AGROFORESTRY AND NATURAL RESOURCES

EXTENSION TRAINING WORKSHOP

May 6 - 18, 1990

Antananarivo, Madagascar

Workshop Report

Produced by Susan Huke
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ORIGIN AND RATIONAL

The Agroforestry and Natural Resources Extension Training (ANRET) Workshop held in Antananarivo, Madagascar from Sunday, May 6 through Friday, May 18, 1990 was one of a series of workshops held in selected sub Saharan African countries. The purpose of these workshops was to bring together extension trainers and program managers to share materials, methods and strategies for training extension workers. The workshop was co-hosted by the Energy/Development International's Natural Resources Management Support (NRMS) program and SAFAFI, a national NGO. It was funded primarily by USAID's Africa Bureau. The lead trainer, Susan Huke was provided by the Forestry Support Program (AID/FSP/OICD).

Twenty-seven participants attended the workshop. They represented national and international PVO/NGOs, parastatal organizations, and government agencies (see Appendix 1 for list of participants and trainers). Most participants were project managers and/or were responsible for training the extension staff of their projects. Types of projects represented fall under the categories of conservation and development, integrated rural development, and agricultural extension. The workshop was intended to stimulate follow-up training activities in each project represented.

The workshop curriculum was based upon the Agroforestry Extension Training Sourcebook published by CARE in August, 1989. The Sourcebook is a trainer's guide synthesizing state-of-the-art extension worker training methodology. It is expressly designed for local level use.

The time and effort of a number of people contributed to the success of this workshop. These include Lisa Gaylord who did an excellent job coordinating the administrative and logistical aspects, Prosper Ramiandrison, who provided strong logistic support, and the three trainers, Susan Huke (Forestry Support Program), Rene Rabenzandrina (University of Madagascar), and Roy Hagen (Independent Consultant). Both Jean Louis Rakotomanana (FOFIFA) and Claus Moller (Cooperation Swisse) generously contributed their time to prepare and lead field visits to their project sites. These visits were a highlight of the workshop. The assistance of Wolfgang Leumer of DVV, who provided some of the workshop training materials, is also greatly appreciated.

WORKSHOP GOALS AND OBJECTIVES

Goals

1) To assist participants to develop and/or improve their agroforestry and natural resource extension training skills;

2) To enhance participants' knowledge of agroforestry technologies appropriate for the ecological conditions and socioeconomic needs of Madagascar.

Workshop Objectives

1. Introduce participants to the concept of agroforestry and the potential usefulness of agroforestry technologies to address local natural resource management problems;

2. Assist participants to identify the needs of their projects for training in agroforestry and natural resource extension;

3. Introduce participants to the Agroforestry Extension Training Sourcebook and explore its applicability to their extension training needs.

4. Assist participants to plan for follow-up training exercises in their own projects

Content Areas

The workshop contained five basic content areas. A summary description of each content area is given below. A review of each course is presented in the following section on curriculum.

Content Area One: Identification of project extension approaches and their impact on extension training needs.

The purpose of courses in this content area was to increase the participant's awareness of their project's extension approach and the relationship between extension approaches and extension training needs.

Content Area Two: Identification of natural resource management extension training needs.

Courses in this content area assisted participants to understand how to do a training needs assessment. Participants carried out a mini-assessment during the workshop.

Content Area Three: Concepts and principals of agroforestry and natural resources management

The purpose of this content area was to introduce agroforestry concepts and principals and to strengthen participants' knowledge and technical skills. The content area began with a course on natural resources management (NRM) problems in Madagascar and their causes. This was followed by a course on traditional agroforestry techniques during which participants exchanged knowledge of techniques used in their regions. Courses were also given on improved NRM techniques. Several field trips were taken to provide concrete examples of techniques potentially suitable for participant projects.

According to participant evaluations, the field trips were among the most useful courses of this content area. Participants expressed a need for more training and technical assistance.

Content Area Four: Extension communication theory and practice

The intent of the communication courses was to increase participant awareness of the various communication skills needed for successful extension. Facilitators and participants discussed the importance of identifying and utilizing appropriate farmer communication channels and of communicating effectively with co-workers and farmers. Participants were given an opportunity to demonstrate their knowledge through role plays.

This was the most popular content area of the workshop. Many participants felt that they would be able to utilize skills learned here in their projects and made communication training a priority follow-up training activity.

Content Area Five: Diagnosis, design and monitoring of agroforestry interventions

Courses in this content area were designed to strengthen participant abilities to identify NRM problems, design agroforestry systems which address those problems, and monitor/evaluate the adoption of those systems.

Participants generally felt that they had benefited from these courses. Several felt that they needed more training in this area.

Analysis and Application Sessions

The final course for each of the above content areas was an "Analysis and Application Session", during which participants analyzed what they had learned and identified aspects of the content area which they would like to incorporate into their own project training programs.

The final afternoon and morning of the workshop were spent planning follow-on training activities for individual projects. These plans are included in Appendix 2 and are summarized in the section Participant Follow-up.

COURSE CURRICULUM

Track 0: Introduction to ANRET Workshop

Session: 0.1
Time: Sunday, 5:00-5:45
Title: **Opening remarks/introductions**

Presenter: Rene

Objective: Participants were introduced to workshop trainers and administrators so that they would become aware of the workshop background and purpose.

Method: Trainer made a 15 minute presentation describing events leading to the workshop and its purpose. Then, each trainer/administrator introduced himself/herself and said a few words about their respective roles in the workshop.

Output: Participants were more aware of the purpose of the workshop and were more familiar with the trainers/administrators.

Session: 0.2
Time: Sunday, 5:45-6:00
Title: **Logistics/administration**

Presenter: Lisa

Objective: Participants were informed of the contents of their information packets, per diem procedures, hotel facilities and services.

Method: Presentation/question and answer period.

Output: Participant familiarity with logistical aspects of training.

Session: 0.3
Time: Sunday, 6:00-7:00
Title: **Ice-Breaker**

Presenter:Susan

Objective: Participants became familiar with one another and developed an attitude of fun and enjoyment about the workshop.

Method: Animal picture game.

Output: Increased participant familiarity with each other.

Ice breaker followed by reception and dinner

Session: 0.4
Time: Monday, 8:30-9:00
Title: **Goals, Objectives and Themes**

Presenter: Susan

Objective: Participants became familiar with the purpose of the workshop and hosts' expectations for the participants.

Method: Presenter read and elaborated from flip charts, and facilitated questions and comments.

Output: Building block for Expectations Setting

Session: 0.5
Time: 9:00-10:30
Title: **Workshop Opening/Key Note Address/Reception**

Organizers: Lisa and Prosper

The workshop was opened with a key note address presented by the Assistant to the Minister of Animal Production and Forestry. (See Newspaper Article in Appendix 4).

Session 0.6
Time: 10:30-11:30
Title: **Agenda Review**

Presenter: Rene

Objective: Participants became aware of the content and methodology of the proposed workshop agenda.

Method: Facilitator reviewed the proposed agenda as presented in participants' information packets, and on flip charts, and answered participant questions.

Output: Participants understood the workshop agenda.

Session 0.7
Time: 9:30-10:30
Title: **Reactions/Expectations**

Presenter: Roy

Objective: Organizers learned participants' reaction to the agenda. Participants and organizers gained a common understanding of what participants hoped to gain from the workshop.

Method: Participants formed groups and recorded what members expected to obtain from participation at the workshop. Groups reported out on a round robin basis to the facilitator, with the rapporteur recording on flip chart paper until remarks became too repetitive.

Output: Assurance that Workshop goals and objectives met the needs of the participants.

Session 0.8
Time: 30 mins 14:00-14:30
Title: **Workshop Norms**

Presenter: Lisa

Objective: Participants agreed on proper behavior during workshop to facilitate smooth functioning.

Method: Presenter introduced idea of workshop norms, then facilitated ideas from the group and sought concensus or majority votes.

Content: Smoking rules and areas, projecting voices, interrupting, use of jargon, arriving on time, etc.

Output: Participants agreed to modify individual preferences/tendencies for collective good.

TRACK: 1. IDENTIFICATION OF PROJECT EXTENSION APPROACHES

Session: 1.1
Time: 1 hour (14:30-15:30, Monday)
Title: **Diversity of Extension Approaches**

Presenter: Susan

Objective: Participants learned that there are a wide variety of extension approaches and that each one has potential advantages and constraints.

Method: Presentation and discussion. Flip charts were used to present the various factors that vary from one extension approach to another. Participants were assisted to make a list of the issues associated with the various approaches.

Content: Factors which vary from one project to another include: Institutional mechanisms and relationships, target audiences/participants, cycles and scales. Issues include control, flexibility, and efficiency

Output: Participants learned how to categorize the extension approaches of their own projects.

Session: 1.2
Time: 15:30-16:30 PM, Monday
Title: **Identification of extension approaches**

Presenter: Roy

Objectives: Participants were able to identify the approaches of their specific extension projects and to identify aspects of their program which may be strengthened through training.

Method/Content: Plenary, working groups.

Facilitator reviewed key factors that influence an extension approach (referring to output of previous session). Facilitator then assigned working groups (according to same or similar projects) to describe their own extension approaches, identify general strengths and weaknesses, and indicate which aspects may be improved through training. Hand-outs were used to guide discussion. The hand outs guided participants to focus upon the following factors in identifying/analyzing their extension approaches: scale, range of subjects disseminated, institutional arrangements, target population, etc.

Each project selected a representative to present a five-minute description of their project extension approach (to be presented during the next session).

Output: Clearer understanding of issues associated with project approaches.

Session: 1.3
Time: Monday, 16:30-17:30
Title: **Participant Presentation/Analysis of Extension Approach**

Presenter: Rene

Objective: To provide participants an opportunity to learn about and assess each others' project extension approaches.

Method: Each project representative made a five minute presentation which highlighted their project extension approach. Following each presentation was a five-minute question and answer period.

Output: Participants had a greater understanding of each others' extension methods and their relative strengths and weaknesses.

TRACK 2. ASSESSING EXTENSION STAFF TRAINING NEEDS

Session: 2.1
Time: Tuesday, 8:30-9:30
Title: **Roles and Responsibilities of Key Actors in Participatory Extension**

Presenter: Susan

Objective: Participants were able to identify roles and responsibilities of extension teams and farmers in participatory NRM extension projects.

Method/Content: Session started with "brainstorming" of a list of roles and responsibilities of extension workers. This list was then compared with one that had previously been prepared.

Roles of extension teams and farmers include data gathering, analysis, design, communication, extension and training in participatory context. They are responsible for decision-making about wide range of activities. (Sourcebook Module 3, and Introduction).

Output: Participants understood the second step in a training needs assessment.

Session: 2.2
Time: 1 hour (9:30-10:30)
Title: **Steps in Extension Training Needs Assessment**

Presenter: Rene

Objective: Participants were familiar with elements of a Training Needs Assessment.(TNA)

Method/Content: The trainer presented the four basic steps of a training needs assessment to the participants. These steps are: 1) identify project objectives; 2) identify knowledge and

skills needed; 3) identify existing knowledge and skills; 4) determine priority training needs.

Output: Participants learned how to do project-specific TNAs.

Session: 2.3
Time: 10:30-12:30
Title: **Analysis and Application of Training Needs Assessment**

Presenter: Susan

Objective: Participants practiced developing project-specific TNA's

Method/Content: Facilitator assigned task to groups of NGO's who had similar project strategies to do a 'generic' TNA. Trainers encouraged discussion among small group members. Members then worked individually, with assistance from training team members as needed. Individual and group work was guided by a hand out. (See Appendix 5 for copies of handouts).

Output: Participant analyses of own projects, and basis for evaluating remaining workshop sessions and Sourcebook material.

Session: 2.4
Time: Wednesday (9), 8:30-9:30
Title: **Overview of Source Book Approach to Agroforestry and Natural Resource Management Extension Training.**

Presenter: Rene

Objective: Participants were familiar with the history, purpose and organization of the Sourcebook.

Method/Content: Trainer presented a brief history of the Sourcebook conception and preparation. He then described the format for each module and presented the contents of each module.

The presenter paused frequently and encouraged participants to ask questions.

Output: Building block - view of Sourcebook as a tool

TRACK:3 AGROFORESTRY AND NATURAL RESOURCES MANAGEMENT TECHNIQUES SUITABLE FOR MADAGASCAR

Session: 3.1
Time: Tuesday, 2:00-3:00
Title: **Agricultural and Natural Resource Management (NRM) Problems in Madagascar and Their Causes**

Presenter: Roy

Objective: To identify the major constraints to sustainable agricultural production and to natural resource management in the different agroecological zones of Madagascar.

Method: Participatory presentation/guided discussion. Participants assisted the presenter to identify the priority land use problems (particularly in their project areas) and then to identify which of these problems could be addressed by improved land management techniques.

Output: Participants became familiar with the types of problems that could be addressed through their projects.

Session 3.2
Time: Tuesday 3:00-5:30
Title: **Introduction to Agroforestry and Sustainable NRM Techniques**

Presenter: Roy

Objective: To define agroforestry and sustainable NRM, identify their advantages, present the principals on which agroforestry is based and present one system of classifying agroforestry techniques.

Method: Combination of didactic lecture, slide presentation and guided discussion.

Output: Participants understood how agroforestry/NRM could help to resolve some of the priority agricultural and natural resource problems identified in Session 3.1.

Session 3.3
Time: Wednesday 4:30-5:30
Title: **Traditional Agroforestry and Soil and Water Conservation Techniques in Madagascar**

Presenter: Roy

Objective: Participants developed an understanding of "indigenous technical knowledge" of agroforestry and soil and water conservation techniques already employed by Malagasy farmers.

Method/Contents: Participants formed small working groups by geographic zone for 20 minutes. Working groups reported back and listed

traditional techniques by category and geographic zones on flip charts.

Output: Understanding of traditional techniques on which improved agroforestry and soil and water conservation techniques could be built.

Session 3.4
Time: Thursday 2:00-4:00
Title: **State of the Art and Potential for Improved Agroforestry and Soil and Water Conservation in Madagascar**

Presenter: Roy

Objective: Participants became knowledgeable of the principal agroforestry/soil and water conservation trials in Madagascar to date and developed an understanding of the techniques that have the greatest potential for extension and small-holder adoption by agroecological zone.

Method: Lecture, slide presentation, guided discussion.

Output: General overview necessary to best profit for the two planned field trips.

Session 3.5
Time: Thursday 4:15-5:30
Title: **Overview of Friday-Sat. Field Trip**

Presenter: Rene (Roy)

Objective: The trainers presented handouts describing the two sites to be visited during a 2 day field trip. These sites were 1) a cassava production site using direct seeding of various tree species to improve soil fertility during fallow periods and 2) Madagascar's main agroforestry research station.

Session 3.6

Title: **Field Trip Friday and Saturday**

The purpose of the field trip was to expose the participants to examples of traditional and modern agroforestry. The visit to Biforna, the agroforestry research station, was particularly useful. Agroforestry systems under investigation have been designed with local farmer needs in mind.

Session 3.7
Time: Monday, 8:30-10:30
Title: **Field Trip Lessons Learned**

Presenter: Roy and Rene

Objective: Participants explored the applicability of lessons learned on the field trip to their own projects.

Method: Trainer worked with participants to summarize lessons learned during the field trips. Participants then broke into working groups according to geographic region of interest. The groups identified agroforestry techniques suitable for their geographic area.

Output: Greater awareness of techniques that can be incorporated into participant projects.

Session 3.8
Time: Monday, 3:00-5:00
Title: **Seed Supply, Storage, Pretreatment, Nursery Management, Tree Planting, Protection and Management**

Presenter: Roy

Objective: Participants were given an overview of the key techniques and issues involved.

Method: Lecture, slides, guided discussion.

Output: Increased knowledge of the topics covered during this session.

Session 3.9
Time: Monday 5:00-5:30
Title: **Overview of Tuesday Field Trip**
Presenter: Rene

Objective: Participants understood purpose of field trip.

Method/Content: Brief overview presented of the upcoming trip and suggestions on what to look for.

Output: Greater appreciation of purpose and usefulness of field trips.

Session 3.10

Title: **Field Trip to FAFIALA**

A field trip was made to the FAFIALA project at Ambatofatsy - a Swiss-financed community reforestation/agroforestry project.

Participants were given an overview of the project (history, extension methods, etc.), and were given a tour of some farmer and project-managed agroforestry sites. Agroforestry species utilized included Tephrosia vogellii, Tephrosia candida, Crotalaria grahamiana, and Sesbania macrantha.

Session 3.11
Time: Wednesday, 8:30-9:30
Title: **Field Trip-Lessons Learned**
Presenter: Roy

Method/Content: Trainer guided participants to summarize lessons learned during the field trip. Emphasis was placed upon specific techniques.

Output: Increased understanding of techniques seen on field trips.

Session 3.12
Time: Wednesday 9:30-12:30
Title: **Analyses and application of agroforestry and natural resource management sessions.**

Presenter: Roy

Objective: Participants from each project initiated plans for incorporating agroforestry/soil and water conservation/improved NRM techniques

into their project activities by detailing the specific natural resource management problems to be addressed, their objectives, the techniques/species to be tested, and the extension techniques to be employed. A handout was developed to guide this exercise.

Method: Short plenary, participants formed working groups by project, working groups report back to full group, group discussion.

Output: Written outline of agroforestry/NRM extension action plan for each project.

TRACK 4. EXTENSION COMMUNICATION THEORY AND PRACTICE.

Session: 4.1
Time: Wednesday, May 9, 9:30-11:00
Title: **Communication strategies for extension.**

Presenter: Susan

Objective: Participants became familiar with examples of good and poor communication between actors in an extension project context.

Method: One of the participants performed a role play to demonstrate poor communication techniques. The other participants analyzed and discussed the role play. A second participant performed a role play demonstrating good communication techniques. The remaining participants analyzed the role play. This was followed by a discussion of positive and negative communication techniques.

Content: Sourcebook Module 4, Lesson 1 (Directive vs non-directive methods of addressing audiences about agroforestry/NRM using role plays). Lesson 1 and 2 for info on barriers to effective communication in an extension project context and how to overcome these, to use in general discussion.

Output: Awareness and knowledge.

Session: 4.2
Time: Wednesday, 11:00-12:30, and 2:00-2:30
Title: **Farmer communication channels.**

Presenter: Roy
Objective: Participants were able to identify specific communication channels among farmers and their communities which could be used for NRM extension.

Method: Trainer facilitated a discussion which generated a "spider web" of potential communication pathways between projects and farmers.

Content: Sourcebook module 4, Lesson 3.

Output: Awareness and knowledge

Session: 4.3
Time: Wednesday, 2:30-4:00
Title: **Theory of interpersonal communication for development.**

Presenter: Susan

Objective: Participants became familiar with the theory that guides the Sourcebook's approach to interpersonal communication skills training.

Method: Facilitator presented short lecture on adult learning theory. This was followed by a role play demonstrating Parent-Child (P-C), and Adult-Adult (A-A) forms of communication, and discussion of PAC communication channels and how to encourage extension agents to adopt A-A modes of communication.

Content: TA - parent/adult/child

Output: Building block; tool for teaching communication theory

Session: 4.4
Time: Thursday, 8:30-12:30
Title: **Interpersonal Communication Skills Between Extension People and Farmers**

Presenter: Susan

Objective: Participants became familiar with the use of Role Play for building communication skills in an extension project context.

Method: Training team members suggested role play situations and lessons to be demonstrated. Small groups enacted role plays and then helped participants analyze.

Content: Module 4, Lessons 1 and 2, selected and modified.

Output: Communication skills and knowledge of training tool.

Session: 4.5
Time: Monday the 14th, 10:30-11:30
Title: **Communication media and material.**

Presenter: Rene

Objective: Increased participant ability to identify conditions and characteristics appropriate for development and use of specific extension media and materials.

Method: Didactic lecture on media options in NRM extension project context in Madagascar. Plenary discussion of pros and cons of each method.

Content: Sourcebook Module 4, Lesson 3

Session: 4.6
Time: Monday, 11:30-12:30, 2:00-3:00
Title: **Analysis and Application of Communication Sessions for Participant Project Context**

Presenter: Susan

Objective: Participants were able to specify how they may incorporate this context area into their extension training programs.

Method/ content: Participants brainstormed examples of how they might use lessons learned on communication material in their programs/activities. Their responses were recorded on flip charts. After plenary session (about 1/2 hour), participants held individual or group working sessions to adapt ideas to project.

Output: Input to participant plans to incorporate workshop results into their projects.

TRACK 5: LAND USE DIAGNOSIS AND DESIGN FOR NATURAL RESOURCES MANAGEMENT

Session: 5.1
Time: Wednesday the 16th, 2:00-4:00
Title: **Theory and application of Land Use Diagnosis**

Presenter: Susan

Objective: To increase participant knowledge of theory and application of Land Use Diagnosis.

Method: Facilitator guided discussions about the reasons for carrying out a land use diagnosis and the basic questions to be answered. This was followed by a short presentation on the 5 steps of diagnosis. Participants then formed small groups to carry out a mini "step one". Groups identified biological, physical, social and/or economic data necessary for a diagnosis and the sources of this data.

Content: Sourcebook Module 5&6, modified and reduced. Begin with defining technology/intervention design criteria; then define steps involved in designing a good technology/intervention and discuss who should be involved in this process and why.

Output: Common awareness, extension teaching tool.

Session: 5.2
Time: Wednesday, 4:00-6:00
Title: **The role of farmers in land use diagnosis**

Presenter: Susan

Objective: Participants became familiar with the role of farmers in land use diagnosis and the advantages and constraints of interviews.

Method: Facilitator suggested roles for each participant, allowing them to practice being interviewers and farmers or "qualified" informants.

After role plays were completed, participants re-assembled to discuss how they felt and what problems or opportunities they encountered.

Content: Sourcebook Modules 5 & 6.
Output: Increased participant understanding of advantages, constraints and techniques for farmer interviews.

Session: 5.3
Time: Thursday, 17th 8:30-11:00
Title: **Agroforestry Tree Species Inventory**

Presenter: Rene

Objective: Participants understood how to compile and use check list of agroforestry tree species for their project.

Method/Content: Facilitator worked with participants to formulate a tree species matrix and then filled it in for some of Madagascar's more useful agroforestry species.

Output: Participants acquired an additional diagnostic tool and exchanged information on the uses of agroforestry species.

Session: 5.4
Time: Thursday, 11:00-12:30
Title: **Analysis of Land Use Diagnosis**

Presenter: Rene

Objective: Participants understood how analysis of information collected during steps one through four of a diagnostic could be used to determine causes of natural resources problems.

Method/Content: Facilitator reviewed the five steps of diagnosis and then guided participants to establish a casual diagram.

Session: 5.5
Time: Thursday, 2:00-3:30
Title: **Theory and application of design**

Presenter: Susan

Objective: Participants understood the basic elements of design and the basic steps of participatory design.

Method: Facilitated discussion of the elements and components of agroforestry design and possible steps for formulating and testing a design.

Output: Participant ability to design agroforestry interventions in participatory manner is strengthened.

Session: 5.6
Time: Thursday, 3:30-4:30
Title: **Planning, Monitoring and Evaluation of Agroforestry Activities**

Presenter: Rene

Objective: To introduce participants to planning, monitoring and evaluation of agroforestry activities.

Method/Content: Guided discussion, based upon information presented in module 7.

Session: 5.7
Time: 4:30-5:30 (2 hours)
Title: **Analysis and Application of Diagnosis and Design**

Presenter: Susan

Objective: Participants were able to specify how they might incorporate this content area into their extension training programs.

Method: Plenary, strategy, content area, or geographically related working groups; individual working sessions. In plenary participants were given a check-list tool of factors to consider in planning a training activity for this content area. First groups, then individuals worked through.

Content: How to plan a training activity - extracted/modified from S.Book.

Output: Component of participant training plan.

PARTICIPANT EVALUATION

Two evaluations were carried out during the workshop - one at the end of the first week and one at the end of the second week. The full results of the evaluation are presented in Appendix 4. A summary is presented here. In general, the workshop received high ratings by participants. The rating for the entire workshop curriculum was 3.1 out of 4 points.

Mid-Term Evaluation

There was not a great deal of variation between ratings of individual courses given before the mid-term evaluation. The courses on communication tended to receive the highest ratings. The courses on "Communication Channels"; "Use of Role Play in Demonstrating Communication Techniques" and "Communication Strategies for Extension" were the most popular and were given ratings of 3.6, 3.6, and 3.5 points respectively. Participants commented that these courses were valuable because they provided concrete examples of communication techniques and because they encouraged participants to actively demonstrate their skills and knowledge.

The courses dealing with agroforestry techniques tended to receive slightly lower ratings than the average. This may be partially due to the fact that participants came from a wide variety of ecological zones and there was not sufficient time to provide in-depth coverage of each zone.

Participants were also asked to list the courses that they found to have the greatest usefulness for their work. Courses listed the greatest number of times included those on: communication channels (8), extension approaches (7), communication strategies (6), and training needs assessments (6).

When asked to comment on the methodology used by the trainers, participants responded very positively. Comments indicated that the methods used were new to most participants, and that they were efficient, dynamic, well organized, simple, clear and demonstrated good active listening skills.

Participants were also asked to comment on the logistical and administrative support provided. Ratings were very high for all aspects including lodging (3.5), meals (3.3). Administrative support received a 3.9.

Final Evaluation

Participants gave the workshop an overall ranking of 3.2 in the final evaluation. It was generally felt that the length of the workshop was appropriate. Course presented during the second half were given an over-all ranking of 3.2. Favorites included the field visit to Biforna, Madagascar's main agroforestry research station (rated 3.75 out of four), and the visit to the Swiss-financed agroforestry project at Ambatofotsy (3.48). The "analysis and application" sessions were also highly appreciated. Participants utilized these sessions to apply what they learned by planning for follow up training activities at their own projects.

Ninety-six percent of the participants thought that they would prepare follow-up sessions based upon the knowledge and skills acquired at the workshop. Eighty percent felt capable of doing the training themselves. Four percent did not feel capable, primarily because they lacked sufficient technical knowledge.

Participants were also asked what changes, if any, they would make to their projects as a result of attending the workshop. Answers included: 1) the integration of agroforestry extension into their projects, utilization of better survey and communication techniques, introduction of new agroforestry species, and greater evaluation of their project activities.

When asked whether the Agroforestry Extension Training Sourcebook would need to be modified in order to meet the needs of their project, several participants indicated that it would need to be more adapted to the local conditions of Madagascar. Several also suggested that it be translated into Malgache.

Participants had numerous suggestions for subject areas that they would like to see covered in a follow-up workshop. These included: more technical information on agroforestry, more on planning, monitoring and evaluation techniques, aboriculture, project management, and the use of agroforestry to meet grazing and fodder production needs.
Some participants also suggested that the training activities resulting from the workshop be monitored and that similar workshops be held annually.

Lodging, logistical arrangements and administrative arrangements were rated as highly here as in the mid-term evaluation.

PARTICIPANT FOLLOW-UP

The last sessions of the workshop were devoted to preparing plans for follow-on workshops to be carried out by the participants. These plans are included in Annex 2 of the French version of this report. A summary is provided here.

The majority of the follow-on workshops placed a heavy emphasis on training in communication techniques and in agroforestry and natural resource management techniques. There was less emphasis placed upon extension strategies and diagnosis and design. There was quite a bit of variation in the length and

timing of the workshops. Some are to be held in segments through out the year - one day each month (when extension agents come to collect their salaries) or three days each quarter. Some participants are planning to hold week-long workshops once a year. Others planned longer workshops - ten days to two weeks.

Possible constraints to workshop plans include: 1) a lack of qualified trainers, 2) the low level of education of project extensionists; 3) difficulty in assembling all of the extension agents and trainers at the same time; and 4) transportation difficulties.

LESSONS LEARNED AND RECOMMENDATIONS

The two major goals of the workshop were:

1) To assist participants to develop and/or improve their agroforestry and natural resource extension training skills and

2) To enhance participants' knowledge of agroforestry technologies appropriate for the ecological conditions and socioeconomic needs of Madagascar.

As indicated in participant evaluations and in conversations with participants, both of these goals were achieved. It seems that the first goal was achieved the most successfully. Much of the workshop focused on training skills and many of the materials and methods presented were new to most participants. The training module in communication was very popular as were the participatory teaching methods used by the trainers.

Achievement of the second goal was more difficult to accomplish as the participants had a wide range of knowledge and skills and were working in a wide diversity of ecological zones. Some had been working on agroforestry projects for several years and some didn't really know what agroforestry was before attending the training. The former found some of the sessions too elementary while the latter had difficulty assimilating so much new information. The majority of the participants could greatly benefit by additional training in agroforestry techniques and, in diagnosis and design. It simply was not possible to go into enough detail in these areas in such a short time.

A number of participants expressed the desire for a follow-up workshop, approximately one year after the first one. SAFAFI has already submitted a proposal to FSP for this. The proposal takes into consideration a number of needs expressed by participants:

1) The need to conduct more site visits to other agroforestry projects. The field trips were among the most highly rated aspects of the workshop. They allowed participants to learn agroforestry extension and design technologies first hand and to see the results of species trials.

2) The need for an in-depth evaluation of the strengths and weaknesses of the first workshop; and

3) The need to expand agroforestry extension training to other NGOs in Madagascar.

This proposal is now being considered for funding.

APPENDICES

APPENDIX 1: LIST OF PARTICIPANTS AND TRAINERS

	NAME	ORGANIZATION & ADDRESS	POSITION
1.	Rakotoniaina Andriamalala Aime	Orimpaka BP 4052 Antananarivo	Technician
2.	Maksim Lucien	Tiako B.P. 65 Antananarivo	President
3.	Razafindranaivo Jean	Nature & Progres B.P. 242 Antsirabe	General Secretary
4.	Ravalamia Remi	Centre FAFIALA Ambatofotsy B.P. 4052 Antananarivo	Socio economic Assistant
5.	Rakotoarison Bien Aime	SAF-FJKM B.P. 623 Antananarivo	Program Chief Rual Development
6.	Razakamanarina Harivony	SAF-FJKM B.P. 623 Antananarivo	Chief, Environment Program
7.	Rakotozafy Mamitiana	FOFIFA - DRFP B.P. 904 Antananarivo	Technician
8.	Andriamampianina Nicolas	FOFIFA - DFRP B.P. 904 Antananarivo	Technician
9.	Rataminjanahary Edmond	CAPR B.P. 1327 Ambozontanty Fianarantsoa 301	Trainer
10.	Rapatsalahy Maronasy	V.K.M. Lot IV D 14 Tsiazotafo Antanarivo	Trainer

11.	Andriantsoavina Haribenja	MPAEF B.P. 7015 Antananarivo	Chief Ciref Tana
12.	Randrianarisoa Pierre	s/c Provincial Eaux et Forets AIVF/Biosphere B.P. 416 Toamasina	Chief Burea AIVF
13.	Andria-Ntoanina Herilanja	DVV B.P. 3481 Antananarivo	Program Assistant
14.	Ratsimbazafy Andrianaivo	SCAE B.P. 5010 Lot IVR 53 Antananarivo	General Secretary
15.	Rakotoarisoa Jeannot	F.I.F.A.M. B.P. 3435 Antananarivo	Project Chief
16.	Bakoize Emile	AICF BP 26 Ste. Marie	Extensionist
17.	Ramiliariniaina Augustin	Operation Cafe B.P. 14 Sambava	Sector Chief
18.	Rajaonarisoa Zerbert	Operation Cafe B.P. 6235 Antananarivo	Training Director
19.	Rasolofoson Eugene	Operation Cafe B.P. 104 Ambanja (203)	Sector Chief
20.	Andriamanarivo	WWF BP 738 Antananarivo 101	Sector Chief
21.	Ratolojanahary Joseph	SAFAFI B.P. 4306 Antananarivo	Program Chief
22.	Ranaivoson Charles	SAFAFI B.P. 4306 Antananarivo	Program Chief

23.	Rakotosoa Simon	SAFAFI B.P. 4306 Antananarivo	Technician
24.	Rakotondramary Dieudonne	FFFLM B.P. 1741 Antananarivo	Project Director
25.	Nehdi Hassen	FAO B.P. 3971 Antananarivo	UN Volunteer
26.	Randriantsilaozana Thomas D.	JICADRAIC Lot AD 186 Morondava	Technician

TRAINERS:

1.	Susan Marie Huke (Lead Trainer)	Forestry Support Program International Forestry U.S. Forest Service P.O. Box 96090 Washington, D.C. 20090-6090 U.S.A.	Agroforestry Coordinator
2.	Rene Rabezandrina	Departement Agriculture Universite de Madagascar B.P. 175 Antananarivo	Chef du Departement
3.	Roy Hagen	60 Bruce Circle Esko, MN 55733 USA	Independent Consultant

Administrative Coordinator:

Lisa Gaylord	AID/Madagascar	PVO Coordinator

APPENDIX 2: PARTICIPANT PLANS FOR FOLLOW-UP

(This annex is available in the french version of the workshop report only).

APPENDIX 3: WORKSHOP EVALUATION RESULTS

ATELIER DE FORMATION EN VULGARISATION

SUR L'AGROFORESTERIE ET LES RESSOURCES NATURELLES

ANALYSE DE MID-TERM EVLUATION

1. Evaluer chaque seance pendant la première semaine sur la base de l'echelle de 1 à 4?

a) Diveristé des approches de vulgarisation

Mal 1	2	3	Très Bien 4	Moyen
0%	4%	72%	24%	3.2

Autres commentaires:

b) Evaluation des approches de vulgarisation

Mal 1	2	3	Très Bien 4	Moyen
0%	16%	64%	20%	3.04

Autres commentaires:

c) Présentation des approches de vulgarisation par les participants

Mal 1	2	3	Très Bien 4	Moyen
0%	20%	56%	24%	3.04

Autres commentaires:

- On n'a pas pu vue des approches des autres projets car leurs projets ne fonctionnement pa encore.
- On voudrait avoir les polycopies de chaque organisation
- Tout le monde aurait dû présenter son approche.

d) Rôles et responsibilities des acteurs de la vulgarisation

Mal 1	2	3	Très Bien 4	Moyen
4%	4%	64%	28%	3.16

Autres commentaires:

- Cours trop estiduauton. Il est mieux de faire participer.

e) Evaluation des besoins d'une formation en vulgarisation

Mal 1	2	3	Très Bien 4	Moyen
0%	12%	56%	32%	3.20

Autres commentaires:

- C'était un cours très interessant et le formateur a essayé de developper l'attention des participants

f) Analyses et application de l'évluations des besoins en formation

Pas de response	2	3	Très Bien 4	Moyen
4%	16%	64%	16%	3.0

Autres commentaires:

g) L'Agriculture et la gestion des ressources naturelles à Madagascar - Problèmes et Causes

Mal 1	2	3	Très Bien 4	Moyen
8%	28%	48%	16%	2.72

Autres commentaires:

- On aimerait encore voir les autre régions.

- Pas très clair - plan trop embrouille

h) Introduction à l'agorforesterie et la gestion durable des ressources naturelles

Mal 1	2	3	Très Bien 4	Moyen
0%	28%	48%	24%	2.96

Autres commentaires:

- Je me demande si l'objectif s'atteint

i) Presentation du manuel de formation

Mal 1	2	3	Très Bien 4	Moyen
0%	20%	40%	40%	3.20

Autres commentaires:

- Malgré le temps imparti, nous n'avons pas pu apprécier les autre manuels.

- Ca aurait été bien si c'est expliqué beaucoup plus approfondi.

j) Strategies de communication pour la vulgarisation

Mal 1	2	3	Très Bien 4	Moyen
0%	8%	36%	56%	3.48

Autres commentaires:

- C'est le plus réussi des cours avec une participation trés active

- Trés bien pour l'utilisation d'une mise en scène

k) Les filères de communication aux paysans

Mal 1	2	3	Très Bien 4	Moyen
0%	0%	40%	60%	3.60

Autres commentaires:

- Parce qu'on a pris des exemples

l) Théorie de la communication pour le développement

Mal 1	2	3	Très Bien 4	Moyen
0%	8%	72%	20%	3.12

Autres commentaires:

- Parce qu'on a pris des exemples

m) Techniques traditionnels d'agroforesterie et de DRS

Mal 1	2	3	Très Bien 4	Moyen
4%	36%	48%	12%	2.64

Autres commentaires:

- C'est exceptionnellement interesssant

n) Demonstration de communication avec usage de jeux de rôles

Mal 1	2	3	Très Bien 4	Moyen
0%	8%	24%	68%	3.6

Autres commentaires:

- Très convainquant
- C'est un succès fou!!!
- A utilser d'avantage

o) Conservation des eaux et du sol et l'agroforesterie moderne à Madagascar

Mal 1	2	3	Très Bien 4	Moyen
0%	36%	48%	16%	2.8

Autres commentaires:

- Incomplete car seulement technique de CES applicable en zone sub-aride
- Pas de relation avec les objectifs
- Pas beaucoup d'exemples locaux

2. Citer les séances qui auront la plus grande utilité pour votre travail sur le terrain

Seance	No. Réponse
- Les filières de communication	8
- Diversité des approches de vulgarisation	7
- Les strategies de communication	6
- Evaluation des besoins d'une formation en vulgarisation	6
- Techniques de base de l'agroforesterie	5
- Demonstration de communication avec usage de jeux de role	5
- Les techniques de communication	3
- Rôles et responsibilities des acteurs de vulgarisation	3
- Vulgarisation	3
- Tout est utile	3
- Les techniques d'agroforesterie moderne	3
- Système agroforesterie à Madagascar	2
- Track 3	1
- Présentation du manuel de formation	1
- Projets	1
- Analyse et application de l'evaluation	1

3. Citer les séances qui auront la moindre utilité pour votre travail sur le terrain

Seance	No. Réponse
- Présentation du manuel	3
- Roles et responsabilities des vulgarisatuers	1
- Jeux de rôles	1
- Evaluation des approches en vulgarisation	1

4. Quel est votre appreciation de la methodologie utilisée par les formateurs pendant le seminaire?

- Trés efficace

- Très efficace et satisfasant surtout avec leur "mise en scènes

- L'intervention tout à tour de trois formatuers est une nouvelle mèthode de formation très efficace

- Excellante

- Ca va, même si les americains ont un petit problème sur la pronunciation français

- Bien dans l'ensemble

- Ca serait mieux si les formateurs parlent bien la langue francaise

- C'est une mèthode dynamique et participation

- Faire participer les seminaristes est une très bonne idée mais cela necessite toujours des protoptypes et dierectives emanant des formateurs au lieu d'accumuler seulement les renseignements isses des stagaires

- La methodologie utilisée a été bonne mais c'est le contenu qui est incomplete

- La méthodologie est bien choisie, organisé, simple, claire, et facile à comprendre

- L'écoute active est très bonne

- Bonne en générale et bien organisé, malgré les difficultés d'expression qu'ont certains formateurs. Toutefois ce n'est pas grave.

- Vous avez utilisé une methodologie trés appropriée et plus terre à terre

- La méthode est bonne et surtout claire

- Efficace

- C'est très bien

- Bien (2)

- Bien, mais je pense qu'une donnée d'une liste de bibliographie utile et souhaitée

- Quelquefois, on a difficulté de conprendre le français utilisé

- Ne respecte pas les besoins de terminer les cours fixées dans l'emploi du temps

5. Evaluer les presentations des formateurs selon l'échelle de 1 à 4

Pas de réponse	2	3	Trés Bien 4	Moyen
4%	0%	72%	24%	3.25

Autres commentaires/ou recommendations pour l'amerlioration des presentations des formateurs:

- Donner le maximum de informations aux participants

- Continuez comme ça

- Les heures de sortie ne sont par bien respectées

- Faut pas être très limité par le programme (de point de vue temps) on a tendence à être esclave" du programme

- Efficace

- Suivre bien les plans du cours; n'eloignez pas des objectifs

- Ne pas lire trop les testes en présentant les cours

- Donner des exekples pratiques sur terrain pour illustrer les exposés

6. Evaluer les aspects suivants du séminaire selon l'echelle 1 à 4:

	Pas de reponse			Très Bien	Moyen
	1	2	3	4	
La Restauration	8%	4%	36%	52%	3.5
L'Horaire	8%	16%	36%	40%	3.3
Le Programme du Seminaire	8%	12%	44%	36%	3.3
Le Soutien Administratif	8%	0%	16%	76%	3.9
Les Materiels Pédogogiques	8%	4%	40%	48%	3.5
Les Polycopies	8%	4%	28%	60%	3.6

7. Est ce que vous avez d'autres commentaires ou suggestions?

- Demande de formation complémentaire, sur l'approfondissement des matières utilisées en agroforesterie (ex. pedologie, espèces utilisées.....)

- Suivi des ONGs dur l'application des connaissance acquises à l'atelier

- Il faut que les formations de ce genre continuent avec beaucoup plus d'expérience et si possible avec les mêmes participants

- Durée de l'atelier un peu limité; on aurait fait plus de sorties dans d'autres projets

- Il ne faut pas trop limiter les dicussions mais seulement les guider si c'est necessaire

- Je souhaite qu'il ya une autre formation pour la suite de cette première

Overall Average = 3.16
#4 Average = 3.02
#10 Average = 3.36

EVALUATION FINALE
ATELIER DE FORMATION EN VULGARISATION
SUR L'AGROFORESTERIE ET LES RESSOURCES NATURELLES

1. Quel est votre appréciation globale sur l'atelier ? (3.24)

2 (4%) 3 (68%) 4 (28%)

Autres Commentaires: 9/25 - *Réussite sur le plan matériel - Programme trop lourd - Lacunes de certains formateurs en Agronomie (** souhaits en Annexe).*

2. A quelle niveau est-ce-que les objectifs de l'atelier ont été atteints ? (3.24)

2 (0%) 3 (76%) 4 (24%)

Autres Commentaires: 7/25 - *Atteints pour la communication et la vulgarisation - Pourrait être atteints en complétant par la lecture.*

3. Durée de l'atelier: (2.84)

Trop court (20%) Suffisant (76%) Trop long (4%)

Autres Commentaires: 3/25 - *Proposé pour 2 semaines non consécutives*

4. Evaluer chaque séance pendant la 2ème semaine sur la base de l'échelle de 1 à 4 ?

a) Présentation / introduction au voyage d'étude à la Féculerie de Marovitsika et la Station de Recherche de Beforona (3.16)

2 (16%) 3 (52%) 4 (32%)

Autres Commentaires:

b) Voyage d'étude à la Féculerie de Marovitsika : (3.1)

1 (4%) 2 (~~16%~~ 14) 3 (~~52%~~ 50) 4 (32%)

Autres Commentaires: 9/25 - *Durée insuffisante - Hors de portée du paysan - A comparer avec exploitation paysanne.*

c) Voyage d'étude à la Station de Recherche de Beforona (3.75)

2 (4%) 3 (16%) 4 (76%)

Autres Commentaires: 7/25 - *Très instructif - C'est le résumé de l'atelier - Durée insuffisante - Manque de données fiables pour la vulgarisation.*

d) Discussions sur le voyage d'etude à la Féculerie de Marovitsika et la Station de Recherche de Beforona (3.36)

2 (8%) 3 (48%) 4 (44%)
Autres Commentaires: *4/25 - Travaux de groupe trop courts - Inadaptés au milieu malgache.*

f) Analyse et application de la communication (3.32)

2 (4%) 3 (60%) 4 (36%)
Autres Commentaires:

g) Gestion des semences, pépinières, et plantation des arbres (2.65)

2 (40%) 3 (44%) 4 (8%)
Autres Commentaires: *5/25 - Durée insuffisante - Trop théorique - Scepticisme sur la conduite d'une pépinière villageoise.*

h) Présentation du voyage d'étude à Ambatofotsy

2 (8%) 3 (64%) 4 (52%)
Autres Commentaires: *2/25 - Durée insuffisante - Double emploi*

i) Voyage d'étude au Projet Suisse à Ambatofotsy (3.48)

2 (4%) 3 (44%) 4 (52%)
Autres Commentaires: *7/25 - Concret - Durée et exemple insuffisants - Manque de résultats fiables - A comparer avec d'autres projets similaires.*

j) Discussions sur le voyage d'étude à Ambatofotsy (2.8)

2 (0%) 3 (88%) 4 (4%)
Autres Commentaires: *2/25 - Durée insuffisante*

k) Analyse et application de l'AF et de l'aménagement des RN (2.76)

2 (12%) 3 (68%) 4 (12%)
Autres Commentaires: *3/25 - Formateurs insuffisamment informés sur les réalités malgaches - A approfondir.*

l) Théorie et application du diagnostic d'utilisation des terres (2,88)

2 (24%) 3 (64%) 4 (12%)
Autres Commentaires: *3/25 - Amettre en pratique - Durée et information suffisante - Application sur terrain aléatoire.*

m) Rôles des patsans dans le diagnostic d'utilisation des terres. (2,84)

2 (4%) 3 (76%) 4 (12%)
Autres Commentaires: *1/25 - Participation réelle des paysans souhaitée*

n) Inventaire agroforestière des arbres (2,54)

2 (52%) 3 (28%) 4 (16%)
Autres Commentaires: *6/25 - Info. insuffisante - Beaucoup de lacunes.*

0) Analyse des doagnostic d'utilisation des terres (2,72)

2 (20%) 3 (72%) 4 (4%)
Autres Commentaires:

p) Formation en vulgarisation pour les méthodes de conception (3,04)

2 (8%) 3 (64%) 4 (24%)
Autres Commentaires: *1/25 _ A approfondir*

q) Formation en vulgarisation pour le suivi et l'évaluation (2,96)

2 (20%) 3 (64%) 4 (16%)
Autres Commentaires: *1/25 - Développement insuffisant*

r) Analyse et application (3,04)

2 (12%) 3 (72%) 4 (16%)
Autres Commentaires: *2/25 - Mise en relief des étapes pour l'application - Répétition.*

s) Plan de suivi des activités de formation des participants (3,0)

2 (8%) 3 (52%) 4 (32%)

Autres Commentaires:

t) Echange des plans de suivi des participants (3,0)

2 (20%) 3 (56%) 4 (20%)

Autres Commentaires: *2/25 - Durée insuffisante - Plan non respecté*

5. Citer les séances pendant la deuxième semaine qui auront la plus grande utilité pour votre travail sur le terrain

- *Formation en Vulgarisation méthodes de conception (9)*
- *Diagnostic d'utilisation et nalyse des sols (9)*
- *Gestion pépinières et plantation d'arbres (7)*
- *Visite Ambatofotsy (6)*
- *Matériel, Moyen de Communication (5)*
- *Inventaires des espèces d'arbres (5)*
- *AF et aménagement - Ressources Naturelles (3)*
- *Analyse et application Cpmmunication (3)*
- *Voyages d'étude (2) et discussions*
- *Evaluation de l'atelier*

6. Citer les séances pendant la deuxième semaine qui auront la moindre utilité pour votre travail sur le terrain

- *Présentation des voyages d'études et discussions*
- *Echange de plan de suivi des participants*

7. Quelle est votre appréciation globale sur les différentes thèmes du séminaire :

a) Approches de vulgarisation (3.36)

2 (0%) 3 (64%) 4 (36%)

Autres Commentaires:

b) Identification des besoins en formation (3,32)

2 (4%) 3 (60%) 4 (36%)
Autres Commentaires:

c) Concepts et principes d'AF (3,72)

2 (12%) 3 (60%) 4 (24%)
Autres Commentaires: *3/25 - Isuffisant - Trop théorique*

d) La théorie et la pratique de la communication en vulgarisation (3,19)

2 (0%) 3 (68%) 4 (20%)
Autres Commentaires:

8. Quel est votre appréciation de la méthodologie utilisée par les formateurs pendant le séminaire ? *13/25*

- *Appropriée et structurée, dynamique*
- *Relation A = A respectée*
- *Problèmes de langue de communication*
- *Connaissance livresque*
- *Synthèse négligée*

9. Evaluer les présentations des formateurs selon l'échelle de 1 à 4 : (3,08)

2 (8%) 3 (60%) 4 (28%)
Autres Commentaires: *3/25 - Relai des formateurs bien réglé - Utilisation des termes prêtant à confusion.*

10. Evaluer les aspects suivants de l'atelier selon l'échelle 1 à 4 :

	Mauvais 1	2	3	Excellent 4
La site (3.36)		4%	48%	40%
La salle de formation (3.16)		12%	60%	28%
Les Chambres (3.27)		4%	60%	32%
La Restauration (3.16)		4%	76%	20%
L'Horaire (3.2)		16%	48%	36%
Le Programme de l'Atelier (3.32)		8%	52%	40%
Le Soutien Administratif (3.76)		0%	24%	76%
Les Matériels Pédagogiques (3.48)		4%	44%	52%
Les Polycopies (3.52)		8%	32%	60%

11. Est-ce que vous pensez que vous allez préparer des sessions de formation pour votre projet sur la base des informations présentées pendant l'atelier ?

OUI	NON	N/A
96%		4%

12. Est-ce que vous vous sentez capable de former vos vulgarisateurs ce que vous avez apris à l'atelier ?

OUI	NON	N/A
80%	4%	16%

Si non, pourquoi ?

- *Lacunes en techniques AF*
- *Manque de soutien*
- *Documentation à étoffer*

13. Quels changements dûs aux apprentissages du séminaire allez-vous apporter à vos projets ?

- *Intégration de l'AF au Développement rural*
- *Techniques d'enquête et de communication*
- *Amélioration des techniques de vulgarisation*
- *Jeux de rôles*
- *Gestion de Ressources Naturelles*
- *Association AF -- Elevage*
- *Introduction des nouvelles espèces AF*
- *Concept AF*
- *Transformation pépinières forestières en AF*
- *Evaluation*
- *Voyages d'études*

14. Quels modules du manuel de formation sur l'AF seront les plus utiles ?

- *Communication*
- *Tous les modules*
- *MMC*
- *Gestion des pépinières et plantation d'arbres*
- *Bases AF*

15. Est-ce qu'il y a des modifications necessaires au manuel de formation sur l'AF pour être plus utile dans votre projet ?

- *Traduction en malgache*
- *Adaptations aux réalités malgaches*
- *Insérer les résultats obtenus à Madagascar*
- *Ajouter les espèces endémiques*
- *Temps insuffisant pour apprécier*

16. Citer les sujets que aimeriez être traités si on envisage de d'organiser un suivi à cet atelier

- *Techniques AF*
- *Planification-suivi-évaluation*
- *GRN*
- *Arboriculture*
- *Pédologie et plantes indicatrices*
- *AF - Elevage*
- *Inventaire des espèces*
- *Culture Biologique*
- *Management d'un projet AF*
- *Sociologie paysanne*

17. Est-ce que vous avez autres commentaires ou recommendations ?

- *Suivi et soutien des Vulgarisateurs*
- *Recyclage annuel*
- *Voyages d'études et échanges entre pays*
- *Bibliographie*
- *Adresses des organisations spécialisées en AF*
- *AF adaptée pour une région donnée à Madagascar.*

COMMENTAIRES ADDITIFS SUR L'EVALUATION FINALE DE L'ATELIER

ANNEXE

1. · Tenue d'un Séminaire identique pour d'autres catégories d'agent de même niveau technique
   · Participation d'un Expert National : J.L RAKOTOMANANA
   · Formateurs spécialistes

2. · Discussions souvent déviées à cause du manque d'uniformitée de niveau technique
   · Multiplier les voyages d'études pour mieux saisir la réalité Malgache

3. · Ecourter le volet communication pour insister sur expériences en AF

4 c. · Souhait pour participation de J.L RAKOTOMANANA

4.g. · Documentation sur les Essences

4.i. · Comparaison entre paysans de différents niveaux
   · Cessions de semences souhaitée

4.j. · Version unilatérale de l'application de l'AF en milieu paysan

4.n. · Ecologie/exigence des variétés adaptés

6. · Inventaire des variétés

APPENDIX 4: NEWSPAPER ARTICLE ON WORKSHOP OPENING

SEMINAIRE

Vulgariser la gestion des ressources naturelles...

Photo de famille avec le S.G du MPAEF, M. Arsène Ralambofiringa.

"Renforcer les capacités des spécialistes en ressources naturelles". Tel est alors l'objectif du séminaire de formation en vulgarisation sur l'agroforesterie et ressources naturelles (ANRET) organisé depuis hier à Ilafy. Réunissant 27 participants issus des Eglises, des ONG, du ministère de la Production Animale (Elevages et Pêches), des Eaux et Forêts (MPAEF) et du ministère de l'Agriculture (MINAGRI), ce séminaire a comme objectif d'assister les participants à identifier leur approche organisationnelle de la vulgarisation considérée comme une base pour la compréhension des besoins fondamentaux en matière de formation, à identifier ces besoins tout en recherchant les solutions possibles.

Ensuite, il consiste à introduire un manuel d'agroforesterie et surtout à explorer son applicabilité aux éventuels besoins de ces participants.

Comme il s'agit ici d'une formation, l'objectif, enfin, est de développer les connaissances des participants en matière de gestion des ressources naturelles.

Ce séminaire au cours lequel six thèmes seront au programme, est organisé conjointement par le programme d'Appui à la Gestion des Ressources Naturelles (NRMS), le SAFAFI (branche chargée du développement rural de l'Eglise Luthérienne Malgache) ainsi que de l'Energy Developpment International. Il est financé par l'USAID. Ce séminaire qui s'achèvera le 19 mai prochain, comporte, entre autres, des voyages d'études et de travaux pratiques sur terrain, dans les régions de Beforona, Marovitsika, Ambatofotsy etc.

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APPENDIX 5: CLOSING ADDRESSES PRESENTED AT WORKSHOP

Closing Address Presented by
Susan Huke

Ladies and gentlemen, welcome to the closing of the Agroforestry and Natural Resources Extension Training Workshop. I would like to thank all who helped make this workshop a success.

Firstly, I would like to thank Energy Development International (EDI) and SAFAFI - the two co-hosts of the workshop. Under the auspices of the AID-funded Natural Resources Management Support project, EDI organized a series of Agroforestry and Natural Resources Management Workshops throughout Africa. An NGO was invited to co-host the workshop in each country. SAFAFI graciously accepted to be the co-host for Madagascar. Thanks to the strong logistical and administrative support provided by SAFAFI's Secretaire Général Prosper Ramiandrison, the workshop has gone very smoothly. Thanks are also due to the Director of the FOFIKRI Training Center, Mr. Michel Rasaona and the Toussaint family, who made sure we were housed and fed comfortably. Perhaps too comfortably - I think I may have gained a few kilos since coming here.

I would also like to thank AID, the U.S. Forest Service and the Office of International Cooperation and Development for financing the workshop, the production of the training materials, and my participation in the workshop.

There are many individuals whose help has been instrumental to the success of the workshop. These include Jean Louis Rakotomanana FOFIFA, Claus Moller of the Cooperation Suisse, Wolfgang Leumer of DVV, and those who worked full time on the workshop: Réne Rabenzandrina, and Roy Hagin who worked long and hard with me to prepare and perform each lesson, and Lisa Gaylord, who coordinated the myriad of administrative and logistical activities necessary to keep things going.

Most importantly, I would like to thank the participants, for their dedicated and enthusiastic participation.

I'd like to present a brief description of the Goals, and proceedings of the workshop.

The two primary goals were:

1. To assist the participants to develop and/or improve their agroforestry and natural resources extension training skills.

2. To strengthen participant knowledge of agroforestry technologies appropriate to the ecological and socioeconomic conditions of Madagascar.

One might say that that is a lot to accomplish in two weeks. Well, it is. But thanks to the dedication of the participants and the trainers and our sincere interest in strengthening Madagascar's natural resource management capabilities, we were able to accomplish a lot!

In order to address these goals, we prepared a series of courses which allowed the participants to identify their training needs. We then provided courses on communication skills to help participants teach their extension agents how to communicate effectively with each other and with farmers. One course which we all enjoyed involved the use of role play. Participants performed small skits for each other to demonstrate proper and improper communication skills.

We also held a series of courses on the diagnosis and design of agroforestry systems. One of the major lessons of these courses was that there is no "magic agroforestry recipe" ready for dissemination throughout Madagascar. Rather, projects in each agro-ecological zone must learn the needs, opportunities, and problems of local farmers and find suitable agroforestry systems to address their situations.

Lastly, we provided a series of courses on agroforestry systems potentially appropriate for Madagascar. These courses included field trips to a cassava production site in Marovitsika, the Agroforestry Research Station in Biforna, and the Swiss-financed community forestry project at Ambatofotsy. At each site we learned about new agroforestry and soil conservation techniques.

An important word that the participants heard, and used throughout the course was "participation". Our training techniques were "participatory" in that we encouraged the participants to share their knowledge, and to work together throughout the workshop.

We also emphasized the importance of encouraging farmers to participate in the design and execution of natural resource management projects.

Another important component of the workshop was the "Analysis and Application Sessions". During these sessions, participants analyzed what they had learned and drafted plans for incorporating useful information into their training programs and/or into the design of new projects.

There, I have given you a brief summary of the two weeks we have all shared here at the FOFIKRI training center. I thank the participants for sharing their knowledge and experience with me. I wish you the very best of luck with your future natural resources management endeavors, and I hope I will have the opportunity to work with you again some day.

DISCOURS DE FERMETURE DU SEMINAIRE SUR L'AGROFORESTERIE ET LA GESTION DES RESSOURCES NATURELLES PRONONCE PAR LE MINISTRE DE LA PRODUCTION ANIMALE ET DES EAUX ET FORETS (M.P.A.E.F)

SON EXCELLENCE Maxime ZAFERA
FOFIKRI - ILAFY

(18 MAI 1990)

C'est pour moi un grand plaisir de pouvoir m'adresser aux séminaristes qui se sont concertés ici pendant deux semaines sur un thème qui constitue, en quelque sorte, l'un des pivots de la gestion de nos ressources naturelles de demain.

En effet, bien que technique relativement nouvelle, l'agroforesterie s'est adjugée déjà une place prééminente dans l'aménagement de notre espace rural.

Les responsables de reboisement se réfèrent à elle pour intégrer l'élément arbre au niveau des paysans dans la valorisation de leurs parcelles agricoles. Les techniques de la lutte contre l'érosion des sols l'utilisent dans les divers chantiers de défense et restauration des sols. L'agroforesterie est un précieux instrument qui a fait ses preuves pour la stabilisation des cultures et de ce fait, s'est révelée comme un moyen de lutte contre la pratique du "tavy" dévoreuse d'espace et de forêts.

Ces quelques exemples ne sont que des cas parmi tant d'autres pour illustrer les diverses possibilités que nous offre cette association "arbre-culture".

Chers séminaristes !

Je ne me hasarderais pas à reprendre les notions que vous avez acquises au cours de vos travaux de réflexion. Je n'ai pas non plus l'intention d'en faire la synthèse. Par contre, j'aimerais souligner quelques points qui me paraissent liés à l'intérêt de la vulgarisation de "l'approche agroforestière".

D'abord, dans un cadre global, nul ne peut contester le problème de transmission auquel se trouve confronté tout vulgarisateur forestier.

La problématique de cette diffusion réside surtout dans la notion de temps que réclame la réponse d'une action forestière. Si l'impact des interventions agricoles peut être perçu au bout d'un laps de temps relativement court, la sylviculture exige

par contre de nombreuses années avant d'édifier pleinement l'opérateur le plus optimiste. C'est dans ce contexte que la vulgarisation de l'agroforesterie se situe merveilleusement au carrefour des deux notions de temps et qu'elle réponde à la rationalité des utilisations de l'espace rural.

Ensuite, en votre qualité de formateurs, vous avez certaine-acquis ici des matériaux didactiques des plus subtiles qui faciliteront le transfert de vos connaissances et de votre savoir-faire, aux différents maillons de la chaîne de la vulgarisation.

Pour cela, les investigations dans lesquelles vous vous êtes engagés, vous ont conduits dans la définition du concept et du principe de l'agroforesterie mais aussi, et surtout, vous avez approfondi le diagnostic de l'utilisation des terres, et la technique d'enseignement, pour une vulgarisation participative au niveau de la cible ultime qui est le paysan.

En d'autres termes, le groupe, que vous constituez ici, sera en quelque sorte, un élément déterminant pour faire office d'une "courroie de transmission" d'un mécanisme de vulgarisation encore en voie d'être édifié à Madagascar, mais qui sera appelé à se développer et à réussir.

Le dernier point que je me plairais à noter ici, est l'importance que les ONG attachent à la cause de la vulgarisation. C'est-là un processus qui devrait se développer dans ce pays en particulier, où la gestion des ressources naturelles est devenue une affaire de tout un chacun et aura cessé d'être l'apanage des départements publics.

Mesdames, Messieurs,

Je voudrais pour terminer, remercier ceux qui, de près ou de loin, ont contribué à la réussite de ce séminaire : en particulier l'USAID qui a bien voulu apporter l'appui financier, le SAFAFI en tant que promoteur de cette rencontre, les experts nationaux et internationaux qui ont déployé tout leur savoir-faire pour animer les travaux, et enfin vous-même honorables participants, qui de par vos expériences personnelles avez réussi à édifier ici vos vis-à-vis, grâce à vos participations assidues et combien complémentaires.

Mon souhait, enfin, serait de voir la concrétisation des acquis et recommandations de ce séminaire, au niveau des différents projets auxquels vous vous consacrerez.

Vive la coopération internationale pour la cause de la "gestion des ressources naturelles".

Je déclare clos le séminaire sur la "vulgarisation de l'agroforesterie en milieu rural".

Appendix 6: Handout providing a comparison between traditional agricultural systems practices at Biforna and modern agroforestry systems (provided by Jean Louis Rakotomanana).

(Available only in the french version of this report).