The Farmers’ Participatory Evaluation
FPE

A methodological guide to evaluate the effect and impact of technological development
The following document was prepared by:

Miguel Obando, National Coordinator of PASOLAC
Edgar Castellón, Deputy Director General of UNICAM

Revised by:  
Martín Fischler, Technical Adviser of PASOLAC
Heriberto Sosa, Responsible for validation, PASOLAC, El Salvador

Design and layout:  
Marvin Mejía Chamorro

Drawings:  
Marvin Mejía Chamorro

Printed by:  
EDISA (Ediciones Educativas, Diseño e Impresiones, S.A.)

Second edition:  
June 2006

Number of copies:  
1000

Translated to English from Spanish:  
Inti Martínez Alemán and Patrick Robinson

© PASOLAC
Programa para la Agricultura Sostenible en Laderas de América Central
Address: Edificio Invercasa, frente al Colegio La Salle
Tel/Fax: (505) 277-1175 & 277-0451
E-mail: pasolac@cablennet.com.ni
www.pasolac.org.ni
Managua, Nicaragua

PASOLAC is implemented by the Swiss Foundation for Development and International Cooperation (INTERCOOPERATION), with the financial support of the Swiss Agency for Development and Cooperation (SDC).
The Farmers’ Participatory Evaluation (FPE) is a tool for internal evaluation made available to organisations by the “Programa para la Agricultura Sostenible en Laderas de América Central” (PASOLAC) to evaluate in the field the achievements obtained through the implementation of agricultural projects. The FPE is an easily applied methodology that directly involves men and women farmers, as well as communities, in the generation and analysis of field information.

As with any development process, the FPE has its limitations as it involves many participants; its cost is relatively high (but not lower than traditional external evaluations), and it requires certain capacity to document immediately the field observations and the final results of the whole process. However, these limitations are not so important as to impede its implementation.

This first edition has been put together by revisiting PASOLAC’s experiences in Nicaragua, Honduras and El Salvador, evaluating the effect of the soil and water conservation (SWC) technologies which are promoted by partner institutions. This edition also includes national experiences made with the methodology by institutions which want to know about the progress made in the adoption of the technologies they are promoting.
With this guide, PASOLAC aims to contribute to the strengthening of methodological capacities of the organizations and institutions that collaborate with the farmers who seek better livelihoods from their own hillside production systems by introducing technologies which are appropriate for the restoration and conservation of soil fertility and water availability for crops.
Contents

Presentation................................................................. 3

I. Introduction ........................................................................ 7

II. Concept and modalities of the Farmers’ Participatory Evaluation (FPE)................................. 9

1. What is a FPE? .......................................................... 9
2. What does the FPE measure? ................................. 10
3. FPE principles ......................................................... 11
4. Modalities of FPE ..................................................... 12
5. What are the lessons learned from the FPE .......... 14

III. Actors of the FPE and their respective role ........ 17

1. The institutions ........................................................ 18
2. Farmers as evaluators (promotores campesinos) .... 19
3. Farmers to be evaluated ........................................... 20
4. Areas and communities to be evaluated .................. 22
5. The extension workers ............................................. 23
6. Main facilitator and local facilitators ......................... 24

IV. Planning ........................................................................ 29

1. FPE Coordinating Commission ................................. 30
2. Definition of the conceptual framework ................. 33
3. General information workshop ................................. 33
4. Local workshops ........................................................ 35
5. Field testing the methodology ................................. 35
6. Methodology appropriation workshops .................... 35
V. Field implementation ........................................... 37
1. Area visits in non-reciprocal succession .................... 7
2. Farm visits ................................................................ 41
3. Sharing and discussing the field information ............... 46
4. Community information ........................................... 49

VI. Documentation and restitution of information ... 53
1. Local reports ........................................................... 53
2. Final report ............................................................. 53
3. Restitution of the results ......................................... 55

VII. Bibliography .......................................................... 57
I. Introduction

The evaluation of the effect or impact of a project is commonly often undertaken through an external evaluation by a group of national and/or international experts, and based on information provided by technicians and administrators from the concerned institutions. With such an evaluation, one obtains a general appreciation of the achievements without delving into too much detail about the implementation and the results of the project at the field level.

However, this type of evaluation gives little voice to the beneficiaries, to whom the development interventions are aimed at. They are the ones who have to participate actively in the development of their communities.

When evaluating the activities carried out by partner institutions, PASOLAC expects the beneficiaries (both men and women) to be the evaluators, so as to obtain a better basis for planning. PASOLAC developed the Farmers’ Participatory Evaluation (FPE) methodology on the basis of the Beneficiary Assessment methodology espoused by the World Bank (Salmen, 1995). The FPE generates information on the adoption and effects of the promoted technologies and complements an external evaluation.
This methodological guide is based on experiences of FPEs undertaken by PASOLAC in Central America. PASOLAC evaluated the effect and the adoption of the soil and water conservation technologies promoted by several institutions within the collaboration framework of the Programme.

This guide is therefore made available to any interested person as a helpful and simple internal evaluation tool for rural development projects, in which the main actors in the implementation of activities are men and women farmers. Thus, these farmers are called to actively participate in the evaluation of the results for which they are responsible.
II. Concept and modalities of the Farmers’ Participatory Evaluation (FPE)

1. What is a FPE?

- The FPE is participatory methodology based on the “Farmer-to-Farmer” principle.
- The FPE uses local criteria to quantitatively and qualitatively evaluate the changes/effects that a new technology produces at field level.
- The FPE takes advantage of and strengthens the area’s human capacity, essentially relying on the leadership and technical knowledge of the community farmer extensionists (promotor campesino).

The FPE, contrary to an external evaluation, is a process through which the community’s population participates with greater enthusiasm and with a wider and more independent vision of the project’s development.
2. What does the FPE measure?

The FPE chiefly determines:

- The practices most frequently implemented by the farmers.
- The observed effects of the practices at the field and farm level.
- The level of adoption of the practices.

When directly measuring these factors, the FPE makes a contribution to the measurement of a project’s impact. The FPE can be applied in projects of all sorts: technological, social and cultural—in which rural communities are directly involved. For the purposes of this guide, reference is made to a technological project whose objective is the adoption of technologies for the sustainable management of soil and water (SMSW).

The FPE is a tool for evaluation primarily at the level of:

- The goal of the project
- Overall objective of the project

However, it is important to note that the FPE is not the only means of verification of the indicators of the project’s goal and overall objective; other sources will also contribute at determining a project’s impact.
3. PPE Principles

The FPE is based on similar principles to those of the Participatory Rural Appraisal (PRA). The FPE:

- Is semi-structured, because it uses guiding questions. But it is not a survey.
- Is participatory, emphasizing dialogue between farmers;
- Uses visual tools to generate and process information;
- Uses other tools such as: field visits, transects, diagrams, calendars, etc;
- Uses the principle of triangulation to verify the obtained information.

The field evaluation is based on the principle of farm visits in non-reciprocal succession. These visits are carried out by small groups of 3 or 4 evaluating farmers working with one institution to farmers to be evaluated working with another institution.
4. Modalities of FPE

Different modalities refer to whether one or more institutions are involved in the FPE.

a. External FPE
This is an evaluation carried out in collaboration with several institutions or a network of institutions that share interest in a common theme. This situation occurs frequently when cooperation programmes work at an intermediate level and whose direct partners are the organizations implementing activities with the rural communities.

Diagram of an external FPE (the organisations indicated are implanting partners of PASOLAC):

- INPRHU
- INTA
- ASPRODIC
- PCaC
- FIDER
- UNICAM
b. Internal FPE
This is undertaken between communities that are supported by the same institution. The contents to be evaluated can include all the institution’s interventions (technical, social, and cultural) or be limited to a specific line of activity. The evaluation is carried out between communities.

Diagram of an internal FPE in Masaya, Nicaragua:

In both instances those responsible for the evaluation are the community farmer extensionists who were selected by their own people as evaluators.
5. What are the lessons learned from the FPE?

PASOLAC has successfully undertaken the FPE for the internal evaluation of three phases (1994-1996; 1997-1999; 2000-2003). The experiences were very positive. The objectives were achieved in terms of evaluating the following:

- Overall project objective
- The expected results
- The effect of technologies
- The adoption of technologies by the farmers

Concerning the strengths of the methodology, one to conclude that:

- It is easy for institutions to adopt it, as UNICAM has shown (UNICAM, 1999).
- One can obtain realistic information from the field, generated and transmitted from farmer to farmer
- The time required to implement it is relatively short.
- It has the approval of the community as a whole.
The methodology also has limitations, some of which are:

- The participatory process involves many individuals, which requires a precise timetable and reliable logistics, especially for transport.

- It is not always easy to have all the invited parties present.

- The cost of a FPE is relatively high, especially if an extensive geographical area is involved. PASOLAC has invested about US$12,000 for the 1999 FPE.

- The farmers often do not have sufficient capacity to document the results. Therefore, this activity is exclusively carried out by local facilitators.

*Community meeting planning a PPE.*
The Producers’ Participative Evaluation ———————————— FPE

Evaluating promoter
III. Actors of the FPE and their respective role

The different categories of actors that are involved in a FPE are:

- The institutions
- Evaluating farmers (promotores)
- Farmers to be evaluated
- Communities
- Main Facilitator (MF) and Local Facilitators (LF)
- Technicians of the institution to be evaluated
In PASOLAC’s experience in 1999, there were 16 institutions, 38 evaluating farmers, 73 evaluated farmers in 8 areas\textsuperscript{1}, one main facilitator and 8 local facilitators who participated in the FPE.

1. The institutions

The institutions participate in the FPE in two ways:

- They are responsible for organising the area evaluations when they carry out activities directly with the farmers.

- They take on the role of local facilitators when they are not directly involved in field level implementation, as in the case of study centres. In the evaluations of PASOLAC, their participation served for methodological capacity building.

Minimum requirements to be considered when selecting institutions to be involved in FPE:

- Have at least three years of experience in the transfer of sustainable soil and water management technologies.

- Good reputation in activity implementation.

- Recognised capacity in systematizing and documenting experiences (for which they work as facilitators).

- Have staff which are qualified in the topic to be evaluated.

- To have trained and qualified personnel in evaluation work.

\textsuperscript{1} In Nicaragua: Estelí, Madriz, León Norte, Chinandega Norte, Masaya, Carazo, Boaco and Matagalpa
2. Farmers as evaluators  
*(promotores campesinos)*

Contrary to other evaluation methods in which participants are only requested to provide information, in the FPE, the farmers are part of a working group with clearly defined roles. This group of evaluators, who are generally community farmer extensionists (promotores/as campesinos/as), are the ones who will collect and analyse the field information.

An evaluating group is composed of 3-4 farmers who have been previously trained on the FPE methodology. To guarantee veracity and to avoid bias in the information, it is recommended that before an evaluation, evaluators and the to-be-evaluated do not visit each other.

**Criteria for selecting the evaluating farmers**

The selection is carried out by the technical field staff of the implementing institution with the farmers of the concerned area. The selection is done according to predetermined criteria in order to guarantee a good selection and therefore, a FPE of good quality. Some of the selection criteria are:

- Interest and time availability to participate in the FPE.
- Wide knowledge of the technologies to be evaluated (preferably to have applied the technologies in his/her farm for at least three years).
- Able to read, write and be well integrated in the working groups.
• Be recognised as a good farmer extensionist (promotor) in his/her community.

• At least 30% of evaluating farmers should be women.

3. Farmers to be evaluated

Once the community or area to be evaluated is identified, one can start selecting the farmers to be visited. The selection is carried out by the farmer evaluators and field technicians based on predetermined criteria which they have themselves chosen.

The number of farmers to be selected for evaluation depends on the size and area coverage of the project. For example:

• In PASOLAC’S FPE, which had national reach, one farmer evaluator was selected per community. This allowed one evaluating farmer to visit two communities and two farmers in one day.

• When dealing with institutions that have already used this methodology, and assuming their area coverage is not too large, the number of farmers can be greater. UNICAM, who conducted an own FPR, selected 8 farmers per location, based on the number of community farmers implementing the soil and water conservation technologies.
Criteria for selecting the farmers to be evaluated

The criteria are defined according to the evaluation’s objective and the farmer’s personal characteristics. For example, if you want to know the effect of soil and water management technologies that have been promoted by an institution, one of the criteria should be the minimum amount of time necessary to observe changes in the soil.

**General selection criteria to be considered:**

- Interest and willingness to share the required information.

- To have adopted at least three technologies.

- To have implemented the technologies for at least three years.

- Producer selection is done randomly from the number of proposed farmers.

The random farm and farmer selection is very important in order avoid selecting only highly successful experiences.
4. Areas and Communities to be evaluated

The community contributes by providing general information:

- Number of farmers.
- Area in which the technologies were applied.
- Positive and negative effects of the technologies.
- Approval of the information presented by the evaluating farmers.

In order to gather this information, a meeting needs to take place with a representative group:

- 2-3 representatives per evaluated community.
- The evaluating farmers.
- The evaluated farmers.

All this is done once the field results from the evaluated communities have been obtained.
The criteria for selecting the community and areas to be evaluated are defined according to:

- The evaluation’s objective.
- The Farmers’ and community’s interest in the project and the FPE.
- Ease of access.
- The length of time over which the technologies have been applied. When wanting to measure the effect or adoption of a technology, a time horizon of no less than 3 years needs to be considered.
- The project’s incidence. Assuring that the activities were carried out with the support of the project (if possible, select communities with little or no presence of institutions not related to the project).

5. The extension workers

The technicians of institutions working as extension workers also participate in the FPE with important roles:

- Providing field information on communities and areas.
- Ensuring coordination within the areas, as well as the communication flow between the other actors in the evaluation process.
- Ensuring the logistics in each area.
Criteria for selecting the technicians of the institution to be evaluated

- Interest in participating in the experience.
- Have a wide knowledge of the communities which his/her institution proposes to evaluate.
- Have thorough knowledge concerning the activities and results of the work undertaken.
- Experience of working with both men and women is desirable.

6. Main Facilitator and Local Facilitators

The Main Facilitator (MF)

It should preferably be an external person to the institution that is hired to coordinate field work undertaken by the local facilitators. He/she has overall responsibility for the task, from its design to the writing of the final report. He/she is the key actor that ensures that the methodology is correctly followed and that results are correctly documented. It is recommended that terms of reference are formulated for the MF.
Criteria for selecting the Main Facilitator

- Technician recognised for his/her capacity and thorough knowledge of the rural development process.
- Demonstrated capacity to conduct participatory rural communication processes.
- Ability to manage working groups and the time required in each step of the evaluation process.
- Ability to document the process.

Local Facilitators (LF)

They are the outside eye of the evaluation in the field areas. If the evaluation is carried out over a wide geographical area including several regions or political jurisdictions, the facilitators are assigned in non-reciprocal succession.

LFs are assigned different functions:

- To check and ensure that the evaluating farmers correctly apply the methodological tools.
- To document the evaluation results from each area.

Criteria for selecting LF

- It is desirable that he/she does not hold a recognized position in the area, in order to avoid a bias in the information.
- Capacity for effective communication and ability to work with groups of farmers.
• Capacity to document experiences.
• Willingness to work intensively and for long hours.

Since several actors are involved in the FPE process, it is important that each actor knows his/her role in the whole process. Chart 1 presents a summary of the most important roles of each actor involved in the FPE. **Chart 1** presents a summary of the most important roles of each PPE actor.

**Chart 1**
**Summary of the roles of the different actors in the FPE**

<table>
<thead>
<tr>
<th>Actor</th>
<th>Role</th>
</tr>
</thead>
</table>
| Evaluating farmers (promotores) | • Apply the semi-structured questionnaire.  
                                 | • Evaluate the results obtained at the farm level.  
                                 | • Prepare a synthesis of 1-2 farm visits, and present it to the community.  
                                 | • Participate in a community meeting that discusses the extent of adoption and work of the institution.  
                                 | • Participate (in a delegation) in the national workshop to verify the preliminary results. |
| Evaluated farmers            | • Each visited family previously prepares a map of its farm which will help determine the plots to be visited and be presented to the evaluating farmer.  
                                 | • Facilitate information to the evaluating farmer during the field visit.  
                                 | • Participate in a community meeting (second day). |
The community participates in the community meeting in the afternoon of the second day of the field visit. During the group discussion, the participants contribute on the following topics:

- Farming situation.
- Adoption rates and suggestions on how to increase the adoption of sustainable soil and water management practices.

| Communities | The community participates in the community meeting in the afternoon of the second day of the field visit. During the group discussion, the participants contribute on the following topics:
- Farming situation.
- Adoption rates and suggestions on how to increase the adoption of sustainable soil and water management practices. |
|---|---|
| Technicians and the institution | * Organize the FPE in the target area.  
* Represent the visited institution as observer during the field visit (must listen/facilitate, but not share opinions during the field visit).  
* Comment the results obtained at the community level.  
* Identify and provide support to FPE actors (evaluating farmers, farmers to be visited, main and local facilitators, etc.)  
* Facilitate the necessary resources (human, logistics) for the FPE. |
| Main Facilitator (MF) | * Coordinates and accompanies the whole FPE process (e.g., planning and methodology appropriation workshops, field visits, information documentation and restitution).  
* Ensure the appropriation of the FPE methodology at the LF level and other involved actors (e.g., evaluating farmers, technicians, etc.).  
* Synthesize the FPE results in a final report that should include the answers which the farmers have provided to the key predefined questions.  
* Participate in a result verification workshop at national level. |
The Producers’ Participative Evaluation

| Area Facilitators (LF) | • Participate in a national planning workshop, and in methodology appropriation workshops.  
|                       | • Ensure the appropriation (with the MF’s support) of the methodology by the other actors involved: evaluating farmer extensionists, supporting technician.  
|                       | • Coordinate and accompany the FPE at the assigned area level.  
|                       | • Accompany the evaluating farmers and farmers during the field visits  
|                       | • Prepare an area report for the MF |
IV. Planning

For the planning phase of a FPE, the following steps must be considered:

- Form a FPE coordinating commission.
- Define the conceptual and methodological framework.
- Conduct a general information workshop, at the national or regional level depending on the situation.
- Conduct local (area) planning workshops.
- Field test the interview orientation guide.
- Conduct capacity-building workshops for evaluating farmers and facilitators.

*Capacity-building workshop with evaluating promoters.*
1. FPE coordinating commission

The first step to carry out a FPE is to form a coordinating commission for the whole process. This commission:

- Sets the conceptual framework for the evaluation.
- Actively participates in the definition of the methodology.
- Provides the necessary follow-up for the implementation.

2. Definition of the conceptual framework

In its first meeting and based on the indicators at the level of the programme’s goal and objectives, the FPE commission:

- Prepares a general plan in which is defined what will be assessed.
- Selects the areas to be evaluated, based on the project’s geographical coverage.
- Defines the farmer/farm sampling strategy based on the predetermined criteria (See Chapter III).
• Prepares a preliminary design of the methodological tools to be used to collect, triangulate and restitute the information to the communities, and which must consist of:

• A semi-structured questionnaire (with guiding questions) with technical evaluation criteria.

• A map of the farm.

• A matrix to triangulate the information.

• A design to collect community information.

• A design of the visits in non-reciprocal succession.

The programme managers and the main facilitator participate during this step, and also prepare a complete timetable for carrying out the FPE.

The list of guiding questions is crucial for the field phase providing a framework for the evaluating farmers. To directly evaluate the extent to which the goal and objectives of a project have been achieved, the planning matrix indicators need to be formulated into guiding questions in simple language which is understandable by the farmers.

It is necessary that these guiding questions are revised and adjusted with the evaluating farmers and communities during the local workshops and the field testing (See points 4 and 5 below).
The Producers' Participative Evaluation ——— FPE

**Figure 1.**

**National PPE Commission**

- **Informational workshops**
- **Planning territorial workshops**
- **Methodology field test**

**Methodology field test**

- Methodological appropriation workshops, with evaluating promoters
- PPE field implementation

**Territories**

<table>
<thead>
<tr>
<th></th>
<th>T1</th>
<th>T2</th>
<th>Tn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executing actors</td>
<td>A1</td>
<td>A2</td>
<td>An</td>
</tr>
<tr>
<td>Facilitators</td>
<td>B1</td>
<td>B2</td>
<td>Bn</td>
</tr>
<tr>
<td>X1</td>
<td>X2</td>
<td>Xn</td>
<td></td>
</tr>
</tbody>
</table>

**Territory results-based workshops**

**Results-presentation national workshop**

**Methodological procedure**

- Commission formed by 5-6 representatives of institutions involved with the FPE
- Invitation, identifying the LFs, organize workshops
- Selection of communities
- Random selection of farms
- Improve the preliminary field guide
- Plan the area wise implementation and logistics
- Selection of evaluating farmer extensionists
- Methodology appropriation by the LF and evaluating farmer extensionists
- Field test and final guide approved
- Organize farm visits and community meetings
- Organize field logistics

**Results**

- NF selection
- Methodological framework
- Three meetings

**First day**

- Farm map. Successive visits. The TF and promoters document their farm visit results

**Second day**

- Information triangulation and summary
- Third day
- Community meetings
- Documenting meetings

**Summary of area reports**

- Present draft area report
- Approval by farmer evaluators

**Territorial report summary, national report rough draft, approval by TF, promoters and participants**

**Territorial report summary, national report rough draft, approval by TF, promoters and participants**

**Territorial final report**

**Final national report**

**Results**

- Meeting documents
- One meeting per territory
- Final field guide
- Ensured logistics

**Documentation**

- By farm, territory and community. Two-month duration.
3. General Information Workshop

When a FPE is carried out at the national level (or in several areas) it is necessary to have a general information workshop in order to:

- Discuss and clarify the conceptual framework.
- Present the general FPE proposal.

Representatives of the coordinating commission and of the concerned institutions participate in this workshop. The MF of the FPE is responsible for the workshop’s facilitation.

4. Local workshops

- Are carried out in each area
- Are of a maximum duration of 2 days
- Extension workers and farmer evaluators participate

In these workshops:
- The local facilitators appropriate themselves of the process to be followed, and
- Contribute to adjusting the guide’s methodologies according to the field test and the inputs of farmer evaluators.
The participation of the technical field team and farmer evaluators is crucial in providing the necessary information about the concerned communities, as well as the number, name and location of the farmers to be selected.

This is the moment for selecting the actors:
• The communities.
• The farmers or farms to be evaluated. A complete list of the names of farmers who benefit from project support is prepared before the random selection.
• The evaluating farmers.

The actors are selected according to the criteria mentioned in Chapter III.

The technicians and farmer evaluators:
• Prepare a timetable for carrying out the area FPE, and
• Define the required logistics for the area, and
• Establish the procedures for the visits: “Who visits who?” “For how long?” and “When?”
5. Field Testing the Methodology

The main facilitator (MF) and local facilitators (LFs) select a farmer in a community and meet him/her to test the methodology with the designed tools. The questions are tested, and, if necessary, adjustments are made according to the terms used by the farmer.

6. Methodology appropriation workshops

Once the methodology has been field tested, capacity-building is undertaken for:
• The farmer evaluators and local facilitators who will participate in the evaluation.

Training and discussion on the use of all the methodological tools take place in these workshops:

• The semi-structured interview/guiding questions.
• The preparation of a farm map with the farmers and other community members
• The information triangulation.
At the close of this step, everyone has a thorough understanding of his/her roles and of the application of the methodology, and has all the necessary material for the fieldwork.
V. Field implementation

1. Area visits in non-reciprocal succession

The field phase is implemented in the communities and farms that have been previously selected by the FPE commission. The visits are carried out in non-reciprocal succession, which means that:

- The farmer evaluators of an area supported by institution A do not conduct the evaluation in their own area of responsibility A. Their work is done in territory B which is supported by another institution.

- The farmer evaluators of area B conduct the evaluation in area C, and so on until all the communities are covered (Figure 2).
A general visit programme should be prepared carefully (see **Chart 2**). According to the FPE experiences made, one farmer evaluator can be assigned to two communities and to no more than two farms, one in each community. Hence if there is a group of three evaluating farmers, six farmers will be visited in six communities.
Chart 2. Example of a general visit programme to institutions and farms during the FPE

<table>
<thead>
<tr>
<th>Date</th>
<th>Evaluated institution or area</th>
<th>Evaluating farmers</th>
<th>Farm/community visited</th>
<th>Facilitating institution/technician</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feb. 4, 2001</td>
<td>1. ADDAC</td>
<td>1. Líliam Castillo—UNICAFE</td>
<td>Farm #1</td>
<td>EIAG</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Agustín Ro-sales—UNICAFE</td>
<td>Farm #2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Óscar Reyes—UNICAFE</td>
<td>Farm #3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Farm #4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Farm #5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Farm #6</td>
<td></td>
</tr>
<tr>
<td>Feb. 8, 2001</td>
<td>2. UCA Sn. Ramón</td>
<td>1. Maritza González—ADDAC</td>
<td>Farm #1</td>
<td>UNA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. César Espinoza—ADDAC</td>
<td>Farm #2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Isaías Herrera—ADDAC</td>
<td>Farm #3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Farm #4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Farm #5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Farm #6</td>
<td></td>
</tr>
<tr>
<td>Feb. 12, 2001</td>
<td>3. UNICAFE</td>
<td>1. Pr. 1 UCA San Ramón</td>
<td>Farm #1</td>
<td>AGRODERSA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Pr. 2 UCA San Ramón</td>
<td>Farm #2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Pr. 3 UCA San Ramón</td>
<td>Farm #3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Farm #4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Farm #5</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Farm #6</td>
<td></td>
</tr>
</tbody>
</table>

The evaluation activities normally last two to three days for each area, distributed in the following way:

- Visits to the farmers’ field(s).
- Sharing and analysis of the field information among the evaluating farmers and technicians.
- Meeting with the community to present the field results, analyze the effects at community level and determine the rates of adoption of the technologies.
- An example of an evaluation programme is presented in Chart 3.
### Chart 3. Example of a community visit programme

<table>
<thead>
<tr>
<th>Day and Time</th>
<th>Activity</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous day</td>
<td>• Arrival of farmer extensionists in the area.</td>
<td>• An operations centre is established, to facilitate the LF’s transportation to the selected communities for the evaluation.</td>
</tr>
<tr>
<td></td>
<td>• Visited institution receives and organizes accommodation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The three farmer extensionists, the institution’s LF and technician define the programme’s details.</td>
<td></td>
</tr>
<tr>
<td>Day 1: Farm 7 a.m.</td>
<td>• Visits to 2 farms (farm plots) per farmer extensionist</td>
<td>• LF accompanies a farmer extensionist on the farm visit</td>
</tr>
<tr>
<td></td>
<td>• Topic: SWC practices and their effects</td>
<td>• Farm plot selection based on the map prepared by the farmer</td>
</tr>
<tr>
<td></td>
<td>• LF accompanies a farmer extensionist on the farm visit</td>
<td></td>
</tr>
<tr>
<td>5 p.m.</td>
<td>• Summary of the day’s activity</td>
<td>• The farmer extensionists, supported by the LFs, prepare a large sheet for each farm with the practices, effects on the plot and observations</td>
</tr>
<tr>
<td>Day 2: 7 a.m. – 12 a.m.</td>
<td>• Summary of the previous day’s activities</td>
<td>• The evaluators should by now have the day’s information prepared</td>
</tr>
<tr>
<td>COMMUNITY MEETING 1 p.m.</td>
<td>• Presentation of the synthesis to the community</td>
<td>• Each farmer extensionist presents his/her synthesis (on a large prepared sheet).</td>
</tr>
<tr>
<td></td>
<td>• Discussion on the adoption rates of the soil and water conservation practices and about the institution’s work</td>
<td>• The LF facilitates/moderates the discussion</td>
</tr>
<tr>
<td>4 p.m.</td>
<td>• Opinion of the institution’s technician (if desired)</td>
<td>• At this stage (but not before) the technician evaluates the results and gives his/her opinion.</td>
</tr>
<tr>
<td>Same day or the following morning</td>
<td>-Farmer extensionists return to their homes</td>
<td>• Evaluated institution organises return transport.</td>
</tr>
</tbody>
</table>
2. Farm visits

The first day’s work consists of the farm visits.

- Each farmer evaluator is assigned two communities.
- One farmer visits and evaluates one farm in each community.
- Hence, if there are three evaluating farmers, in one day they would visit 6 farmers and 6 communities.
- Organise the information collected during the day

For example: In an area of Masaya, farmer Eugenio Alejo was selected from the community of El Túnel, and Óscar Chávez from the community of La Poma.
On the farm

- You arrive at the farmer’s house, who has been forewarned about the visit. A general conversation is established, in order to establish trust (“break the ice”) and create a friendly atmosphere.
- Then the first tool is applied: the farm map\(^2\). The farmer might already have a map, but if not, it is prepared together with the farmer. All the data on land use, farm size and other relevant information should be taken into consideration.
- Then, the farm plots with soil and water conservation technologies are visited in order to observe the effects of the technologies.
- You proceed to generate the information in regards to the effects at farm level using the transect to complement the information from the farm map.

In this step, the information is gathered with the help of the semi-structured questionnaire \((\text{Chart 4})\), led by the evaluating farmer supported by the technician or facilitator.

\(^2\text{Farm map tool, look document PRA, PASOLAC 2001}\)
Farm Map.

- Forest
- Sorghum
- Beans
- Corn
- Fruit trees
- Cabbage
- Piggery
- Corral for cows & calfs
- Family consumption
- Onions
- Tomatoes
- Sweet pepper
Chart 4.
Hints on how to formulate guiding questions for the assessment of implemented soil and water management practices, their effects and their rate of adoption.

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Key Questions</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Practices implemented by the farmers</td>
<td>-What are the most commonly used practices or combination of practices?</td>
<td>Inventory of the frequency of practices found on the farm</td>
</tr>
<tr>
<td></td>
<td>-When did you start using these practices?</td>
<td>-Length of time used (important for assessing the effects)</td>
</tr>
<tr>
<td></td>
<td>-Why do you use these practices?</td>
<td>-Reasons for use/adoption</td>
</tr>
<tr>
<td>2. Effects of the soil and water conservation (SWC) practices,</td>
<td>What is the total number of families in this community?</td>
<td>-Information about the effects of the practices according to the</td>
</tr>
<tr>
<td>according to indicators:</td>
<td>-How many families have adopted the practices today?</td>
<td>indicators.</td>
</tr>
<tr>
<td>-Erosion reduction</td>
<td>-How many families were using the practices 3 years ago?</td>
<td></td>
</tr>
<tr>
<td>-Increase in soil fertility</td>
<td>-What is the total area of cultivated land in this community (estimate from</td>
<td></td>
</tr>
<tr>
<td>-Increase in agricultural productivity</td>
<td>the average farm area)?</td>
<td></td>
</tr>
<tr>
<td>-Decrease in production costs</td>
<td>-What is the area today on which the practices are used?</td>
<td></td>
</tr>
<tr>
<td>-Better distribution and utilisation of family workforce during the</td>
<td>-What was the area with the practices 3 years ago?</td>
<td></td>
</tr>
<tr>
<td>year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Increase in farm market value</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Aspects

3. The adoption of the practices in the community, according to the indicators:
   - Number of farmers who adopted the practices
   - Area with the practices

### Key Questions

- What is the total number of families in this community?
- How many families have implemented practices?
- How many families had implemented practices 3 years ago?
- What is the total amount of planted land in this community (estimate by adding up individual farms)?
- How much of the total area uses practices today?
- How much of the total area used practices 3 years ago?

### Product

- Percentage of farmers who have adopted the practices
- Change in the adoption rate
- Percentage of land area on which the practices are used
- Change in amount of land on which the practices are used
3. Sharing and discussing the field information

A meeting should take place on the second day involving all the evaluating farmers and technicians in order to:

- Reflect over the previous day’s work.
- Identify the difficulties that were faced and their possible solutions.
- Analyse, triangulate\(^3\) and synthesise the obtained results.
- Reach consensus on all the information.
- **NOTE:** These meetings should be carried out the first day of field work and after the field visit, depending on the availability and disposition of the participants.

**Chart 5** presents an example of the procedure for triangulating the information obtained with the tools used at the plot and farm levels.

\(^3\) Triangulation tool, see document PRA, PASOLAC 2001
**Chart 5.**
**Matrix to order and triangulate the obtained information**

You can use an evaluation scale: 0 = no effect, 1 = average to good effect, 2 = very good to excellent result. Write down the data obtained from each farm and calculate an average. Note: erase the column lines in the title line below.

<table>
<thead>
<tr>
<th>Number of farms</th>
<th>Effect at the field level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>What are the practices or combination of practices that are used the most?</td>
</tr>
<tr>
<td>Farm 1</td>
<td>2</td>
</tr>
<tr>
<td>Farm 2</td>
<td>2</td>
</tr>
<tr>
<td>Farm 3</td>
<td>1</td>
</tr>
<tr>
<td>Farm 4</td>
<td>2</td>
</tr>
<tr>
<td>Farm 5</td>
<td>2</td>
</tr>
<tr>
<td>Farm 6</td>
<td>1</td>
</tr>
</tbody>
</table>
### Effect at the farm level

<table>
<thead>
<tr>
<th>No of farms</th>
<th>Effect at the farm level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>With the practices adopted, did you have the same or a more crops?</td>
</tr>
<tr>
<td>Farm 1</td>
<td></td>
</tr>
<tr>
<td>Farm 2</td>
<td></td>
</tr>
<tr>
<td>Farm 3</td>
<td></td>
</tr>
<tr>
<td>Farm 4</td>
<td></td>
</tr>
<tr>
<td>Farm 5</td>
<td></td>
</tr>
<tr>
<td>Farm 6</td>
<td></td>
</tr>
</tbody>
</table>
4. Community information

At the end of the area evaluations, a community meeting needs to be programmed involving:

- The local facilitator
- Evaluating farmers
- Evaluated farmers
- Community representatives (2-3 men and women per community).

The evaluating farmers present the results obtained at plot/farm level for comments from the community representatives. The following aspects need to be analysed:

- The effects of the promoted technologies
- The extent of adoption per community, based on the area and number of farmers who apply the technologies
- The positive and negative factors which have an influence on the effects and adoption of the observed technologies
- The community map
To facilitate the discussion, the participants organise themselves in groups according to the components to be evaluated. Visualisation cards and large sheets of paper need to be used. Each group tries to answer the guiding questions, organizing the information in matrices previously prepared for this purpose (Chart 6).

**Chart 6. How to collect the information on the extent of adoption of the promoted technologies**

<table>
<thead>
<tr>
<th>Region</th>
<th>Community</th>
<th>Total area Ha.</th>
<th>Total No. of farmers</th>
<th>Area with Soil and water conservation</th>
<th>Number of farmers with soil and water conservation practices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3 yrs ago</td>
</tr>
<tr>
<td>Carazo</td>
<td>El Sol</td>
<td>10</td>
<td>8</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>La Poma</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>El Tunel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>La Hormiga</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parrales</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Matagalpa</td>
<td>Wirruca</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Las Torres</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>La Pita</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>La Reina</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>La Corona</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Potrero Grande Community
The Producers' Participative Evaluation

FPE
VI. Documentation and restitution of information

All the FPE process is carefully documented and systematized:

- The methodology
- The field phase with its results per area
- The analysis and consolidation of results at a global level

1. Local reports

The area reports are the primary source of information that substantiate the FPE results. Each local facilitator prepares a report for his/her area which should contain:

- A synthesis of the methodology used in the areas
- The evaluation results on the basis of the guiding questions following the questionnaire pertaining to the end results.
The farm and community maps

An appendix should include:
• The information that is considered of interest and that served as the basis for the analysis of the results
• The guiding questions
• The matrices for collecting information
• List of participants, communities and institutions

2. Final Report

The Chief Facilitator prepares the final report on the basis of the area reports. This final report consists of a consolidation of the whole process which includes:
• What is expected to be accomplished by the FPE and its objectives
• The methodology used and the applied tools
• The results obtained, the observed tendencies, lessons learned and challenges to be addressed to improve the project’s implementation and planning.
• The area reports are part of the appendices of the general or final report
3. Restitution of the Results

a) At the local level
The results need to be restituted rapidly to the communities that participated in the FPE. This is a way to acknowledge their hard work in providing all the requested information and in participating in the analysis of results at the farm and community levels.

The process of restituting results is carried out through community meetings in each area, in which participate:

- Evaluated farmers
- Evaluating farmers
- Filed level technicians from the concerned institutions
- Community representatives who participated in the FPE

b) At the general level
The final report is presented to:

- The FPE commission
- The local facilitators
- The evaluating farmers
- Management level staff of institutions which are interested in the programme’s progress...
Restituting the information requires the preparation and timely presentation of the local information reports. Therefore, both the main facilitator and local facilitators should rapidly complete their assigned tasks.
VII. Bibliography

Asociación Tierra y Vida y PASOLAC, 1999. Herramientassocioeconómicas de seguimiento y evaluación de la transferencia en CSA. Managua, Nicaragua. 171 pgs.


A methodological guide to evaluate the effect and impact of technological development

The Farmers’ Participatory Evaluation
FPE