Chapter 2 Objectives of the Guideline and the "Extension" process

2.1 Objectives of the Guideline

1) Background

The Alhajuela Project (Project for Participatory Community Development and Integrated Management of the Alhajuela Lake Subwatershed) began in August 2006 with the cooperation of ANAM (National Environmental Authority) and JICA (Japan International Cooperation Agency). Its objective is to "establish a watershed management system contributing to the environmental conservation of the region and the improvement of the living standard of its inhabitants in a participatory manner." The Alhajuela Project is currently being implemented together with the farmers of the area and will end in 2011.

This Extension Guideline (second edition) was prepared based on the knowledge acquired during the implementation of the Alhajuela Project, and with the lessons learned from earlier projects carried out by ANAM and JICA, among which CEMARE and PROCCAPA should be mentioned.

PROCCAPA (Panama Canal Watershed Conservation Project)

The PROCCAPA Project, implemented by ANAM and JICA from 2000 to 2005 in the Trinidad and Cirí Grande subwatersheds, organized 18 farmer groups and trained 179 small-scale farmers. The participating farmers also created an association for their farmer groups (APRODECA) by their own initiative. The final evaluation report states that all 18 groups were continuously practicing more than 5 conservation techniques on their group farmland, and that 78% of their members had introduced some type of conservation technique on their individual farm.
After the PROCCAPA Project ended, 3 new groups were created and 30 new members have joined. In addition, 6 groups have obtained financing from the NATURA Foundation for agroforestry projects.

2) Objective of the Guideline

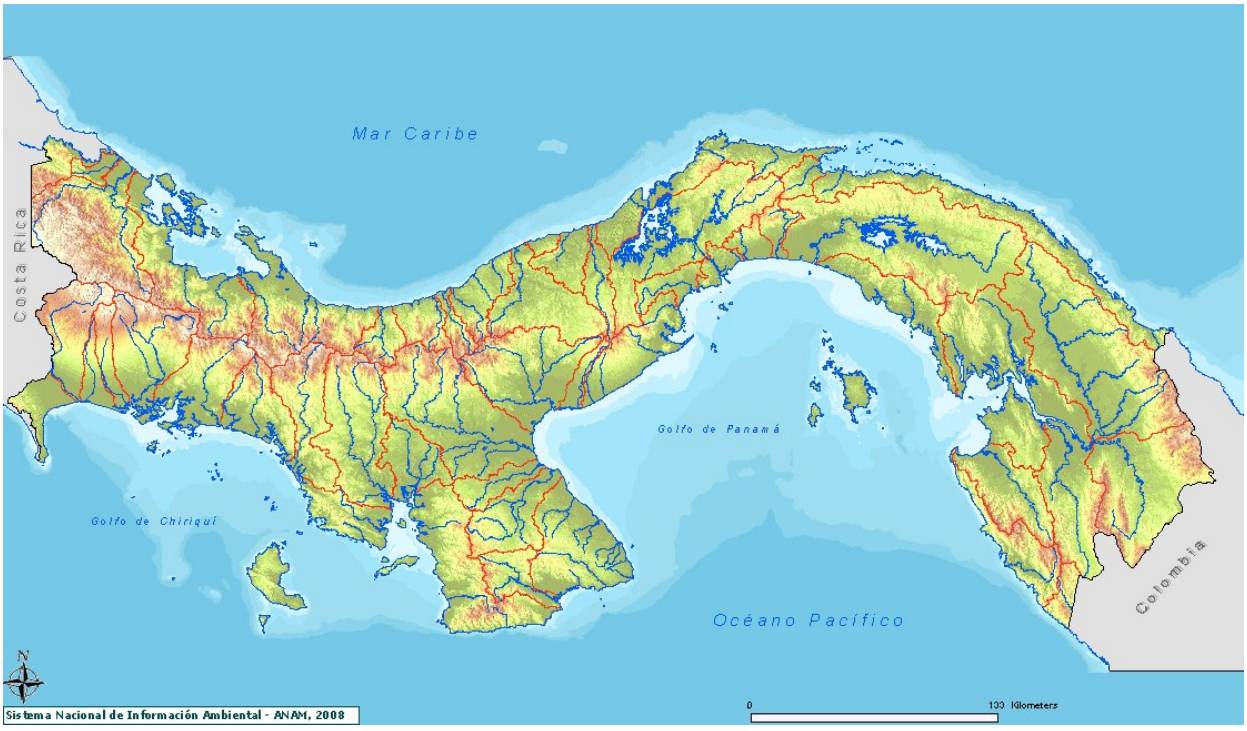
This Extension Guideline presents the process for the extension of "watershed management with community participation to conserve an area's environment and improve the inhabitants' quality of life." Whole process considers the focus on the equity of gender, which might be applied in the field.

In other words, it provides the detailed steps to be taken in the extension of watershed management, including the basic concepts of participatory watershed management, a work flowchart, methodology, necessary resources, and specific case studies. The Guideline is made to be complementary to technical manuals on already established conservation techniques that are available to the public in various publications both inside and outside of Panama. At the end of this Guideline, in the Annexes, you will find several lists of technical manuals organized according to their technical content. If necessary, the reader may use the list to find the manual explaining the individual techniques that he/she may be interested in.

3) Guideline's application and Potential users

The Guideline is based on experiences reaped from the Alhajuela Project, located in the Panama Canal watershed. The intention is, however, that it would be applicable to other participatory, watershed management projects to be, or being, implemented in rural and semi-rural areas of watersheds in the Republic of Panama.

This second edition of the Guideline was specifically designed with the understanding that its primary users would be those persons in charge of ANAM's current, or new, projects for integrated watershed management. On the other hand, the Guideline is also an open instrument that could prove beneficial to other users, such as park rangers, environmental volunteers, other government institutions, NGO's and farmers.



Source: www.anam.gob.pa/mapas_interactivos/index.htm

Figure 2-1 Map of watersheds in the Republic of Panama

4) Induction of project personnel

It should be remembered that each project is responsible for carrying out an induction program with its personnel (extension workers) before initiating contact with persons from the area of interest. Such a program should cover, first of all, the alignments of the nation, of the executing institution and of the cooperating agency, furthermore, the specific regulations of each project.

In the case of technical personnel, it is indispensable that they have complete knowledge of the technical menu, including a unified terminology and understanding of the significance of each technology, which the project plans to disseminate. Personnel from the social component should be skilled in methods for facilitating meetings and workshops in accordance with the organizational strengthening model to be used. Likewise, it is fundamental that all personnel should be knowledgeable of the planning, monitoring and evaluation cycle.

2.2 Extension process

2.2.1 Phases in the extension

The extension process proposed by this Guideline is composed of three phases:

Phase (1): initial development on group farmland;

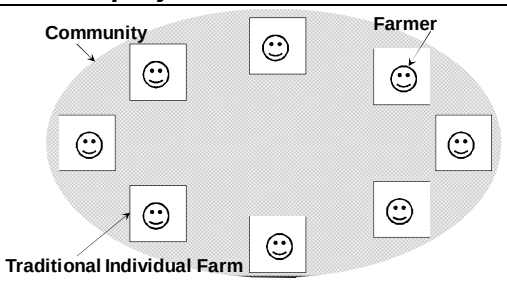
Phase (2): adoption of techniques on individual farms; and,

Phase (3): horizontal dissemination outside the groups.

This Guideline covers Phases (1) and (2), and where possible establishes the mechanism for Phase (3).

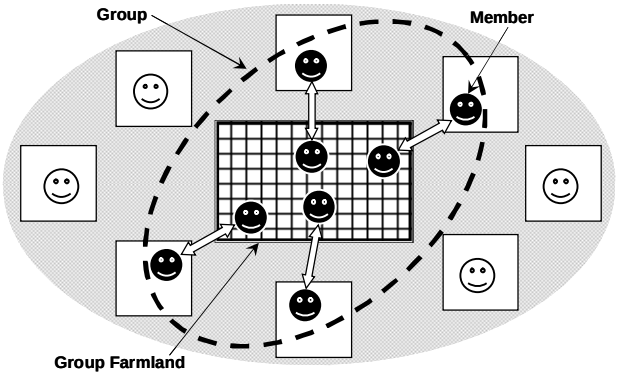
It should be mentioned that there are projects that use a different extension method, for instance in the case of livestock farmers. Normally, such a project will give direct assistance to individual farmers without forming farmer groups or establishing group farmlands.

Without the project



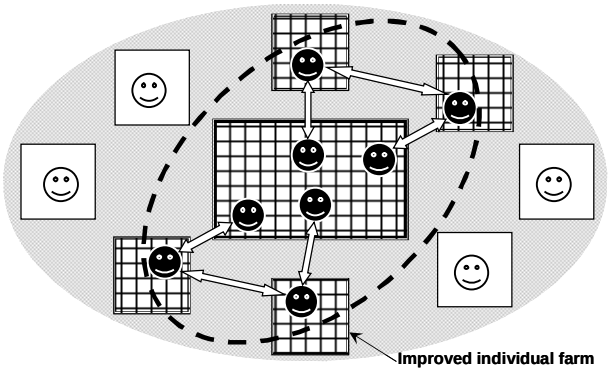
- The farmers of the community use their traditional farming methods on their individual farms.

Phase (1): initial development on group farmland



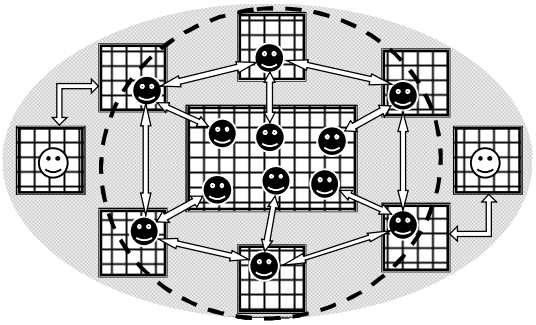
- Participatory assessment with farmers.
- Formation and/or reorganization of a group.
- Establishment of a group farmland.
- Learning conservation and environment-friendly farming techniques by practicing them on the group farmland.
- Organizational strengthening of the group.
- Development of members' capabilities in various areas.
- Evaluation of the group's maturity (social, environmental and economic sustainability).

Phase (2): adoption of techniques on individual farms

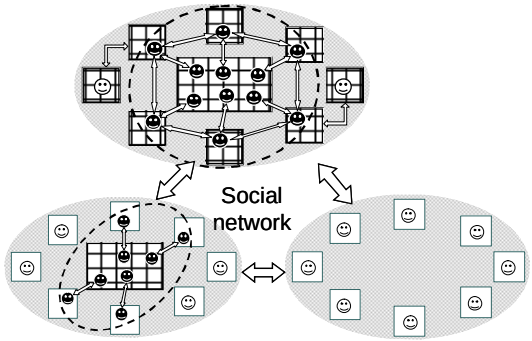


- Introduction and adaptation of the conservation and environment-friendly farming techniques on the members' individual farms.
- The group members help each other in such matters as labor, tools, material, farming techniques, financing and transportation.
- The group achieves sustainable self-management, with or without outside funds.

Phase (3): horizontal dissemination outside the groups (various options)



- Increase in membership of the group within the community.
- Transference to neighbors outside the group.



- Creation of a network among the groups and communities: the experiences spread to other watersheds.

2.2.2 Phase (1) Initial development on group farmland

Figure 2-2, below, depicts the basic concept of the first phase of the extension process where activities are carried out on the group farmland. The activities begin from the upper left-hand corner of the diagram and proceed along the black arrows leading to a cycle of 4 activities, consisting of "Planning Conservation and Farm Production", "Implementing and Managing Conservation and Farm Production", "Promoting the Sale of Products and Services", and "Managing Funds and Capital". The black arrow connecting the last two activities is the key to insuring the group's sustainability because it signifies the reinvestment of the group's profits into the next cycle of activities.

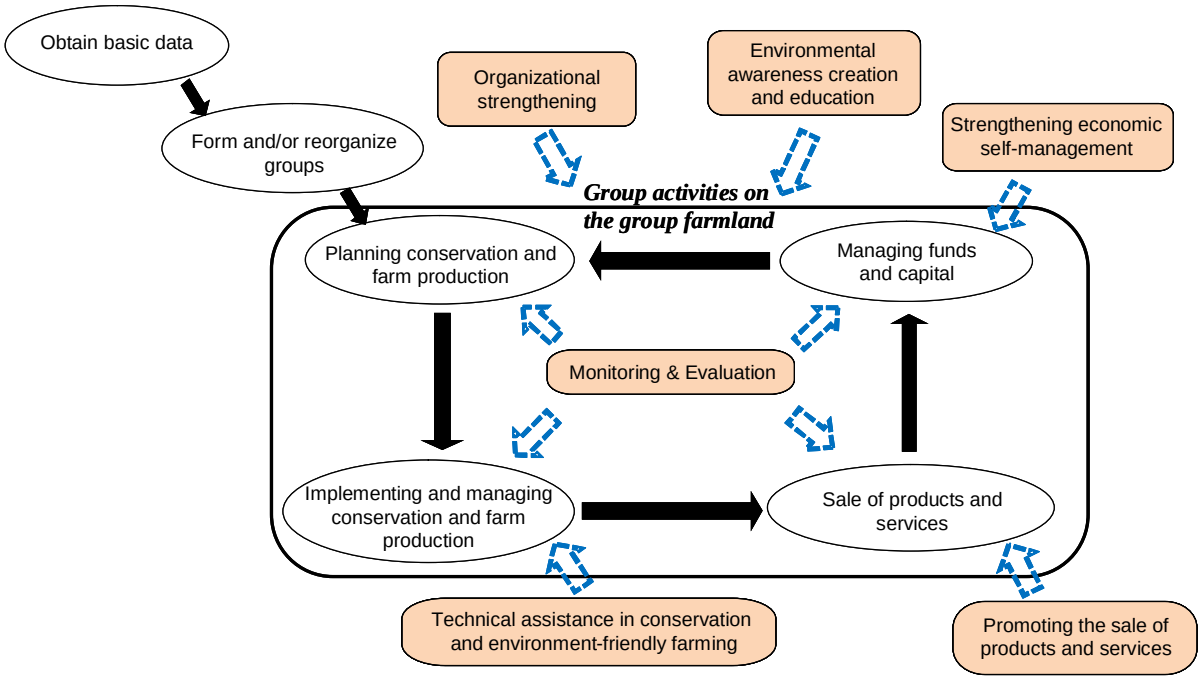


Figure 2-2 Process of the Initial Phase of Developing the Group Farmland

By comparison, the white arrows show the interventions made by the project team in order to develop the group's ability to carry out their activities in a sustainable manner, namely leading to the creation of micro-businesses and/or cooperatives for environmental businesses.

The monitoring and evaluation of the advancement of the group activities, as indicated in the center of the cycle, are also an indispensable part of the project.

2.2.3 Phase (2) Adoption of techniques on individual farms and Phase (3) Horizontal dissemination

Figure 2-3, below, shows the concepts of Phases (2) and (3), namely "adoption of techniques on individual farms" and "horizontal dissemination outside the groups" and their relationship to integrated watershed management.

Once the participating farmers become mature in their group organization and activities on the group farmland, the second phase to "adopt the techniques on individual farms" may be started. The activities on the individual farms are the application of the techniques learned on the group farmland. In order to insure the successful adoption of these techniques, it is important that the group members achieve a certain level in the skills they learn on the group farmland. Therefore, one needs to evaluate a group's level of technical ability before beginning the second phase.

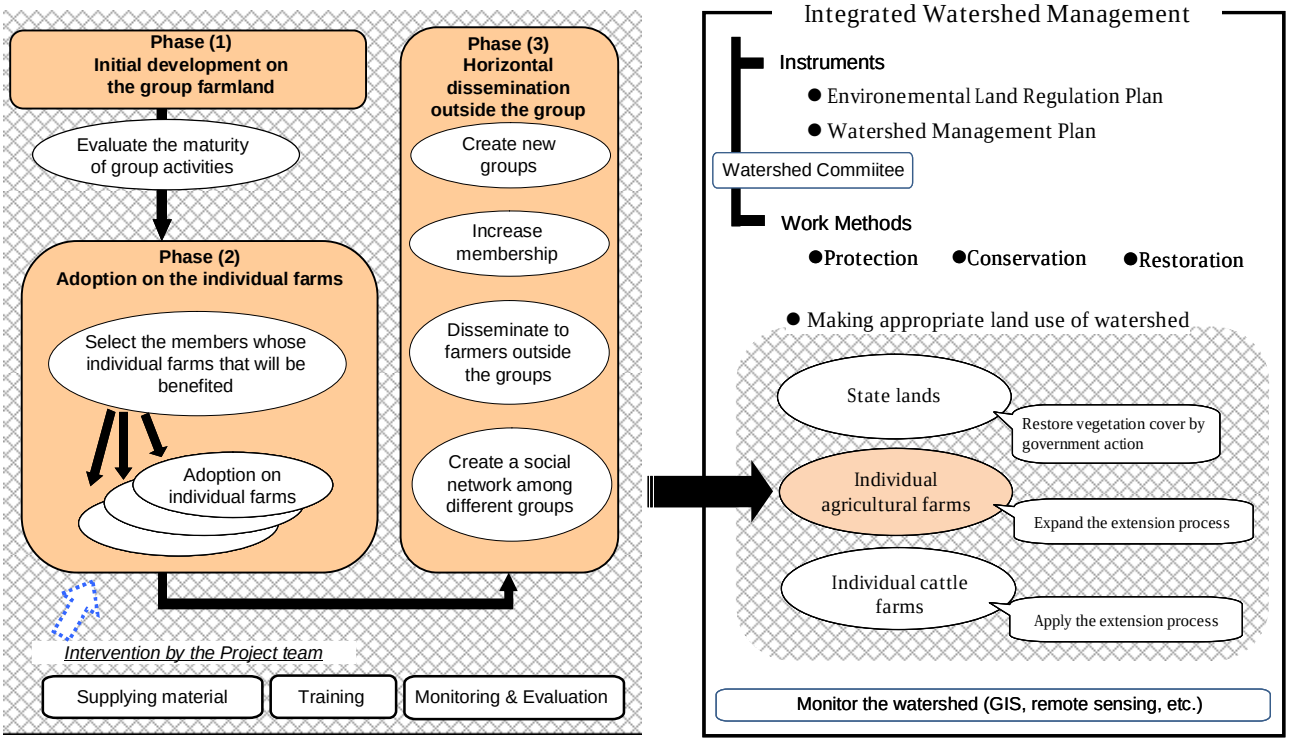


Figure 2-3 Process of Phases (2) and (3) and their relationship to integrated watershed management

It is assumed that during Phase (2) a mechanism will be established for carrying out Phase (3), which is the horizontal dissemination of techniques to farmers that do not belong to the groups. Such extension could take diverse forms such as transference from group members to neighboring farmers, the creation of new groups by interested farmers, and the establishment of a network with other more experienced groups to facilitate technical extension among all groups.

Since the horizontal dissemination of techniques is carried out by the farmers' own initiative, in order for this to contribute to the effective management of the entire watershed, a system will need to be created for the planned managing of the entire watershed.