective CEOs, while a collective vision will distinguish the company of the future

“In the transformed world of management,” comments business columnist Barbara Block, “firms are driven by a vision—not by a chain of command People closest to the action have authority to make decisions based on a shared understanding of the company mission ”

Steps in Visioning

Despite traditional connotations, “predicting” the future is not the restricted domain of bearded seers and gypsy fortune-tellers, but only a refinement of common day-dreaming Because it relies on creative, “right-brain” patterns of thinking, visioning may prove easier for some people than for others, but, like many other management tools, it is simply a skill that can be learned The actual steps in the process vary with the levels of visioning—personal, departmental, or organizational

How to Create an Ideal Future for an Organization

Perhaps no other planning tool holds as much potential for defining the future as does organizational visioning. Through the visioning process, managers and employees alike journey deep into the heart of the organization, exploring its strengths and weaknesses, rethinking its goals and values, and ultimately creating a portrait of all it might be.

Visioning can benefit almost any organization, but it is especially valuable for organizations that can be described as

- wilting, but worth saving
- energetic, but unfocused
- productive, but not yet ideal

Usually guided by an experienced facilitator, an organizational visioning experience begins with a look at the organization's past and an assessment of its current state. To initiate discussion, participants are asked to explore tough questions, such as

- What is the purpose of this organization?
- What is its driving force?
- What are its core values?
- What does it do best and how does that relate to the world's needs?
- How can this organization make a difference in society and in the lives of its members?
- What activities are worth undertaking over the next 10 years?
- What do we want to accomplish?
- What do we need to change?

Participants must next decide how significant a change they feel is needed to enable their organization to succeed during the next 10 years. In a series of subsequent discussions, managers, employees, and sometimes members or constituents of the organization, suggest and sort out the various pieces that will eventually coalesce into an ideal portrait of the organization, five to ten years into the future. Once this collective vision is firmly in place, three-to-five-year strategic plans and short-term action plans can be designed to take the organization from its present state to its ideal future or, as one trainer put it, from the chalkboard to the grass.

It is, therefore, very important that, in order to create an ideal future for our organization, we must first evaluate the status of the organization, then explore the other intricate questions in order to come up with visions.

Key Definitions

Functions listing of activities or responsibilities

Vision a statement which portrays future attributes desired for the organization

Mission statement a concise short statement which sets out the essential purpose of the organization

Objective specifies the desired outcome by performing a function

Goal the ultimate end point perceived for an objective

Target a nominated position along the path to the goal

Strategy line of action and key priorities established to achieve an agreed objective

Plans, programs, budgets a set of detailed activities to be implemented in accordance with the agreed strategy

Formulating the Mission¹

*“What is our business?
We rarely ask ourselves this question,
or reflect on the most appropriate answer”*

What is our business? We rarely ask ourselves this question in relation to our institutions. We dedicate even less time to adequate reflection that would help find an answer to this question. This has been one of the major causes of failure in private industry. In public organizations, it is one of the factors that explains loss of credibility which, in turn, jeopardizes institutional sustainability.

We cannot exaggerate the significance of a clear, precise, and explicitly formulated mission for an institution, and the importance of communicating that mission both inside and outside the organization. But before formulating the mission, top and middle management must be convinced of the reasons for doing so, and should agree on the content of the mission.

Concepts

What is an institution's mission? Why must an institution formulate its mission clearly, precisely, and explicitly?

A mission statement is a short description of [an organization] main purpose, final goal and its most comprehensive justification. It should include information that will guide the organizational behaviour and the direction the institution takes. A well-formulated mission communicates values that motivate and guide. It gives the impression that the institution is successful, that it knows where it is going, and that it deserves support, time, and investment.

In the widest sense, the mission is the purpose of an institution. There are several reasons for concentrating efforts to formulate a mission. David (1988), Rue and Holland (1989), and Oliveira (1992) have given various definitions for a mission.

- It communicates unanimity about the purpose of the organization, avoiding contradictions and conflicts
- It gives a logical general base for the allocation of resources
- It is the most appropriate reference (perhaps the only one) for working out an adequate formulation of general objectives, policies, and strategies, which should be consistent among themselves and with the mission
- It guides human resources and other organizational resources in a certain direction, reducing the costly, counterproductive fragmentation which occurs in the absence of an explicit mission, or when a mission has been vaguely formulated
- It provides a base for other sub-units to formulate their own specific missions consistent with the general mission. Objectives and goals are linked to the organizational structures and processes. An institution's general mission should serve as the broadest reference for defining the missions and general purposes of its centers, programs, and projects.

¹ Extracted and adjusted from J E Borges Andrade, M D Escobar, J Palomino, R Saldanã, J Souza Silva, 1995. Strategic planning in agricultural research management. Module 2 of the series *Training in planning, monitoring and evaluation for agricultural research management*. Cali, Colombia: ISNAR.

- It helps to establish an organizational climate which can attract and motivate the people involved both internally and externally

Besides understanding the basic reasons for formulating an institution's mission top and middle management should agree on the philosophical and political meaning of the mission

A mission, according to David (1988) and Oliveira (1992)

- defines the organization and what it hopes to be
- is specific enough to exclude certain activities and comprehensive enough to allow creative growth
- distinguishes its institution from all the other organizations in the same field of activities
- serves as the most logical frame of reference for guiding the general assessment of present and future institutional activities
- defines the space and path to which the main resources, principles, values, expectations, responsibilities, and creative efforts will be committed
- is formulated in such clear terms that all internal and external relevant actors can understand it

The mission does not express concrete goals. It provides motivation, general direction, image, and a philosophy which all serve as guides to develop the organization. Public institutions should mainly formulate "open missions" that establish generic satisfaction in the external environment without necessarily indicating specific products/services to be offered, which would reduce or impede future actions in case of changes in the external environment (David 1988)

In conclusion, a mission is a short statement of an organization's major purpose, of the most comprehensive reason justifying the existence of an institution. Its formulation should include enough information to guide organizational behavior and provide direction at all levels. But only the collective exercise of formulating a mission will improve (a) understanding of its importance, and (b) understanding of its meaning.

Examples

After completing a strategic planning exercise, EMBRAPA (the Brazilian Corporation for Agricultural Research) formulated a new mission for their organization to "generate, promote, and transfer knowledge and technology for sustainable development of agriculture, agroindustry, and forestry, for the benefit of Brazilian society" (Borges-Andrade and Horton 1994). This new mission reflects the profound search for a new development model that is participatory, democratic, and sustainable. It results also from a search for new funding sources due to decreasing government funds in the organization's budget.

The desire to diversify clientele and users is evident in the mission of EMBRAPA. It acknowledges the reduction of the role of purely agricultural research, in a society in which the agricultural sector is closely related to other chains of production.

A mission's description needs a certain degree of flexibility to follow changes in the context. The mission defined by CENICAFE (Centro Nacional de Investigaciones del Café) in Colombia is an excellent example of this.

CENICAFE's mission is to "generate, adapt, and transfer scientific knowledge and technology, according to the need of the coffee growers, in the areas of natural resources, production, harvesting, post-harvest and processing, in order to assure sustainability of production, increase productivity, preserve and improve quality and competitive capacity of coffee and other products of the coffee-growing zone" (Posada 1994). The major challenge for CENICAFE is to "provide producers with technologies that allow them to cope with the drastic reduction of international prices and/or find alternatives that give at least an equal profit" (Posada 1994).

CENICAFE's mission aims at transforming a threat into an opportunity, by diversifying business areas

According to Collion (1989) the mission of a national agricultural research institute can

- support the development of the agricultural sector of the country
- contribute to the progress of agricultural science
- serve to formulate policies

Unlike EMBRAPA and CENICAFE, which do not mention rural extension as part of their mandate, INTA (Instituto Nacional de Tecnología Agropecuaria) in Argentina has responsibilities both in research and in agricultural and livestock extension. Its mission is to "impel and invigorate research and agricultural and livestock extension in order to accelerate the spread of technology and the improvement of agricultural business and rural life" (Hogg 1994)

Missions can be defined at the institute, center, and program levels. For example, the mission of the Agricultural Research Unit of Canada (equivalent to a NARI), is to "improve the long-term competence of the Canadian agro-food sector through the development and transfer of new technologies." At the largest experimental station within the research unit, the Experimental Station of Lethbridge, the mission is "produce new technology and information to aid in the development of more competitive and sustainable systems for dryland and low irrigation in the prairies of southern Canada" (Ayres 1993) (Figure 1)

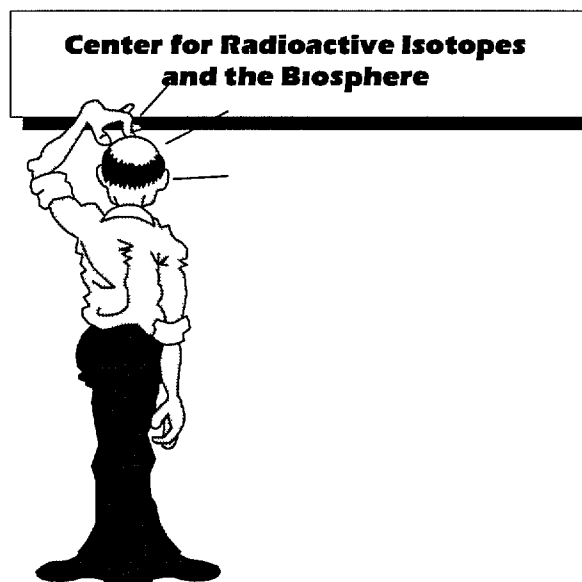


Figure 1 The name of an organization is not enough to express its wishes and communicate them to others. These need to be stated in the mission.

Methodology

The literature on strategic planning, management, and administration reveals that there are no fixed techniques or recipes for formulating a mission. But all agree that there are some key components to the job. Table 1 looks at some aspects of formulating and assessing a mission according to the strategic approach, using some examples from Pfeiffer et al. 1985, David 1988, Oliveira 1992, and Certo and Peter 1993.

The matrix of Table 1 can be used to formulate and evaluate an institution's mission. To formulate a mission, use the same components and questions of Table 1, only substituting the word "organization" for the name of the institution or program, as the case may be. The answers to the questions should be written in the third column.

Table 1 Matrix for Formulating and Assessing a Mission

Components of a mission statement	Questions to answer in the mission statement	Mission Statement of the Future Valley Agricultural Research Center (hypothetical example)
<ul style="list-style-type: none"> ● Major purpose, basic reason for the organization's existence 	<p>What is the business of the organization?</p>	<p>Develop research to solve environmental, social, and economic problems of the agricultural and agroindustrial segments of Future Valley</p>
<ul style="list-style-type: none"> ● Products and services produced 	<p>What are the main (types of) products/services of the organization?</p>	<p>Technical scientific knowledge and agricultural technology appropriate for dryland and irrigation areas</p>
<ul style="list-style-type: none"> ● Clients 	<p>Who are the relevant clients and where are they?</p>	<ul style="list-style-type: none"> ● Small and medium farmers of dryland areas ● Farmers and agroindustries of the irrigation areas
<ul style="list-style-type: none"> ● Technology 	<p>What are the organization's research approaches?</p>	<ul style="list-style-type: none"> ● Traditional biotechnology and technology for dryland areas ● Biotechnology and other frontier technologies for irrigation areas
<ul style="list-style-type: none"> ● Philosophy 	<p>What is the philosophic base (values, beliefs and aspirations) of the organization?</p>	<ul style="list-style-type: none"> ● Valuing human resources in the organization ● Clients and partners are the organization's guides ● Interest in the internal market and technological competition in the country ● Interest in the productivity, quality, profit, and health of the crops and their final products ● Environmental factors as developmental factors, to be preserved and used rationally for the good of society ● Valuing the interchange and partnership with other local, state, regional, national, foreign, and international institutions
<ul style="list-style-type: none"> ● Interest in the sustainability of the organization 	<p>What is the organization's attitude to its sustainability in the long run?</p>	<p>Clients and partners of the organization participate in</p> <ul style="list-style-type: none"> ● choosing problems and challenges to be addressed by research ● defining and assessing research policies and priorities ● building the organization's future
<ul style="list-style-type: none"> ● The organization's self image 	<p>What are the key strengths and competitive advantages of the organization?</p>	<p>The most modern infrastructure of laboratories for research, the best human team in biotechnology, and adopting the "strategic approach" in management, because the center believes that 'if you're not the biggest, you have to be the best'</p>
<ul style="list-style-type: none"> ● Interest for building a positive public image 	<p>What is the public image that the organization would like to have?</p>	<p>The center as a technological pillar of the agricultural present and future of Future Valley</p>
<ul style="list-style-type: none"> ● Sources of inspiration 	<p>What key factors motivate and inspire the organization?</p>	<p>Committed to (a) sustainable development, (b) clients and partners of the center and (c) human resources of the organization, in the long run</p>

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Agricultural Research Center of Future Valley - mission statement -

The mission of the Future Valley Agricultural Research Center (FVARC) is to develop agricultural research activities to contribute to solving social, economic, and environmental problems of the agricultural and agroindustrial segments of Future Valley. This contribution is provided through the continuous supply of technical-scientific knowledge and appropriate technologies, which permit a "qualitative jump" in the performance of the small and medium farmers of the dryland area and the farmers and agroindustrials of the irrigation area, so they can fully participate in the equitable and sustainable socioeconomic development of the region and strengthen the competitiveness of the national economy.

For the dryland area, FVARC will combine the potential of biotechnology with other appropriate technologies for the agroecological and socioeconomic characteristics of rain-fed agriculture. For the irrigation area, FVARC will combine the potential of biotechnology with other frontier technologies needed by the high level of technology of irrigation agriculture.

The success of the FVARC mission will be based on (a) the valuing and strategic development of its human resources, (b) the needs, challenges, and expectations of its clients and partners, (c) interest in the productivity, profitability, quality, and health of the crops and their products, which will contribute to supplying the internal market and to improving the competitiveness of the regional agriculture, (d) the understanding that environmental factors are important for development, and should be preserved and used rationally in the long run for the benefit of society, (e) the interchange with other relevant local, state (provincial), national, foreign, and international institutions.

The FVARC will establish and maintain mechanisms that permit the direct participation of representatives of the different groups of its relevant clients and partners in the processes of (1) choosing problems and challenges to be addressed by research, (2) defining and evaluating policies and priorities for research, and (3) building future areas for research in the center.

The center is not the only nor even the largest agricultural research institution in Future Valley. But FVARC has the most advanced infrastructure and laboratories for agricultural research and researchers team in biotechnology in the region. Also, it has adopted the strategic approach "to management and the development of agricultural research." This is because the center believes that "if you're not the biggest, you have to be the best." But the center recognizes that only the social, political, and financial support of its clients and partners can transform FVARC in the technological pillar of regional agriculture.

In the long run, FVARC will be committed to (a) the strategic development of its human resources, (b) the expectations of its clients and partners, and (c) the socioeconomic sustainable development of Future Valley.

Figure 2 Example of a mission statement

To evaluate an existing mission of an institute or a program identify the basic components and proceed in the same way When an institution or program has no explicit mission statement (perhaps because it has not adopted the strategic approach), the most general objective should be regarded as the mission

Eventually, one can identify which of the components of the mission statement are missing and revise and update it

The matrix is just a tool to facilitate formulating or evaluating a mission Based on the information in the third column, the mission statement can be formulated and used, for example, in corporate publications

The elements presented in Table 1 are those considered most relevant in formulating a mission for an institution The final composition of a mission (see Figure 2) does not necessarily have to include all the components in a single paragraph, because the text may then be too long and complex For greater clarity and to improve comprehension of the mission, the statement should consist of two parts (a) an introductory paragraph, which generally includes the purpose, the products, and the clients of the organization, and (b) the "body" of the statement, which expands on the introduction Top management must decide on the contents of the first paragraph, which is the most important, and on the statement as a whole

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Concepts of Vision and Mission (summary)

A *vision statement* outlines and focuses on the ideal end-state you want to create in the future for the organization. The description of that exciting, ideal end-state is called a *vision*.

A vision is not a plan. You might have a vision of what you want to create, but you don't know how to get there. If you know how to get there, it is no longer a vision, but a plan.

A *mission statement* is a succinct statement which sets out the essential purpose of the organization. Its purpose is to provide a clear and common understanding of the agency role inside and outside the organization.

While a mission statement is a necessarily brief statement, it will need some interpretation for different sets of interest groups or "clients," e.g., the mission will have a different implication for staff and those outside the organization.

The mission statement might be interpreted and explained to the various concerned groups or parties. Such a brief clarification should convey to those groups how the agency role will be exercised in respect to their particular interests.

Exercise 9. NARIs role in the future: Vision and mission formulation ("trip around the tables" technique and small groups)

Part I Redefining NARIs role (1 hour 55 minutes)

Phase 1 Group work (55 minutes)

- 1 Form four groups of participants, each group electing a rapporteur



- 2 The groups pretend all belong to the same organization
- 3 Each group works on the question assigned to them as follows (20 minutes)
 - Group A What does the government require of us?
 - Group B Who are the "clients" or "stakeholders" of our business? What do they expect from us?
 - Group C What are the most important functions for the organization to carry out?
 - Group D What are the desirable attributes and characteristics to which the organization should aspire in the execution of its role?
- 4 The rapporteurs compile their group's inputs on worksheet 3 9 5 (30 minutes)

Phase 2 Trip around the tables (35 minutes)

- 5 The rapporteurs begin their "trip around the tables" They have five minutes to spend at each table They present their group's inputs and collect contributions to improve their responses (15 minutes)
- 6 The rapporteurs return to their own group They share the contributions collected during the "trip" and decide on the best answers The rapporteurs write the results on the flipchart and prepare to present their group's results (20 minutes)

Phase 3 Reporting and discussion (25 minutes)

- 7 The rapporteurs present their results to the audience Five minutes are available for each presentation (20 minutes)
- 8 The trainer provides feedback on the responses of Part I and invites the participants to work on Part II (5 minutes)

Part II Formulating vision and mission (1 hour 20 minutes)

- 9 Form the same groups as in Part I of the exercise. Before formulating vision and mission statements, review the concepts in handouts 3 9 1, 3 9 2, and 3 9 3 (35 minutes)
- 10 Pretend you are all from the same NARI. Taking into account the responses of Part I, compose a vision and mission statement for your NARI. Use worksheet 3 9 6 to write down the group ideas.
- 11 The rapporteurs will write the vision and mission statements on two separate flipcharts to present and discuss with the audience (5 minutes)
- 12 At the end of this exercise, the trainer will invite the participants to come to a consensus to select and/or reformulate one statement on vision and mission, which will be used during the remainder of the workshop to support the next steps of the strategic planning exercise (i.e. formulation of strategies and objectives) (40 minutes)
- 13 The “new” vision and mission will be displayed on the wall until the end of the workshop
- 14 The trainer summarizes this exercise, invites participants to provide feedback, and closes the session (5 minutes)

Strengths and Weaknesses

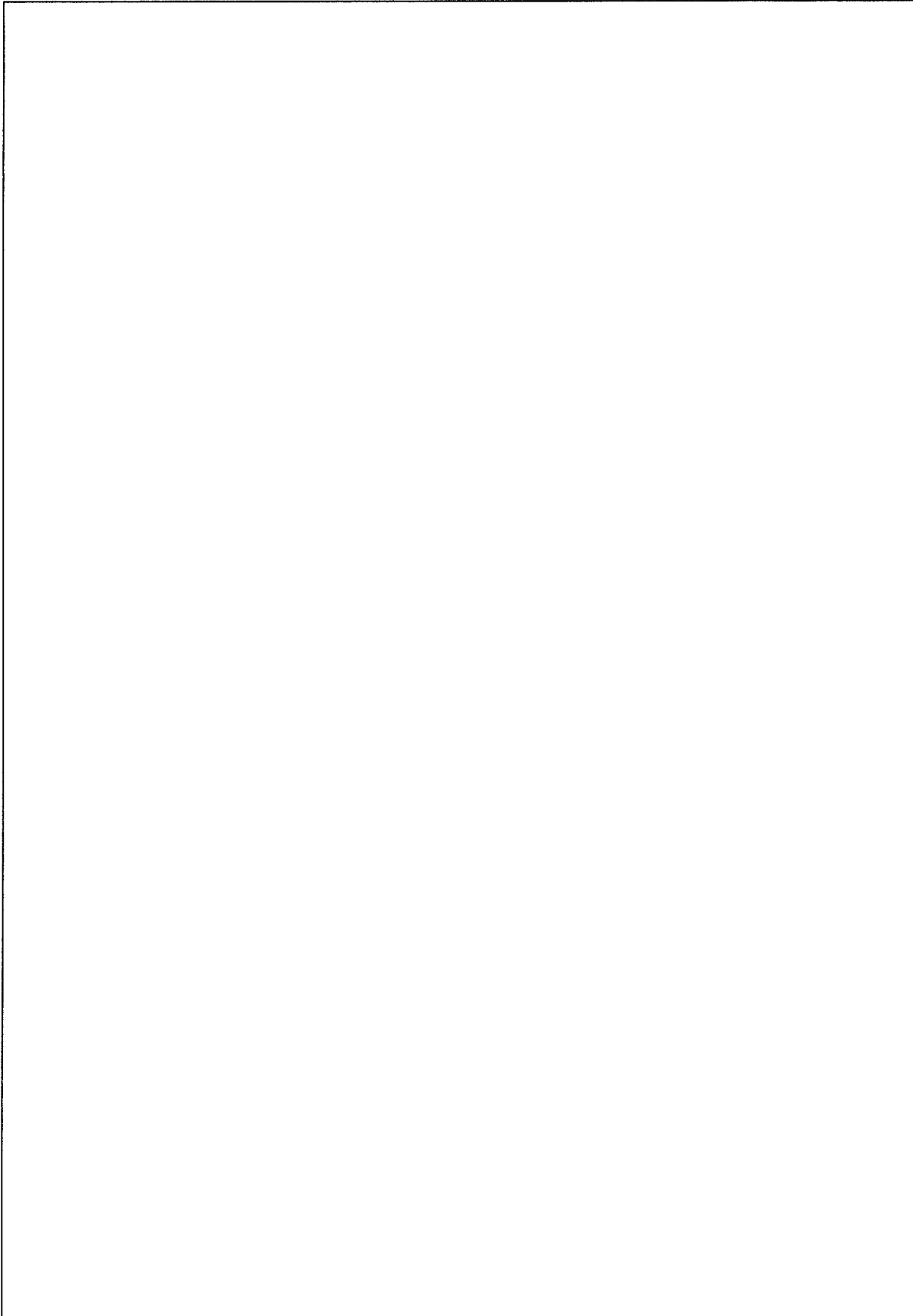
- Please list what you consider to be three strengths of day three

1
2
3

- Please list what you consider to be three weaknesses of day three

1
2
3

- **Suggestions for improvements**



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Guidelines to Provide Feedback on the Workshop

1 The Module

Content

- usefulness/relevance
- amount of information

Structure

- sequence
- duration
- balance between trainers' and trainees' participation
- instructions to trainers
- visual aids
- handouts, exercises
- extra readings
- PAPA
- evaluation

2 Process training techniques and direction

- usefulness/relevance/effectiveness
- group interaction
- clarity of questions/exercise instructions
- opening and closure of the days

3 Trainers', facilitators', and trainees' performance

- presentation/communication skills
- interaction/effective participation
- punctuality/interest/commitment/willingness to facilitate learning/willingness to participate
- other attitudes

4 Logistical support

- organization
- accuracy
- punctuality
- willingness to assist participants
- services provided in general

5 Workshop environment

- physical (training facilities, training material, hotel facilities in general)
- psychological (personal feelings such as self-motivation, interest, satisfaction, self-achievement)
- social (development of friendship, relaxed, comfortable among participants, etc)

6 Workshop results/outputs

- personal and professional assessment
- recommendations

7 General comments

FIRST STAGE

PAPA - ideas for action items

Date _____

Workshop title SADC/ESAMI/ISNAR Workshop on Strategic Planning

Date/Venue _____

Name _____

Organization _____

Ideas I would like to try when I return to work at my research institute, based on what I have learned in this training workshop

Note You can use the workshop objectives what you learn during the workshop the handouts, conversations with participants and trainers etc to come up with ideas

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DAY FOUR

Strategic Planning

DAY FOUR — Overview

Objectives

By the end of the day the participants will be able to do the following

- 1 Formulate objectives for a NARI based on the vision and mission statements
- 2 Formulate policies for a NARI
- 3 Formulate strategies for a NARI

Handouts

- 4 10 1 Overview of Day Four
- 4 10 2 Tentative Schedule of Day Four
- 4 10 3 Formulating Objectives (text)
- 4 10 4 Exercise 10 Formulating Objectives
- 4 10 5 Exercise 10 Worksheet
- 4 11 1 Formulating Policies (text)
- 4 11 2 Exercise 11 Formulating Policies
- 4 11 3 Exercise 11 Worksheet
- 4 12 1 Formulating Strategies (text)
- 4 12 2 Exercise 12 Formulating Strategies
- 4 12 3 Exercise 12 Worksheet
- 4 12 4 Strengths and Weaknesses of Day Four
- 4 12 5 Guidelines to Provide Feedback on the Workshop
- 4 12 6 PAPA—First Stage

Strategic Planning

DAY FOUR — Schedule

08 30 – 09 00 **Opening of the Day's Activities**

09 00 – 10 30 **Session 10 Formulating Objectives**
(Presentation and exercise 10)

10 30 – 10 45 Tea/Coffee Break

10 45 – 13 00 **Session 11 Formulating Policies**
(Presentation and exercise 11)

13:00 – 14:00 Lunch

14 00 – 15 15 **Session 12 Formulating Strategies**
(Presentation and exercise 12)

15 15 – 15 30 Tea/Coffee Break

15 30 – 17 00 **Session 12 (Continued)**

17 00 – 17 30 **Feedback on the Day's Activities and PAPA**

Strategic Planning

DAY FOUR — Checklist for Trainers

Handouts

	Yes ✓	No ✓
4 10 1 Overview of Day Four	<input type="checkbox"/>	<input type="checkbox"/>
4 10 2 Tentative Schedule of Day Four	<input type="checkbox"/>	<input type="checkbox"/>
4 10 3 Formulating Objectives (text)	<input type="checkbox"/>	<input type="checkbox"/>
4 10 4 Exercise 10 Formulating Objectives	<input type="checkbox"/>	<input type="checkbox"/>
4 10 5 Exercise 10 Worksheet	<input type="checkbox"/>	<input type="checkbox"/>
4 11 1 Formulating Policies (text)	<input type="checkbox"/>	<input type="checkbox"/>
4 11 2 Exercise 11 Formulating Policies	<input type="checkbox"/>	<input type="checkbox"/>
4 11 3 Exercise 11 Worksheet	<input type="checkbox"/>	<input type="checkbox"/>
4 12 1 Formulating Strategies (text)	<input type="checkbox"/>	<input type="checkbox"/>
4 12 2 Exercise 12 Formulating Strategies	<input type="checkbox"/>	<input type="checkbox"/>
4 12 3 Exercise 12 Worksheet	<input type="checkbox"/>	<input type="checkbox"/>
4 12 4 Strengths and Weaknesses of Day Four	<input type="checkbox"/>	<input type="checkbox"/>
4 12 5 Guidelines to Provide Feedback on the Workshop	<input type="checkbox"/>	<input type="checkbox"/>
4 12 6 PAPA—First Stage	<input type="checkbox"/>	<input type="checkbox"/>

Overheads

4 10 1 Objectives of Day Four	<input type="checkbox"/>	<input type="checkbox"/>
4 10 2 Schedule of Day Four	<input type="checkbox"/>	<input type="checkbox"/>
4 10 3 Objective of Session 10	<input type="checkbox"/>	<input type="checkbox"/>
4 10 4 Objective and Target	<input type="checkbox"/>	<input type="checkbox"/>
4 10 5 Categories of Objectives	<input type="checkbox"/>	<input type="checkbox"/>
4 10 6 Institutional Objectives	<input type="checkbox"/>	<input type="checkbox"/>
4 10 7 Functional Objectives	<input type="checkbox"/>	<input type="checkbox"/>
4 10 8 Operational Objectives	<input type="checkbox"/>	<input type="checkbox"/>
4 10 9 Guidelines for Formulating Objectives	<input type="checkbox"/>	<input type="checkbox"/>
4 10 10 Different Objectives	<input type="checkbox"/>	<input type="checkbox"/>
4 11 1 Objective of Session 11	<input type="checkbox"/>	<input type="checkbox"/>
4 11 2 Policy	<input type="checkbox"/>	<input type="checkbox"/>
4 11 3 Policy Definition	<input type="checkbox"/>	<input type="checkbox"/>
4 11 4 Let's All Shoot at the Same Target	<input type="checkbox"/>	<input type="checkbox"/>
4 11 5 Policy Typology	<input type="checkbox"/>	<input type="checkbox"/>
4 11 6 Policy Characteristics	<input type="checkbox"/>	<input type="checkbox"/>
4 11 7 Different Targets	<input type="checkbox"/>	<input type="checkbox"/>

	Yes ✓	No ✓
4 11 8 Which Target to Aim at?	<input type="checkbox"/>	<input type="checkbox"/>
4 11 9 Wisdom	<input type="checkbox"/>	<input type="checkbox"/>
4 12 1 Objective of Session 12	<input type="checkbox"/>	<input type="checkbox"/>
4 12 2 Strategy	<input type="checkbox"/>	<input type="checkbox"/>
4 12 3 Strategy Definition	<input type="checkbox"/>	<input type="checkbox"/>
4 12 4 Policy versus Strategy	<input type="checkbox"/>	<input type="checkbox"/>
4 12 5 The Need for Strategies	<input type="checkbox"/>	<input type="checkbox"/>
4 12 6 Strategies Methodology	<input type="checkbox"/>	<input type="checkbox"/>
4 12 7 Questions to Formulate a Strategy	<input type="checkbox"/>	<input type="checkbox"/>
4 12 8 11 Questions for Selecting Strategies	<input type="checkbox"/>	<input type="checkbox"/>
4 12 9 11 Questions for Selecting Strategies (continued)	<input type="checkbox"/>	<input type="checkbox"/>
4 12 10 Strategy Formulation in Terms of CIPP Framework	<input type="checkbox"/>	<input type="checkbox"/>
4 12 11 Strategic Planning Process	<input type="checkbox"/>	<input type="checkbox"/>

Materials

● Overhead projector	<input type="checkbox"/>	<input type="checkbox"/>
● Projector screen	<input type="checkbox"/>	<input type="checkbox"/>
● Flipchart stands (minimum 2)	<input type="checkbox"/>	<input type="checkbox"/>
● Flipchart paper/pads (about 10 per day)	<input type="checkbox"/>	<input type="checkbox"/>
● Markers for writing on newsprint	<input type="checkbox"/>	<input type="checkbox"/>
● Markers for writing on transparencies	<input type="checkbox"/>	<input type="checkbox"/>
● Blank transparencies	<input type="checkbox"/>	<input type="checkbox"/>
● Stapler	<input type="checkbox"/>	<input type="checkbox"/>
● Tape (strong masking tape and regular tape)	<input type="checkbox"/>	<input type="checkbox"/>
● Push pins	<input type="checkbox"/>	<input type="checkbox"/>
● Glue	<input type="checkbox"/>	<input type="checkbox"/>
● Pencils/notepads/pens	<input type="checkbox"/>	<input type="checkbox"/>
● Pencil sharpeners	<input type="checkbox"/>	<input type="checkbox"/>
● Extension cords	<input type="checkbox"/>	<input type="checkbox"/>
● Certificates	<input type="checkbox"/>	<input type="checkbox"/>
● Photocopying facilities	<input type="checkbox"/>	<input type="checkbox"/>
● Spare bulbs for overhead projector	<input type="checkbox"/>	<input type="checkbox"/>
● Extra notepads and pens	<input type="checkbox"/>	<input type="checkbox"/>
● Scissors	<input type="checkbox"/>	<input type="checkbox"/>

DAY FOUR

Session 10 Formulating Objectives

Instructions to Trainers

PRE-SESSION

08 30 – 09 00 Opening of the Day's Activities

- Review of the previous day's activities
- Summary of the evaluation of the previous day
- Overview of the day's activities

OBJECTIVES

By the end of this pre-session, the participants will be able to do the following

- Assess the progress of the workshop
- Summarize the objectives and agenda for the day's activities

OPENING

Invite a volunteer to review the previous day's activities (10 minutes)

Summarize the evaluation of the previous day (10 minutes)

Distribute the overview and the schedule for day two to the participants (handouts 4 10 1 and 4 10 2) Review the objectives and schedule, using overheads 4 10 1 and 4 10 2 Ask if clarifications are needed (10 minutes)

SESSION 10

09 00 – 10 30 Session 10 Formulating Objectives

OBJECTIVE

By the end of this session the participants will be able to do the following

- Formulate objectives for a NARI based on the vision and mission statements

Use overhead 4 10 3 to present the objective

PROCEDURE

Training techniques presentation, "trip around the tables"

PRESENTATION

(*experience*) Give a brief presentation focusing on formulating objectives Use handout 4 10 3 as background information for the presentation Overheads 4 10 4 through 4 10 10 support the presentation Distribute handout 4 10 3 (10 minutes)

EXERCISE 10

Exercise 10 Formulating objectives (1 hour 15 minutes)

Note Keep the flipcharts from this exercise, to use them again during exercise 12

- 1 Distribute handout 4 10 4 This gives clear instructions for the exercise Go over the instructions with the participants step by step Emphasize and remind the participants about the time Ask if clarifications are needed (5 minutes)

Phase 1 Group work (15 minutes)

- 2 Divide the participants into four groups, and ask each group to elect a rapporteur
- 3 The groups work on defining the objectives on the organizational levels assigned to them (15 minutes)
- 4 (*experience*) As the groups work, circulate from group to group to check progress Clarify any concerns they may have while working Be sure to remind them of the time remaining

Phase 2 "Trip around the tables" (25 minutes)

- 5 (*experience, process*) The rapporteurs make the "trip around the tables," spending five minutes at each table (15 minutes)
- 6 (*process*) The rapporteurs return to their own groups. The groups revise their statements based on the contributions collected during the "trip" The rapporteurs write the results on a flipchart for presentation (10 minutes)

Phase 3 Reporting and discussion (30 minutes)

- 7 (*process*) The rapporteurs present the results to the audience Each rapporteur has five minutes to present (20 minutes)
- 8 (*process, generalize*) The trainer provides feedback on the content of the presentations and facilitates a discussion (10 minutes)

CLOSURE

Closure (5 minutes)

- 1 (*application*) Ask the participants "What might you do differently in your job as a result of what you have learned?"
- 2 Make a transition to the next session

10 30 - 10 45 Tea/Coffee Break

DAY FOUR

Session 10 Summary of Overheads

Objectives of Day Four

- 1 Formulate objectives for a NARI based on the vision and mission statements
- 2 Formulate policies for a NARI
- 3 Formulate strategies for a NARI

4 10 1

Schedule of Day Four

08:30	09:00	Opening of the Day / Aims
09:00	10:30	Session 10 Formulating Objectives
Tea/Coffee Break		
10:45	13:00	Session 11 Formulating Policies
Lunch		
14:00	15:15	Session 12 Formulating Strategies
Tea/Coffee Break		
15:30	17:00	Session 13 Concluded
17:00	17:30	Feedback on the Day / Activities and PAPA

4 10 2


Objective of Session 10

- Formulate objectives for a NARI based on the vision and mission statements

4 10 3

Objective and Target

- **Objective** in the broadest sense
the future state that results that somebody wants to achieve
- **Target**
the specific objective that is achievable through the implementation of policies and processes



4 10 4

Categories of Objectives

- Institutional
- Functional
- Operational

4 10 5

Institutional Objectives

- based on the institution's mission statement and external organizational and gap analyses
- strategic in nature
- long-term
- rather inflexible
- qualitative
- serve as reference for formulating policies and strategies and for functional objectives

4 10 6

Functional Objectives

- ◆ based on institutional objectives
- ◆ refer to tactical level
- ◆ medium term
- ◆ more flexible
- ◆ quantitative-probabilistic
- ◆ serve as reference for formulating functional norms and tactics and for operational objectives
- ◆ middle management responsible

4 10 7

Operational Objectives

- derived from functional objectives
- refer to operational level
- short term
- highly flexible
- quantitative-deterministic
- serve as reference for formulating operational directives and activities in administrative and technical units
- line management responsible

4 10 8

Guidelines for Formulating Objectives

- 1 Coherence between mission and objectives
- 2 Within the categories list objectives hierarchically
- 3 Use an objective flow chart to rank in the following order: institutional, functional and operational objectives
- 4 Those responsible for the strategic planning process should support/organize the steps of the process

4 10 9

Different Objectives

Management	Objectives	Plan	Term
top	institutional	strategic	long
middle	functional	tactical	medium
operational	operational	operational	short

4 10 10

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Handout – Overview of Day Four

Strategic Planning

Objectives

By the end of the day the participants will be able to do the following

- 1 Formulate objectives for a NARI based on the vision and mission statements
- 2 Formulate policies for a NARI
- 3 Formulate strategies for a NARI

Handouts

- 4 10 1 Overview of Day Four
- 4 10 2 Tentative Schedule of Day Four
- 4 10 3 Formulating Objectives (text)
- 4 10 4 Exercise 10 Formulating Objectives
- 4 10 5 Exercise 10 Worksheet
- 4 11 1 Formulating Policies (text)
- 4 11 2 Exercise 11 Formulating Policies
- 4 11 3 Exercise 11 Worksheet
- 4 12 1 Formulating Strategies (text)
- 4 12 2 Exercise 12 Formulating Strategies
- 4 12 3 Exercise 12 Worksheet
- 4 12 4 Strengths and Weaknesses of Day Four
- 4 12 5 Guidelines to Provide Feedback on the Workshop
- 4 12 6 PAPA—First Stage

Handout — Tentative Schedule of Day Four

Strategic Planning

- 08 30 – 09 00 **Opening of the Day's Activities**
- 09 00 – 10 30 **Session 10 Formulating Objectives**
(Presentation and exercise 10)
- 10 30 – 10 45 Tea/Coffee Break
- 10 45 – 13 00 **Session 11 Formulating Policies**
(Presentation and exercise 11)
-

13:00 – 14:00 Lunch

- 14 00 – 15 15 **Session 12 Formulating Strategies**
(Presentation and exercise 12)
- 15 15 – 15 30 Tea/Coffee Break
- 15 30 – 17 00 **Session 12 (Continued)**
- 17 00 – 17 30 **Feedback on the Day's Activities and PAPA**
-

Formulating Objectives¹

Concepts

“In the broadest sense, an objective is the future state, situation, or result that somebody wants to achieve ”

In the literature on planning, there is no uniform definition of an objective. Even in the literature on strategic planning, there is no consensus (David 1988, Oliveira 1992, Certo and Peter 1993). In the broadest sense, an objective is the future state, situation, or results that somebody wants to achieve. For our purposes, objectives will be defined in line with the strategic approach, which recommends that objectives be defined in association with decision-making levels and the time horizon for achieving them. From this perspective, objectives may be divided into three categories:

Institutional objectives These objectives should be based on the institution's mission statement and on external, organizational, and gap analysis. They are strategic in nature, long-term, rather inflexible, and qualitative. They should serve as a reference for formulating institutional policies and strategies, and for the functional objectives. Top management is responsible for formulating and periodically updating them.

Functional objectives These objectives should be based on the institutional objectives. They refer to the tactical level, are medium-term, and more flexible, and quantitative-probabilistic (define a probable situation, in terms of percentages or other measurable indicators, stating the desired minimum). They should serve as a reference for the formulation of the functional norms and tactics, and for the operational objectives. Middle management is responsible for formulating, monitoring, assessing, and bringing the functional objectives up to date.

Operational objectives These objectives should be derived from the functional objectives. They refer to the operational level, are short-term, highly flexible, and quantitative-deterministic (precisely define a situation that should occur, in terms of percentages or other measurable indicators). They should serve as a reference for formulating the operational directives and activities in the various administrative and technical units. Line managers are responsible for formulating, monitoring, assessing, and bringing the operational objectives up to date.

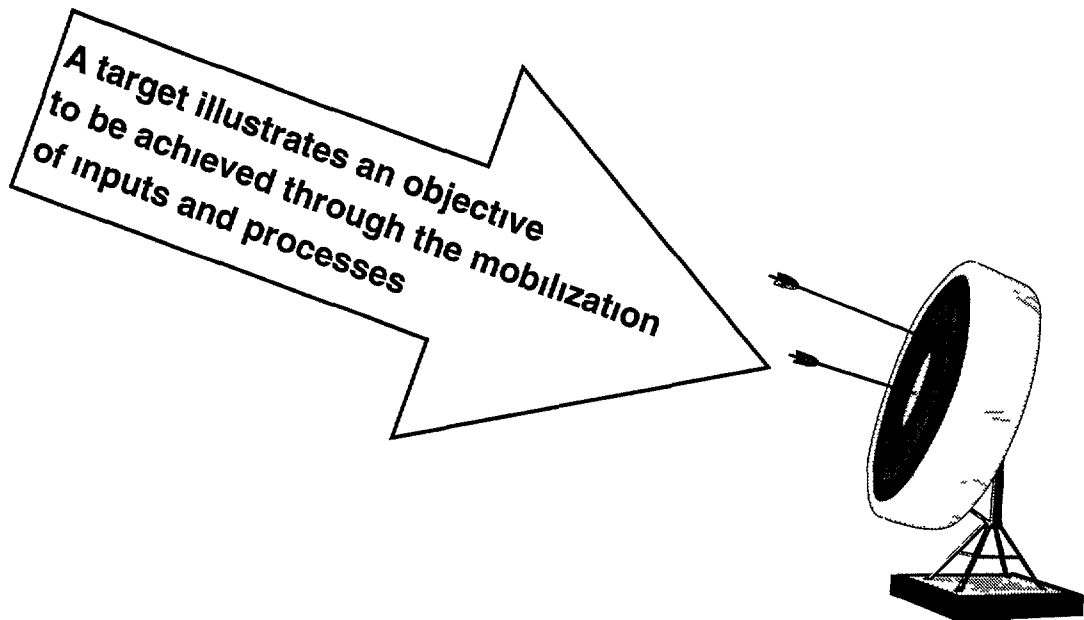
These three levels of objectives should be widely discussed by top, middle, and line management. Line managers should discuss the objectives with those staff who will carry out the objectives. The level of interaction among the groups of relevant actors in the institution, with respect to these three categories of objectives, determines the level of success in achieving the defined objectives.

¹ Extracted and adjusted from J.E. Borges Andrade, M.D. Escobar, J. Palomino, R. Saldanã, J. Souza Silva. 1995. Strategic planning in agricultural research management. Module 2 of the series *Training in planning, monitoring, and evaluation for agricultural research management*. Cali, Colombia: ISNAR.

Methodology

There is no fixed rule or universal technique for formulating objectives. There are, however, some guidelines that may help in carrying out this task.

1. Maintain coherency between the mission and the institutional, functional, and operational objectives. The operational objectives are derived from the functional objectives, which are derived from the institutional objectives, which in turn are derived from the mission statement and the analyses of the external environment, the organization itself, and its gaps.
2. Institutional objectives should be formulated by top management, which should derive them from the mission statement and from the external, organizational, and gap analyses.



3. Functional objectives should be formulated by middle management, which should derive them from the institutional objectives and from the external, organizational and gap analyses.
4. The operational objectives should be formulated by line management, which should derive them directly and exclusively from the functional objectives and from the external, organizational, and gap analyses.
5. In each of the three categories, objectives should be formulated and listed in hierarchical order (see Figure 1). To organize the objectives by hierarchy within a certain category, the members of the relevant committee must identify, by consensus, the interdependency among them. After making a list of the most relevant objectives, the members should answer individually and then as a group (to achieve consensus), two key questions for each of the objectives, to determine the interdependency between objectives:
 - Does this objective contribute to the achievement of other objectives?
 - On which other objectives does fulfillment of this objective depend?

The committee's answers should be organized in an "objective flowchart," in which the most comprehensive objective appears at the top. The remaining general and specific objectives

are organized in descending hierarchical order. The greatest number of objectives that contribute to the fulfillment of others appear at the bottom. The connecting arrows relate the lower objectives to those in higher levels. Each objective contributes to the achievement of the objectives above it.

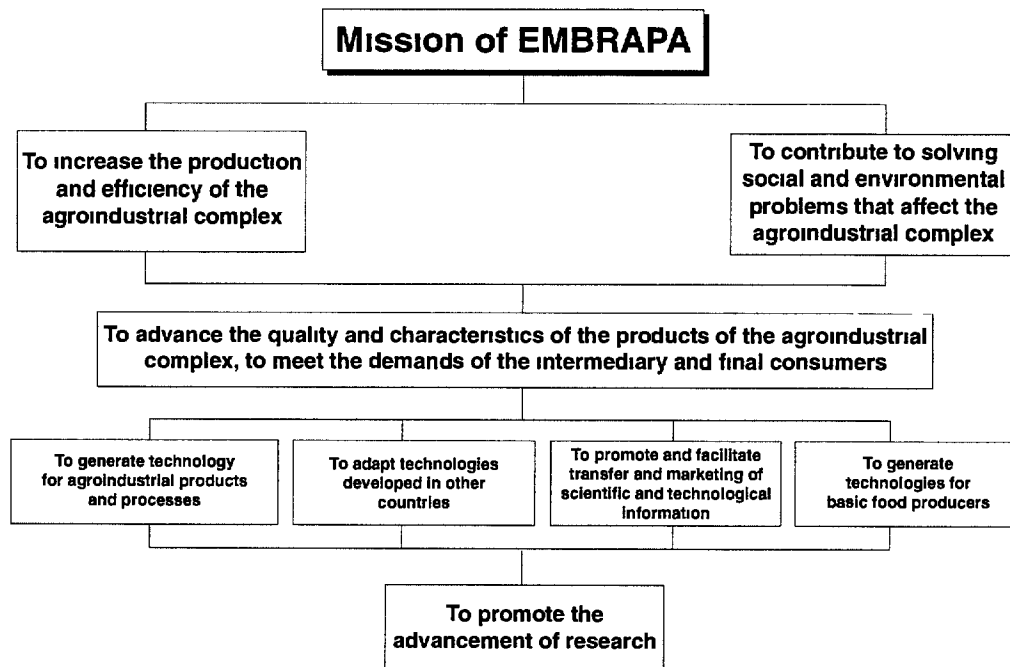


Figure 1 Hierarchical classification of EMBRAPA's objectives

- 6 As a principle of methodology, in the exercise for formulating institutional objectives, the mission should be considered the broadest objective. Beginning with the mission, top management will discuss what institutional objectives should be formulated in order to fulfill the mission of the institution. This means there must be as many general institutional objectives as necessary to include all the points of the mission. For each general objective, there should be as many specific institutional objectives as necessary to cover the corresponding general objective.
- 7 Once the general and specific institutional objectives are formulated, the functional objectives are formulated in the same manner. The difference is that those responsible for the different functions of the institution should first discuss and identify which relevant functional objectives should be derived from the institutional objectives. They make a list of these objectives, to be implemented in the medium-term, to achieve the specific institutional objectives. Then, as a group, middle management will organize the objectives according to the different functions of the institution. Next, those with corresponding functions will put them in hierarchical order within each function. Each group will define the general functional objective to which the others contribute. There will be only one group of middle management: the managers of the overall functions of the institution. In the case of functional objectives for research, these will be organized by program.
- 8 Once the general and specific functional objectives are formulated, the operational objectives are formulated following the same system. The difference is the actors who participate in the process. In this case, line management participates, as well as those under their command. The operational objectives should be formulated every year. This corresponds to the projects level.

- 9 The group or committee that coordinates the strategic planning process should organize and support all the strategic steps of the process. But each manager should be autonomous in carrying out the steps of the process in relation to the participation of those under his command.
- 10 The institutional objectives should be included in the strategic plan, the functional objectives in the tactical plan, and the operational objectives in the operational plan. The objectives of all three categories should be communicated to all employees every year.

Table 1 Relationships between Management Level, Objectives, Plan, and Term

<i>Management level</i>	<i>Objectives</i>	<i>Plan</i>	<i>Term</i>
Top	Institutional	Strategic	Long
Middle	Functional	Tactical	Medium
Operational	Operational	Operational	Short

Clearly formulated objectives provide direction, allow synergy for development, guide planning, monitoring, and evaluation, and support both resource allocation and the design of positions and their respective functions.

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Exercise 10. Formulating objectives ("trip around the tables" technique)

Phase 1 Group work (15 minutes)

- 1 Form four groups of participants, each electing a rapporteur



- 2 Remember that an objective is a statement reflecting values or desired outcomes related to a vision of the future. Objectives are hierarchical in order, broad in scope at the top level, and specific and detailed at the action level
- 3 Use the mission statement agreed to in exercise 9, to formulate four major objectives, for the levels assigned to your group as follows

Group A	director level
Group B	national research institute level
Group C	regional research centers
Group D	central support services

- 4 The rapporteurs compile their group's inputs on worksheet 4 10 5

Phase 2 Trip around the tables (25 minutes)

- 5 The rapporteurs begin their "trip around the tables." They have five minutes to visit each table. They present their group's inputs and collect contributions to improve their responses (15 minutes)
- 6 The rapporteurs return to their own group. They share the contributions collected during the "trip" and decide on the best answers. The rapporteurs write the results on the flipchart and prepare to present their group's results (10 minutes)

Phase 3 Reporting and discussion (30 minutes)

- 7 The rapporteurs present their results to the audience. Five minutes are available for each presentation (20 minutes)
- 8 The trainer analyzes the responses, after which you will be invited to participate in a discussion (10 minutes)

DAY FOUR

Session 11 Formulating Policies

SESSION 11

Instructions to Trainers

10 45 – 13 00 Session 11 Formulating Policies

OBJECTIVE

By the end of the session the participants will be able to do the following

- Formulate policies for a NARI

Use overhead 4 11 1 to present the objective

PROCEDURE

Training techniques presentation, modified panel

PRESENTATION

(experience) Give a brief presentation focusing on formulating policies Use handout 4 11 1 as background information for the presentation Use overheads 4 11 2 through 4 11 9 to support the presentation Distribute handout 4 11 1 (15 minutes)

EXERCISE 11

Exercise 11 Formulating policies (1 hour 55 minutes)

- 1 Distribute handout 4 11 2 and 4 11 3 Handout 4 11 2 gives clear instructions for the exercise Go over the instructions with the participants step by step Emphasize and remind the participants about the time Ask if clarifications are needed (5 minutes)

Phase 1 Group work (35 minutes)

- 2 Divide the participants into four groups and ask each group to elect a rapporteur (5 minutes)
- 3 *(experience)* As the groups work, circulate from group to group to check progress Clarify any concerns they may have while working Be sure to remind them of the time remaining (25 minutes)
- 4 The groups answer the questions on the exercise sheet and the rapporteurs write their group's results on a flipchart (5 minutes)

Phase 2 Reporting and discussion (1 hour 15 minutes)

- 5 *(experience, process)* Each rapporteur has five minutes to present their results to the audience (20 minutes)
- 6 Invite the rapporteurs to discuss the presentation and results among themselves (20 minutes)

- 7 Open the discussion to the plenary audience and, finally, provide your view on the results of the exercise (25 minutes)
- 8 (*process, generalize*) At the end of the exercise provide feedback on the content of the presentations. Ask the participants questions such as "How did you feel doing this exercise?" and "What did you learn?" (10 minutes)

CLOSURE

Closure (5 minutes)

- 1 (*application*) As the participants "What might you do differently in your job as a result of what you have learned?"
- 2 Make a transition to the next session

13 00 – 14 00 Lunch

DAY FOUR

Session 11 Summary of Overheads

Objective of Session 11

- Formulate policies for a NARI

4 11 1

Policy

- Definition
- Concepts typology
- Formulating policies

4 11 2

Policy Definition

A policy is a formal guide to decisions and behavior intended to stimulate support or guide action in a desired direction toward the attainment of an objective

4 11 3

Let's all shoot at the same target

Policies are input toward achieving an objective

4 11 4

Policy Typology

By their

- scope general or specific
- way of being made known explicit/implicit
- origin tabulated solicited or imposed
- objective innovative form intense or survival
- level of decision making strategic functional or operational
- nature institutional or technological

4 11 5

Policy Characteristics

- Flexible
- Targeted
- Ethical

4 11 6

Group takes training and chooses

The teacher

Sometimes researchers and external groups aim at different targets

4 11 7

What is the limit?

What is your plan?

Validation of objectives requires external consultation

4 11 8

Wisdom

- Too many limits boundaries and restrictions can be counterproductive
- Too much openness can promote chaos

4 11 9

Formulating Policies¹

Concepts

A policy is not an action, but a guide to decisions and behavior intended to stimulate, support, or guide actions in a desired direction toward an objective (see Figure 1)



Figure 1 Policies are inputs toward achieving an objective

For example, if one of the policies of an institution is “the mixing of disciplines in agricultural research projects,” this policy will influence and guide many other decisions at different levels and areas of the institution

Policies can be classified according to their scope, the way of making them known, their origin, their objectives, the decision-making levels at which they are formulated, and their nature

- scope—policies are classified as general or specific
- way of making them known—policies are classified as explicit (written and made known widely and publicly or implicit (not written and for restricted communication)
- origin—policies are classified as established, when they are derived from the mission and objectives, solicited, when they are derived from claims made by certain groups, or imposed, when they are derived from external pressures
- objectives—policies are classified as innovative, to combine strengths and opportunities, for maintenance to use the inner strengths against the external threats, or for survival to avoid confronting weaknesses with external threats
- levels of decision-making—the classification is made according to where the policies were formulated or managed strategic functional, or operational

¹ Extracted and adjusted from J E Borges Andrade M D Escobar J Palomino R Saldanã J Souza Silva 1995 Strategic planning in agricultural research management Module 2 of the series *Training in planning monitoring and evaluation for agricultural research management* Cali Colombia ISNAR

- nature—policies can be classified as institutional or technological

Well-formulated policies contribute in several ways to the management of an institution. For example, some policies may set limits, boundaries and restrictions to different actions, while others may open new possibilities for creativity. Some policies clarify what is expected from different groups of staff, improve coordination among different technical and management units, reduce the amount of time that managers need to make decisions, and promote and facilitate the delegation of authority and responsibility. Each unit of an institution should formulate its respective set of policies, all seek the fulfillment of their own objectives.

Table 1 Classification of Institutional Policies

<p>By their scope</p> <ul style="list-style-type: none"> • general • specific 	<p>By their objective</p> <ul style="list-style-type: none"> • innovative • for maintenance • for survival
<p>By their way of being made known</p> <ul style="list-style-type: none"> • explicit • implicit 	<p>By their level of decision</p> <ul style="list-style-type: none"> • strategic • functional • operational
<p>By their origin</p> <ul style="list-style-type: none"> • established • solicited • imposed 	<p>By their nature</p> <ul style="list-style-type: none"> • institutional • technological

The basic characteristics of an effective policy are a) flexibility to support the institution's adjustment to the changing environment, b) "scope" to include relevant aspects that allow the institution to move toward its desired goal, c) coordination, to concentrate efforts around related activities, and d) ethics, so the actors of the institution can carry out their activities according to ethical and moral values.

Examples

Ayres (1994) describes a policy in Agriculture Canada to concentrate funds allocated by Parliament on strategic research projects, of great economic and environmental significance, which are unlikely to be carried out by the private sector.

Let's assume that an organization has the objectives described for EMBRAPA (see Handout 4.10.3, Figure 1). Some possible policies for this organization could be:

- To define as a priority the training of researchers to identify technological, social, and environmental problems related to the agroindustrial complex
- To use available financial resources for research projects on basic food products and to transfer scientific information
- To seek outside private funding for the research projects on technology for agroindustrial products and processes
- To develop a program to improve quality in the research management, with emphasis on monitoring and evaluation

Methodology

Policies are usually formulated by top management of an organization, but should be made known to and discussed by all staff

Staff should be aware of the mission and the objectives of the institutes, centers, or programs

Formulating policies is an activity with much exchange and knowledge. It requires group creativity and maximum consensus. The main guides for formulating policies are the institutional, functional, and operational objectives to be achieved, the external opportunities and threats, and the internal strengths and weaknesses.

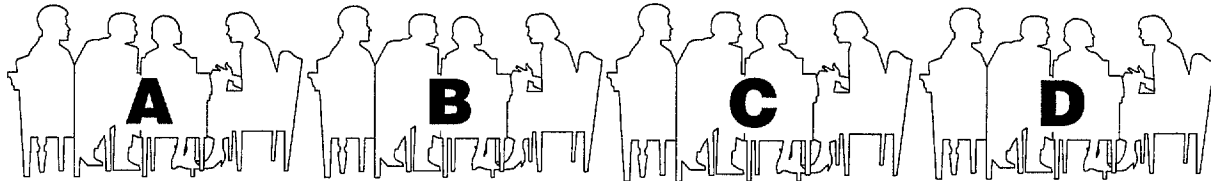
At the different decision-making levels, management should formulate strategic, tactical, and operational policies. The formulation and classification by hierarchy of the policies in each of the levels should follow an approach similar to that for formulating and classifying objectives.

In organizations that produce knowledge, such as agricultural research institutions, institutional, program, and project-level policies should be consistent. For example, if an institutional policy advocates conservation of natural resources, a project to introduce new plant species in a region should explicitly consider this objective.

Exercise 11. Formulating policies (modified panel technique)

Phase 1 Group work (35 minutes)

- 1 Form four groups of participants, each group electing a rapporteur



- 2 Groups work on the following questions. You may use the attached worksheet (handout 4 11 3) to write down the answers
 - a List two major policies from your organization and indicate how they are classified (established, solicited, or imposed)
 - b Summarize the issues that the policies, mentioned in point a, addressed in your institution
 - c From your point of view, what are the impacts or how effective are the above policies within and outside your organization?
 - d How would you classify them based on the levels of decision making?
 - e **Role playing** you are all director generals of agricultural research institutions and you need to formulate two important policies for the region. Identify *one fundamental objective* of your organization from the previous exercise and formulate *two critical policies* to improve the quality of agricultural research management
- 3 The rapporteurs write the results on a flipchart

Phase 2 Reporting and discussion (1 hour 15 minutes)

- 4 The rapporteurs present the results of their group's discussion to the audience. Each rapporteur has approximately five minutes to report (20 minutes)
- 5 First, the results of the presentations are discussed among the rapporteurs (20 minutes)
- 6 Then the discussion is opened to the audience. Finally, the trainers provide their views on the results of the exercise (25 minutes)
- 7 The trainer will invite you to provide feedback on the content and process of this exercise (10 minutes)

Exercise 11. Worksheet

A series of 22 horizontal lines for writing.

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DAY FOUR

Session 12 Formulating Strategies

Instructions to Trainers

SESSION 12

14 00 – 15 15 Session 12 Formulating Strategies

15 15 – 15 30 Tea/Coffee Break

15 30 – 17 00 Session 12 (Continued)

OBJECTIVE

By the end of the session the participants will be able to do the following

- Formulate strategies for a NARI

Use overhead 4 12 1 to present the objective

PROCEDURE

Training techniques presentation, group work

PRESENTATION

(*experience*) Give a brief presentation focusing on formulating strategies Use handout 4 12 1 as background information for the presentation Overheads 4 12 2 through 4 12 11 support the presentation Distribute handout 4 12 1 (30 minutes)

EXERCISE 12

Exercise 12 Formulating strategies (2 hours 15 minutes)

Note This exercise builds on the objectives formulated during exercise 10 You must post the flipcharts from session 10 with the objectives listed in order to complete this exercise

- 1 Distribute handout 4 12 2 and 4 12 3 Handout 4 12 2 gives clear instructions for the exercise Go over the instructions with the participants step by step Emphasize and remind the participants about the time Ask if any clarifications are necessary (5 minutes)

Phase 1 Group work (1 hour 5 minutes)

- 2 Divide the participants into four groups and ask each group to elect a rapporteur Note that the groups should be formed on the basis of similar functions (for example, discipline, institution, job, etc) (5 minutes)
- 3 Invite the participants to refer back to the objectives on the flipcharts that were generated in exercise 10 They should select one objective appropriate to the group specific area of work Then, formulate strategies and activities to accomplish the selected objective

- 4 Invite the participants to read handout 4 12 1 and use the Table 1 from the handout to guide them during this exercise on formulating strategies (15 minutes)
- 5 As the groups work, circulate from group to group to check progress. Clarify any concerns they may have while working. Remind them of the time remaining (45 minutes)

Phase 2 Reporting and discussion (1 hour 5 minutes)

- 6 (*experience, process*) The rapporteurs present their group's results to the audience. Each rapporteur has about five minutes to present. Facilitate a brief discussion after each presentation. Comment on the results, highlighting the issues and points raised regarding formulating policies (55 minutes)
- 7 (*process, generalize*) At the end of the exercise, ask the participants questions such as "How did you feel doing this exercise?" and "What did you learn?" to facilitate discussion of the process (10 minutes)

CLOSURE

Closure (5 minutes)

- 1 (*application*) Ask the participants "What might you do differently in your job as a result of what you have learned?"
- 2 Make a transition to the last session

17 00 – 17 30 Feedback on the Day's Activities and PAPA

OBJECTIVES

By the end of the session participants will be able to do the following

- Provide feedback on the day's activities
- Consider possible actions they would like to implement in their own organization

PROCEDURE

Training techniques individual exercise

Highlight positive and negative points of the day. Note areas that may need additional attention in the workshop. Participants can describe some strengths and weaknesses of the day on handout 4 12 4 and use 4 12 5 to facilitate their task (15 minutes)

PAPA

(*application*) Ask the participants to take some time to jot down some "action ideas" they may have for themselves as a result of today's activities. They can use handout 4 12 6 (15 minutes)

DAY FOUR

Session 12 Summary of Overheads

Objective of Session 12

- Formulate strategies for a NARI

4 12 1

Strategy

- Definition
- Concepts
- Formulating policies

4 12 2

Strategy Definition

- Logical set of decisions to take an appropriate course of action to achieve an objective
- Logical combination of actors, factors and actions selected from among other alternative combinations to achieve a certain objective in a specific context

4 12 3

Policy versus Strategy (II)

Policy		Strategy
• General	↔	• Specific
• Expresses desire	↔	• Expresses task
• Formally objective	↔	• Focus on few objective
• Sets of decisions	↔	• Sequence of steps
• Emphasize internal environment	↔	• Emphasize external environment

4 12 4

The Need for Strategies

Strategies are needed because there are

- opportunities to be taken advantage of
- threats to be avoided
- strengths to be used
- weaknesses to be reduced
- gaps to be overcome

4 12 5

Strategies Methodology

- There is no unique methodology but it is agreed that much information, intelligence, creativity and experience is required
- The clarity and precision of the objective is key to setting a strategy and to its success or failure

4 12 6

Questions to Formulate a Strategy

What is the objective?
What is the context?
Who are the relevant actors?
What are the strategic factors?
What are the most important actions?
What are the logical steps?

Achievement of the objective

4 12 7

11 Questions for Selecting Strategies

- What are the most critical external factors for defining the objective?
- What price are you willing to pay to achieve the objective?
- What are the critical limits of those interested in achieving the objective?
- What small initial concessions would you offer to gain support?
- Which concessions would you make in the most critical moment to achieve your objective?
- What time limits are there?

4 12 8

11 Questions for Selecting Strategies (continued)

- What are the external critical factors for achieving the objective?
- What critical questions can the opposition present and what would be the logic for answering them?
- Who are the key actors involved?
- What is the best way to start?
- What actions could other actors initiate and how could you react?

4 12 9

Strategy Formulation in Terms of CIPP Framework

Context: Threats, Opportunities, Weaknesses, Strengths

Inputs: Combinational, Factor, Factor, and Distinctive

Processes: Alternative as Action

Products: Objectives

4 12 10

Strategic Planning Process

4 12 11

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Formulating Strategies¹

Concepts

The term “strategy” is widely used in different areas. Many authors define strategy as a logical set of decisions to take an appropriate course of action to achieve an objective. Some define it as a set of organized actions to guide an institution toward the achievement of a certain objective, still others define it as the set of objectives and policies of an institution (David 1988, Rue and Holland 1989, Oliveira 1992, Certo and Peter 1993). All these definitions are incomplete, however, in the sense that they do not clarify what the basic components of a strategy are.

In order to offer a methodological guide for formulating strategies, we define “strategy” as a logical combination of actors, factors, and actions, selected among other alternative combinations, to achieve a certain objective in a specific context. This definition has three implications:

- To achieve a certain objective there are many possible combinations and, therefore, alternative strategies.
- In order for the same objective to be achieved by different institutions, or similar objectives in different locations, the strategies will be different.
- Considering that there are many possible combinations of actors, factors, and actions to achieve one objective, the selection of a strategy is the result of a political decision.

Strategies can be classified in more or less the same manner as objectives and policies. The possibilities and variations are so many that there is no consensus in the literature with respect to the classification of strategies.

Policies are general, they express desires and give focus to many objectives. Strategies are specific, they express tasks and give focus to few objectives. Strategies consists of a sequence of steps, policies are sets of decisions. Strategies emphasize the external environment (the conditions) in which inputs and processes (actors, factors, and actions) will be combined to achieve an objective. Policies emphasize the internal environment of the organizations.

¹ Extracted and adjusted from J.E. Borges Andrade, M.D. Escobar, J. Palomino, R. Saldanã, J. Souza Silva, 1995. Strategic planning in agricultural research management. Module 2 of the series *Training in planning, monitoring and evaluation for agricultural research management*. Cali, Colombia: ISNAR.

Methodology

It is most important to understand that strategies are needed because there are opportunities to be taken advantage of, threats to be avoided, strengths to be used, weaknesses to be reduced and gaps to be overcome

Strategies are needed because there are opportunities to be taken advantage of, threats to be avoided, strengths to be used, weaknesses to be reduced, and gaps to be overcome

Most strategists agree that formulating strategies requires much information, intelligence, and creativity (Ohmae 1983, Mintzberg 1987). The main consensus among most strategists is that the desired "objective" is the main reference point for formulating strategies. So, the key question is: How can objectives be used in the formulation of a strategy?

The success or failure of a strategy depends on the clarity and precision of the objective. Clarity is needed in a) defining the relevant context in which the objective will be achieved, b) identifying the strategic actors to achieve the objective, c) identifying the critical factors for achieving the objective, d) defining the actions with the greatest potential for supporting the achievement of the objective, and e) designing the logical steps of the strategy that will combine the actors, factors, and actions to achieve the objective in its corresponding context.

The desired "objective" serves as a source of inspiration for carrying out the task. The success or failure of a strategy depends upon the clarity and precision of the objective. Besides this, the lack of commitment of those who make decisions has been a cause of failure for many strategies.

Eleven key elements for defining an objective are presented in Table 1.

Six steps are useful for the formulation of a strategy (see Figure 1).

1. What is the objective to be achieved? Define it clearly and precisely (see Table 1). The objective is the "product" aimed for with the strategy.
2. What is the context in which the objective must be achieved? The "context" offers key information on the relevant actors, factors, and actions in the formulation of a strategy.
3. Who are the relevant actors to achieve the objective? Look at the different groups of internal and external actors who can affect, positively or negatively, the selected course of action of achieving the objective. The identified actors are important "inputs" for formulating the strategy.
4. What are the strategic factors for achieving the objective? Evaluate the external and internal factors that may be useful for achieving the objective. These key factors are relevant "inputs."
5. What are the most important actions that should be organized to achieve the objective? Think of actions in the short, medium, and long term that could contribute to achieving the objective. These actions are the "processes" that the strategy uses to combine actors and factors in logical steps toward an objective.
6. What are the logical steps of the strategy, and in what order should they be performed to assure the best combination of actors, factors, and actions to achieve the objective? The steps correspond to possible series of actions needed to produce a specific impact. Each step is the basis for the success of the following step, so designing the logical order of the steps is fundamental in the formulation of the strategy.

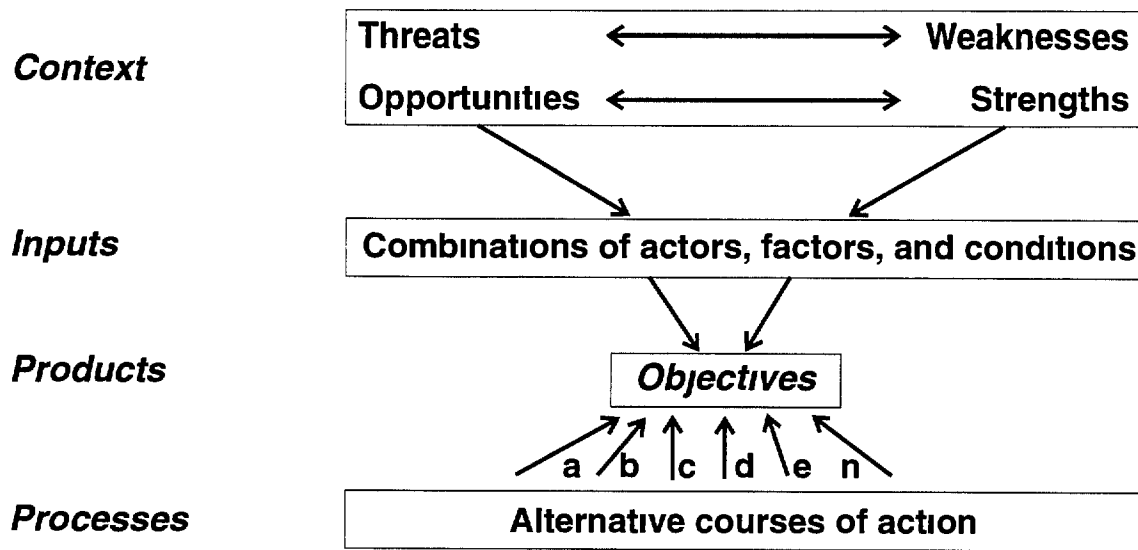


Figure 1 Strategy formulation in terms of CIPP framework

Before beginning to formulate a strategy, it is important to assure that those who decide on its formulation and implementation are sufficiently motivated and will act strategically with the purpose of reaching the proposed objective. After lack of clarity and precision in the definition of objectives, a lack of commitment and participation by decision makers is a main cause for the failure of many strategies.

Table 1 Questions to Be Answered When Defining a Strategy's Objective

<i>Questions</i>	<i>Justification</i>
1 What are the most critical external factors, positive or negative, for defining the objective?	Most objectives are affected by factors beyond your control. It is necessary to consolidate your own interests with external expectations.
2 What price are you willing to pay to achieve the objective?	Achieving any objective has a price.
3 What are the critical limits of those interested in achieving the objective?	Certain limits cannot be passed.
4 What small concessions can you offer from the beginning as a proof of goodwill to get the necessary support?	You can make some small concessions without compromising the general objective.
5 Which concessions are you willing to make in the most critical moment of negotiation to obtain your objective?	Often you must make major concessions to obtain an objective.
6 What are the time restrictions for achieving the objective?	Every objective requires time to be achieved.
7 What are the most critical external factors, positive or negative, for achieving the objective?	External factors beyond the control of those interested affect most objectives.
8 What critical questions can the opposition present, and what would be the logic for answering them?	Every objective generates questions, usually from the opposition.
9 Who are the most important actors in relation to the proposed objective?	There are several actors related to the process of obtaining an objective.
10 What is the best way to begin the strategy, causing the best initial impact?	There are many ways of beginning a strategy.
11 What actions could other actors initiate, and how can we neutralize those actions?	Like a chess game, other actors interested in obtaining the objective may begin actions that affect the strategy's development.

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Exercise 12. Formulating strategies (group exercise)

Phase 1 Group work (1 hour)

- 1 Form four groups of participants having similar functions (for example discipline, institution, or job) Each group elects a rapporteur



- 2 Refer back to the objectives on the flipcharts that were generated in exercise 10 Select one objective from the list of broad objectives for your consideration Choose an objective appropriate to your specific area of work
- 3 Invite the participants to read handout 4 12 1
- 4 Discuss the summary of how to define strategy in handout 4 12 1 (Table 1) and formulate strategies and activities to achieve the selected objectives

Phase 2 Reporting and discussion (1 hour 5 minutes)

- 5 The rapporteurs present their group's results on a flipchart Each rapporteur has about five minutes to present Each presentation is followed by a discussion
- 6 The trainer summarizes lessons learned and provides feedback on the results of this exercise

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Exercise 12. Worksheet

- **Selected objective**

- **Selected strategies**

- **Selected activities**

This worksheet will be collected by the facilitator

Strengths and Weaknesses

- Please list what you consider to be three strengths of day four

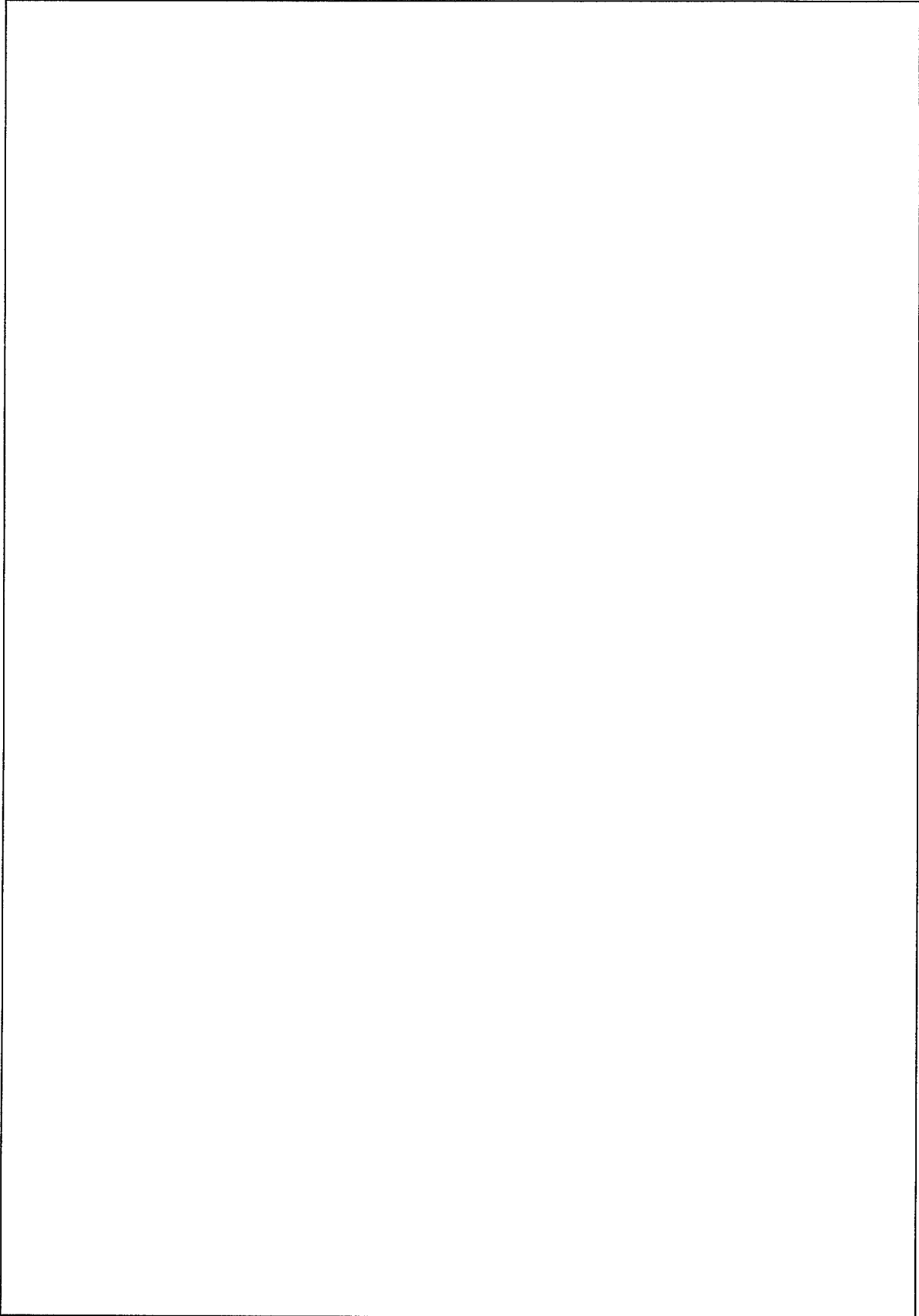
1
2
3

- Please list what you consider to be three weaknesses of day four

1
2
3

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- **Suggestions for improvements**



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Guidelines to Provide Feedback on the Workshop

1 The Module

Content

- usefulness/relevance
- amount of information

Structure

- sequence
- duration
- balance between trainers' and trainees' participation
- instructions to trainers
- visual aids
- handouts, exercises
- extra readings
- PAPA
- evaluation

2 Process training techniques and direction

- usefulness/relevance/effectiveness
- group interaction
- clarity of questions/exercise instructions
- opening and closure of the days

3 Trainers', facilitators', and trainees' performance

- presentation/communication skills
- interaction/effective participation
- punctuality/interest/commitment/willingness to facilitate learning/willingness to participate
- other attitudes

4 Logistical support

- organization
- accuracy
- punctuality
- willingness to assist participants
- services provided in general

5 **Workshop environment**

- physical (training facilities, training material, hotel facilities in general)
- psychological (personal feelings such as self-motivation, interest, satisfaction, self-achievement)
- social (development of friendship, relaxed, comfortable among participants, etc)

6 **Workshop results/outputs**

- personal and professional assessment
- recommendations

7 **General comments**

FIRST STAGE

PAPA - ideas for action items

Date _____

Workshop title SADC/ESAMI/ISNAR Workshop on Strategic Planning

Date/Venue _____

Name _____

Organization _____

Ideas I would like to try when I return to work at my research institute, based on what I have learned in this training workshop

Note You can use the workshop objectives what you learn during the workshop the handouts conversations with participants and trainers etc to come up with ideas

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DAY FIVE

Strategic Planning

DAY FIVE — Overview

Objectives

By the end of the day the participants will be able to do the following

- 1 Discuss the role of leaders/managers in the management process
- 2 Explain the factors of success and failure in the process of institutionalization of planning
- 3 Develop strategies to lead a process of institutionalization of planning with the strategic approach in an agricultural research institution or program
- 4 Develop individual plans of action for future activities in strategic planning
- 5 Evaluate the workshop

Handouts

- 5 13 1 Overview of Day Five
- 5 13 2 Tentative Schedule of Day Five
- 5 13 3 The Concepts of Leadership and Management (summary of presentation)
- 5 13 4 Exercise 13 Planners Roles and Responsibilities
- 5 13 5 Exercise 13 Worksheet
- 5 13 6 Planners Roles and Responsibilities (text)
- 5 14 1 Institutionalization of Strategic Planning (text)
- 5 14 2 Exercise 14 Institutionalization of Strategic Planning
- 5 14 3 Exercise 14 Worksheet
- 5 15 1 PAPA—Second Stage
- 5 15 2 Evaluation Form for the Five-Day Workshop
- 5 15 3 Guidelines to Provide Feedback on the Workshop

Strategic Planning

DAY FIVE — Tentative Schedule

- 08 30 – 09 00 **Opening of the Day's Activities**
- 09 00 – 10 30 **Session 13 The Management Process Role of Leaders/Managers**
(Presentation and exercise 13)
- 10 30 – 10 45 Tea/Coffee Break
- 10 45 – 11 45 **Session 13. (Continued)**
- 11 45 – 13 00 **Session 14 Institutionalization of Strategic Planning**
(Presentation and exercise 14)

13:00 – 14:00 Lunch

- 14 00 – 14 45 **Session 14 (Continued)**
- 14 45 – 15 15 **Session 15 Participant Action Plan Approach (PAPA) and Workshop Evaluation**
- 15 15 – 15 30 Tea/Coffee Break
- 15 30 – 16 30 **Session 15 (Continued)**
- 16 30 – 16 45 **Closure of the Workshop**

Strategic Planning

DAY FIVE — Checklist for Trainers

Handouts	Yes	No
	✓	✓
5 13 1 Overview of Day Five	<input type="checkbox"/>	<input type="checkbox"/>
5 13 2 Tentative Schedule of Day Five	<input type="checkbox"/>	<input type="checkbox"/>
5 13 3 The Concepts of Leadership and Management (summary of presentation)	<input type="checkbox"/>	<input type="checkbox"/>
5 13 4 Exercise 13 Planners Roles and Responsibilities	<input type="checkbox"/>	<input type="checkbox"/>
5 13 5 Exercise 13 Worksheet	<input type="checkbox"/>	<input type="checkbox"/>
5 13 6 Planners Roles and Responsibilities (text)	<input type="checkbox"/>	<input type="checkbox"/>
5 14 1 Institutionalization of Strategic Planning (text)	<input type="checkbox"/>	<input type="checkbox"/>
5 14 2 Exercise 14 Institutionalization of Strategic Planning	<input type="checkbox"/>	<input type="checkbox"/>
5 14 3 Exercise 14 Worksheet	<input type="checkbox"/>	<input type="checkbox"/>
5 15 1 PAPA—Second Stage	<input type="checkbox"/>	<input type="checkbox"/>
5 15 2 Evaluation Form for the Five-Day Workshop	<input type="checkbox"/>	<input type="checkbox"/>
5 15 3 Guidelines to Provide Feedback on the Workshop	<input type="checkbox"/>	<input type="checkbox"/>
Overheads		
5 13 1 Objectives of Day Five	<input type="checkbox"/>	<input type="checkbox"/>
5 13 2 Schedule of Day Five	<input type="checkbox"/>	<input type="checkbox"/>
5 13 3 Objective of Session 13	<input type="checkbox"/>	<input type="checkbox"/>
5 13 4 What Do We Need?	<input type="checkbox"/>	<input type="checkbox"/>
5 13 5 Leadership Qualities	<input type="checkbox"/>	<input type="checkbox"/>
5 13 6 Leadership Is	<input type="checkbox"/>	<input type="checkbox"/>
5 13 7 Expectations of a Leader	<input type="checkbox"/>	<input type="checkbox"/>
5 13 8 Original Meaning of Lead	<input type="checkbox"/>	<input type="checkbox"/>
5 13 9 Five Distinctive Characteristics of Leadership	<input type="checkbox"/>	<input type="checkbox"/>
5 13 10 Functions of a Leader	<input type="checkbox"/>	<input type="checkbox"/>
5 13 11 Management? Managers? What Do They Mean?	<input type="checkbox"/>	<input type="checkbox"/>
5 13 12 History of “Managers” (I)	<input type="checkbox"/>	<input type="checkbox"/>
5 13 13 History of “Managers” (II)	<input type="checkbox"/>	<input type="checkbox"/>
5 13 14 Historical Assumption of Managers	<input type="checkbox"/>	<input type="checkbox"/>
5 13 15 Concept of “Managing”	<input type="checkbox"/>	<input type="checkbox"/>
5 13 16 Management Believes and Stresses	<input type="checkbox"/>	<input type="checkbox"/>
5 13 17 Management Functions	<input type="checkbox"/>	<input type="checkbox"/>
5 13 18 Managers versus Leaders (I)	<input type="checkbox"/>	<input type="checkbox"/>
5 13 19 Managers versus Leaders (II)	<input type="checkbox"/>	<input type="checkbox"/>
5 13 20 Leader—Manager Models	<input type="checkbox"/>	<input type="checkbox"/>

	Yes ✓	No ✓
5 14 1 Objectives of Session 14	<input type="checkbox"/>	<input type="checkbox"/>
5 14 2 Institutionalization of Strategic Planning (list)	<input type="checkbox"/>	<input type="checkbox"/>
5 14 3 Definition of Institutionalization	<input type="checkbox"/>	<input type="checkbox"/>
5 14 4 Institutionalization of Strategic Planning (chart)	<input type="checkbox"/>	<input type="checkbox"/>
5 14 5 Key Factors to Be Considered	<input type="checkbox"/>	<input type="checkbox"/>
5 14 6 Key Factors (I)	<input type="checkbox"/>	<input type="checkbox"/>
5 14 7 Key Factors (II)	<input type="checkbox"/>	<input type="checkbox"/>
5 14 8 Key Factors (III)	<input type="checkbox"/>	<input type="checkbox"/>
5 14 9 Change Process	<input type="checkbox"/>	<input type="checkbox"/>
5 14 10 Wisdom	<input type="checkbox"/>	<input type="checkbox"/>
5 15 1 Objectives of Session 15	<input type="checkbox"/>	<input type="checkbox"/>
5 15 2 Steps in PAPA	<input type="checkbox"/>	<input type="checkbox"/>
5 15 3 Step 2 In-Course Activities	<input type="checkbox"/>	<input type="checkbox"/>

Materials

● Overhead projector	<input type="checkbox"/>	<input type="checkbox"/>
● Projector screen	<input type="checkbox"/>	<input type="checkbox"/>
● Flipchart stands (minimum 2)	<input type="checkbox"/>	<input type="checkbox"/>
● Flipchart paper/pads (about 10 per day)	<input type="checkbox"/>	<input type="checkbox"/>
● Markers for writing on newsprint	<input type="checkbox"/>	<input type="checkbox"/>
● Markers for writing on transparencies	<input type="checkbox"/>	<input type="checkbox"/>
● Blank transparencies	<input type="checkbox"/>	<input type="checkbox"/>
● Stapler	<input type="checkbox"/>	<input type="checkbox"/>
● Tape (strong masking tape and regular tape)	<input type="checkbox"/>	<input type="checkbox"/>
● Push pins	<input type="checkbox"/>	<input type="checkbox"/>
● Glue	<input type="checkbox"/>	<input type="checkbox"/>
● Pencils/notepads/pens	<input type="checkbox"/>	<input type="checkbox"/>
● Pencil sharpeners	<input type="checkbox"/>	<input type="checkbox"/>
● Extension cords	<input type="checkbox"/>	<input type="checkbox"/>
● Certificates	<input type="checkbox"/>	<input type="checkbox"/>
● Photocopying facilities	<input type="checkbox"/>	<input type="checkbox"/>
● Spare bulbs for overhead projector	<input type="checkbox"/>	<input type="checkbox"/>
● Extra notepads and pens	<input type="checkbox"/>	<input type="checkbox"/>
● Scissors	<input type="checkbox"/>	<input type="checkbox"/>

DAY FIVE

Session 13 The Management Process: Role of Leaders/Managers

Instructions to Trainers

PRE-SESSION

08 30 – 09 00 Opening of the Day's Activities

- Review of the previous day's activities
- Summary of the evaluation of the previous day
- Overview of the day's activities

OBJECTIVES

By the end of this pre-session, the participants will be able to do the following

- Assess the progress of the workshop
- Summarize the objectives and agenda for the day's activities

OPENING

Invite a volunteer to review the previous day's activities (10 minutes)

Summarize the evaluation of the previous day (10 minutes)

Distribute the overview and the schedule for day five to the participants (handouts 5 13 1 and 5 13 2) Review the objectives and schedule, using overheads 5 13 1 and 5 13 2 Ask if clarifications are needed (10 minutes)

SESSION 13

09 00 – 10 30 Session 13 The Management Process Role of Leaders/Managers

10 30 – 10 45 Tea/Coffee break

10 45 – 11 45 Session 13 (Continued)

OBJECTIVE

By the end of this session the participants will be able to do the following

- Discuss the role of leaders/managers in the management process

Use overhead 5 13 3 to present the objective

PROCEDURE

Training techniques presentation, group work, "trip around the tables"

PRESENTATION

(experience) Give a brief presentation focusing on the role of leaders/managers in the management process Use handout 5 13 3 as background information for the presentation Overheads 5 13 4 through 5 13 20 support the presentation Distribute handout 5 13 3 (10 minutes)

Note As background reading for the presentation on the role of the manager, the trainer should read 1) Chapter 30, "What makes a manager," and Chapter 31, "The manager and his work" from *Management Tasks, Responsibilities, Practices* by Peter Drucker (New York, NY, USA Harper and Row, 1973) and 2) "What effective general managers really do" by John P. Kotter (Harvard Business Review, November - December 1982)

EXERCISE 13

Exercise 13 Planners Roles and responsibilities (1 hour 45 minutes)

Note: Do not distribute handout 5 13 6 until the exercise has been completed by the participants. Distribute handout 5 13 6 at the end of the exercise

- 1 Distribute handouts 5 13 4 and 5 13 5 Handout 5 13 4 gives clear instructions for the exercise Go over the instructions with the participants step by step Emphasize and remind the participants about the time Ask if clarifications are needed
- 2 Divide the participants into four groups, and ask each group to elect a rapporteur (5 minutes)

Phase 1 Group work (30 minutes)

- 3 (*experience*) As the groups work, circulate from group to group to check progress Clarify any concerns they may have while working Be sure to keep the groups aware of the time remaining in the exercise Keeping the groups on time is critical to the success of this exercise Be sure to signal for the rapporteurs to switch tables at the same time Be strict!
- 4 Groups discuss and record their responses (30 minutes)

Phase 2 "Trip around the tables" (30 minutes)

- 5 Rapporteurs make the "trip around the tables," spending five minutes at each table (15 minutes)
- 6 Rapporteurs return to their own group, and each group revises their statement based on the input from the rapporteur's trip Rapporteurs write the results on a flipchart for presentation (15 minutes)

Phase 3 Reporting and discussion (45 minutes)

- 7 Rapporteurs present the groups' results to the audience Five minutes per presentation are available (20 minutes)
- 8 (*process*) Summary and discussion Distribute handout 5 13 6 (**Note** This should not be distributed before the

end of the reporting phase) Invite a few volunteers to read the handout (questions and answers) Then invite participants to discuss the important issues Compare the participants' reports with the handout answers and provide feedback on the content of the presentations At the end of the exercise, ask the participants questions such "How did you feel doing this exercise?" and "What did you learn?" (25 minutes)

CLOSURE

Closure (5 minutes)

- 1 (*application*) Ask the participants "What might you do differently as a result of what you have learned?"
- 2 Make a transition to the next session

10 30 — 10 45 Tea/Coffee Break

DAY FIVE

Session 13 Summary of Overheads

Objectives of Day Five

- 1 Discuss the role of leaders/managers in the management process
- 2 Explain the factors of success and failure in the process of institutionalization of planning
- 3 Develop strategies to lead a process of institutionalization of planning with the strategic approach
- 4 Develop individual plan of action for future activities in strategic planning
- 5 Evaluate the workshop

5 13 1

Schedule of Day Five

08:30	09:00	Opening of the Day Activity
09:00	10:30	Session 13 The Management Process Role of Leaders/Managers
10:45	12:00	Session 14 Institutionalization of Strategic Planning
12:00	13:00	Session 15 Participant Action Plan Approach (PAPA)
Lunch		
14:00	14:30	Session 15 (Continued)
14:30	14:45	Closing of the Workshop

5 13 2

Objective of Session 13

- Discuss the role of leaders/managers in the management process

5 13 3

What do we need?

Leaders? Managers?
or both?

5 13 4

Leadership Qualities

Often described in terms of personal attributes such as:

- intelligence
- energy
- initiative
- enthusiasm
- creativity

5 13 5

Leadership is

- ◆ More than a personal attribute a quality of personality or a character
- ◆ A role determined by expectations of a group of people or an organization

5 13 6

Expectations of a Leader

- Enable the group or organization to fulfill its mission
- Hold it together as a working unit

A leader is a person who has the appropriate qualities, knowledge and skills to lead a group to achieve its objective

5 13 7

Original Meaning of Lead

Originates from LAED which means
path, road, course of a ship at sea, journey

5 13 8

Five Distinctive Characteristics of Leadership

```

Sense of direction
  |
Teamwork
  |
Inspiration
  |
Example
  |
Acceptance by others
    
```

5 13 9

Functions of a Leader

- 1 Challenge the process
- 2 Inspire and share vision
- 3 Enable others to act
- 4 Model the way
- 5 Encourage the heart

5 13 10

Management? Managers? What Do They Mean?

- These words originate from the Latin word MANUS meaning hand
- The father of these words is the Italian verb for handling or managing a war horse

5 13 11

History of Managers (I)

In the 18th and 19th centuries the term **managers** was used for employees who ran the business of factories or companies

5 13 12

History of Managers (II)

Managers were largely drawn from the pool of engineers or accountants of the company and being more technically oriented were more concerned about machines and figures

5 13 13

Historical Assumption of Managers

Running a business is a problem of managing hands

- no concern about people
- people seen as cogs in a machine
- the organization as a whole seen as a machine that managers were running

5 13 14

Concept of Managing

- Focuses much more on objectives that have to be achieved than on the processes that have to be maintained
- Puts much greater emphasis on the results

5 13 15

Management Believes in and Stresses

Application of systems
↓
Scientific method
↓
Planning
↓
Monitoring
↓
Controlling
↓
Good administration

5 13 16

Management Functions

- Communication
- Conceptualization
- Collaborative work environment
- Monitoring and performance feedback
- Problem solving/Conflict resolution
- Team effectiveness
- Decision making
- Representation of unit
- Technical leadership
- Staff development

5 13 17

Managers versus Leaders (I)

<p>Managers Believe and Stress</p> <p>Applicati f system ↓ Scientifi method ↓ Plan i g ↓ Monit i g ↓ Co tr ill g ↓ G od adm i tr ti</p>	<p>Leaders Promote</p> <p>Sense i di ction ↓ Teamw rk ↓ I pi t ↓ M ti s ↓ Examp l ↓ Accepte by the</p>
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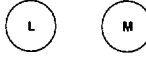
5 13 18

Managers versus Leaders (II)

<p>Managers</p> <p>adm i ter</p> <p>focu y tem and tr ct es</p> <p>ely on ont l</p> <p>hav hort-r g lew</p> <p>ask h w & when</p> <p>d thi g ight</p>	<p>Leaders</p> <p>t</p> <p>focu peopl</p> <p>i pi tr t</p> <p>ha long-r ge pe pectiv</p> <p>ask wh t & why</p> <p>do the right thi g</p>
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5 13 19

Leader—Manager Models




L M

L&M are distinct and separate




L (M)



(L) M

M is part of L or vice versa



L M

L&M have a lot in common

5 13 20

Handout – Overview of Day Five

Strategic Planning

Objectives

By the end of the day the participants will be able to do the following

- 1 Discuss the role of leaders/managers in the management process
- 2 Explain the factors of success and failure in the process of institutionalization of planning
- 3 Develop strategies to lead a process of institutionalization of planning with the strategic approach in an agricultural research institution or program
- 4 Develop individual plans of action for future activities in strategic planning
- 5 Evaluate the workshop

Handouts

- 5 13 1 Overview of Day Five
- 5 13 2 Tentative Schedule of Day Five
- 5 13 3 The Concepts of Leadership and Management (summary of presentation)
- 5 13 4 Exercise 13 Planners Roles and Responsibilities
- 5 13 5 Exercise 13 Worksheet
- 5 13 6 Planners Roles and Responsibilities (text)
- 5 14 1 Institutionalization of Strategic Planning (text)
- 5 14 2 Exercise 14 Institutionalization of Strategic Planning
- 5 14 3 Exercise 14 Worksheet
- 5 15 1 PAPA—Second Stage
- 5 15 2 Evaluation Form for the Five-Day Workshop
- 5 15 3 Guidelines to Provide Feedback on the Workshop

Handout — Tentative Schedule of Day Five

Strategic Planning

- 08 30 – 09 00 **Opening of the Day's Activities**
- 09 00 – 10 30 **Session 13 The Management Process Role of Leaders/Managers**
(Presentation and exercise 13)
- 10 30 – 10 45 Tea/Coffee Break
- 10 45 – 11 45 **Session 13 (Continued)**
- 11 45 – 13 00 **Session 14 Institutionalization of Strategic Planning**
(Presentation and exercise 14)

13:00 – 14:00 Lunch

- 14 00 – 14 45 **Session 14 (Continued)**
- 14 45 – 15 15 **Session 15 Participant Action Plan Approach (PAPA) and Workshop Evaluation**
- 15 15 – 15 30 Tea/Coffee Break
- 15 30 – 16 30 **Session 15 (Continued)**
- 16 30 – 16 45 **Closure of the Workshop**
-

The Concepts of Leadership and Management¹ (summary of presentation)

This presentation gives a short overview on the concepts of leadership and management. It gives the definition of a leader and a manager, and shows the distinguishing characteristics and features of managing and leading an organization, company, unit, or department.

The objective of this presentation is two-fold. First, it is to acquaint the audience with the above concepts. The second objective is to start a process of self-reflection which helps the participant to identify his/her own management style as the head of an institution or department where leadership qualities are demanded.

A *leader* is a person with the appropriate skills and knowledge to guide a group of people to achieve an objective. The leadership style, the way of guiding people to fulfill their mission, is dependent on the personal qualities of the leader, such as intelligence, initiative, creativity. It is also dependent on the role which is determined by the expectations of the group or organization being led. The original meaning of *laed* is "a path," "a road," "a course of a ship at sea." The roots of this word emphasize the importance of the way that needs to be smoothed, of guiding people on the path to a set output. Characteristics of a leader are a sense of direction, the ability to work in a team and to foster teamwork, and the ability to inspire people and to be an example.

Being accepted by others is also important. A leader should challenge the process, inspire a shared vision, enable others to act, model the way, and encourage people's hearts. It is a position that places importance on the people who do the job, the assistance needed to accomplish the job, and the work environment.

The terms *management* and *managers* are derived from the Latin word "manus," meaning "hand." In the factories of the 18th and 19th centuries, the terms were used for the employees who ran the business of companies. They were very technically oriented and they saw people as cogs in a machine, and the company as a machine they were running. Much greater emphasis was put on the results and outputs than on the processes to achieve the output. This can be seen as a major difference between the concepts of "leadership," as described before, and the concept of "management." Management believes in and stresses the application of systems—the relevance of scientific methods, planning, monitoring, controlling the achievement of the objective—and in good administration. Managers are involved in a range of important functions (see overhead 5 13 17 "Management Functions").

The roles of a manager and a leader could almost be seen as distinct or even contrary—though this might not be the case. The management or leadership style to which people adhere or feel comfortable with depends very much on their upbringing, personality, education, and personal experience. Leadership skills depend—to a large extent—on the personality of people and develop over time and with experience. People can change their personal character and behavior to be appreciated by others as a good leader.

¹ By Edsen J. 1994. The concepts of leadership and management. The TNA Exercise in Uganda. The Hague. The Netherlands. ISNAR.

Management is an important function to keep an institution running. Managers rely more on administrative skills, on the application of systems, and on performing specific functions. Management is often taught in school. It is believed that persons heading an institution, department, or unit should perform well in both leading and managing the organization. Often, it is the leadership part of the function that needs further improvement and development.

Exercise 13. Planners: Roles and responsibilities ("trip around the tables" technique)

Phase 1 Group work (30 minutes)

- 1 Form four groups of participants, each electing a rapporteur



- 2 Discuss and answer the questions assigned to your group, as indicated below. You may want to use handout 5 13 5 to write down your answers. (30 minutes)

Group A

- What should be the best place for planners within the structure of your NARIs?
- Based on your experience with NARIs, is there any correlation between agency size and the number of strategic planning personnel? Justify your answer.

Group B

- What roles and responsibilities might those in strategic planning have?
- Are strategic planners necessarily a permanent resource? Can an agency continue with strategic planning without a full-time, dedicated planning specialist? Justify your answer.

Group C

- Can all managers strategically plan? Justify your answer.
- What skills and capabilities might strategic planners be expected to possess?

Group D

- If the NARIs do not have a planning resource, where can it acquire one?
- What is the role of the chief administrator, the top manager of a NARI, in effective strategic planning?

- 3 The rapporteurs compile the group responses on a worksheet, it should comprise a list of alternatives.

Phase 2 "Trip around the tables" (30 minutes)

- 4 The rapporteurs begin their "trip around the tables," spending five minutes at each of the other tables. The rapporteurs present their group results to the new tables and collect contributions from the participants to improve their list. (15 minutes)

- 5 After visiting the three other tables, the rapporteurs return to their groups, share the contributions collected during the “trip” and make a group decision on the responses to be presented to the audience. The rapporteurs write the groups’ results on flipcharts to present them to the audience (15 minutes)

Phase 3 Reporting and discussion (45 minutes)

- 6 The rapporteurs present their results to the audience. Five minutes are available for each presentation (20 minutes)
- 7 After the presentations, you will be invited to discuss the results and provide feedback on the context and process of the exercise (10 minutes)
- 8 The trainers distribute handout 5 13 6 with possible responses and invite some volunteers to read them out. A discussion of the important issues will follow (10 minutes)
- 9 The trainers present their comments and provide the participants with insights to develop further analysis and learning (5 minutes)

Exercise 13. Worksheet

295

Planners: Roles and Responsibilities¹

Note Do not distribute this handout until the exercise has been completed by the participants

Strategic planning processes should encourage planning by managers at all levels, and not just by the strategic planning specialists or a group of top managers

Q What is the right place for planners?

The person who is given the responsibility for strategic planning should report directly to the chief administrator. Where functional planners exist, they can remain in divisions, or can be grouped regionally depending on the agency. But strategic planners should remain at the center to coordinate the whole planning effort.

Q Is there any correlation between agency size and the number of strategic planning personnel it has?

The requirement for planning personnel will depend more on the complexity of the issues the agency must address, and the variety and dispersal of its "business" activities, than on size.

Q What roles and responsibilities might those in strategic planning have?

The main responsibility of the strategic planner is to coordinate and manage the planning process. It is not necessary that the agency have in its planning unit all the expertise required for planning (such as market research or economic evaluation). The strategic planner is not a ministerial advisor, nor one dedicated to answering ministerial questions.

Q What skills and capabilities might strategic planners be expected to possess?

A basic distinction is needed between "process" type skills and "content" type skills. The former are predominantly required of the strategic planner and imply perhaps a longer-term commitment and expertise in designing appropriate supporting processes for the planning effort. The latter relate to competence and expertise in the specialist area of the agency, a lesser requirement of planners.

Strategic planners must have negotiating and facilitating skills in relation to planning processes. They must possess a corporate mentality and be capable of taking an overview of the agency. They should have certain technical skills, such as those used in forecasting, economic evaluation, and organization design. They should appreciate, above all, that it is the managers, not themselves, who bear the responsibility for planning.

¹ Extracted from *Corporate planning in Victorian Government 1986 Concepts and Techniques* State of Victoria Department of Management and Budget Program Development and Review Division Australia

Q Are strategic planners necessarily a permanent resource? Can an agency continue with strategic planning without a full-time, dedicated planning specialist?

This depends whether the chief administrator needs one. The strategic planner is a resource to be acquired and used for as long as there is a need. A strategic planning responsibility can provide personal growth and development opportunities for a staff member on a secondment basis, providing that the chief administrator has time to direct the effort.

Q If an agency does not have a planning resource, where can it acquire one?

An agency can acquire its planning resource from several areas. As an alternative to recruiting, it can draw persons from its own management or specialist staff on a secondment basis, and often as a development exercise, it can appoint consultants to do specialized tasks, it can solicit personnel from central agencies to assist in certain aspects of the process, and, finally, it may appoint individuals from divisional or functional areas within the agency.

Q Can all managers strategically plan?

Some managers are more capable of thinking strategically than others. A group of "operational" planners may need only one "strategic" planner among them to function well.

Managers who are involved in the planning process develop and broaden their awareness of issues and their capabilities to deal with them. In this way, strategic planning is an important management development activity, and can extend the capacity of managers to think strategically and corporately.

Q What is the role of the chief administrator in effective strategic planning?

For strategic planning to be successful, the chief administrator must support and be committed to the strategic planning process.

In demonstrating commitment to the strategic planning process, he or she should

- Actively plan and initiate its introduction
- Ensure that a timetable is developed and followed
- Impose a discipline on his or her immediate executive to monitor and review progress against the plan, and to insist this be carried out throughout the agency
- Be the chief communicator
- Be seen to work within the planning process, and to use the plan

By supporting it, he or she should

- Ensure adequate resources are available for it
- Defend it and those committed to the process when under attack
- Explain and demonstrate its benefits and the reason for adopting it to the Minister, staff and clients
- Ensure all stakeholders have a chance to contribute to it

Without this drive and support, the strategic planning process will quickly come adrift.

DAY FIVE

Session 14 Institutionalization of Strategic Planning

Instructions to Trainers

SESSION 14

11 45 – 13 00 Session 14. Institutionalization of Strategic Planning

13 00 – 14 00 Lunch

14 00 – 14 45 Session 14 (Continued)

OBJECTIVES

By the end of this session the participants will be able to do the following

- Explain the factors of success and failure in the process of institutionalization of planning
- Develop strategies to lead a process of institutionalization of planning with the strategic approach in an agricultural research institution or program

Use overhead 5 14 1 to present the objectives

PROCEDURE

Training technique presentation, group exercise

PRESENTATION

(*experience*) Give a brief presentation on institutionalization of strategic planning Use handout 5 14 1 as background information for the presentation Overheads 5 14 2 through 5 14 11 support this presentation Distribute handout 5 14 1 (15 minutes)

EXERCISE 14

Exercise 14 Institutionalization of strategic planning
(55 minutes)

- 1 Distribute handout 5 14 2 This gives clear instructions for the exercise Go over the instructions step by step with the participants Ask if any clarifications are needed Remind them about the time set for the exercise (5 minutes)

Phase 1 Group work (55 minutes)

- 2 Divide the participants into four groups, and ask each group to elect a rapporteur (5 minutes)
- 3 Invite the participants to read handout 5 14 1 before begin to work on the questions As the groups work, circulate from group to group to check progress Clarify any concerns they may have while working Be sure to remind the groups of the time remaining (50 minutes)

Phase 2 Reporting and discussion (40 minutes)

- 4 The rapporteurs present their group's results to the audience. Five minutes is available for each presentation (20 minutes)
- 5 Facilitate a discussion on the results of the exercise and provide feedback on the presentations (20 minutes)

CLOSURE

Closure (5 minutes)

- 1 (*application*) Ask the participants to tell one of their neighbors two things they might do differently as a result of what they have learned. Choose some volunteers to give examples
- 2 Make a transition to the next session

DAY FIVE

Session 14 Summary of Overheads

Objectives of Session 14

- Explain the factors of success and failure in the process of institutionalization of planning
- Develop strategies to lead a process of institutionalization of planning with the strategic approach

5 14 1

Institutionalization of Strategic Planning

- 1 Definition of institutionalization
- 2 Framework for institutionalization
- 3 Key factors to take into account
- 4 Resistance to change
- 5 Wisdom
- 6 Points for discussion

5 14 2

Definition of Institutionalization

A process by which the structure and organization of strategic planning is accepted

- with predictable patterns and guidelines of action and interaction
- to achieve a determined goal

5 14 3

Institutionalization of Strategic Planning

5 14 4

Key Factors to Be Considered

- Formalization
- Structure and organization
- Management tools
- Mechanisms/relationships
- Resources
- Operation
- Feedback

5 14 5

Key Factors (I)

Formalization

- strategy
- leadership
- organizational culture

Structure and Organization

- should not be rigidly framed
- clear definition of responsibilities
- clear flow of information

5 14 6

Key Factors (II)

Management tools

- training

Mechanisms/relationships

- planning
- programming
- budgeting
- information systems

5 14 7

Key Factors (III)

Resources

- human
- financial
- physical

Operation

- protocols
- procedures
- guidelines

Feedback

5 14 8

Change Process

5 14 9

Wisdom

- To over institutionalize is as futile as weak institutionalization or none at all
- There is no universal principle on how to institutionalize a strategic process
- The success or failure of any institutionalization effort depends on human conduct and the desire for change

5 14 10

Institutionalization of Strategic Planning¹

This section emphasizes the need to internalize, operationalize, and institutionalize strategic planning within a national agricultural research institution. Training in strategic planning is not effective unless it is included within an institutionalization process, or other planning activity or function, aimed at achieving effective and efficient institutional research management and administration.

Definition

Institutionalization can be broadly defined as a process by which the structure and organization of any function, activity, or methodology—in this case strategic planning—is accepted, with predictable patterns and guidelines of action and interaction to achieve a determined goal.

Institutionalization Process

As in any other process, the institutionalization of a function, activity, or methodology demands that the process follow a series of steps or sequences aimed toward its inclusion within the NARS (see Figure 1).

Figure 1 depicts the need to analyze and program what strategic planning would mean within a NARI. It begins with a “diagnosis” of the current situation of the strategic planning. The next step is the design and definition of the future objectives, functions, and activities of the strategic planning within the overall planning function. Also at this stage, the priority, hierarchy, and dimension of the strategic planning activity would also be defined, and the national capacity of the institution to carry out activities inherent to strategic planning would be developed within a coherent, flexible, and functional planning system, operating at different levels of activity and decision.

Figure 1 also outlines the key factors to be taken into account during the process of institutionalizing strategic planning. It refers to the factors that generally make the strategic planning functional:

- formalization
- structure and organization
- management tools
- mechanisms/relationships
- resources
- operation
- feedback

In terms of *formalization*, leadership, strategy, and organizational culture play very important roles in institutionalizing concrete, strategic activities (i.e. strategic planning). Many national research institutions have formalized strategic planning as an official tool when planning their activities.

¹ By Carlos Valverde, Senior Officer, 1997, The Hague, The Netherlands, ISNAR.

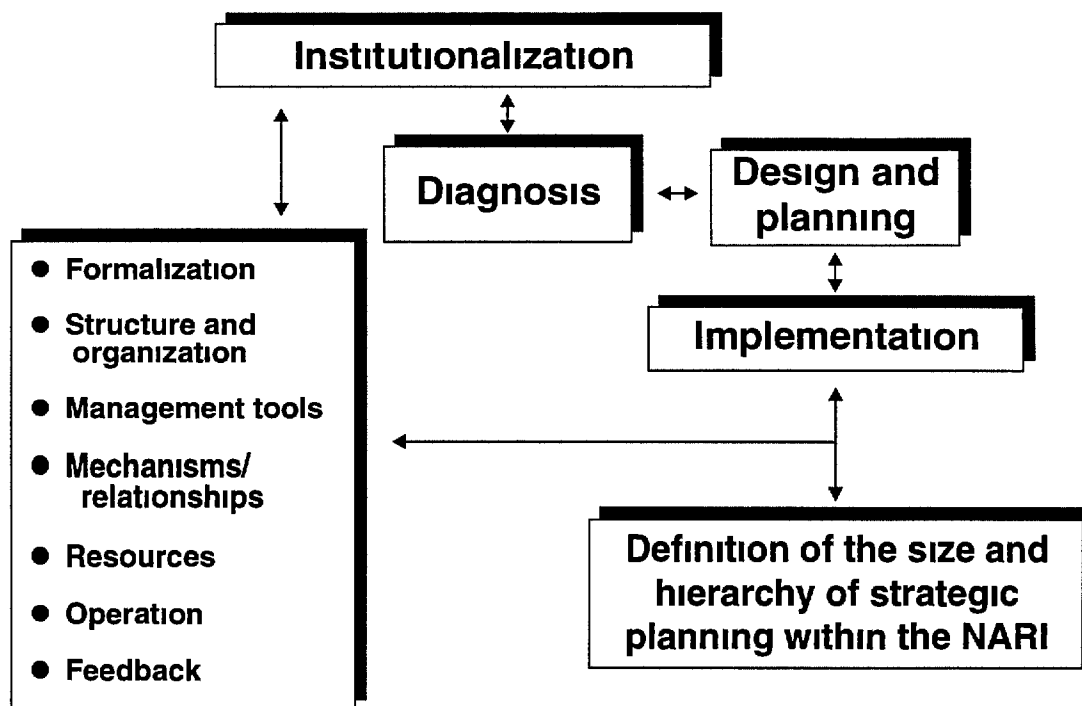


Figure 1 The institutionalization of strategic planning

With regard to *structure* and *organization*, care should be taken not to lose sight of the fact that strategic planning is a methodology. It need not be seen in terms of structured boxes and divisions at all levels. Depending on the dimension of the national research system, the structure and organization of the strategic planning should not be rigidly framed, this is particularly relevant for small countries. Rather, it should be organized as a strategic activity. It could even take the form of a loosely organized ad hoc committee or task force. However, there should be a clear definition of the responsibilities and information flows at the different levels of activity and operation.

Training activities should be included within the cluster of activities referred to as *management tools*. Training in the use and operation of strategic planning is the most important link to facilitate its internalization and future adaptation within the institution. It would be advantageous to have strategic planning training modules on hand. They are very helpful in the internalization process.

Considering *mechanisms* and *relationships*, the institutionalization of the strategic planning should not be seen as isolated, but rather as a component of planning and other managerial and administrative functions and activities, particularly those closely related to programming, budgeting, and information. It should be remembered that these activities fulfill functions interrelated with those of monitoring and evaluation and, together, constitute the planning process of any national research institution.

It is impossible to put strategic planning into operation without providing *human, physical, and financial resources*, which should be taken into account when determining its nature, dimension, and form of operation.

To ensure the effectiveness of strategic planning, the necessary tools must be provided. *Protocols, procedures, and guidelines* are needed for the *operation* of the strategic planning. The material prepared in this training module offers the basic elements for preparing such tools.

Strategic planning should be understood as a dynamic exercise, a flexible, interactive process, open to continuous improvement. That is why some kind of *feedback* mechanism is necessary.

Resistance to Change

Human behavior and the desire for change contribute toward the success or failure of any institutionalization effort. The institutionalization of essential strategic functions and activities, which usually bring about changes in the management and administration of an institute, require particular consideration in terms of those affected by its internalization and future operation. This is especially true when dealing with activities affecting or having operational consequences on the performance of the researchers and their collaborators.

It is possible that the institutionalization of strategic planning could meet with resistance. This could be expressed passively, actively, or even aggressively (see Figure 2). Such resistance will need to be managed properly to facilitate the institutionalization of strategic planning within a NARS.

Such a “resistance to change” requires that any institutionalization process generating change, whether it be a function or activity, pay special attention to strategic management. It also requires the design and development of strategies to manage such difficult circumstances which can result in the failure of the changes to be introduced through strategic planning and implementation activities.

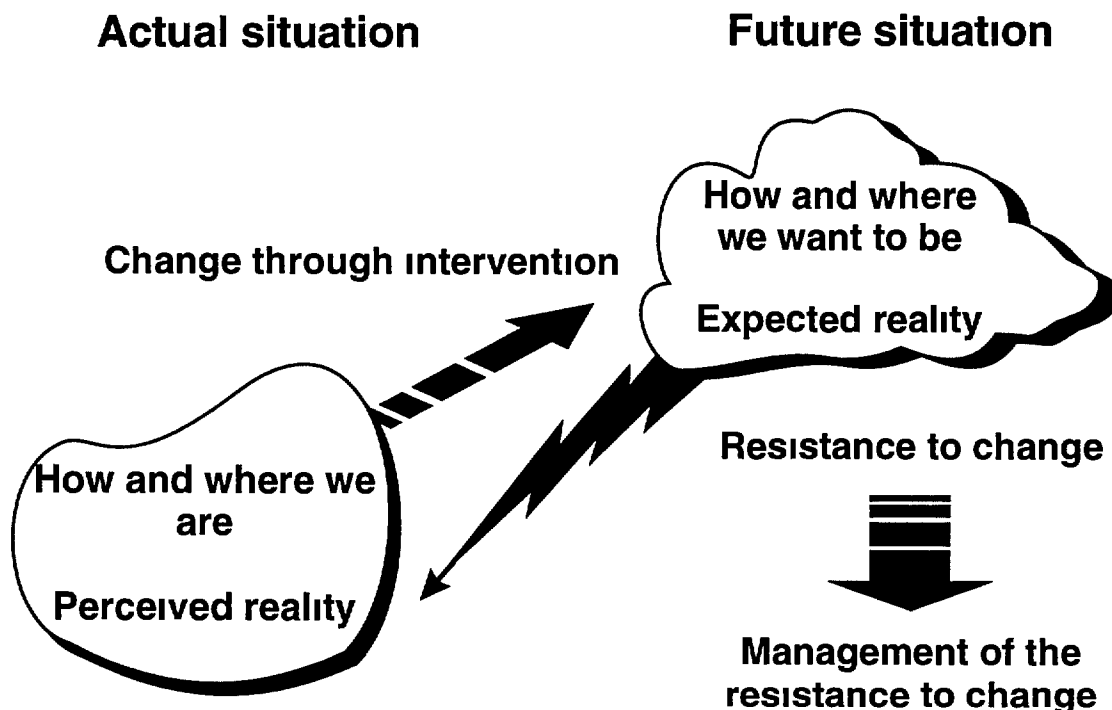


Figure 2 The change process

Final Remarks

The institutionalization of strategic planning as an essential decision-making tool must avoid so-called "over-institutionalization." Neither should institutionalization be weak. What institutionalization *should* be is realistically suited to the conditions of the country. In extreme cases, it might be better not to engage in strategic planning at all.

Training those who direct the strategic planning and put it into operation is important, as this provides the strategic importance and technical and professional precision necessary to any strategic planning exercise.

There is no universal principle on how to institutionalize a strategic process. The experience of the actors involved in strategic planning and the directors of the research institutions is what counts when directing and making the institutionalization process happen.

Exercise 14. Institutionalization of strategic planning (group exercise)

Phase 1 Group work (55 minutes)

- 1 Form four groups of participants, each electing a rapporteur



- 2 Invite the participants to read handout 5 14 1
- 3 Discuss and answer the following questions You may want to use handout 5 14 3 to write down your answers
 - A In terms of institutionalizing strategic planning in your institution
 - a What are the strengths?
 - b What are the weaknesses?
 - c What are the opportunities?
 - d What are the threats?
 - B Mention three critical actions to make strategic planning functional in your organization
- 4 The rapporteurs write the answers on flipcharts to be used during the presentations in the next phase

Phase 2 Reporting and discussion (40 minutes)

- 5 The rapporteurs present their group's results to the audience Five minutes are available for each presentation (20 minutes)
- 6 The trainer facilitates a discussion on the content of the presentations and provides feedback on the exercise (20 minutes)

DAY FIVE

Session 15 Participant Action Plan Approach (PAPA) and Workshop Evaluation

Instructions to Trainers

SESSION 15

14 45 – 15 15 Session 15 Participant Action Plan Approach (PAPA) and Workshop Evaluation

15 15 – 15 30 Tea/Coffee Break

15 30 – 16 30 Session 15 (Continued)

OBJECTIVES

By the end of this session, the participants will be able to do the following

- Develop individual plans of action for future activities in strategic planning
- Evaluate the workshop

Use overhead 5 15 1 to present the objectives

PROCEDURE

Training techniques presentation, individual work, group sharing, PAPA

14 45 – 16 30 Participant Action Plan Approach (PAPA)

PRESENTATION

(experience) Give a brief presentation reinforcing the use of PAPA during this workshop. Remind the participants of the information you gave them at the beginning of the workshop. You may want to use the overheads on PAPA from day one, session one. Note that the participants have been jotting down possible action items throughout the workshop. Now is time for them to focus on finalizing their specific action items for when they return to their jobs. Be sure to ask the participants if they have any comments, questions, or need clarification (15 minutes)

EXERCISE

PAPA Exercise—Second Stage (45 minutes)

- 1 Distribute handout 5 15 1 (3 forms). These are the forms for the second stage of the PAPA action plan.
- 2 Individual work. Ask the participants to review the work they have done over the last five days and to refer to the PAPA notes they made throughout the workshop. They should formulate specific action items and write them on the handout. Tell them to refer to the questions about their action items in order to be sure they are written as “specifically” as possible (20 minutes)

- 3 Group sharing and discussion Go around the room and ask each person to tell you their action items List each item on flipcharts If some people have similar items, just indicate with a check by the item Do not rewrite This will give a good idea of the range of action items people are interested in undertaking (15 minutes)
- 4 Collect the completed forms from the participants (Make photocopies to return to the participants before they leave) Remind them that you will be following up with them after several months to see how they have progressed toward their action items (10 minutes)

16 00 – 16 30 Workshop Evaluation

Distribute handout 5 15 2 and 5 15 3 Have the participants complete the evaluation before they leave the session Give them about 15 minutes for this task During the last 15 minutes, invite the participants to make oral comments regarding the evaluation of the workshop Facilitate a brief discussion

Note A diskette with the text of the evaluation form in WP5 1 is included and, if necessary, may be adjusted to meet your needs

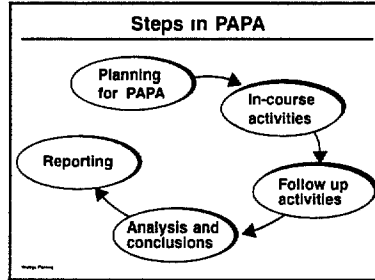
16 30 – 16 45 Workshop closure by officials and distribution of certificates

DAY FIVE

Session 15 Summary of Overheads

Objectives of Session 15
<ul style="list-style-type: none">• Develop individual action plans for future activities in strategic planning• Evaluate the five-day workshop

5 15 1



5 15 2

Step 2 In-Course Activities
Stage 2
Objectives develop action plan
Procedure <ul style="list-style-type: none">• prepare preliminary list of action items• confer with partner• finalize and prioritize list of action items• report individual action plans• make copy and submit to trainer

5 15 3

PARTICIPANT ACTION PLAN APPROACH

Supervisor's Contact Address

Name	_____
Organization/Center	_____
Name of Immediate Superior	_____
Title of Immediate Superior	_____
Address	_____

Tel No	_____
Fax No	_____
Telex No	_____
Email	_____

QUESTIONS ABOUT YOUR ACTION ITEMS

1 *Preliminary nature of plan*

- Were you specific in writing the action items?
- What will you need to do when you return to work to find out which actions are possible?

2 *Resources*

- Who would be carrying out the proposed action, or helping with it (formally or informally)?
- Are the skills for carrying it out available?
- How much time would this take?
- Are there special materials or equipment required?
- What is involved in obtaining them?
- Will you be using a tool, system, or aid from this training workshop?
- How much adaptation is required?
- Is continual monitoring or follow-through required?
- Who will do it?

3 *Implementation*

- Do you have the authority to implement the action?
- If not, who does?
- How do you think you can go about getting approval?
- What do you think the degree of support is for your idea?
- Will you need to sell people on it?
- Who?

4 *Effects*

- Whom will this action affect?
- How will it affect them?
- Will anyone be the worse for the results?
- Anyone improved?
- What will be affected?

5 *Environment*

- What in the organizational environment might interfere with your doing this?
- What factors in the organization will support your effort?



**Workshop on Strategic Planning
Evaluation Form**

Your cooperation in completing this questionnaire will be greatly appreciated. The information you provide will be useful in planning future events and will help resource persons to improve their materials and presentation.

A. General Reactions	In general, I would rate the workshop as <input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Average <input type="checkbox"/> Fair <input type="checkbox"/> Poor	On balance, would you say that the workshop objectives were achieved? <input type="checkbox"/> Yes <input type="checkbox"/> Partially <input type="checkbox"/> No (If no, please explain briefly in section H)
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B. Objectives	The objectives of this workshop are listed below. Please mark to what extent, in your opinion, the objectives have been achieved, using a scale from 1 to 5. The scale ranges from: 1 I cannot perform this objective or I have not been exposed to the information 2 I cannot perform this objective but I have been exposed to the information 3 I can perform the skill or express the knowledge with assistance from others 4 I can perform the skill or express the knowledge without assistance from others 5 I can perform the skill or express the knowledge well enough to instruct others
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- Use the systems approach _____ 1 2 3 4 5
- Explain the diagnosis, planning and implementation (DPI) paradigm to study NARS _____ 1 2 3 4 5
- Explain the process of strategic planning including external, organizational, gap analysis and internal analysis _____ 1 2 3 4 5
- Explain institutional performance assessment _____ 1 2 3 4 5
- Formulate a vision and mission statement for a national agricultural research institution _____ 1 2 3 4 5
- Formulate objectives, policies and strategies _____ 1 2 3 4 5
- Discuss the role of leaders/managers in the management process _____ 1 2 3 4 5
- Explain the factors of success and failure in the process of institutionalization of planning and develop strategies _____ 1 2 3 4 5

C.
Strengths and Weaknesses

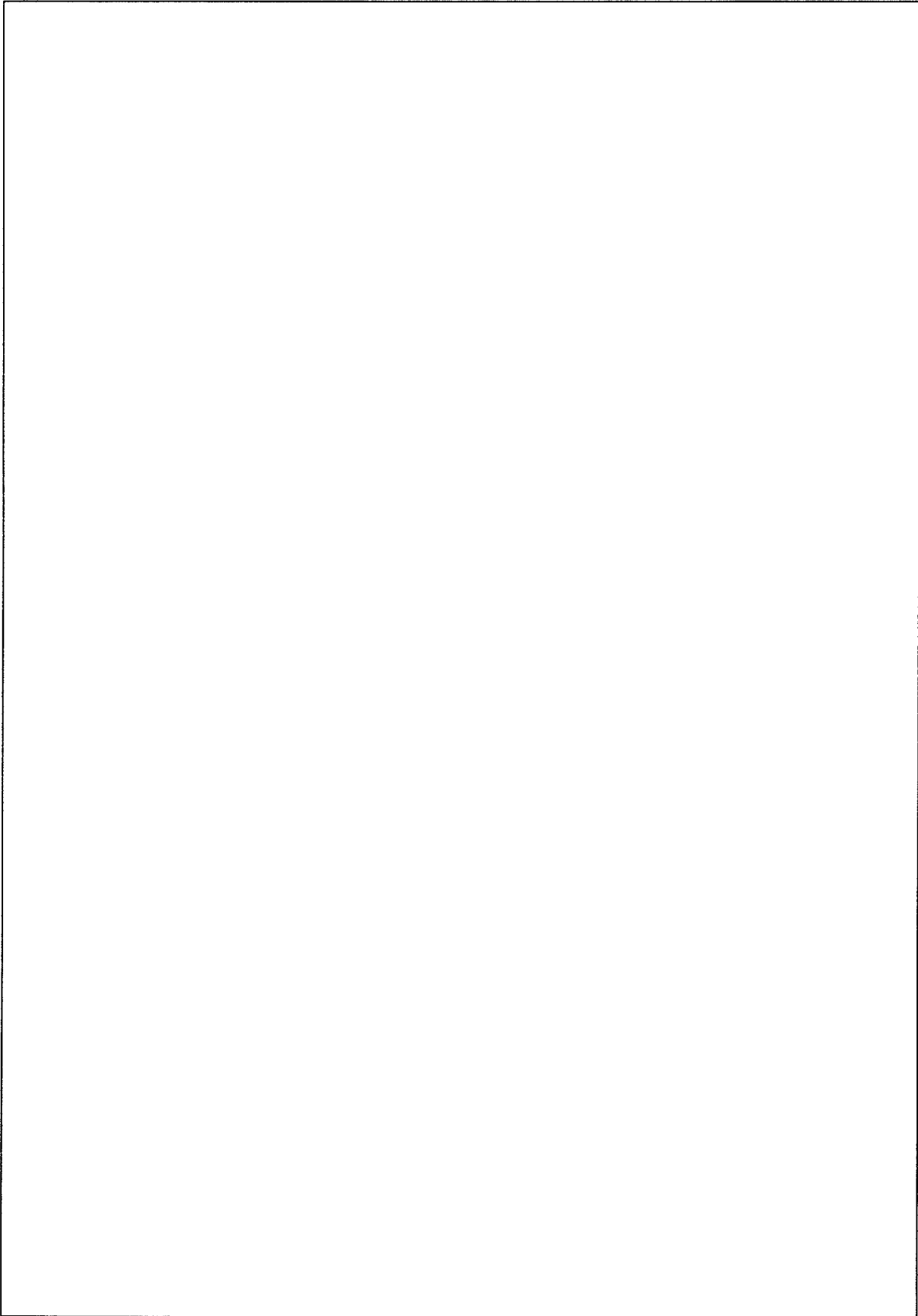
- Please list what you consider to be three strengths of the workshop

1
2
3

- Please list what you consider to be three weaknesses of the workshop

1
2
3

- **Suggestions for improvements**



3/5

D. Features		Very Good	Good	Fair	Poor
	Accommodations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Meals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Lectures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Discussions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Papers/Handouts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Organizations and Management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Quality of visual aids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Quantity of visual aids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**E.
Additional
Topics**

What additional topics would you have liked included in this activity?

**F.
Management
Topics**

On what other management topics would you like to receive training in future events?

**G.
Comments**

Please use the space below to write down any additional comments or suggestions you might have

Guidelines to Provide Feedback on the Workshop

1 The module

Content

- usefulness/relevance
- amount of information

Structure

- sequence
- duration
- balance between trainers' and trainees' participation
- instructions to trainers
- visual aids
- handouts, exercises
- extra readings
- PAPA
- evaluation

2 Process training techniques and direction

- usefulness/relevance/effectiveness
- group interaction
- clarity of questions/exercise instructions
- opening and closure of the days

3 Trainers', facilitators', and trainees' performance

- presentation/communication skills
- interaction/effective participation
- punctuality/interest/commitment/willingness to facilitate learning/willingness to participate
- other attitudes

4 Logistical support

- organization
- accuracy
- punctuality
- willingness to assist participants
- services provided in general

5 Workshop environment

- physical (training facilities, training material, lodging facilities in general)
- psychological (personal feelings such as self-motivation, interest, satisfaction, self-achievement)
- social (development of friendship, relaxed, comfortable among participants, etc)

6 Workshop results/outputs

- personal and professional assessment
- recommendations

7 General comments

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***Annex 1:
Glossary and
Support reference material***

Glossary

The training materials on strategic planning use a number of general concepts related to agricultural research management. Not strictly limited to definitions of terms, they propose concepts that reflect the thinking of the authors in relation to the general theme.

Accountability

The obligation to report, explain, or justify something. The responsibility of an organization or its staff to provide evidence of research expenditures and performance to donors or higher levels of management.

Assumption

A fact or statement that is accepted as true. In relation to the logical framework, it is a statement about factors that can influence the achievement of objectives, but which are beyond the control of researchers, such as political or economic policies or the availability of farming inputs.

Beneficiaries

People, households, organizations, communities, or other units that are affected positively by (or benefit from) a research program or activity.

CIPP evaluation model

A conceptual framework for improvement-oriented evaluation. CIPP stands for four kinds of evaluation:

- *Context evaluation* Assessing the context of a program, identifying target populations and their needs, identifying opportunities and problems in addressing those needs, and judging the responsiveness of goals and objectives to assessed those needs.
- *Input evaluation* Identifying and assessing alternative strategies, schedules, budgets, resource requirements, and procedural designs needed to accomplish the goals and objectives of a research activity.
- *Process evaluation* Assessing the implementation of a plan by recording and judging ongoing activities and accomplishments in relation to the procedural design. It provides information helpful for changing operational plans during implementation.
- *Product evaluation* Measuring, interpreting, and judging the attainments of a research activity. Intended to interpret the work and merit of an activity's final outcomes in relation to the needs of the group it is intended to serve.

Clients

The intended users of agricultural research products, generally including farmers, agribusiness entrepreneurs, policymakers, extensionists, and consumers.

Criteria

A standard of judgment The basis for a comparison, test, or evaluation

Decision-making level

The level within a research organization or system (for example, the level of the researcher, project manager, experiment station or institute manager, or policymaker) at which a particular decision is made, or to which an evaluator reports

Effectiveness

The degree to which an activity, project, or program attains its objectives The extent to which outputs are obtained and effects achieved in relation to objectives

Efficiency

The degree to which an activity produces outputs at the least cost

Evaluation

Judging, appraising, or determining the worth, value, or quality of research—whether it is proposed, ongoing, or completed—in terms of its relevance, effectiveness, efficiency, and impact

Ex ante evaluation

An assessment done before research begins, usually in terms of its relevance, feasibility, potential impact, or expected benefits Can be used to define a baseline against which progress toward objectives can be measured, or to set priorities among several research areas

Expert review

(See Peer review)

Ex post evaluation

An assessment of an activity or its outputs after the activity has been completed The purpose is usually to estimate benefits in relation to costs

External analysis

Sometimes called prospective analysis of the external environment (or context analysis) The process of assessing and evaluating the external environment, to identify present and potential opportunities and threats, which can influence the institution's ability to achieve its objectives (See also *Organizational analysis*)

External environment

In the case of agricultural research, the macro environment that affects an institution, program, or project At this level, events are practically beyond the organization's control Examples are governmental policies, consumption trends, and the development of new scientific knowledge

External review

Evaluation of a research system, organization, program, or project carried out by persons from outside the unit being evaluated Usually conducted by experts or peers, but research clients, supporters, or stakeholders may also participate in the evaluation



External validation

The process by which internal decisions are discussed among external stakeholders, in order to confirm or revise them. In strategic planning, conclusions about threats and opportunities, and the mission, objectives, and policies are generally validated externally.

Formative evaluation

An evaluation aimed at providing information to planners and implementing staff on how to improve an ongoing program or project.

Gap analysis

An assessment of the requirements of a research plan in terms of the resources needed (financial, human, and physical) to achieve the desired goals.

Goal

Used in the logical framework, a goal is the ultimate end or objective toward which a research activity, project, or program is directed. It is usually something like improving incomes for farmers. (See also *Objective, Output, and Purpose*.)

Impact

The broad, long-term effects resulting from research, usually economic, social, and environmental.

Input

In terms of the logical framework, inputs refer to the resources needed to implement a project, including personnel, operating funds, facilities, and management.

Institutional sustainability

An organization's condition of being accepted and considered legitimate by society. Institutional sustainability has several requirements including (a) an institutional project (clearly defined mission, objectives, policies, and strategies), (b) institutional competence, and (c) institutional credibility.

Institutionalization

A process that impersonally establishes a structure, plan, program, project, or activity in the day-to-day operation of an organization.

Internal review

Evaluation of a research project, program, or organization that is organized and carried out by the management and staff of the unit.

Logical framework

Often called the *logframe*, this is a tool for planning, monitoring, and evaluating projects in the broader context of programs and national goals. It clarifies the logical links between project inputs and a hierarchy of objectives: direct outputs, broader purposes, and the ultimate goal.

Means of verification

The sources and methods used to obtain and assess information about the achievement of research objectives.

Meta-evaluation

Critical assessment and overview of evaluation procedures and experiences. Meta-evaluation is performed to learn from past evaluations and improve future ones.

Mission

The official statement of the reason for an organization's existence—its basic goals and purpose. (See also *Strategic planning*)

Objective

The expected output, purpose, or goal of a research effort, that toward which efforts are directed. Objectives may also be specific operational statements regarding the desired accomplishments of an activity. (See also *Goal, Output, and Purpose*)

Objectively verifiable indicator

Specific measures of progress or results at a specific level of a project's hierarchy of objectives.

Ongoing evaluation

Evaluation carried out during implementation of an activity. It involves observing or checking on research activities and their context, results, and impact. Ensures that inputs, work schedules, and outputs are proceeding according to plan (in other words, that implementation is on course). It also provides a record of input use, activities, and results, and warns of deviations from initial goals and expected outcomes.

Operational planning

A process for defining what an organization intends to accomplish, how and when this will take place, and who will be held accountable.

Organizational analysis

Internal analysis carried out by gathering and assessing information on the inputs, processes, and products of an organization. The purpose is to identify strengths and weaknesses in relation to opportunities and threats posed by the external environment, and in relation to the organization's objectives.

Output

The specific product or service that an activity produces or is expected to produce. Used in the logical framework to refer to specific results for which the project manager may be held accountable, such as the release of a new maize variety. (See also *Goal, Objective, and Purpose*)

Participatory management

Creating a culture of effective participation of an organization's members at all levels. It involves sharing ideas and responsibilities, and getting members' commitment to design and carry out activities that will contribute to institutional objectives and bring about desired institutional changes.

Peer review

Process by which the scientific merit (conceptual and technical soundness) of a research proposal, publication, or activity is evaluated by other scientists working in the same or a closely related field.

Planning

A process for setting organizational goals and establishing the resources needed to achieve them. It is also a way of building a consensus around the mandate, direction, and priorities of a research program or organization.

Policies

Major guidelines for reaching ends in accordance with priorities. Policies should be formulated after, or as a consequence of, the formulation of the organization's mission and objectives. Policies give direction to decisions on inputs and processes.

Products

Specific goods or services produced by an organization program, project or activity. (See also *Outputs*)

Program

An organized set of research projects or activities that are oriented toward the attainment of a common set of objectives. A program is not time bound, as projects are, and programs are higher in the research hierarchy than projects.

Programming levels

The areas that encompass activities of an agricultural research institution, according to the specificity of the objectives. The two most common levels are projects and programs.

Project

A set of research activities designed to achieve specific objectives within a specified period of time. A research project is composed of a group of interrelated research activities or experiments that share a rationale, objectives, plan of action, schedule for completion, budget, inputs, outputs, and intended beneficiaries.

Project cycle

A framework for planning and managing projects. It is composed of distinct phases through which a project moves during its lifetime. Variations of the project cycle are used to manage large-scale investments, development-agency activities, and various kinds of research.

Project management

A framework for the systematic planning, implementation, monitoring, and evaluation of research projects and activities.

Purpose

The desired effect or impact of a project. (See also *Goal*, *Objective*, and *Output*)

Quality control

A set of planned and systematized activities to guarantee that the products and services of an institution will fulfill the expectations of the public, beneficiaries, and stakeholders.

Relevance

The appropriateness and importance of research activity's objectives in relation to broader (e.g. regional or national) goals or clients' needs.

Scenario

The simulation of a probable future situation, in the context of the institution's location, taking into consideration the interaction among economic, political, social, and cultural factors, and how these may affect the institution's ability to act

Stakeholders

Groups whose interests are affected by research activities The stakeholders of a research organization include staff members, farmers, and extension agents, among others

Strategic planning

A process by which an organization builds a vision of its future and develops the necessary structure, resources, procedures, and operations to achieve it The process is generally participatory, and based on analyses of the external environment, the organization, and "gaps" External opportunities and threats and internal strengths and weaknesses are assessed This is followed by the formulation of the organization's mission, objectives, policies, and strategies Strategic planning is long term in nature (e.g. for 10 or more years) It serves as a base for tactical and operation planning (See also *Operational planning* and *Tactical planning*)

Strategy

A course of action involving a logical combination of actors, factors, and actions chosen to reach a long-term goal or vision It is important to distinguish policy from strategy Policies are general guidelines to achieve given objectives In addition, strategies incorporate a logical sequence of steps (See also *Strategic planning*)

Summative evaluation

A summary statement about the accomplishments, effectiveness, value, and impact of programs Summative evaluations are made for accountability purposes and for policymaking

Survey

A technique for gathering information from individuals or groups It can be done by observing, administering questionnaires, or having discussions with members of the group being surveyed

Tactical planning

A process of organizational planning at the intermediate management level The objectives, goals, policies, priorities, and strategies defined through tactical planning are for the medium term (generally three-five years), they are based on the strategic planning and are the guidelines for the operational planning

Strategic Planning¹

Introduction

The purpose of this session is to explain to you how to accomplish *Strategic Planning*

This is not an easy task because we will be focusing on a **process** and that is more difficult than focusing on an object, such as a seed, or a discipline, such as entomology

We will be focussing on the **process of analysis**

The *content* of this analysis will vary from national level to institutional level, from institution, to institution and even from individual to individual, but the *process of analysis* is the same, regardless of the situation

Strategic planning is nothing new for you—even for those who are not familiar with the phrase We all engage in strategic planning Our hope is that after this event we can perform Strategic Planning with more clarity

We are focusing on strategic planning because you, our users, have repeatedly told us that you need to strategically plan and that you want to do it better

Therefore, we have assigned significant resources to this topic at ISNAR

- We have carefully reviewed the existing documentation on strategic planning
- We have carefully studied how to best adapt it to agricultural research management
- We have taken this work into the field for testing
- Finally, we have evaluated the field testing, synthesized our experience, and prepared the presentations and materials that are being presented to you here

Strategic Planning as Analytical Process

Strategic planning is an analytical process for making decisions on the use of resources

In general terms, agricultural research managers make decisions on the following items

- **activities**
- **human resources**
- **financial resources**
- **physical resources**

¹ by Huntington Hobbs Senior Officer 1993 The Hague The Netherlands ISNAR

Decision making on these items is, or should be, a process involving the following four stages

- | |
|---|
| <ul style="list-style-type: none"> ● planning ● programming ● monitoring ● evaluating |
|---|

At ISNAR, these four items and four stages of decision-making have been combined into a matrix, as follows

Management Decision Areas		
Decisions related to	Planning & Programming	Monitoring & Evaluation
Activities	Programs Projects	Output Impact
Human resources	Recruitment Careers Training	Performance
Financial resources	Budgeting	Accounting Auditing
Physical resources	Procurement	Stock Control Appraisal

Planning and programming have been combined in the matrix because together they lead to the *making of a decision*

Monitoring and evaluation have been combined because they reveal the *consequences of a decision*

The planning and programming of activities leads to the design of *Programs and Projects*

Monitoring and evaluation leads to measuring the *output* and *impact* of these activities

The planning and programming of human resources leads to *recruitment* policy, *career* planning, and *training*

Monitoring and evaluation leads to measuring the *performance* of the human resources

The planning and programming of financial resources is accomplish through *budgeting*

The monitoring and evaluation of these Financial Resources is accomplished by *accounting* and *auditing*

The planning and programming of Physical Resources leads to *procurement*

Monitoring and evaluation of these physical resources is performed through *stock control* and *appraisal*

This matrix also allows us to visualize the evolution of planning methodologies

2,29

Since the time of the earliest societies, mankind has engaged in *physical planning*, which is planning for the use of physical resources. For example, a hunting party would need so many arrows, so many stones, so many slings, etc. The birth of *financial planning* occurred with the first use of currency. The moment a monetary value could be placed on goods and services, planning could be based on a financial basis. The addition of human resources to planning, and the awareness that planning involved a certain degree of forecasting, brought about the beginning of *long-range* or *forecast-based planning*.

When activities are added to the planning mix, a strategic orientation has been introduced, as different situations and alternatives have to be continually considered. This orientation, with a recognition of the need to adjust to a changing environment, leads to *strategic planning*.

Strategic planning began to be extensively used in the 1960s by numerous private sector companies. The success of these companies popularized the use of strategic planning, and now public sector organizations and even national governments are using strategic planning.

But strategic planning actually is an old concept, with a military origin ("strategos" means military leader in ancient Greek). The strategist knows the forces at his command, but is uncertain about the forces, resources, and plans of those opposing him. Therefore, the strategist must anticipate different alternative actions against him, and prepare a suitable response for each. Perhaps the greatest strength of strategic planning is that it forces the strategist to consider and evaluate new alternatives. Let us illustrate with a brief example.

Early in the so-called "green revolution," a seed company in a developing country began to offer high-yielding varieties, but sales were low. The company engaged in some strategic planning and realized they were in the *wrong* business. They thought they were in the seed business, but with strategic planning, they recognized they were in the business of selling modern/high-input agriculture. So they opened a series of agricultural input stores and made a very profitable business selling their seed, as well as fertilizer, agrochemicals, and agricultural equipment. They recognized they had to sell the package, not just the seed.

It is the rapid rate of change of today's world which has made strategic planning so valuable, because strategic planning accounts for uncertainty and adapts to changing circumstances.

We all recognize that the world is changing fast. But just how fast is illustrated by a simple statistic of today's electronic world. We all talk about the population explosion, yet, more television screens will be built today than people will be born.

The literature on strategic planning is extensive and growing, some authors are already writing about "post-strategic planning," "strategic management," and similar concepts. And every author seems to present a *different* model for strategic planning. We have reviewed this literature and have concluded that all of these models are essentially the same, they are only different in the level of detail used.

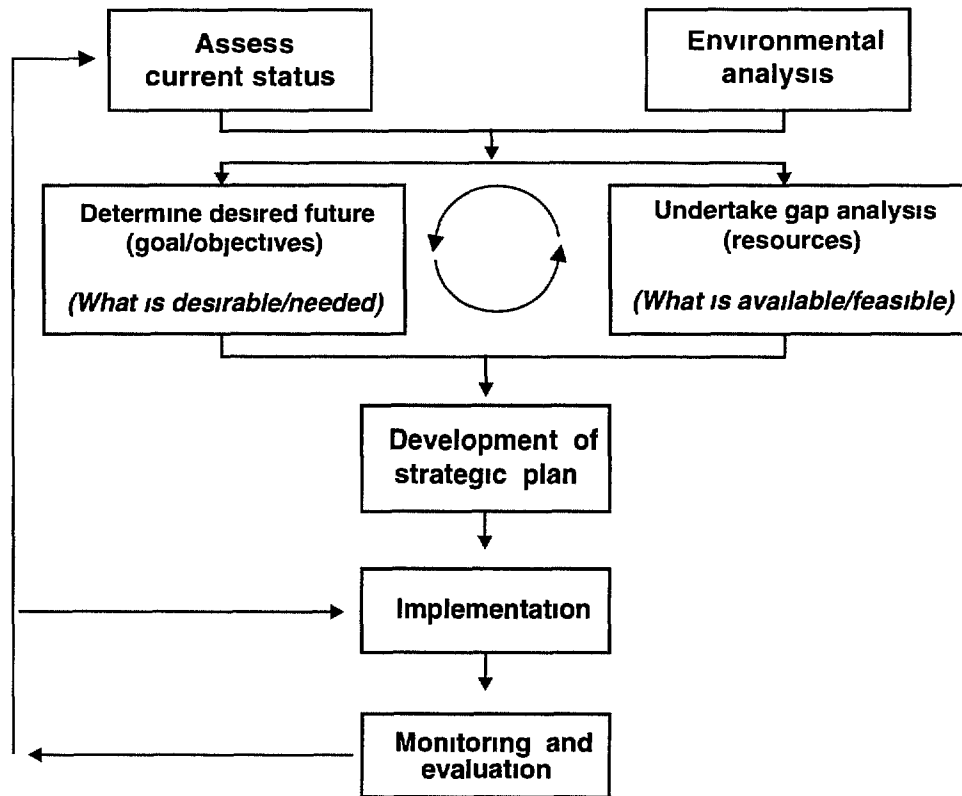
At ISNAR we have chosen one model—the one that is most basic and simple to communicate and that, in our judgment, covers the essential elements. It is a model of six steps or stages.

We have studied models from 4 up to 57 steps, but again, they are essentially the same.

Let us focus on this six-step basic model.

Let us first illustrate this model with a simple example.

Strategic Planning Model



Strategic Planning for Purchasing a Family Car

Assess Current Status

- I need transport and I don't want to use public transportation
- I don't have a car
- The spouse thinks the idea of a family car is wonderful

Undertake Environmental Analysis

- Overcrowding of public transport is becoming more uncomfortable
- The research institute is not in a position (nor will be in the next four years) to provide a vehicle for personal transport
- Inflation makes investment in a car a good and attractive proposition
- Friends and neighbors have been buying new cars

Determine Desired Future

- I need transport and strongly favor buying a vehicle
- Driving a Mercedes Benz would be lovely

Undertake Gap Analysis

- There are many brands and prices available
- Mercedes Benz sure is expensive, I cannot afford a new one
- A new Toyota or a new Volkswagen seems affordable
- A used Mercedes Benz is a possibility, (return to Step 1), but the spouse wants a *new* car (return to Step 2) Repairs are expensive and used cars need more repairs (return to Step 3a) I would prefer a *new* economy model rather than a luxury *used* model

Develop a Strategic Plan

- Buy a new Toyota
- I have about half of the money, and will borrow the rest from my uncle

Implementation

- Family travels by bus to Toyota dealership
- Spouse wanted blue car, but none available in country, so settles for red car
- Children insist on cassette player, costs extra
- Drive out of dealership with family packed in shiny red car with loud stereo

Monitoring and Evaluation

- See how well the car drives, and let the neighbors know
- Monitor fuel consumption, repairs, overall cost of maintenance
- Factor in unplanned benefits (family beach trips)
- Factor in unplanned liabilities (neighborhood boys are spraying graffiti on cars)
- Evaluate whether to keep or sell car, if sell, do we replace? With what?

This simple illustration is used to emphasize that strategic planning is a common and everyday process. Our task is simply trying to understand it better.

Let us now look at each of the steps in terms of general strategic planning.

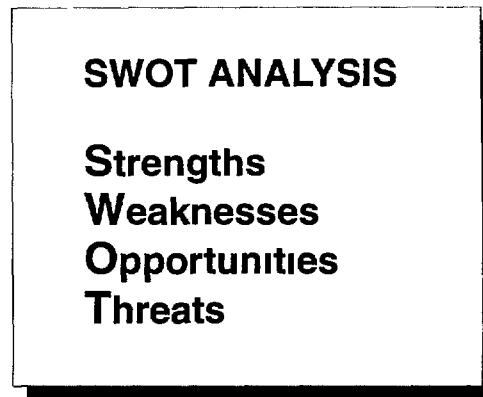
Assess Current Status

- Assess present goals, strategy, and performance
- Assess strengths and weaknesses of the organization

Undertake Environmental Analysis

- Assess present and future client needs
- Evaluate threats and opportunities

Note In some models, each of these tasks or sub-headings are a separate step. In some models, steps 1 and 2 are combined into a SWOT Analysis



Determine Desired Future

- Based on the assessment of the *current status* and the *environmental analysis*, specify the competitive advantage and distinctive competence to be sought or maintained in the future
- Formulate desired mission, goals, and program thrusts
- Specify desired program mix and balance, priorities and targets, and the time frame for their achievement

Undertake Gap Analysis

- Compare current status with desired future and identify gaps
- Specify gaps, with particular attention for difference between present and desired outputs, and between present and required inputs (resources, skills, organization)
- Identify probable resources and limitations and estimate areas of flexibility or manoeuvre
 - optimist scenarios (example increase in donor funding)
 - pessimist scenarios (example cutback in national funding)

Develop a Strategic Plan

- Identify and evaluate strategies for closing gaps
- Select the most appropriate strategy
- Elaborate operational plans for implementation
 - Who?
 - When?
 - How?
 - With what resources?
- Identify criteria for monitoring and evaluating progress

Implementation

- Communicate plans
- Proceed with plans

Monitoring and Evaluation

- Monitor progress, periodically review achievement
- Identify deviation from plan and evaluate reasons for this
- Adjust and modify plans as required

Bellow, the strategic planning process is explained more fully

Undertake Environmental Analysis

We will first look at the second step, environmental analysis. We do this to point out that is often better for an organization to begin with this step, rather than the assessment of current status, because sometimes organizations focus too much on their own problems and fail to move on to the analysis of their environment. Organizations and companies that base their work on technological innovation have a critical need to undertake environmental analysis.

One of the most useful places to start environmental analysis is with demographic data. In many developing countries, the average age of the population is 17 to 19 years old. In 10 to 15, the average age will be 16 or lower.

- What implications does this have for agriculture?
- What implications does this have for farm employment?
- What implications does this have for income distribution?

Another useful place to consider in environmental analysis is in trade data.

- What have been the trade patterns of your country in the last 15 years?
- What opportunities and threats (SWOT analysis) are presented by the emerging trade blocks?

It is also useful to look at the farm data of your potential clients and competitors. For example, in a European Community country, farmers receive a subsidy of up to US\$4,000 per year. In many developed countries, farmers are paid substantial funds *not* to produce.

Can you compete with this? What can you do? What must you do?

Assess Current Status

One of the more interesting examples of how to assess the current status comes from a national agricultural research organization in a fairly large developing country. After assessing the current status, they concluded:

- The key strength of the organization was its large pool of trained and experienced researchers.
- Its key weakness was in trying to set priorities for a large country producing numerous commodities in many different agroclimatic regions.

This SWOT analysis led the organization to the following strategic plan:

- Send most of the research staff to the regions to perform regional research.
- Maintain a small technical office in the capital to guide a few national programs. These national programs would have funds, but no research staff. The regions will present

projects to the national programs, which will guide national-level priorities by the disbursement of funds

Determine Desired Future

To determine the desired future of the organization it is important to distinguish between

- what the organization is,
- what the organization is going to be,
- what the organization should be,
- what the organization can be

This is more than a game of verb conjugations. An example will illustrate.

At the end of the last century, universities in the United States were in a crisis. The general population in the country continued to increase, but the university population was decreasing. At that time, the university was essentially a seminary to prepare theologians.

A handful of universities (Harvard, Cornell, Stanford) decided to change what a university "is," to what a university "should be." Their first definition: universities should be centers for the application of rational thought to improve society. Thus, they initiated the first programs in economics, education, and political science. But universities found out that the "should be" scenario was something of a utopia, and thus changed what a university "should be" to what it "can be." Their second redefinition: universities can prepare the individual to contribute to society in specific areas. The universities could not change all society, but they could have a specific impact on their students.

Since the task of the universities was to prepare the individual to contribute to society, the university concluded they also had to help the individual by helping that person find a job. To implement this strategy, the universities created employment offices. Furthermore, having found the individual a job, and considering that most of the alumni would be happily and productively integrated into society, the universities created alumni offices to collect contributions for the university from satisfied and grateful alumni.

This illustration points out that not only must an appropriate desired future state be identified, but that the strategic vision needs to be converted into specific mechanisms to bring the vision into reality.

Gap Analysis

An interesting example of gap analysis comes from a regional agricultural research organization. It was a fundamental belief of this organization that it should serve all its member countries on an equal basis. However, during the process of strategic planning, they analyzed their gaps and they found the following:

- The smaller countries had very different needs from the larger countries.
- The smaller countries needed a partner to do most agricultural research, leaving the country with the manageable responsibilities of testing sites and extension.
- The larger countries could do their own research on the most vital commodities, but needed a partner for *supplementary* research in some other commodities. The larger countries also required assistance in research management.

In its gap analysis the regional organization found it was doing too little for the smaller countries and too much, or in the wrong areas, for the larger countries

Developing a Strategic Plan

Developing a strategic plan requires evaluating alternatives and choosing an option. This does not mean there is a single, ideal option. Several alternatives could be viable, or all could fail.

In an agricultural research setting, the easiest way to illustrate the necessity and complexity of evaluating alternatives is with the question: How many research stations should your country have? The number of issues that must be considered is enormous. It is possible that every researcher in the country will come up with a somewhat different answer. Each alternative will have benefits and costs. But a decision will have to be made.

Implement the Strategy

The determination of the future strategy might be correct and appropriate, however any strategy is useless unless the organization proceeds to implement it. For example, a few years ago, ISNAR did a review in a country which contained a series of very specific recommendations for a country. On a subsequent visit, an ISNAR staff member met with a key national leader, who said, "The recommendations are excellent, but I don't know why that report has not been implemented."

Perhaps the proposed plan was good, maybe it was not so good, but even the best plan is useless unless implemented.

Monitoring and Evaluation

Most managers agree that *monitoring and evaluation* is of critical importance, and yet many managers express difficulty in knowing how to do it. Monitoring and evaluation can be divided into concerns about the effectiveness and efficiency of the organization.

Effectiveness relates to the organization's impact on its users and other beneficiaries. Therefore, to monitor and evaluate effectiveness, the participation of users and other beneficiaries in the process is essential. Efficiency relates to how the work is organized and assigned within the organization. In professional organizations, such as research institutions, one of the best ways to monitor and evaluate efficiency is through peer review.

Strategic Planning in Agricultural Research

Finally, it is useful to again review the steps of the strategic planning process, with a complete example from agricultural research management.

This example comes from Dr. Eliseo Alves and his presentations on the establishment of EMBRAPA, the Brazilian public sector national agricultural research institute (NARI).

Undertake Environmental Analysis

Brazil is an enormous country, with a demographic explosion in cities, and a vast subutilized Amazonian region.

Assess Current Status

Brazil has received strong financial support to organize a public sector NARI.

Determine Desired Future

Create a NARI, but with what specific objectives? The EMBRAPA planners went to the Brazilian president for the answer. The president determined that the desired future would bring cheap food to the cities and develop the Amazonian region.

Undertake Gap Analysis

This was done by the EMBRAPA planners who returned to the Brazilian President to say

“We can develop the Amazonian region and we can provide cheap food to the cities but we cannot do both at the same time. It is too expensive to transport food from the Amazon region to the cities.”

Determine Future Strategy

Brazilian President determines “cheap food for the cities.”

Implementation

EMBRAPA planners establish their activities near the principal cities and in the areas of high agricultural potential.

Monitoring and Evaluation

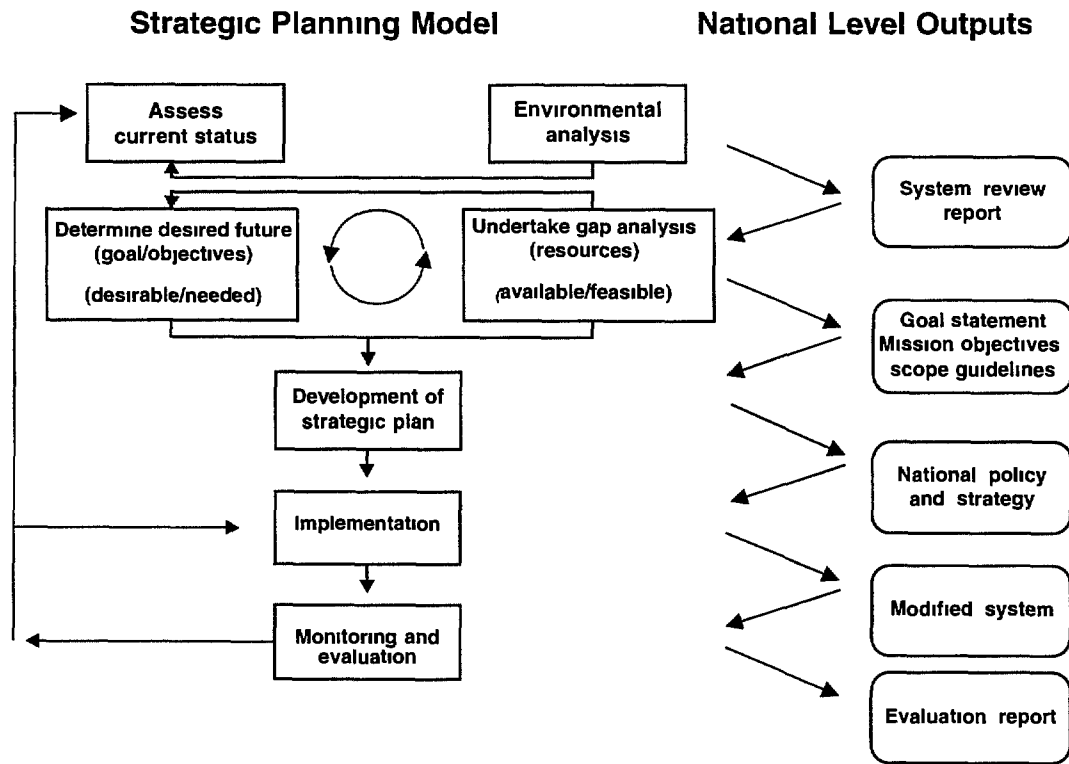
EMBRAPA evaluates its activities, and finds its research is successful in providing cheaper food for the cities. However, they find that the key beneficiaries, the urban poor, are totally ignorant of EMBRAPA’s role. Thus, EMBRAPA starts a series of television commercials informing the urban masses that cheap food starts with EMBRAPA.

National Level vs Institutional Level Outputs

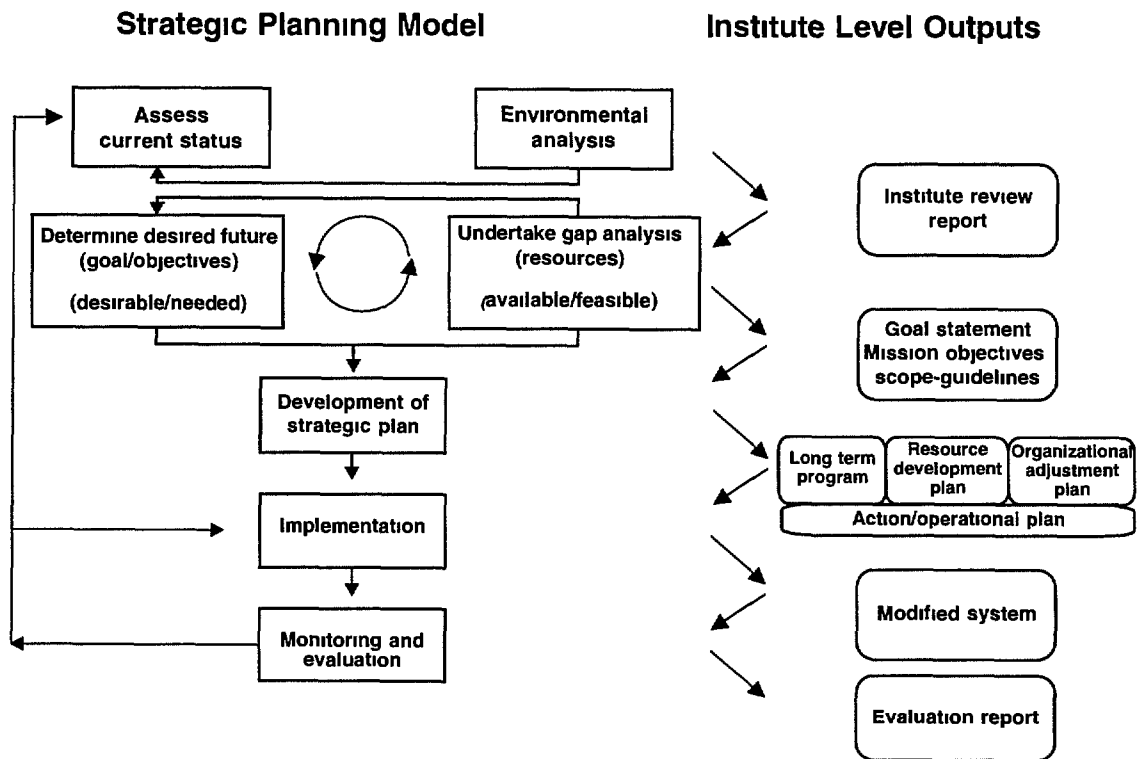
We have seen examples of strategic planning at the national level and the institutional level.

The analytical process is the same, the only difference is the kind of outputs produced.

The following chart illustrates the outputs of strategic planning at the national level



The outputs of strategic planning at the institutional level are illustrated as follows



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Final Comments

This presentation has covered the “how” and “why” of strategic planning. A few words should be added on the “who” and “when.”

Who should perform strategic planning? This is essentially a question of cost. The more people that are involved, the greater the amount of information that will be brought to bear on the process, and the greater the probability of developing a consensus that will facilitate implementation. However, the greater the number of people involved, the greater is the cost. Some organizations have professional planners, and leave the planning—strategic or otherwise—to them. Experience would seem to indicate that strategic planning will be successful only if the leadership of the organization is intensively involved, and that involving middle management helps assure effective implementation.

When should strategic planning be done? The undertaking of environmental analysis should be constant. The assessing of current status should be periodic, regular, and institutionalized (probably annually), leading to a review, at least for monitoring purposes, on the desired future state. When significant gaps begin to be noticed between the current and desired future states, it is time for some in-depth work on strategic planning.

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Johnson, Gerry. 1987. *Strategic change and the management process*. UK and USA. Basil Blackwell.

Journal of Strategic Change. 1994. Volume 3. Number 1. London, UK. Wiley Publishers.

Mintzberg, Henry. 1994. January-February. The fall and rise of strategic planning. USA. In *Harvard Business Review*.

Annex 2: Overheads

Workshop on Strategic Planning

Workshop Goal

To equip NARS chief executives and senior managers with tools to carry out strategic planning to ensure better management of agricultural research institutes

Workshop Objectives

- **Use the systems approach**
- **Explain the diagnosis, planning and implementation (DPI) paradigm to study NARS**
- **Explain the process of strategic planning including external, organizational, gap analysis, and internal analysis**
- **Explain institutional performance assessment**
- **Formulate a vision and mission statement for a national agricultural research institution**
- **Formulate objectives, policies and strategies**
- **Discuss the role of leaders/managers in the management process**
- **Explain the factors of success and failure in the process of institutionalization of planning and develop strategies**

Expected Outputs

- **Improved skills of top and senior research managers in strategic planning**
- **Improved commitment from agricultural research managers to work as a team toward designing strategic planning involving the entire staff of the organization**
- **Action plans designed to implement activities to institutionalize strategic planning in your organizations**

Objectives of Day One

- 1. Discuss the background, rationale, objectives, and schedule for the five-day workshop**
- 2. Explain the use of the participant action plan approach (PAPA)**
- 3. Identify the trainers and trainees**
- 4. Use the systems approach in your organizations**
- 5. Explain the diagnosis, planning, and implementation paradigm to study NARS**
- 6. Present a synthesis of the strategic approach for research planning at the institutional and program levels**

Schedule of Day One

08:30 – 09:00

Welcome

09:00 – 10:30

Session 1. Introduction to the Workshop

Tea/Coffee Break

10:45 – 13:00

Session 2. NARS: The Systems Approach

Lunch

14:00 – 15:15

Session 3. Diagnosis, Planning, and Implementation

Tea/Coffee Break

15:30 – 17:00

Session 4. Conceptual Framework for Planning

17:00 – 17:30

Feedback on the Day's Activities and PAPA

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Participant Action Plan Approach



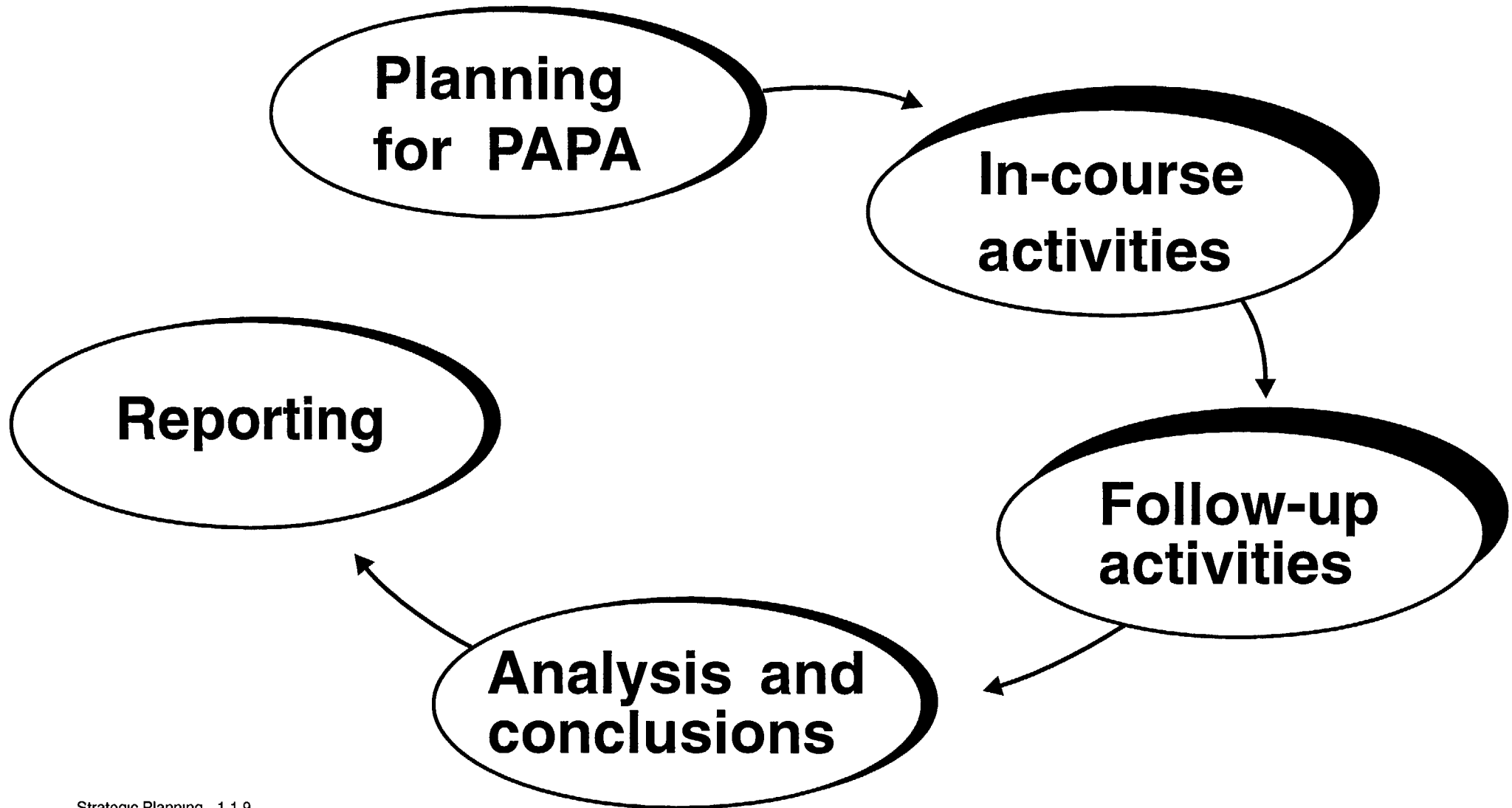
Why PAPA?

- **Systematic and continuous planning of future activities by trainees as training evolves**
- **Formal link between trainees and trainer for follow-up activities: which skills have been used in the job?**
- **Further involvement of trainee in improving the training material after training event**

Uses of PAPA

- ▶ **Assess the transfer of skill to work place**
- ▶ **Determine impact of change introduced**
- ▶ **Identify problems of implementation**
- ▶ **Decide how to modify the course**
- ▶ **Evaluate the most useful parts/quality of workshop**

Steps in PAPA



In-Course Activities

Stage 1

Objectives:

- understand the use of PAPA
- identify possible action ideas to be tried on the job

Procedure:

Jot down action ideas during the training

- use the handout provided
- do it at end of last session each day
- confer with other participants/trainers periodically



In-Course Activities

Stage 2

Objectives:

- develop action plan

Procedure:

- prepare preliminary list of action items
- confer with partner
- finalize and prioritize list of action items
- report individual action plans
- make copy and submit to trainer

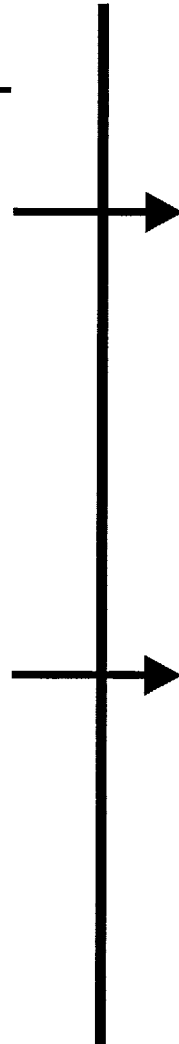
Follow-up Activities

Trainers

- **Formulate and send questionnaire**
- **Analyze and interpret data**
- **Prepare report**
- **Modify course content**

Participants

- **Fill out and return questionnaire**
- **Receive report and send feedback**



PAPA Questionnaire, First Stage

Ideas for action items

Date

Workshop title

Date/Venue

Name

Organization

Ideas I would like to try when I return to work at my research institute, based on what I have learned in this training workshop

Note You can use the workshop objectives, what you learn during the workshop, handouts, conversations with participants and trainers, etc , to come up with ideas

5/2

Objective of Session 2

- **Use the systems approach in your organization**



NARS: The Systems Approach

- Introduction
- Definition
- Levels of systems
- Closed ↔ open systems
- NARIs as open systems
- Research institution as a production system
- Concept of NARS

System

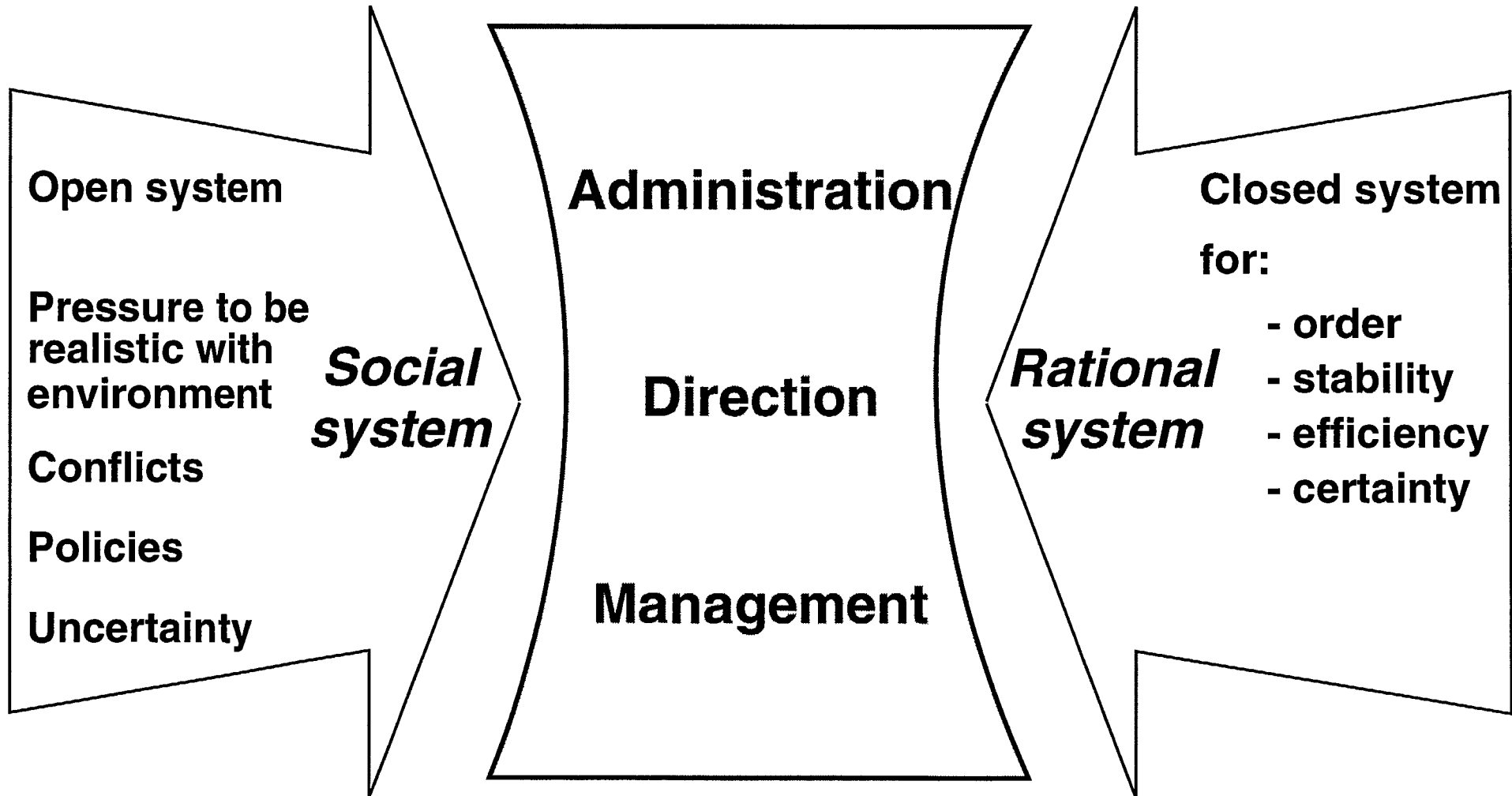
- A set of organized interacting components seeking to achieve a common purpose**
- A series of interrelated elements/parts/ components that receive inputs from the environment, and process them to be transformed into products**



Defining a System Boundary

- 1. List all components that make up the system and circumscribe them**
- 2. List all flows across the boundary**
- 3. Identify all elements contributing to specific goals and include them within the boundary**

Conflicting Pressures on Social and Rational Systems



NARS as Open System

Characteristics:

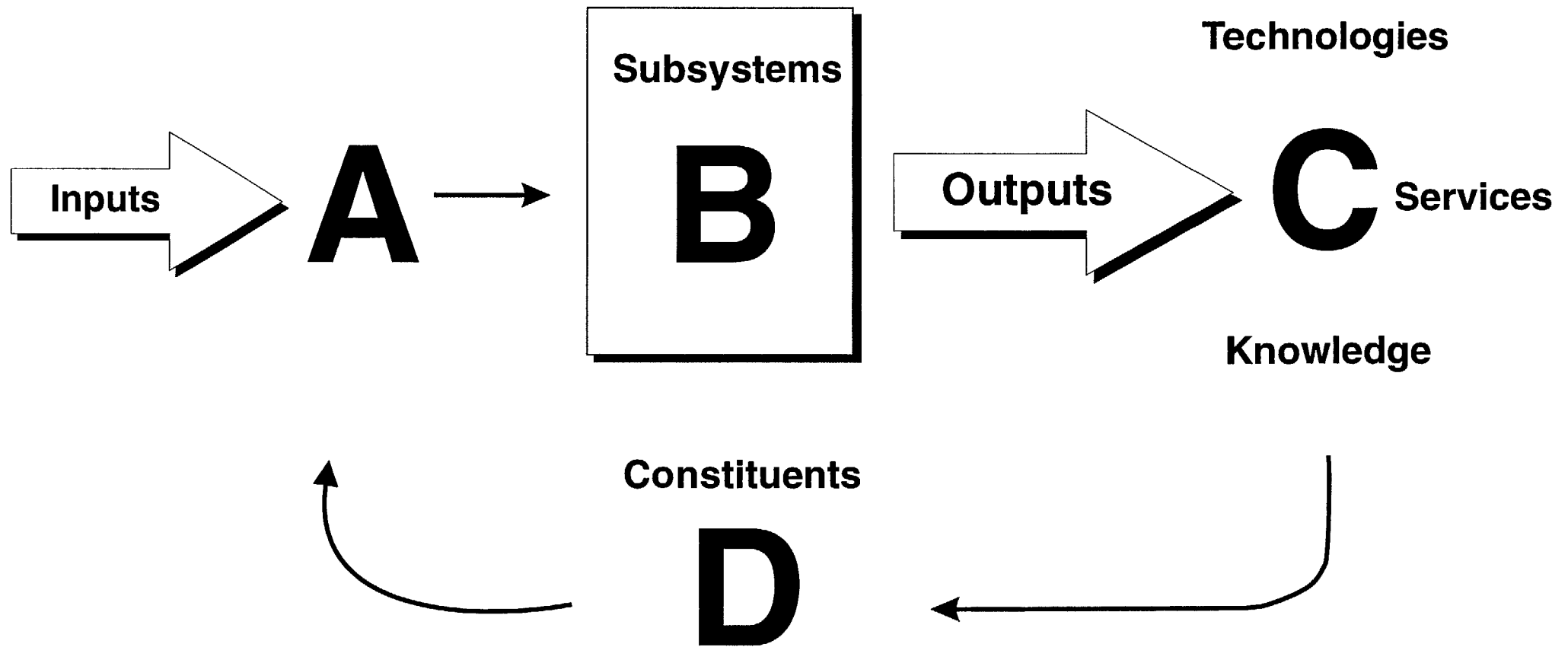
- **spacial boundary of action and scope**
- **two or more subsystems**
- **subsystems are interrelated and interdependent**
- **subsystems require inputs to produce outputs/products**
- **environment in which NARS operate determines the extent of their survival**

National Agricultural Research System

**A system comprising all those organizations
of a country,
whatever their denomination or structure,
whose principal mission is
to carry out agricultural research activities
(promotion, coordination, execution)
in the different fields of agricultural sciences**

The Organizational Structure as an Open System

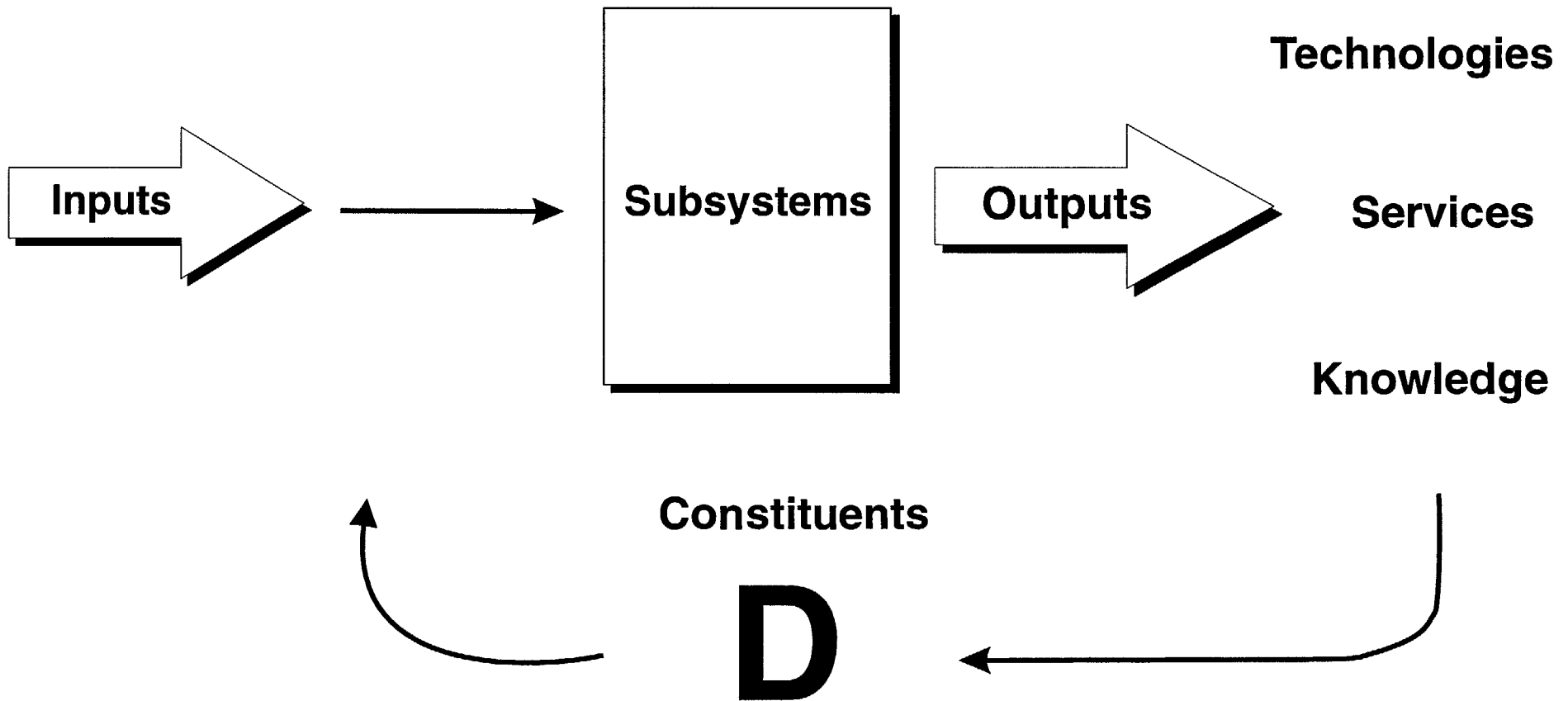
Structure and Organization - Model (1a)



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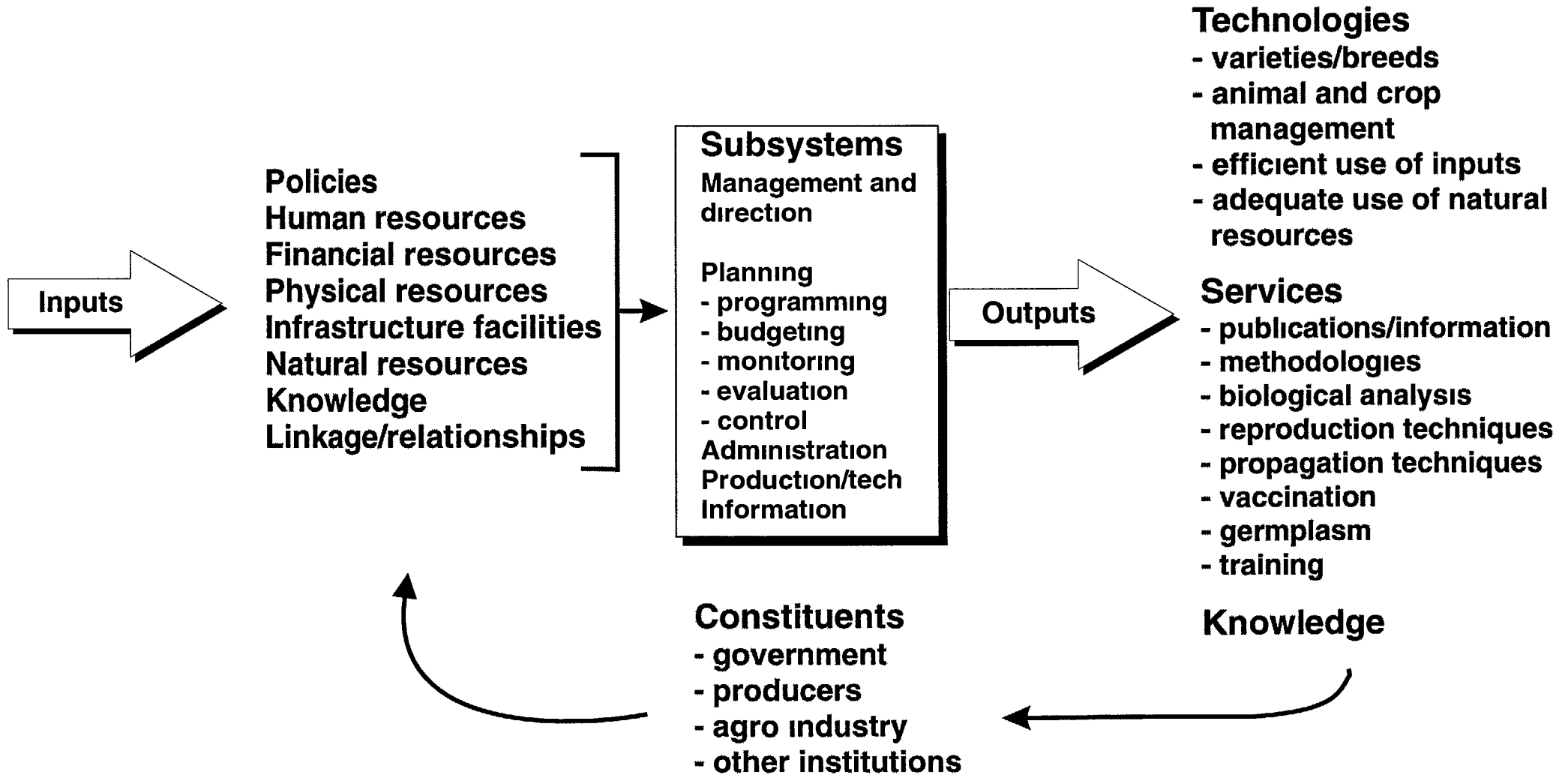
The Organizational Structure as an Open System

Structure and Organization - Model (1b)



The Organizational Structure as an Open System

Structure and Organization - Model (2)



Objective of Session 3

- **Explain the diagnosis, planning, and implementation paradigm to study NARS**

Institutional Change

The DPI paradigm

- Introduction
- Diagnosis
- Planning
- Implementation

Diagnosis

- Evaluate/assess the present institutional capability of the system**
- Diagnose the main restrictions, weaknesses, strengths, threats, and opportunities**
- Prepare options and recommend plan of action for strengthening the system**

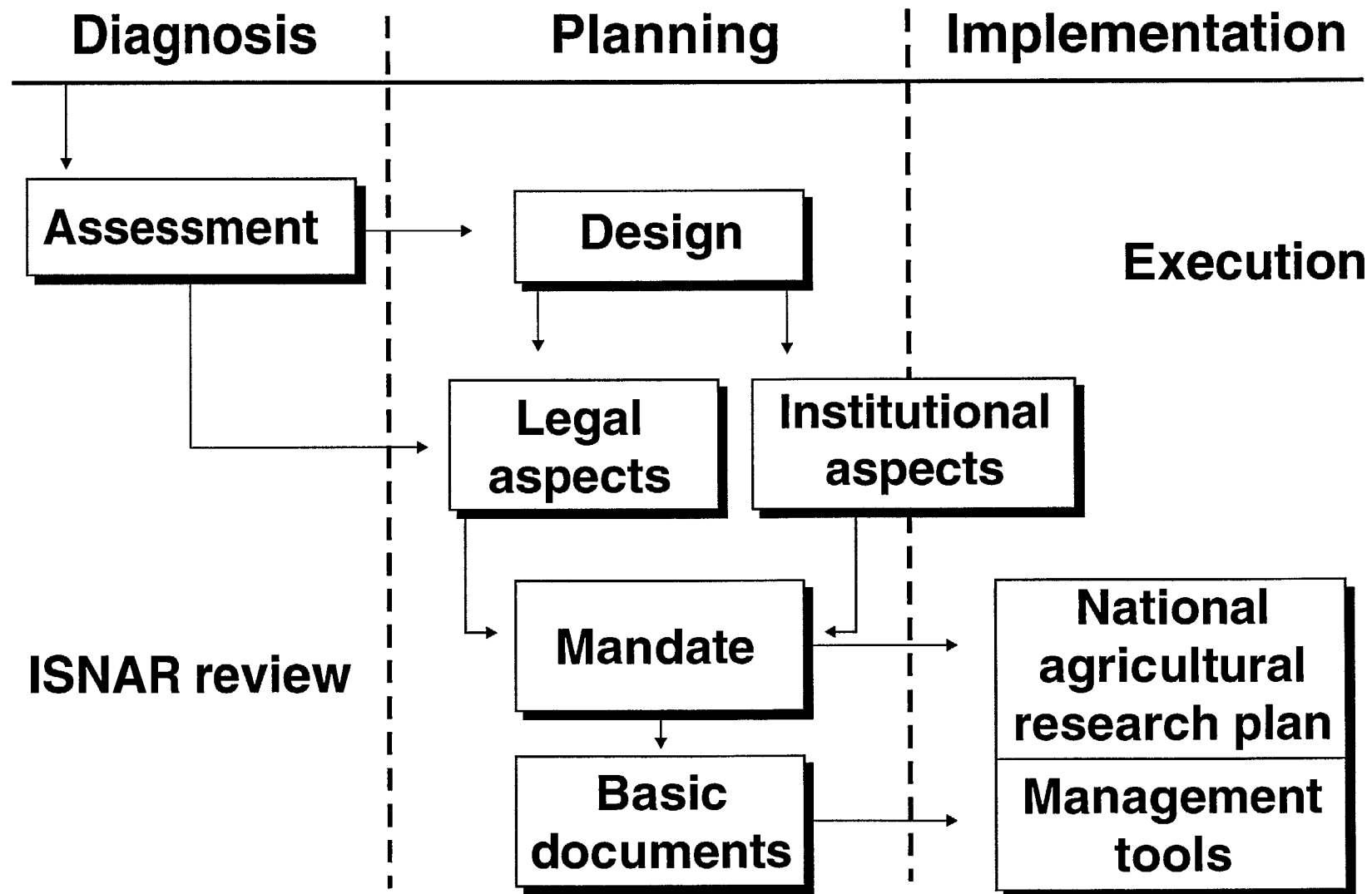
Planning

- **Design the future system**
- **Prioritize and plan necessary steps to achieve the desired institutional changes**

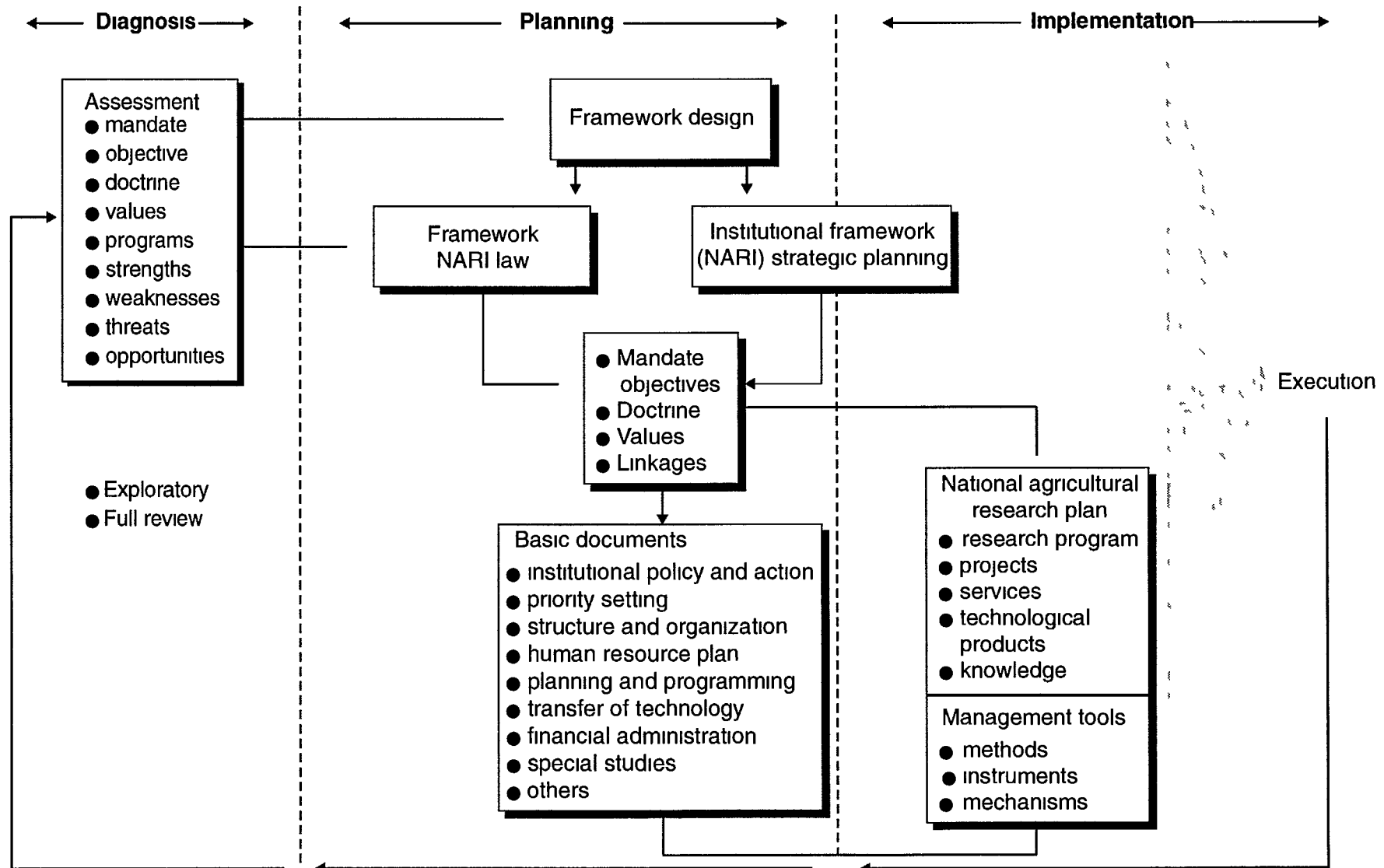
Implementation

- **Execute the plan and monitor changes**
- **Evaluate results, experience gained, and feedback for improvement**

DPI Paradigm



DPI Conceptual Framework for Strengthening NARI



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Questions for Discussion

- 1. Have you used the DPI paradigm (or a similar one) before?**
- 2. State strengths and weaknesses of the paradigm or similar framework**
- 3. How do you overcome/minimize the weaknesses?**
- 4. Do you have an alternative paradigm or framework to recommend based on a successful experience?**
- 5. What are the anticipated results of a relevant paradigm or framework to study NARS?**

Objective of Session 4

- **Present a synthesis of the strategic approach for research planning at institutional and program levels**

Conceptual Framework for Planning

- 1. Definition and characteristics**
- 2. Principles**
- 3. Planning levels, types, and products**
- 4. Strategic approach to planning**
- 5. Political dimension**

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Definition of Planning for Agricultural Research

A process to rationally combine organizational resources and activities to allow an institutional center, program, project, or activity to achieve certain objectives in a specific context or environment

Six Characteristics of Planning

- 1. Rational in selecting options**
- 2. Coherent in setting objectives**
- 3. Congruent objectives, resources, and policies**
- 4. Strategic in reaching objectives**
- 5. Forward-looking outlines for the preferred future**
- 6. Structured elements for political viability of plan**

General Planning Principles

- ▶ **Planning takes precedence**
- ▶ **Objectives organized hierarchically**
- ▶ **Potential for transformation**
- ▶ **Efficiency and effectiveness**

Specific Planning Principles

- ▶ **Participative**
- ▶ **Coordinated**
- ▶ **Integrated (vertically and horizontally)**
- ▶ **Continuous**

Organizational Planning Levels

Program level

System level

Project level

Institutional level

Activity level

**Center/experiment
station level**

Researcher level

Program level

Decision-Making Levels—Types of Planning

Strategic planning
- top management

Diagnostic/prognostic process
- long-term

Tactical planning
- middle management

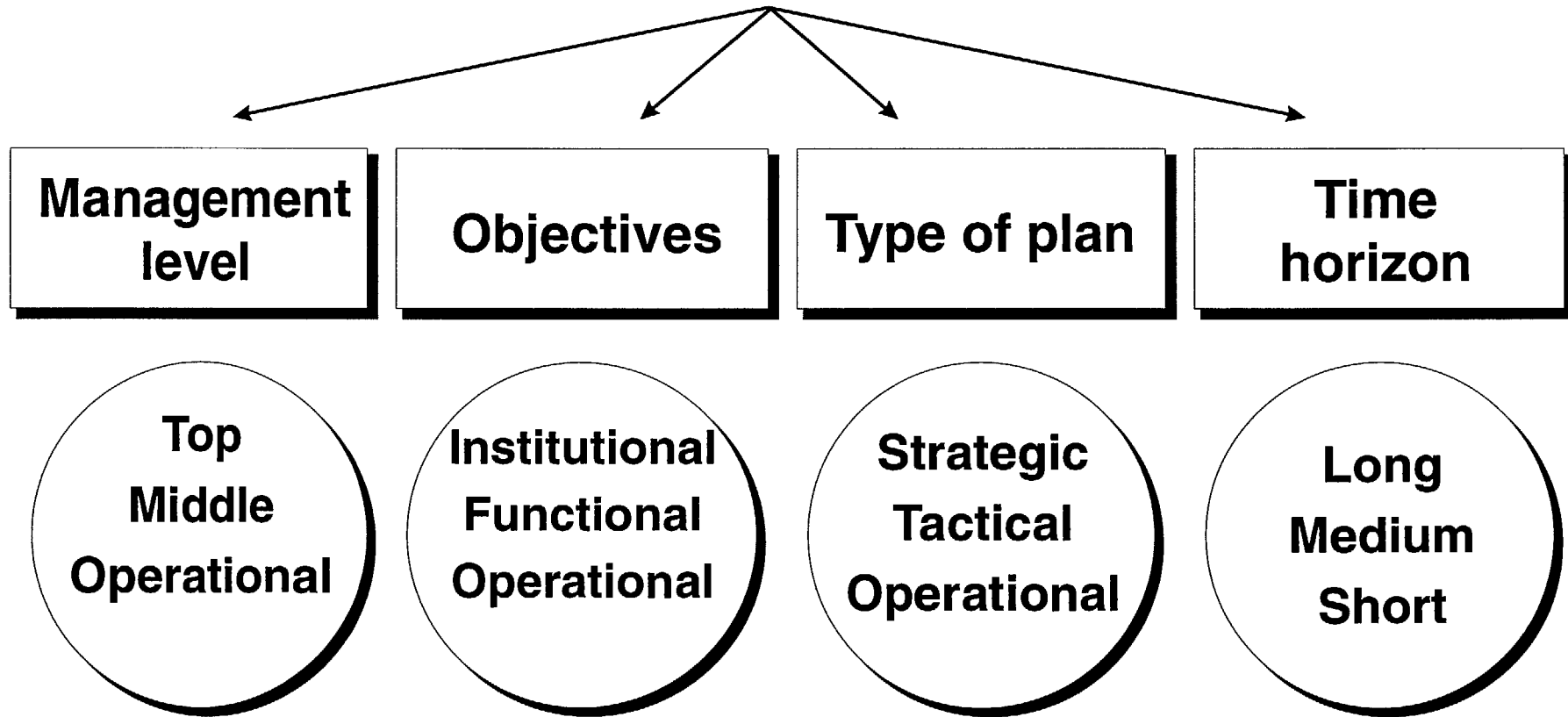
Organizational process
- medium-term

Operational planning
- operational management

Practical process
- short-term

Relationships between Types of Planning

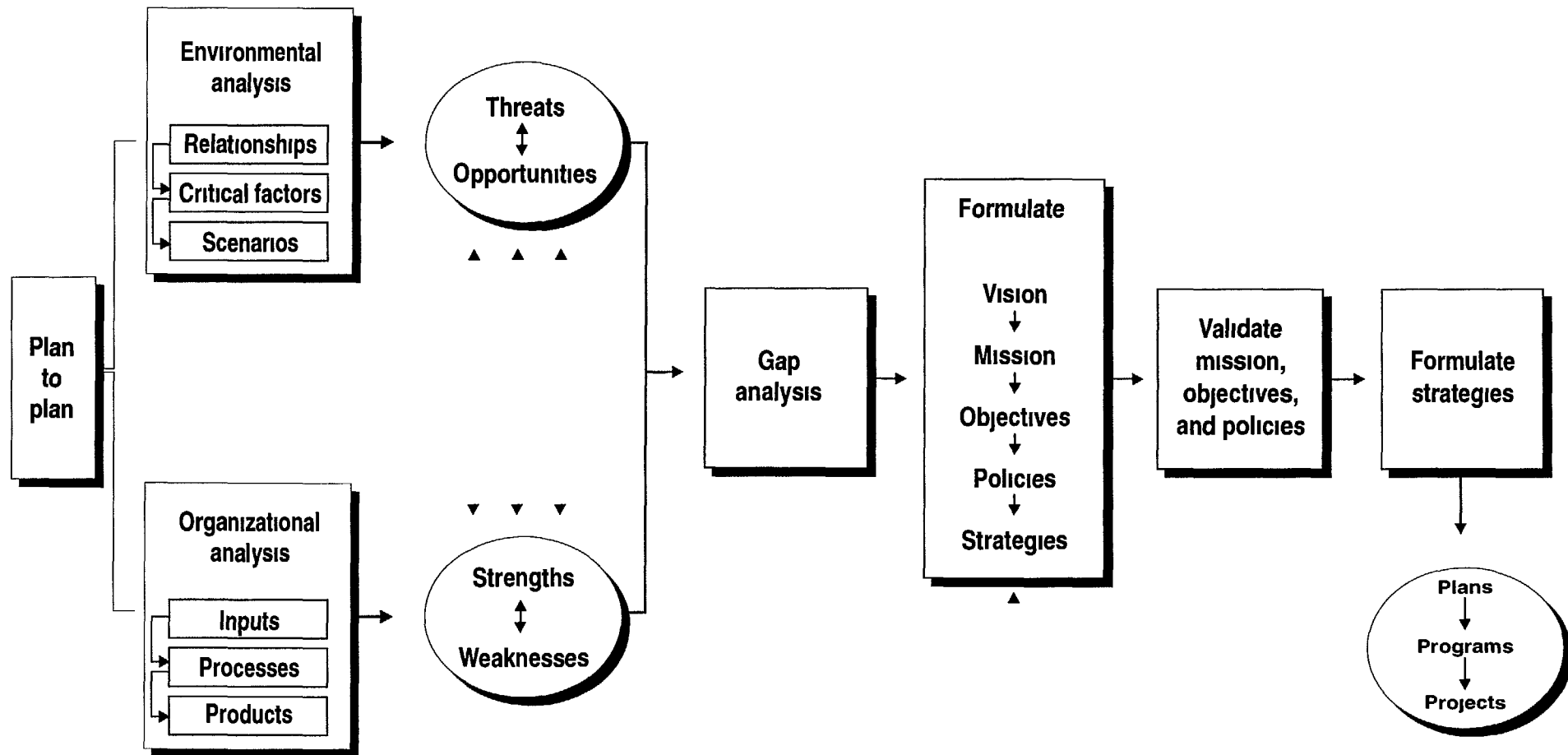
Relationships



Contributions of the Strategic Approach

- ✓ Analysis of external environment
- ✓ Internal, organizational analysis
- ✓ Gap analysis
- ✓ Identification of client needs
- ✓ Review of mission and objectives
- ✓ Consensus through strategic planning exercise
- ✓ Consideration of interdisciplinary approaches and multidimensional perspectives
- ✓ Building a strategic culture
- ✓ Identification of "intelligent investments"
- ✓ Participatory management and mechanisms

Implementation of Strategic Plan



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Why Strategic Planning?

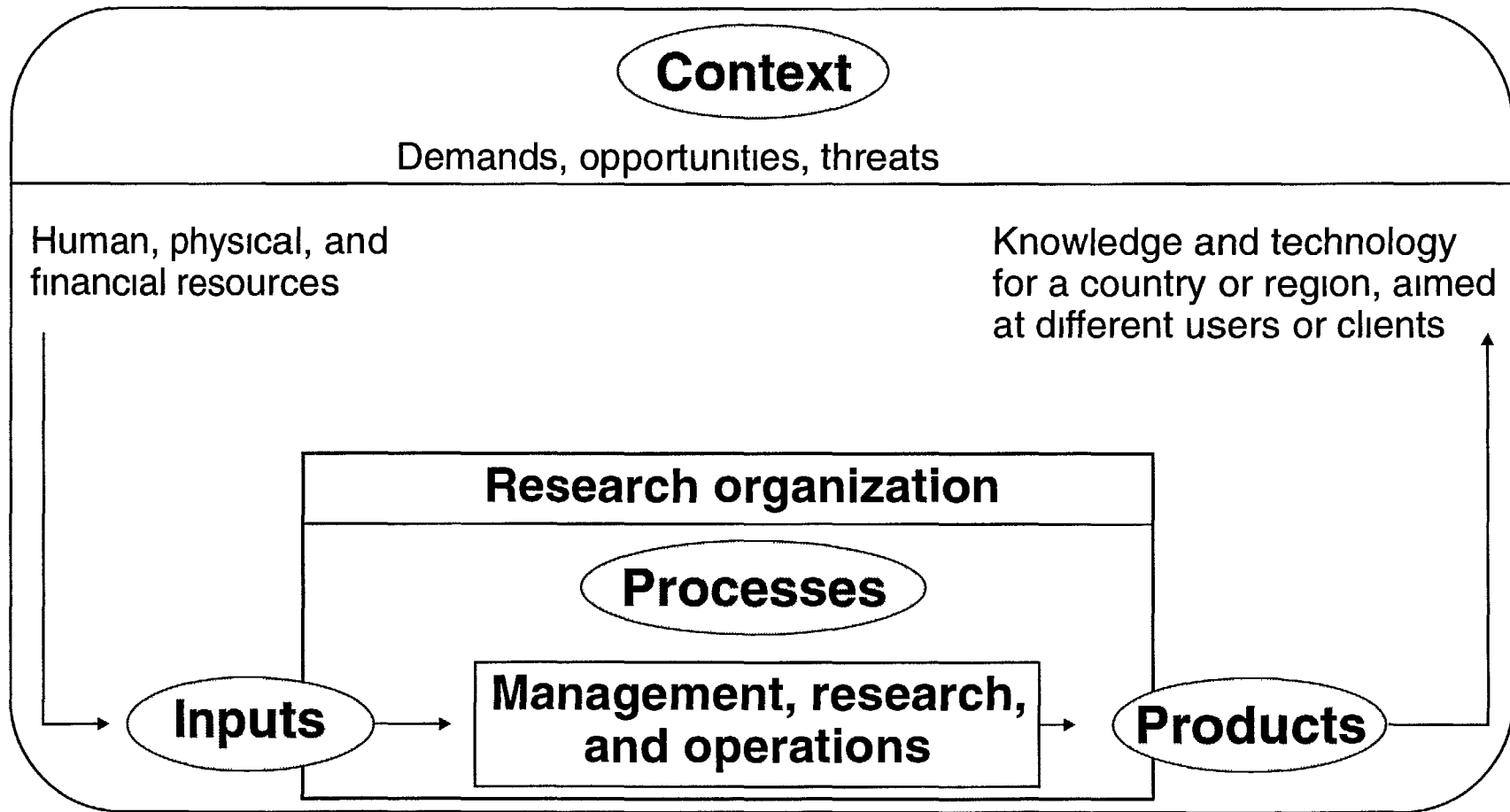
Strategic planning in NARIs emphasizes:

- Diagnosis of the environment**
- Identification of clients', beneficiaries', users' needs**
- Consensus in characterization of the demand**
- Consensus of required institutional products**

Strategic Intention in Planning

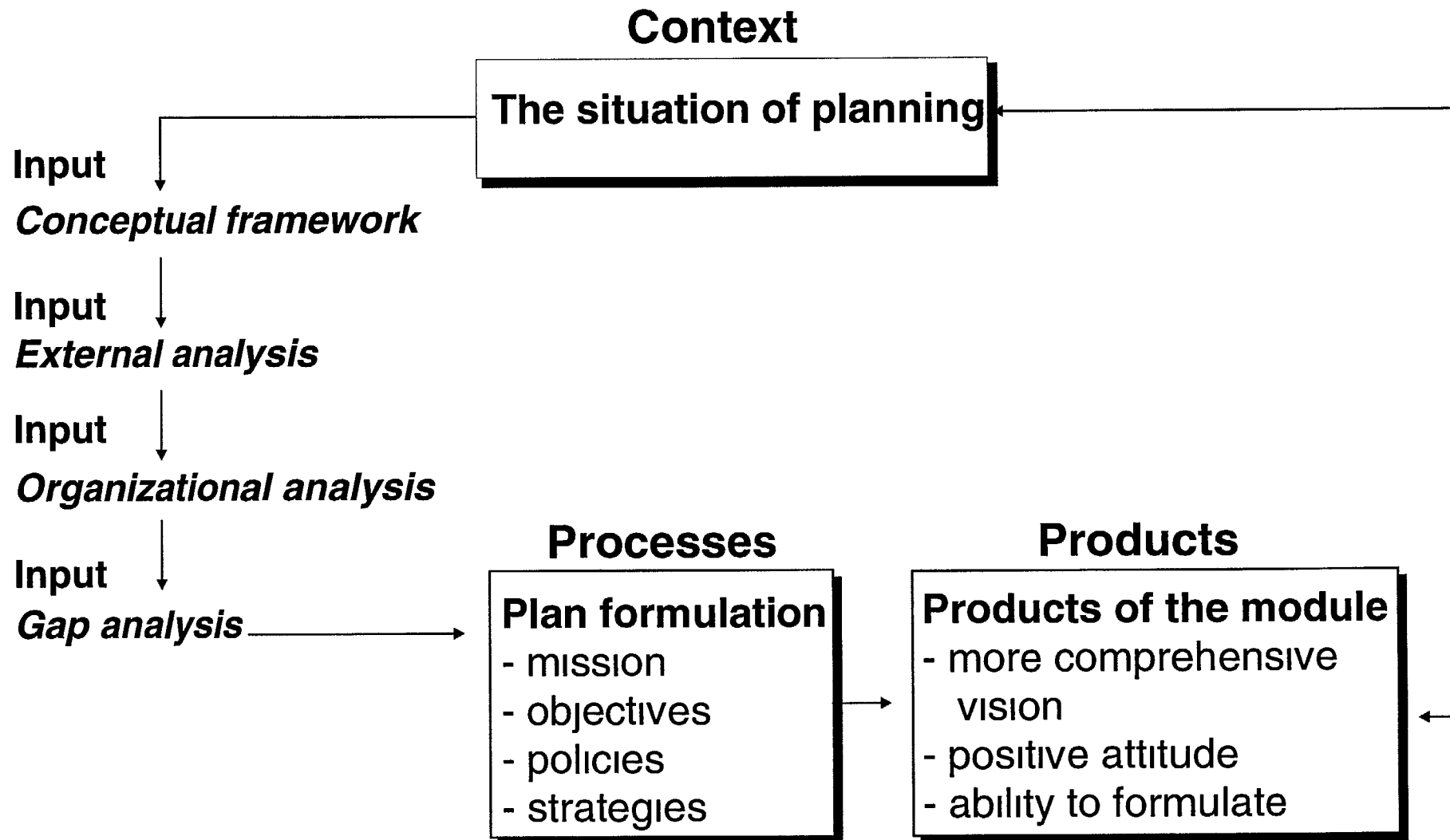
- **Future vision**
- **Confidence in its usefulness**
- **Political will**
- **Political decision**
- **Political courage**

Agricultural Research Organization as a Production System



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The General Logic of the Module



Essential Features of Planning

Planning: a process of thinking, analysis, and decision making that determines:

- **Who are the clients?**
- **What are we trying to achieve?**
- **What resources do we have?**
- **What challenges/constraints exist in our management environment?**
- **What action plan is resulting from analysis?**

Advantages of Strategic Planning

- **Greater purpose and direction for the whole agency**
(designs the future, invents ways to bring it about)
- **Sharing of common goals by various component units**
(develops a team approach to management)
- **Creation of agency sensitive to external environment**
- **Identification of strategies to react to that environment**
- **Provision of step-by-step process toward the future**

Questions for Discussion

- Have you carried out a strategic planning process in your organization? What were the steps you took? How effective were they?
- Have you confronted any constraints in conducting strategic planning? How did you overcome them?
- What would you consider to be some advantages and disadvantages of conducting strategic planning in your organization?

Objectives of Day Two

- 1. Explain the process of strategic planning**
- 2. Discuss critical issues in the management of planning**
- 3. Explain external, organizational, and gap analysis**
- 4. Demonstrate an internal analysis of an institution**
- 5. Identify and categorize the gaps**

Schedule of Day Two

08:30 – 09:00	Opening of the Day's Activities
09:00 – 10:30	Session 5. Strategic Planning
	Tea/Coffee Break
10:45 – 13:00	Session 6. Management Issues
	Lunch
14:00 – 15:15	Session 7. External, Organizational, and Gap Analysis
	Tea/Coffee Break
15:30 – 17:00	Session 7. (Continued)
17:00 – 17:30	Feedback on the Day's Activities and PAPA

Objective of Session 5

- **Explain the process of strategic planning by listing the steps and discussing their importance to the process**

What Is Strategic Planning?

**The process by which the most desirable
future vision is developed for an organization**

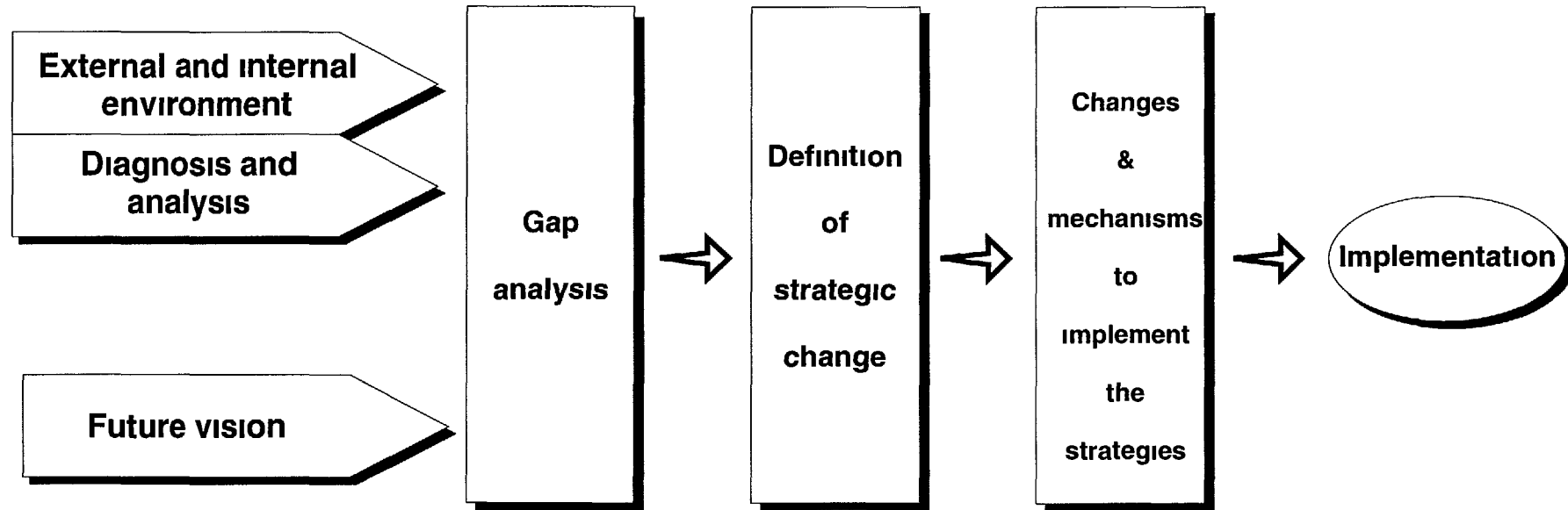
Strategic Planning—Major Characteristics

- oriented toward future achievement (long-term)
- takes into account:
 - political, socioeconomic, and legal circumstances
 - organization's strengths, weaknesses, threats, and opportunities
- directed toward the clients of the organization

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Strategic Planning Process

1 Define the current situation



2 Establish future vision

3 Analyze the current situation with the ideal future vision

4 Develop mission, mandate, objectives

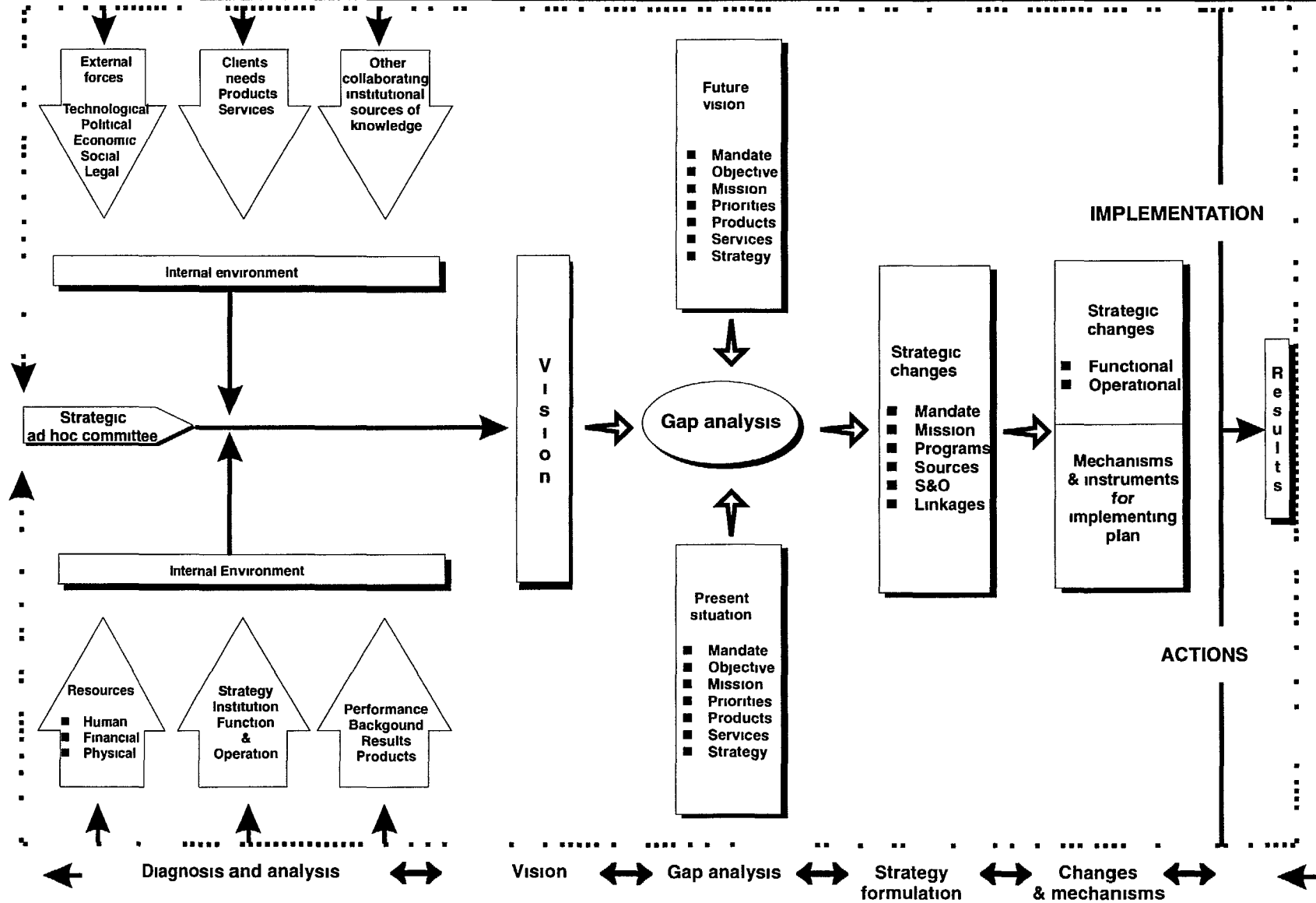
5 Select strategies, mechanisms, tools

6 Define actions to carry out the agreed strategies



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Strategic Planning — Conceptual Model



Strategic Planning Process—Six Steps

- 1. Diagnosis/analysis**
- 2. Establishment of a vision**
- 3. Identification of gaps**
- 4. Definition of strategic change**
- 5. Determination of changes and mechanisms**
- 6. Implementation**

Step 1: Diagnosis/Analysis

- **Formation of an ad hoc committee**
- **Diagnosis of government policies, future technological tendencies, and opportunities**
- **Analysis of organization's current situation**

Step 2: Establishment of a Vision

***Purpose:* to achieve an ideal future and create a strong sense of organization-wide vision**

Includes:

- **Identification of clients and their needs**
- **Development of future mandate/objectives**
- **Identification of future values**
- **Formulation of revised mission**
- **Identification/justification of future research**
- **Allocation of priorities**
- **Formulation of strategies for priorities**
- **Formulation of products/services**

Step 3: Identification of Gaps

Purpose: to analyze gaps that resulted from comparison between current situation and future vision

- **Must yield clear panorama of discrepancies in mandate, objectives, values, strategies, priorities**
- **Sets foundation for organizational changes**

Step 4: Definition of Strategic Change

- **Formulation of the strategy of change**
- **Formulation of the desired structure and organization**
- **Definition of the objectives, strategies, operation of main functional areas**

Step 5: Determination of Changes and Mechanisms

- **Clear description of mechanisms to perform periodic monitoring and evaluation of strategic plan**
- **Definition of the design, location, implementation, and operation of the planning unit**

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Effectiveness of a Strategic Planning Process

Depends on:

- **support from top management**
- **participation from clients, stakeholders**
- **clear communication strategy and mechanisms**
- **adequate time to develop the process**

Objective of Session 6

- **Discuss critical issues in the management of planning**

Objectives of Session 7

- **Explain external organizational, and gap analysis of an institution**
- **Demonstrate an internal analysis of an institution**
- **Identify and categorize the gaps**



External Analysis

Prospective Analysis

- Involves monitoring, interpreting, and evaluating the relevant external environment
- Identifies the "probable future" in order to build a "desired future"
- Identifies trends to guide policy formulation and design effective strategies

Purposes of External Analysis

- Study relationships between the institution and its environment in terms of opportunities and threats**
- Provide capacity to respond to critical questions from the external environment**
- Explore future conditions of the institution's external environment**
- Identify and prioritize emerging problems and design strategies to handle each one**
- Build a vision of the future**



Methodologies for External Analysis

There is no universal methodology, but a combination of concepts and methods suiting specific conditions of the NARIs

Qualitative **Brainstorming, pooling of experts' judgment, Delphi techniques, and scenario building**

Quantitative **Structural analysis, cross-impact matrix, dynamic models, risk forecasting, and trend extrapolation**

Relevant External Environment

A multidimensional (sociocultural, economic, political, legal, and technological) combination of general or operational elements (forces, aspects, events, facts, and actors), directly affecting present or future activities of the institution

Critical External Factor

Any element (*force, event, fact, or actor*) that can directly affect the institution's general performance or the performance of some of its activities

Should be considered in the external analysis

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Threat

Any element or circumstance that can become a disadvantage, risk, or danger for the performance of any of the institution's most important activities

**Threats must be recognized, to avoid them
or to reduce their impact**

2/2

Interdisciplinary Coordinating Committee

- ◆ **Should be appointed before formulating strategic plan**

- ◆ **Requires political will to support:**
 - **financially—enough funds to carry out process**
 - **politically—constant participation from top management**
 - **logistically—adequate materials, equipment, personnel**
 - **technically—ability to consult external experts**

Methodology for Prospective External Analysis

Steps - Strategic diagnosis	Steps - Strategic prognosis
1 Identify the relevant external environment	4 Identify and evaluate the trend for each critical factor chosen
2 Identify the critical external factors in hierachical order	5 Identify and evaluate opportunities and threats
3 Identify key sources of information for each critical factor	

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Summary: Steps in External Analysis

Process

1. Define the external environment

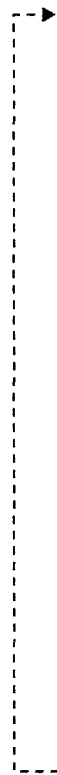
2. Identify critical external factors

3. Select key sources of information

4. Identify and evaluate trends of critical factors

Product

5. Identify and evaluate opportunities and threats



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Organizational Analysis

Methodology for Organizational Analysis

- 1. Identify aspects to be analyzed**
- 2. Define information needed**
- 3. Decide who will gather the information**
- 4. Determine how to gather and process the information**
- 5. Plan how to present results and conclusions**



Steps in Organizational Analysis

Process

1. Identify key inputs

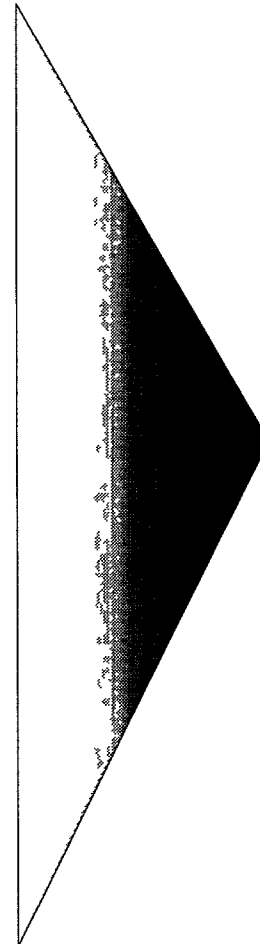
2. Identify key processes

3. Identify key products

4. Gather, process, present relevant information

Product

5. Evaluate strengths and weaknesses



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Organizational Inputs

All financial, physical, and human resources used in the institution's operations, whether in management, research, or technology transfer

Analyzing Organizational Inputs

- 1. What inputs are to be evaluated?**
- 2. Who can/should provide the information?**
- 3. Which are the indispensable inputs?**
- 4. Which are the complementary inputs?**
- 5. What do the complementary inputs contribute?**
- 6. What is the availability of each input?**
- 7. What is the quality of each input?**

Gap Analysis

Definition of Gap Analysis

**An approach to define actions needed to enhance
institutional sustainability in the
medium and long term**

Gap Analysis Should Answer:

What changes should be made in the inputs and internal processes to be able to offer the products or services that the clients will need in the next five to ten years?

Gaps

Differences between:

- **present and desired products**
- **existing inputs and the ones needed**
- **current processes and ones still to be introduced**

Gap Identification and Analysis

Major steps:

- 1. Form a committee that is responsible for carrying out gap identification and analysis**
- 2. Discuss in detail the relations among opportunities, threats, strengths, and weaknesses**
- 3. Produce a list of gaps ordered in terms of relevance**
- 4. Make results known internally**

Format for Identifying , Analyzing, and Priority Setting for Gaps

1 **Description (A)** *Training program to bring scientists and researchers up to date and make them more aware of new research techniques and disciplines*

2 **Classification (B)**

Input _____
 Process _____
 Product _____

3 **Characterization (C)**

Weakness for facing a threat _____
 Strength for facing a threat _____
 Strength for taking advantage of an opportunity _____
 Weakness for taking advantage of an opportunity _____

4 **Type of risk faced (D)**

Present institutional sustainability _____
 Adaption to future environmental conditions _____
 Changes in the institutional environment (innovation) _____

5 **Demand of institutional resources (E)**

	low	medium	high
Financial	_____	_____	_____
Human	_____	_____	_____
Infrastructure	_____	_____	_____
Others _____	_____	_____	_____

6 **Possibility of external negotiation (F)**

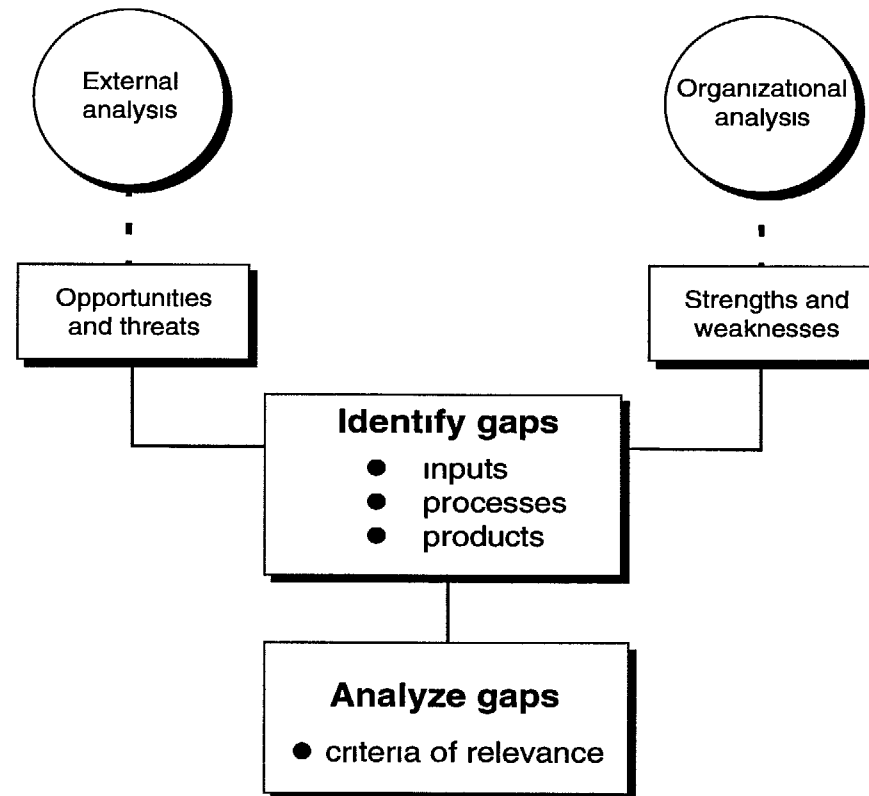
High _____
 Medium _____
 Low _____

Notes

- A In the description be brief and use precise terms that permit identification of the activity to be carried out
- B Relate a gap to its highest classification For example in introducing a product that requires new processes and inputs mark it as a product
- C Mark the appropriate main objective to be achieved
- D Mark the type of risk one hopes to reduce by eliminating this gap
- E Estimate the resources needed for implementing the action in relation to the available resources and the needs caused by other gaps
- F This refers to external negotiations the institution would have to carry out to implement the proposed activities

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Process of Generating Information to Formulate a Strategic Plan



TOWARD A STRATEGIC PLAN

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Sample Result

Exercise 7. Identification of Trends, Opportunities, and Threats

Critical factors	Trends	Opportunities	Threats
1 State funding	Dropping in percentage	Donors' offers for new areas of research	
2 Private sector	Assumes role of financier and executor		Lower funding, competing for human resources
3 Research model	No new contributions to traditional plant breeding	Opening new areas of research	
4 Scientists and researchers	Outdated techniques and knowledge		Lack of appropriate human resources

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Sample Result

Exercise 7. Identification of Institutional Strengths in Relation to the External Environment

	Strengths that allow institution to take advantage of opportunities	Strengths that protect institution from threats
A Inputs 1 Infrastructure		All investments are complementary, the private sector would have to begin from almost nothing
B Processes 1 Research model	Biotechnology can create new inputs for traditional plant breeding, e g new gene combinations	
C Products 1 Sustainability 2 Technologies	Private people, for specific groups, such as small farmers	This technology is a "public good" that the private sector will not want to fund

Sample Result

Exercise 7. Identification of Institutional Weaknesses in Relation to the External Environment

	Weaknesses that prevent institution from taking advantage of opportunities	Weaknesses that do not protect institution from threats
A Inputs 1 Human resources		
B Processes 1 Centralization	Biotechnology can create new inputs for traditional plant breeding, e g new gene combinations	At the regional level, competitors emerge who have more clearly defined the clientele and their needs
C Products 1 Varieties 2 Technologies	They do not incorporate achievement in other disciplines, such as biotechnology	They are not developed in a participatory way with the procedures

Sample Result

Exercise 7. Identifying, Analyzing, and Priority Setting for Gaps

1 Description (A) *Training program to bring scientists and researchers up to date and make them more aware of new research techniques and disciplines*

2 Classification (B)

Input	_X_
Process	____
Product	____

3 Characterization (C)

Weakness for facing a threat	____
Strength for facing a threat	____
Strength for taking advantage of an opportunity	____
Weakness for taking advantage of an opportunity	_X_

4 Type of risk faced (D)

Present institutional sustainability	_X_
Adaption to future environmental conditions	____
Changes in the institutional environment (innovation)	____

5 Demand of institutional resources (E)

	low	medium	high
Financial	____	____	_X_
Human	____	_X_	____
Infrastructure	____	____	____
Others _____	____	____	____

6 Possibilities of external negotiation (F)

High	_X_
Medium	____
Low	____

Notes

- A In the description be brief and use precise terms that permit identification of the activity to be carried out
- B Relate a gap to its highest classification For example in introducing a product that requires new processes and inputs mark it as a product
- C Mark the appropriate main objective to be achieved
- D Mark the type of risk one hopes to reduce by eliminating this gap
- E Estimate the resources needed for implementing the action in relation to the available resources and the needs caused by other gaps
- F This refers to external negotiations the institution would have to carry out to implement the proposed activities

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Objectives of Day Three

- 1. Explain institutional performance assessment**
- 2. Discuss concepts of vision and mission**
- 3. Formulate a vision and mission statement for a national agricultural research institution**

Schedule of Day Three

08:30 – 09:00	Opening of the Day's Activities
09:00 – 10:30	Session 8. Institutional Performance Assessment
	_____ Tea/Coffee Break _____
10:45 – 12:00	Session 8. (Continued)
12:00 – 13:00	Session 9. NARIs Role in the Future: Vision and Mission Formulation
	_____ Lunch _____
14:00 – 15:15	Session 9. (Continued)
	_____ Tea/Coffee Break _____
15:30 – 17:00	Session 9. (Continued)
17:00 – 17:30	Feedback on the Day's Activities and PAPA

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Objective of Session 8

- **Explain institutional performance assessment**

Institutional Performance Assessment

- **An essential element to determine the degree of achievement of the objectives set in the strategic and operational planning stages**
- **Deals with the quality of management conditions established and management processes that occur**

Performance Category

- **Set of related skills, procedures, and capabilities which define a particular area of institutional function or performance**
- **Describes a generalization or pattern of performance which can be observed or verified through research**

Performance Categories for Institutional Assessment

- 1. Organizational autonomy**
- 2. Leadership**
- 3. Management and administration**
- 4. Commercial orientation**
- 5. Consumer orientation**
- 6. Technical capability**
- 7. Developing and maintaining staff**
- 8. Organizational culture**
- 9. Interactions with key external institutions**

Organizational Autonomy

- Degree of independence from governmental and regulatory agencies
- Power to make decisions on important matters
- Adequate level of autonomy—prerequisite for success of institutions

Leadership

Effective leadership is necessary and important at all levels of an organization

- Provides vision and mission
- Provides sense of direction
- Establishes good communication and influence
- Engages in team building
- Inspires and motivates
- Demonstrates firm and fair treatment
- Shows commitment and dedication
- Demonstrates competence and is hardworking
- Is positive, energetic and dynamic
- Sets positive example (positive role model)
- Encourages problem-solving environment

Effective Management

Management organizes people and resources to accomplish work of the institution

Good Managers

- have a clear sense of goals and priorities
- are aware of operational details
- systematically plan, implement, monitor
- coordinate and control activities
- decentralize and delegate
- develop teamwork, cooperation, and good communication
- set and use performance indicators and standards to evaluate performance

Key Administration

Administration provides clear policies and procedures to regulate and guide actions of management

Organizations need effective subsystems for:

- personnel
- budget
- accounting
- financial management
- procurement of supplies and services
- management information systems
- maintenance management
- stores and inventory control

Commercial Orientation

Concern for:

- cost effectiveness**
- value for money**
- operating efficiency**
- quality control**
- clear and auditable financial records**
- budget control**
- tariff structure**

Consumer Orientation

- **Primary function—serving consumers**
- **Client/consumer awareness—important factor in all decisions and actions**
- **Create means for effective interaction with consumers**
- **Quick response to complaints and suggestions from consumers**
- **Build and project a positive image of the institution**

Organizational Culture

- **Set of values and norms which inform and guide everyday actions**
- **Pattern of shared beliefs and assumptions which translate into observable behavior**
- **How organizations deal with change or crisis**
- **Acceptance of innovation and support of positive developments OR resistance to change at the cost of overall organizational health**
- **Sense of pride in belonging to the organization**
- **Facilities look clean, well maintained and attractive**



Interactions with Key External Institutions

Capacity to influence positively and strategically institutions which affect it

**Politically - ministry, legislative bodies
Legally - regulatory agencies
Financially - lending sources, budget, etc.**

Ability to influence and adapt to the external entities to achieve its goals

Example of Performance Category Indicators (I)

Performance indicators, measures, and standards

1. **Indicator:**

Is oriented toward producing results which move work toward meeting goals

Measure:

1-----2-----3-----4-----5---

Very
low

Low

Medium

High

Very
high

Standard:

To be set internally, or externally, and is relative

Example of Performance Category Indicators (II)

Performance indicators, measures, and standards

2. **Indicator:**

Shows sense of dynamism and energy in everyday contact with others

Measure:

Standard:



As in the previous overhead



Objectives of Session 9

- **Discuss the concepts of vision and mission**
- **Formulate a vision and mission statement for a national agricultural research institution**

Vision and Mission

- **What is a vision?**
- **Need for a vision**
- **Formulation of the mission**
- **Methodology**
- **Terminology**

Vision

- **an idea that portrays future attributes desired for the organization**
- **attempts to establish the ideal future of a NARI**

***Visioning is a deep voyage into the heart
and soul of an organization***

***The essence of successful organizational visioning
is a commitment to rethinking and reviewing
the organization***

Why Should Organizations Develop a Vision?

Visions:

- inspire and motivate**
- provide direction and foster success**
- are essential to the future of the organization**



Formulating the Vision

What will

- the purposes of the NARI be?
- the organization be like in 10-15 years time?
- the major products and services be?
- the shared values of the NARI be?

A Planning Comparison

STRATEGIC PLANS

VISIONS

Appeal to mind	↔	Appeal to heart and spirit
Rational	↔	Intuitive
Linear view	↔	Holistic view
Reaction to trends, peers	↔	Desire to be unique, creative
Focus on directions	↔	Focus on end-state
Show how to get there	↔	Unclear how to get there
Walk forward to the future	↔	Work backward from the future
Cool, bureaucratic language	↔	Hot, poetic language
Secret	↔	Public
Push people	↔	Draw people

Mission and Mission Statement

Mission

is the purpose of an institution (in widest sense)

Mission statement

- **short, clear, and concise**
- **states the major purpose**
- **gives the most comprehensive reason justifying the institution's existence**

Name Isn't Everything

Center
for Radioactive Isotopes
and the Biosphere

The name of an organization is not enough to express its wishes and communicate them to others

Needed: a mission statement

Components of a Mission Statement

Basic purpose

Products and services

Clients

Values, philosophy and technology

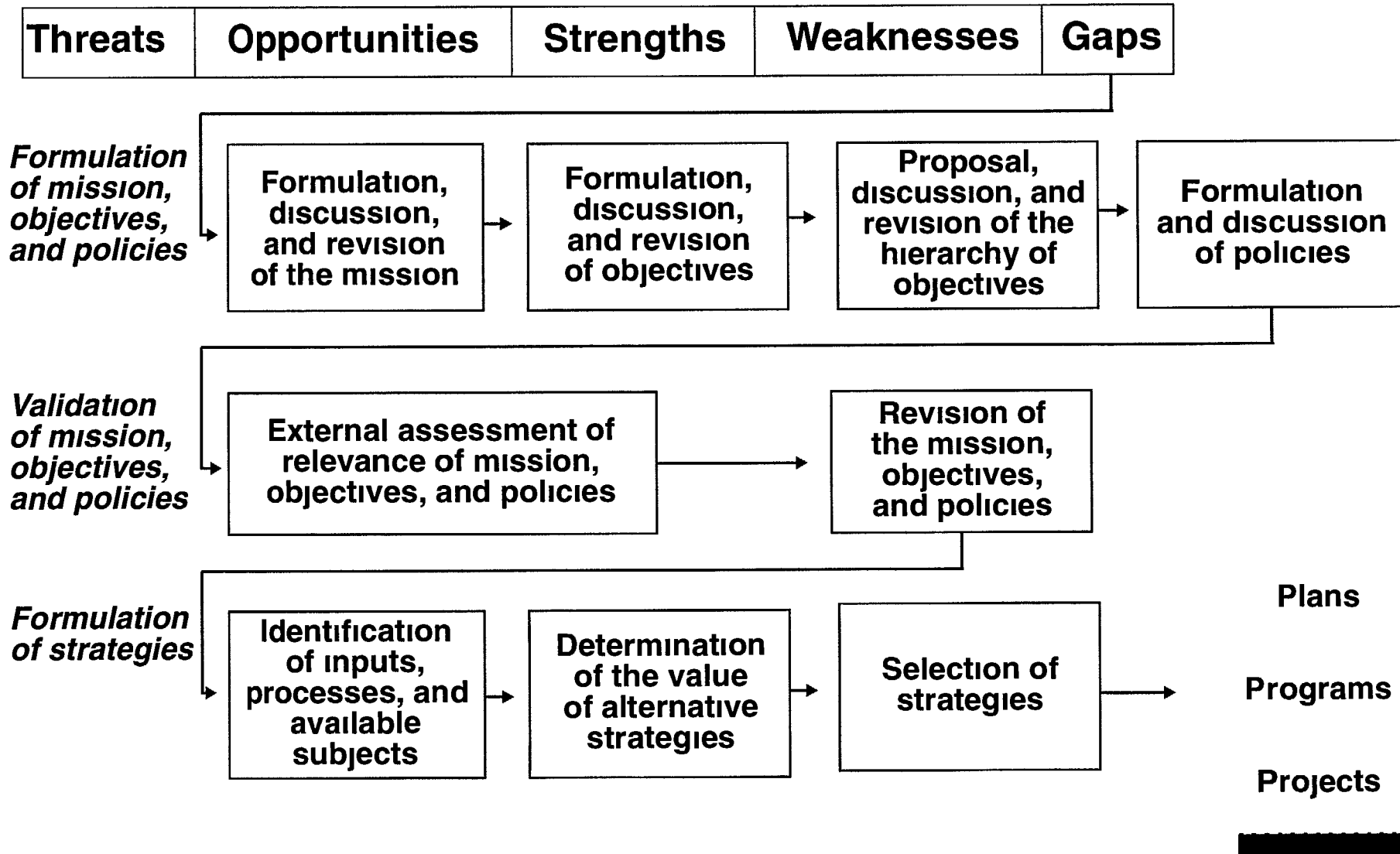
Self image

Sources of inspiration

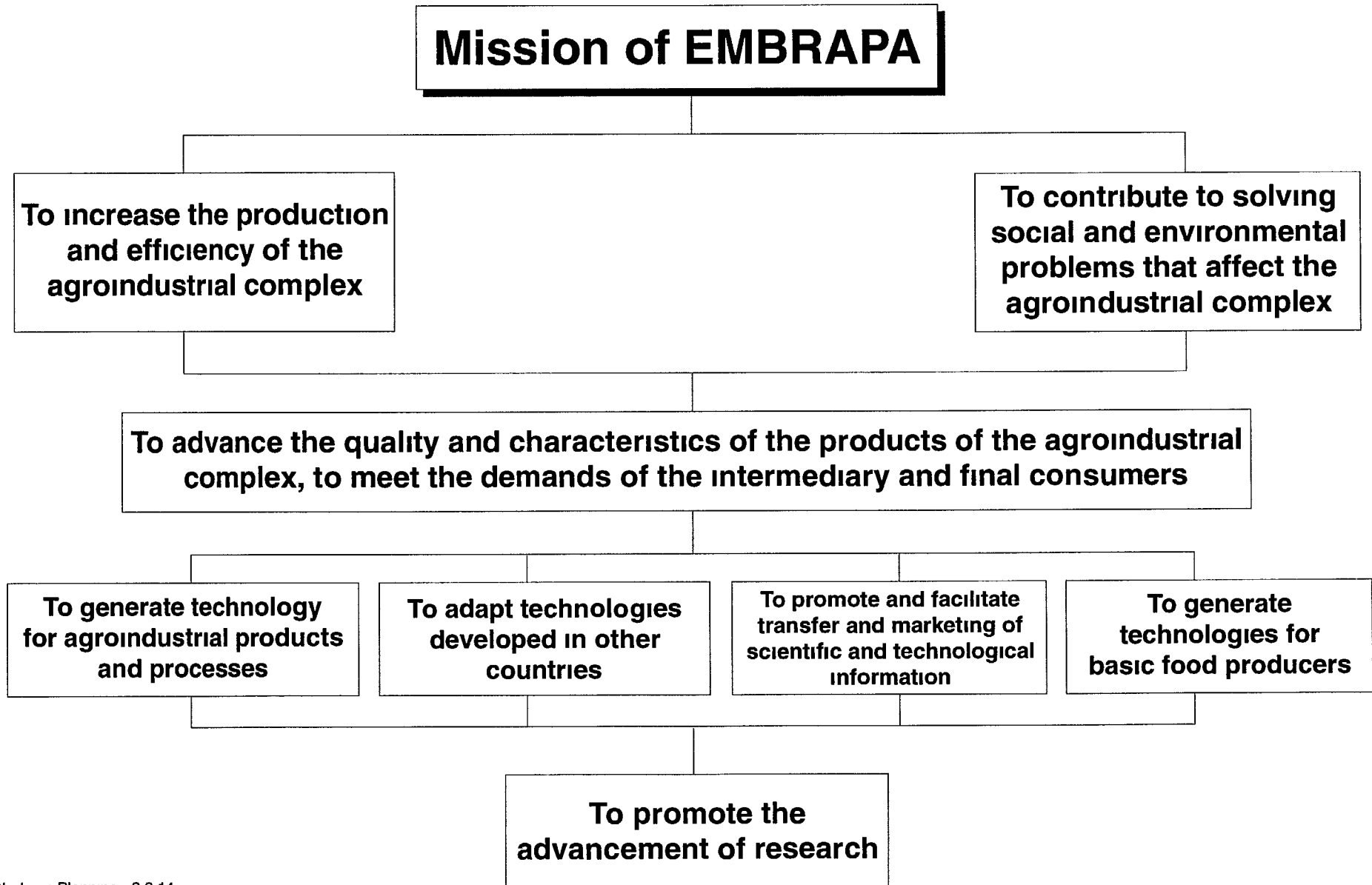
Questions to Answer in the Mission Statement

- What is the business of the NARI?**
- What are the main products/services?**
- Who are the relevant clients?**
- What are the organization's research approaches?**
- What are the values, beliefs, and aspirations?**
- What is the organization's attitude to its sustainability?**
- What are the key strengths and advantages?**
- What image would the organization like to have?**
- What motivates and inspires the organization?**

Analysis



Hierarchical Classification of EMBRAPA's Objectives



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Objectives of Day Four

- 1. Formulate objectives for a NARI based on the vision and mission statements**
- 2. Formulate policies for a NARI**
- 3. Formulate strategies for a NARI**

Schedule of Day Four

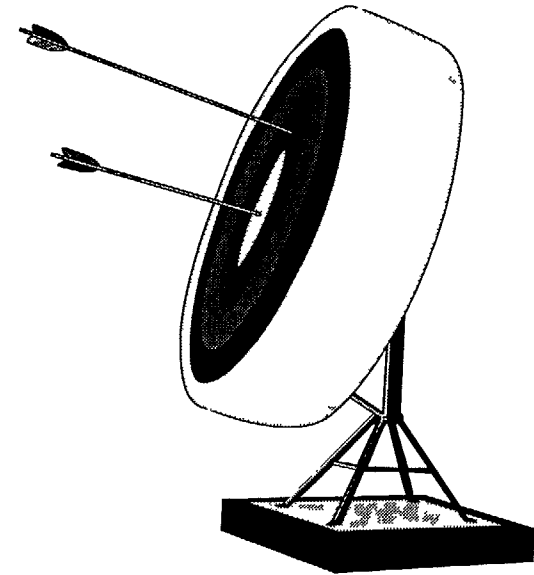
08:30 – 09:00	Opening of the Day's Activities
09:00 – 10:30	Session 10. Formulating Objectives
	_____ Tea/Coffee Break _____
10:45 – 13:00	Session 11. Formulating Policies
	_____ Lunch _____
14:00 – 15:15	Session 12. Formulating Strategies
	_____ Tea/Coffee Break _____
15:30 – 17:00	Session 12. (Continued)
17:00 – 17:30	Feedback on the Day's Activities and PAPA

Objective of Session 10

- **Formulate objectives for a NARI based on the vision and mission statements**

Objective and Target

- ***Objective in the broadest sense:***
the future state, situation, or results that somebody wants to achieve
- ***Target***
illustrates an objective that is achievable through the mobilization of inputs and processes



Categories of Objectives

- **Institutional**
- **Functional**
- **Operational**

Institutional Objectives

- **based on the institution's mission statement and external, organizational, and gap analyses**
- **strategic in nature**
- **long-term**
- **rather inflexible**
- **qualitative**
- **serve as reference for formulating policies and strategies and for functional objectives**

Functional Objectives

- ◆ **based on institutional objectives**
- ◆ **refer to tactical level**
- ◆ **medium-term**
- ◆ **more flexible**
- ◆ **quantitative-probabilistic**
- ◆ **serve as reference for formulating functional norms and tactics and for operational objectives**
- ◆ **middle management responsible**

Operational Objectives

- **derived from functional objectives**
- **refer to operational level**
- **short-term**
- **highly flexible**
- **quantitative-deterministic**
- **serve as reference for formulating operational directives and activities in administrative and technical units**
- **line managers are responsible**

Guidelines for Formulating Objectives

- 1. Coherence between mission and objectives**
- 2. Within the categories, list objectives hierarchically**
- 3. Use an objective flowchart to rank in the following order:
institutional, functional, and operational objectives**
- 4. Those responsible for the strategic planning process
should support/organize the steps of the process**

Different Objectives

<i>Management</i>	<i>Objectives</i>	<i>Plan</i>	<i>Term</i>
top	institutional	strategic	long
middle	functional	tactical	medium
operational	operational	operational	short

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Objective of Session 11

- **Formulate policies for a NARI**

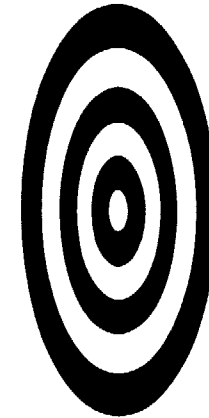
Policy

- Definition**
- Concepts: typology**
- Formulating policies**

Policy: Definition

A policy is a formal guide to decisions and behavior intended to stimulate, support, or guide action in a desired direction toward the attainment of an objective

Let's all shoot at the same target



Policies are input toward achieving an objective

Policy: Typology

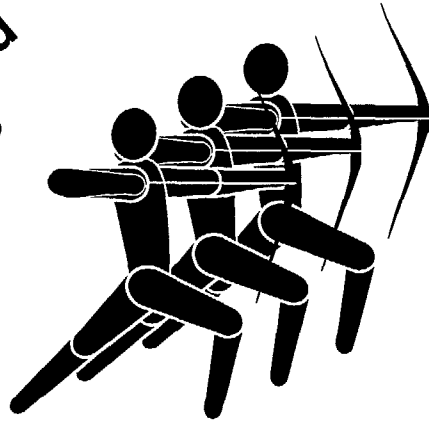
By their:

- ***scope:* general or specific**
- ***way of being made known:* explicit /implicit**
- ***origin:* established, solicited, or imposed**
- ***objective:* innovative, for maintenance, or for survival**
- ***level of decision making:* strategic, functional, or operational**
- ***nature:* institutional or technological**

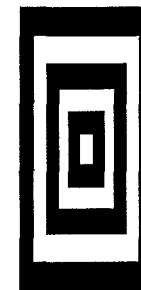
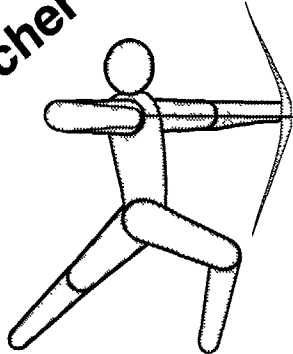
Policy Characteristics

- **Flexible**
- **Targeted**
- **Ethical**

**Beneficiaries,
farmers, and
donors**

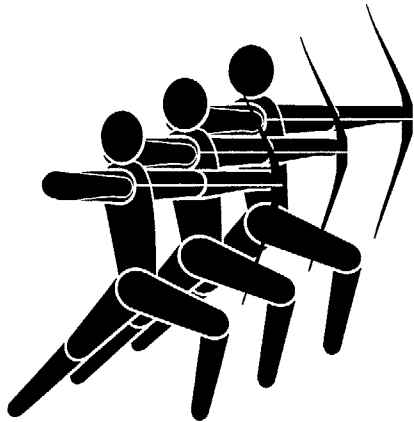


Researcher

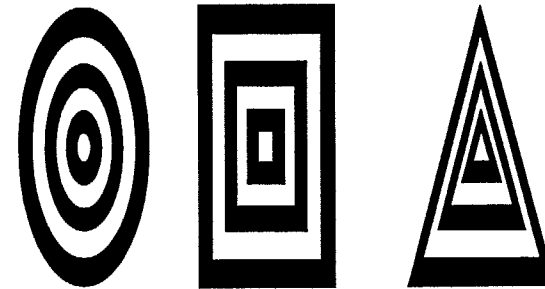


**Sometimes researchers and external groups
aim at different targets**

**Beneficiaries, donors,
and collaborators**



Which target to aim at?



What is your opinion?

**Validation of objectives requires
external consultation**

Wisdom

Remember when you formulate policies and strategies:

- Too many limits, boundaries, and restrictions can be counterproductive**
- Too much openness can promote chaos**

Objective of Session 12

- **Formulate strategies for a NARI**

Strategy

- Definition**
- Concepts**
- Formulating policies**

Strategy: Definition

- **Logical set of decisions to take an appropriate course of action to achieve an objective**
- **Logical combination of actors, factors, and actions, selected from among other alternative combinations to achieve a certain objective in a specific context**

Policy versus Strategy (II)

Policy

- **General**
- **Expresses desire**
- **Focuses on many objectives**
- **Sets of decisions**
- **Emphasizes internal environment**



Strategy

- **Specific**
- **Expresses tasks**
- **Focuses on few objectives**
- **Sequences of steps**
- **Emphasizes external environment**

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The Need for Strategies

Strategies are needed because there are:

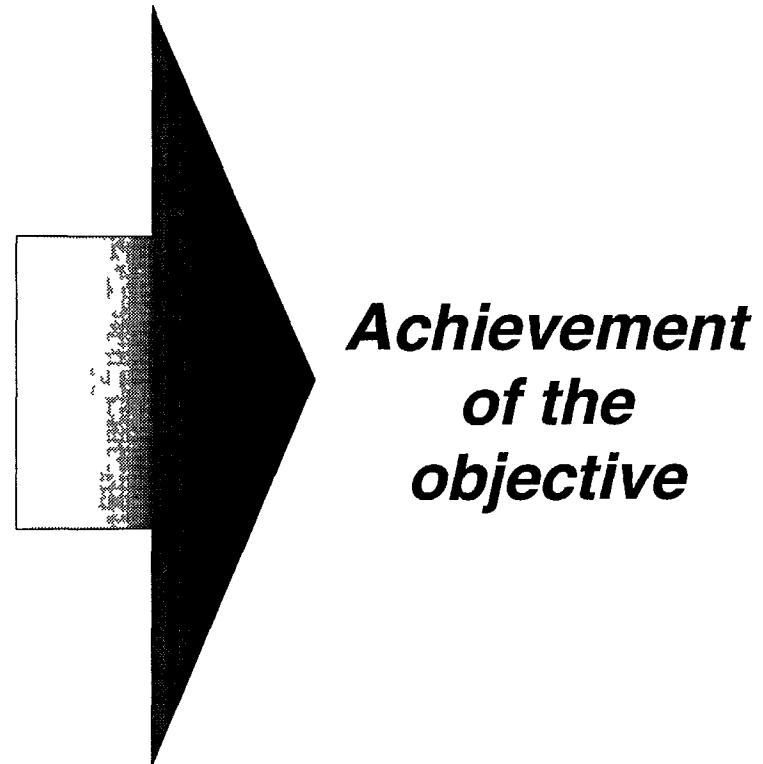
- ◆ **opportunities to be taken advantage of**
- ◆ **threats to be avoided**
- ◆ **strengths to be used**
- ◆ **weaknesses to be reduced**
- ◆ **gaps to be overcome**

Strategies: Methodology

- **There is no unique methodology, but it is agreed that much information, intelligence, creativity, and experience is required**
- **The clarity and precision of the objective is key to setting a strategy and to its success or failure**

Questions to Formulate a Strategy

- ◆ What is the objective?
- ◆ What is the context?
- ◆ Who are the relevant actors?
- ◆ What are the strategic factors?
- ◆ What are the most important actions?
- ◆ What are the logical steps?



11 Questions for Selecting Strategies

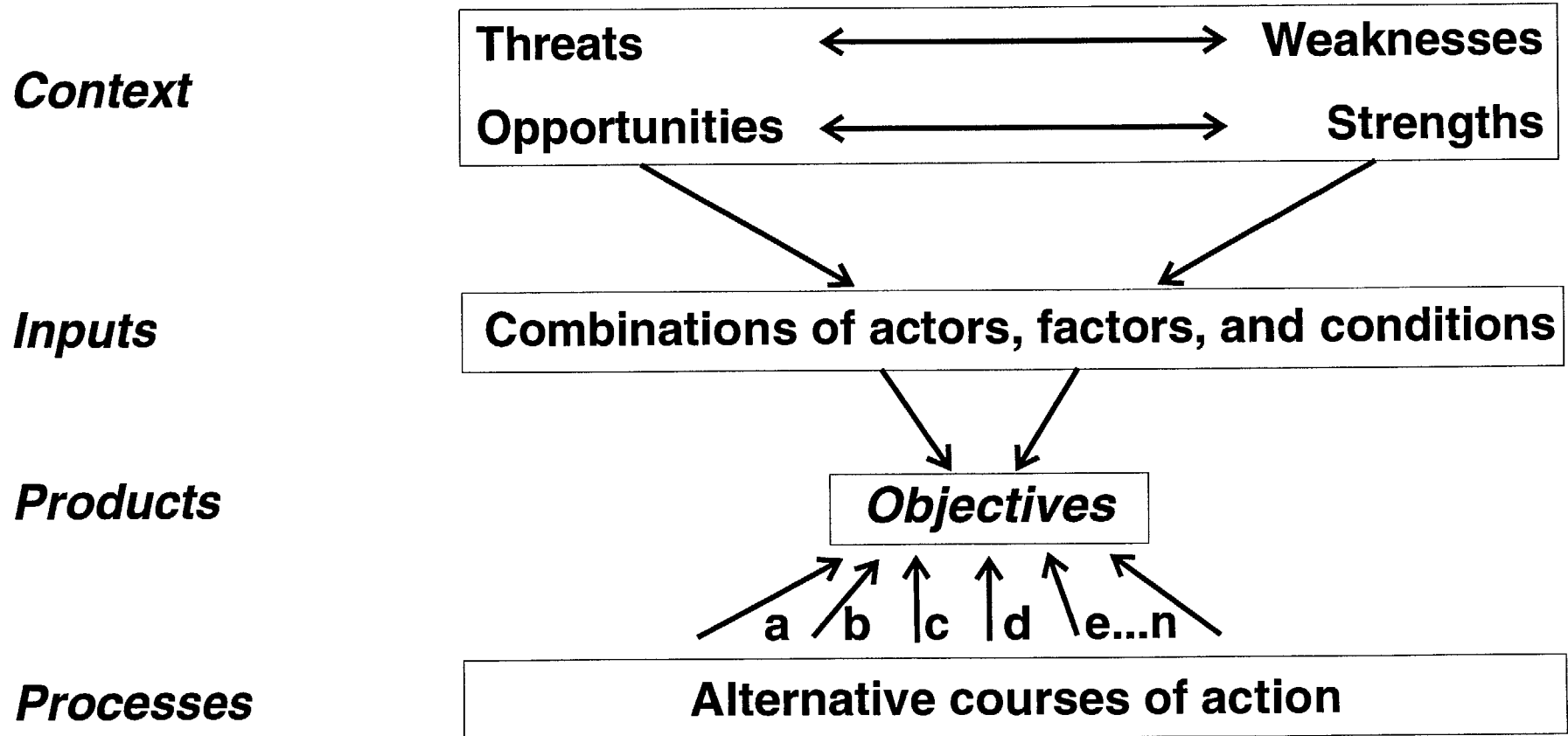
- 1. What are the most critical external factors for defining the objective?**
- 2. What price are you willing to pay to achieve the objective?**
- 3. What are the critical limits of those interested in achieving the objective?**
- 4. What small, initial concessions would you offer to gain support?**
- 5. Which concessions would you make in the most critical moment to achieve your objective?**
- 6. What time limits are there?**

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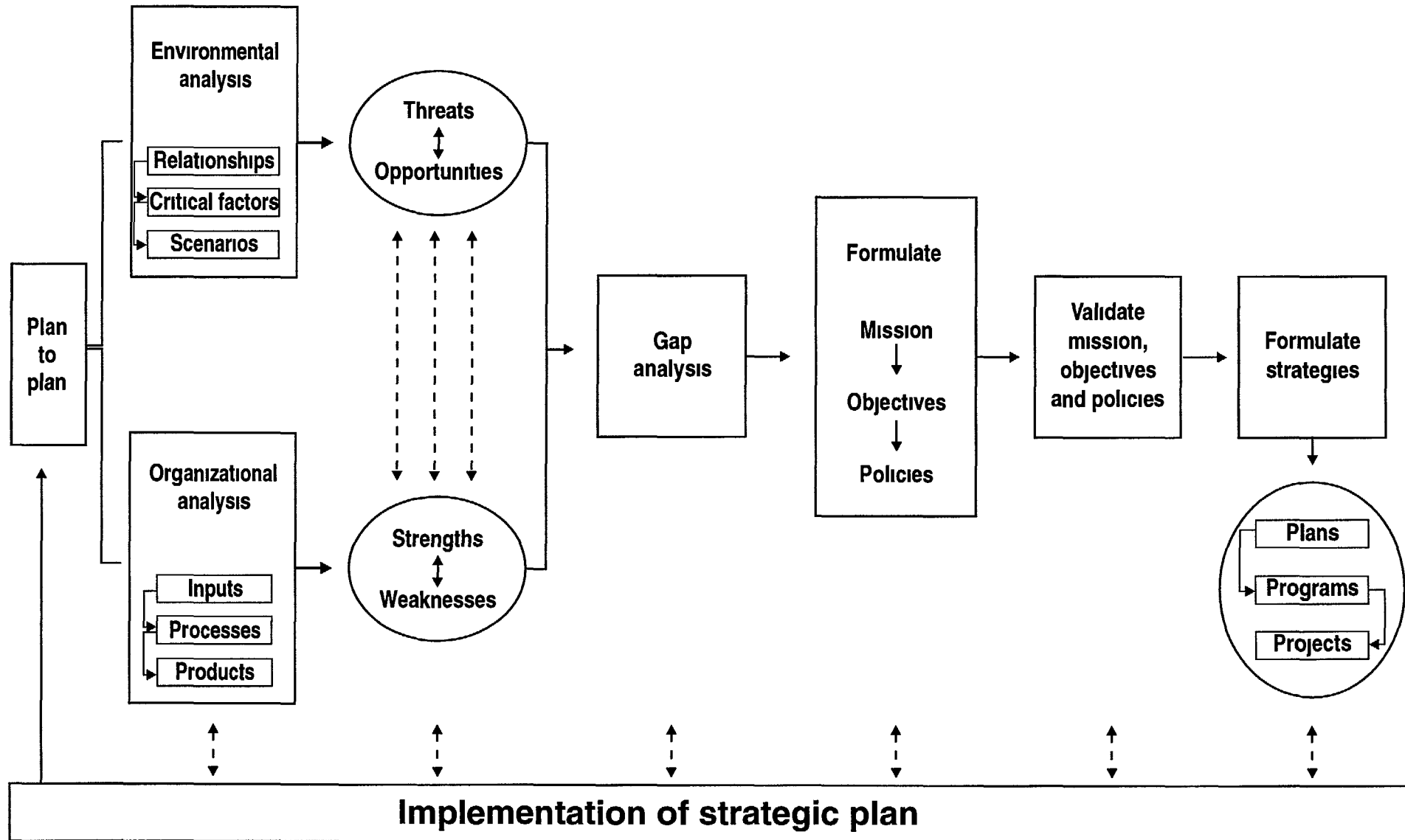
11 Questions for Selecting Strategies (continued)

- 7. What are the external critical factors for achieving the objective?**
- 8. What critical questions can the opposition present, and what would be the logic for answering them?**
- 9. Who are the key actors involved?**
- 10. What is the best way to start?**
- 11. What actions could other actors initiate, and how could you react?**

Strategy Formulation in Terms of CIPP Framework



Strategic Planning Process



10/1

Objectives of Day Five

- 1. Discuss the role of leaders/managers in the management process**
- 2. Explain the factors of success and failure in the process of institutionalization of planning**
- 3. Develop strategies to lead a process of institutionalization of planning with the strategic approach**
- 4. Develop individual plans of action for future activities in strategic planning**
- 5. Evaluate the workshop**

Schedule of Day Five

08:30 – 09:00	Opening of the Day's Activities
09:00 – 10:30	Session 13. The Management Process: Role of Leaders/Managers
<hr/> Tea/Coffee Break <hr/>	
10:45 – 11:45	Session 13. (Continued)
11:45 – 13:00	Session 14. Institutionalization of Strategic Planning
<hr/> Lunch <hr/>	
14:00 – 14:45	Session 14. (Continued)
14:45 – 15:15	Session 15. Participant Action Plan Approach (PAPA) and Workshop Evaluation
<hr/> Tea/Coffee Break <hr/>	
15:30 – 16:30	Session 15. (Continued)
16:30 – 16:45	Closure of the Workshop

Objective of Session 13

- **Discuss the role of leaders/managers in the management process**

● ● ● ●

What do we need?

Leaders?

Managers?

or both?

Leadership Qualities

Often described in terms of personal attributes, such as:

- intelligence
- energy
- initiative
- enthusiasm
- creativity

Leadership Is:

- ◆ **More than a personal attribute, a quality of personality, or a character**
- ◆ **A role determined by expectations of a group of people or an organization**

Expectations of a Leader

- ❑ **Enable the group or organization to fulfill its mission**
- ❑ **Hold it together as a working unit**

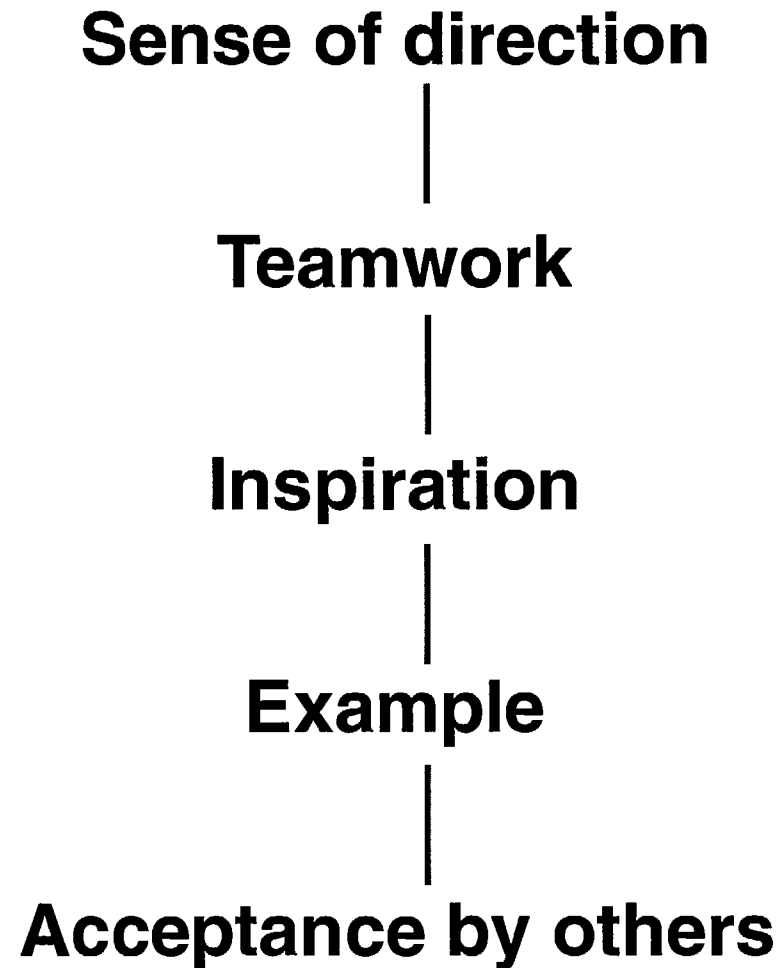
A leader is a person who has the appropriate qualities, knowledge, and skills to lead a group to achieve its objective

Original Meaning of Lead

Originates from “LAED” which means:

path, road, course of a ship at sea, journey

Five Distinctive Characteristics of Leadership



Functions of a Leader

- 1. Challenge the process**
- 2. Inspire and share vision**
- 3. Enable others to act**
- 4. Model the way**
- 5. Encourage the heart**

Management? Managers? What Do They Mean?

- **These words origin from the Latin word "MANUS" meaning hand**
- **The father of these words is the Italian verb for "handling" or "managing" a war horse**

History of “Managers” (I)

In the 18th and 19th centuries the term “managers” was used for employees who ran the business of factories or companies

History of “Managers” (II)

Managers were largely drawn from the pool of engineers or accountants of the company and, being more technically oriented, were more concerned about machines and figures

Historical Assumption of Managers

Running a business is a problem of managing hands:

- **no concern about people**
- **people seen as cogs in a machine**
- **the organization as a whole seen as a machine that managers were running**

Concept of “Managing”

- **Focuses much more on objectives that have to be achieved than on the processes that have to be maintained**
- **Puts much greater emphasis on the results**

Management Believes in and Stresses:

Application of systems



Scientific method



Planning



Monitoring



Controlling



Good administration

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Management Functions

- Communication**
- Conceptualization**
- Collaborative work environment**
- Monitoring and performance feedback**
- Problem solving/Conflict resolution**
- Team effectiveness**
- Decision making**
- Representation of unit**
- Technical leadership**
- Staff development**

Managers versus Leaders (I)

Managers Believe and Stress

/

Leaders Promote

Application of systems

Scientific method

Planning

Monitoring

Controlling

Good administration

Sense of direction

Teamwork

Inspiration

Motivation

Example

Acceptance by others

Managers versus Leaders (II)

Managers

/

Leaders

administer



innovate

focus on systems and structures



focus on people

rely on control



inspire trust

have a short-range view



have a long-range perspective

ask how & when



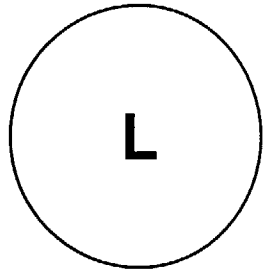
ask what & why

do things right

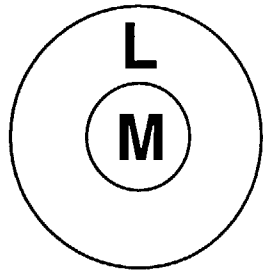


do the right things

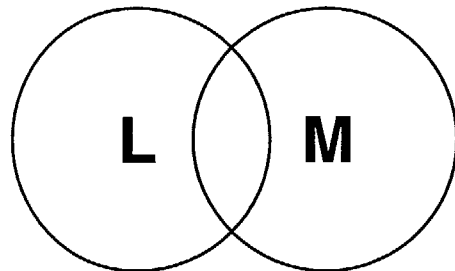
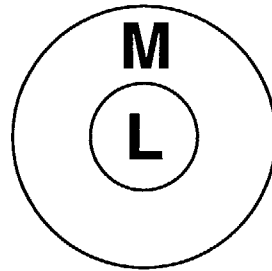
Leader—Manager Models



L&M are distinct and separate



M is part of L or vice versa



L&M have a lot in common

Objectives of Session 14

- **Explain the factors of success and failure in the process of institutionalization of planning**
- **Develop strategies to lead a process of institutionalization of planning with the strategic approach**

Institutionalization of Strategic Planning

- 1. Definition of institutionalization**
- 2. Framework for institutionalization**
- 3. Key factors to take into account**
- 4. Resistance to change**
- 5. Wisdom**
- 6. Points for discussion**

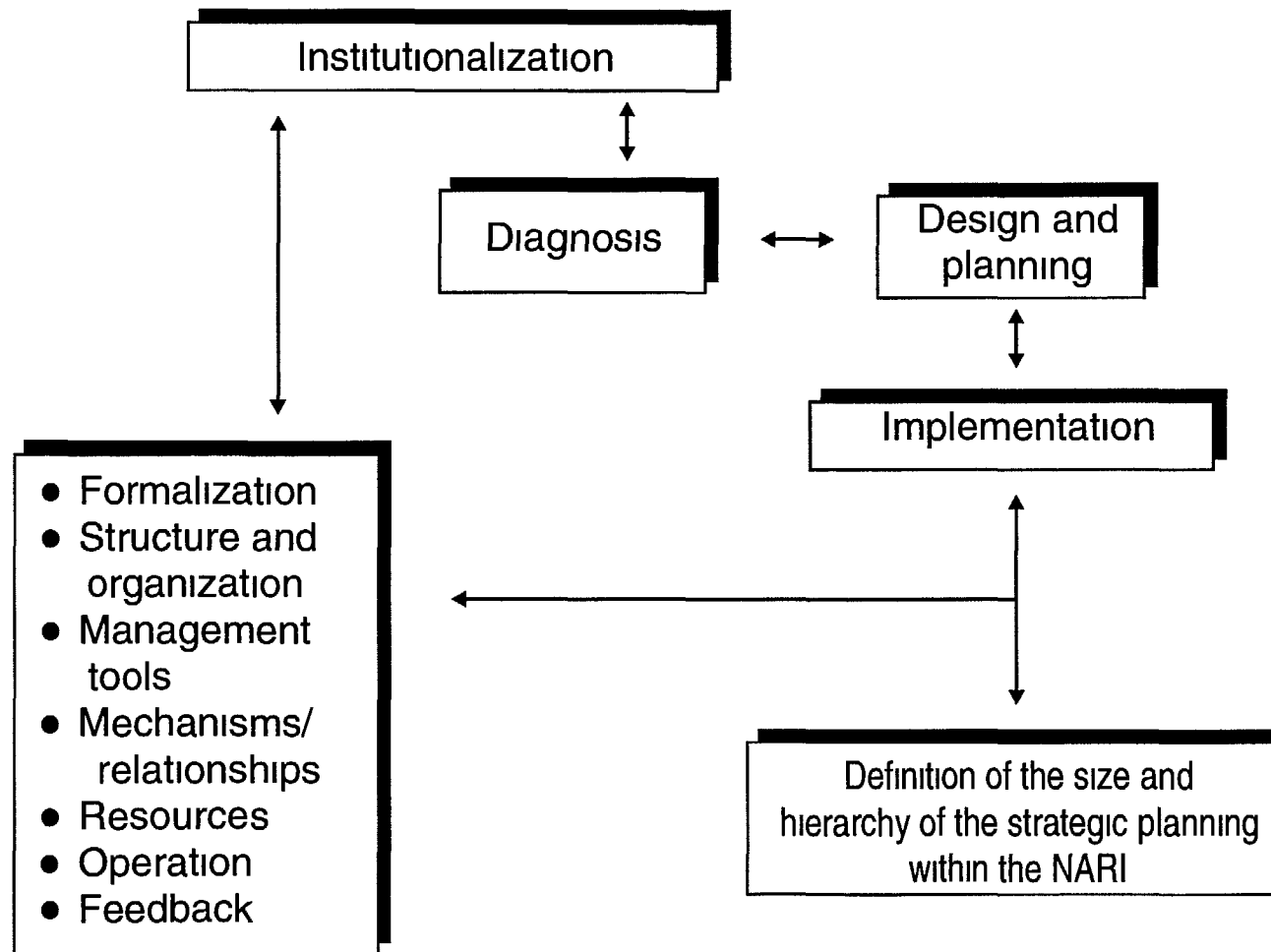
Definition of Institutionalization

A process by which the structure and organization of strategic planning is accepted

- **with predictable patterns and guidelines of action and interaction**
- **to achieve a determined goal**

SP

Institutionalization of Strategic Planning



Key Factors to Be Considered

- **Formalization**
- **Structure and organization**
- **Management tools**
- **Mechanisms/relationships**
- **Resources**
- **Operation**
- **Feedback**

Key Factors (I)

Formalization

- **strategy**
- **leadership**
- **organizational culture**

Structure and Organization

- **should not be rigidly framed**
- **clear definition of responsibilities**
- **clear flow of information**

Key Factors (II)

Management tools

- training

Mechanisms/relationships

- planning
- programming
- budgeting
- information systems

Key Factors (III)

Resources

- human
- financial
- physical

Operation

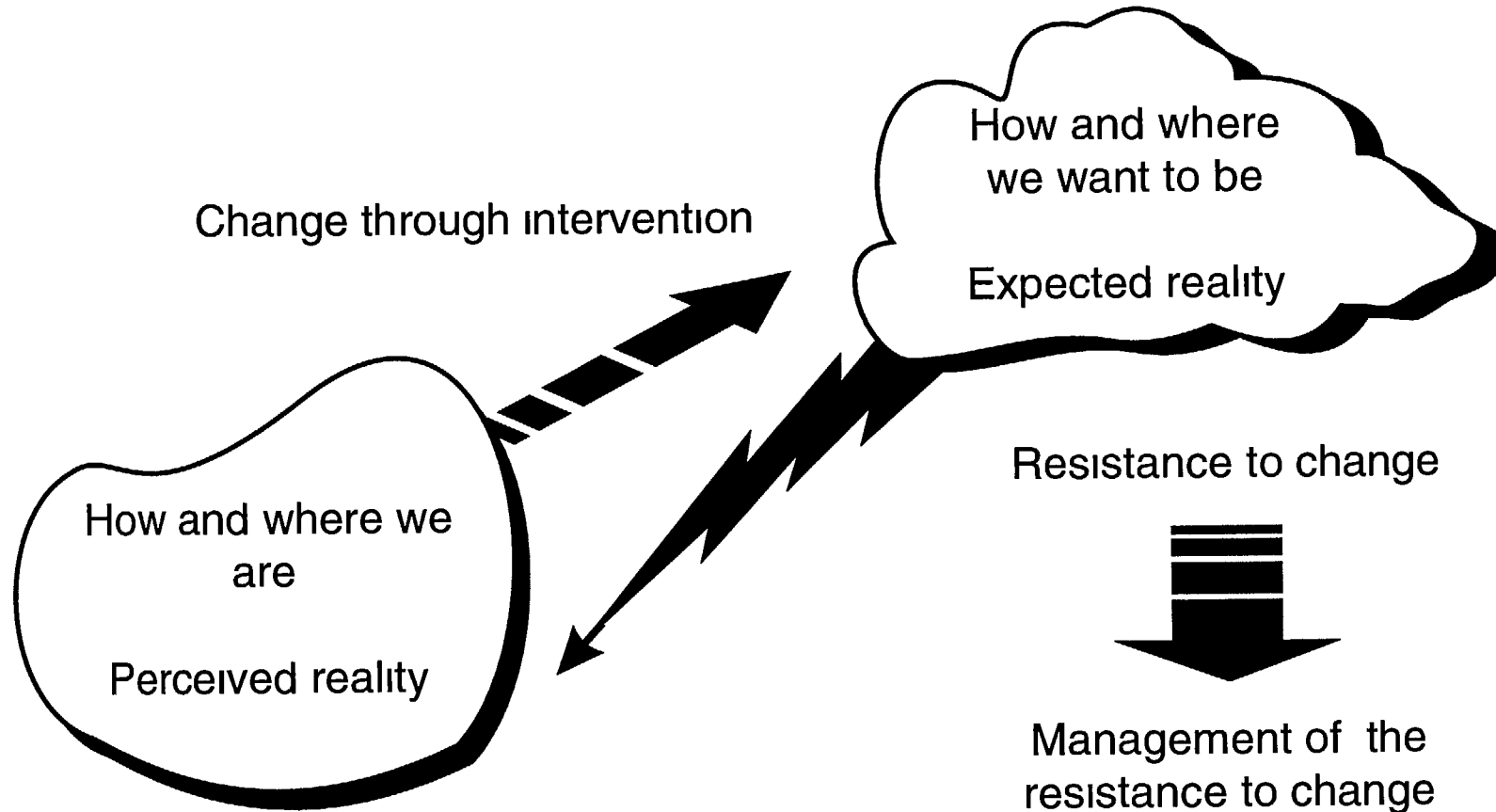
- protocols
- procedures
- guidelines

Feedback

Change Process

Actual situation

Future situation



Source IJPA 16 93

Wisdom

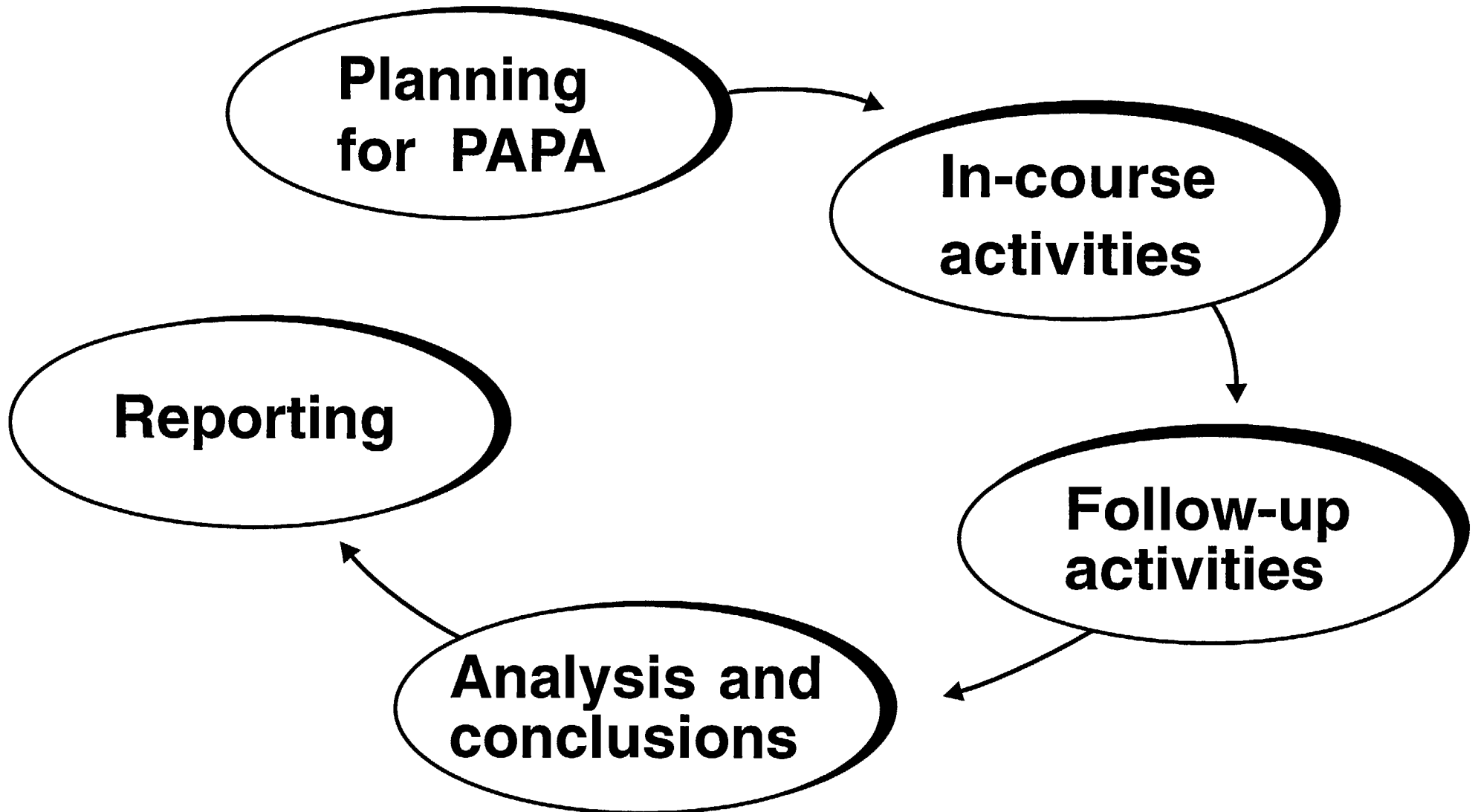
- **To over-institutionalize is as futile as weak institutionalization or none at all**
- **There is no universal principle on how to institutionalize a strategic process**
- **The success or failure of any institutionalization effort depends on human conduct and the desire for change**

Objectives of Session 15

- **Develop individual action plans for future activities in strategic planning**
- **Evaluate the five-day workshop**

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Steps in PAPA



Step 2: In-Course Activities

Stage 2

Objectives:

- develop action plan

Procedure:

- prepare preliminary list of action items
- confer with partner
- finalize and prioritize list of action items
- report individual action plans
- make copy and submit to trainer

5/15