**Conservation Farming Village**

**Philippines**

A modality in mobilizing resources for sustainable upland development which utilizes a basket of strategies, technologies, and interventions to catalyze the widespread transformation of traditional upland farming systems into resilient and sustainable upland production systems.

**Aim/objectives:** The objectives of Conservation Farming Village (CFV) are the following: to enhance farmers’ adoption of sloping land management technologies through Science and Technology-based farming; to capacitate key groups and stakeholders in the community to better manage fragile upland resources; to conduct sustainability exercises to ensure sustainability of upland community development; to establish linkages among research-extension agencies and organizations for capacity building; and to provide support systems for the conservation farming communities.

**Methods:** The methods involved in the approach include capacitating upland farmers for sustainable development; strong Local Government Unit (LGU) support system; and establishing collaborative linkages and partnership as a tool for an enhanced support system.

**Stages of implementation:** The project of CFV in La Libertad, Negros Oriental was initiated in 2009. The first stage in the implementation of the approach is program orientation followed by community profiling. Then, Community Organizing or Peoples’ Organization strengthening. After that, technical trainings, barangay development council and municipal development council meetings were conducted to capacitate the farmers. Farm establishment was done through ‘bayanihan’ or group volunteerism, and lastly, farmers were encouraged to participate in the CFV.

**Role of stakeholders:** The National Program Coordinating Office, Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD) and academic institutions (University of the Philippines, Los Baños, Silliman University) provided technical support in the conceptualization and implementation of CFV. The LGU of La Libertad conducted the following: (1) capacity building for farmer volunteers and adopters; (2) assist in the establishment of science and technology based conservation model farms; (3) incorporate CFV activities in the LGU Annual Investment Plan and (4) provision of livelihood and support mechanisms to farmers. The implementation of the CFV project became a focal point of convergence of relevant and related activities being undertaken in the upland communities of La Libertad by Non-Government Organizations (NGO’s), Government Offices (GO’s) and other institutions. Through this approach, the farmers have made linkage with other service providers that enhanced the farmers’ access to examine other technology options, livelihood opportunities, credit and financing source, and others that may help the farmers.

**Problem, objectives and constraints**

**Problems**

High influx of farmers to the uplands in search of areas to till, poverty, low agricultural production, lack of technical knowledge, soil erosion and land degradation

**Aims/Objectives**

The CFV addresses the development, application, and validation of integrated farming systems in which holistic technology transfer and emphasis on sustainable development dimensions - environmental, economic, social - are the major driving forces for economic and environmental security.
## Constraints addressed

<table>
<thead>
<tr>
<th>Constraint</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>technical</td>
<td>Lack of technical knowledge among farmers and technical staff.</td>
</tr>
<tr>
<td>social / cultural / religious</td>
<td>Attitudes of farmers wherein they want an immediate result</td>
</tr>
<tr>
<td>institutional</td>
<td>Lack of unity among farmers</td>
</tr>
<tr>
<td>financial</td>
<td>No continuous funding</td>
</tr>
</tbody>
</table>

## Participation and decision making

### Stakeholders / target groups

- Land users, individual
- SLM specialists / agricultural advisors
- Government (PCAARRD and UPLB)
- Local government (district, county, municipality, village etc) (LGU of La Libertad)

### Approach costs met by:

- Government (PCAARRD and UPLB) 30%
- Local government (district, county, municipality, village etc) (LGU of La Libertad) 70%
- Total 100%

**Annual budget for SLM component:**

US$ 10,000-100,000

### Decisions on choice of the Technology(ies)

Mainly by land users supported by SLM specialists.

### Decisions on method of implementing the Technology(ies):

Mainly by land users supported by SLM specialists.

### Approach designed by:

National specialists

### Implementing bodies:

Other (Academic Institutions (University of the Philippines Los Banos and Silliman University program and project management team)), local government (district, county, municipality, village etc) (Local Government Unit of La Libertad, Negros Oriental), local community / land users (Barangay officials).

## Land user involvement

<table>
<thead>
<tr>
<th>Phase</th>
<th>Involvement</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiation/motivation</td>
<td>Passive</td>
<td>Ten model farms were selected from CFV barangays.</td>
</tr>
<tr>
<td>Planning</td>
<td>Interactive</td>
<td>Participation in meetings, sharing inputs.</td>
</tr>
<tr>
<td>Implementation</td>
<td>Interactive</td>
<td>Model farm establishment and maintenance, Farmer volunteers serve as local extension agents to fellow farmers.</td>
</tr>
<tr>
<td>Monitoring/evaluation</td>
<td>Interactive</td>
<td>Participation in consultation meetings, farm record keeping</td>
</tr>
<tr>
<td>Research</td>
<td>Passive</td>
<td></td>
</tr>
</tbody>
</table>

### Differences between participation of men and women:

No

### Involvement of disadvantaged groups:

Yes, moderate

The approach involved the upland farmers in the establishment of science and technology based farms.
Technical support

Training / awareness raising:
Training provided for land user, field staff/agricultural advisor
Training was on-the-job, demonstration areas, public meetings
Training focused on Conservation Farming, Sloping Land Management, Agroforestry, Climate Change, Organic Farming/Fertilizer Production, measuring rainfall and soil erosion. Trainers' training were conducted to capacitate the implementer.

Advisory service:

Research:
Yes, moderate research. Topics covered include technology, economics / marketing
Mostly on station and on-farm research.
Researches were conducted by PCAARRD and UPLB to evaluate the approach and technologies introduced in the area. Land users were also taught in the collection of climatic data such as rainfall and farm record keeping that could be used in evaluating the impacts.

External material support / subsidies

Contribution per area (state/private sector): Yes. Trainings and subsidies

Labour: Voluntary.

Inputs:
- Equipment (machinery, tools, etc): shovel, mattock, sickle and bolo. Fully financed
- Agricultural (seeds, fertilizers, etc): vegetable & forage seeds, coffee & cacao seedlings. Fully financed

Credit: Credit was not available

Support to local institutions: Yes, moderate support with training, equipment

Monitoring and evaluation

<table>
<thead>
<tr>
<th>Monitored aspects</th>
<th>Methods and indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>technical</td>
<td>Regular observations by project staff: functionality of the technology</td>
</tr>
<tr>
<td>bio-physical</td>
<td>Regular measurements by land users: rainfall</td>
</tr>
<tr>
<td>economic / production</td>
<td>observations by project staff: yield and income</td>
</tr>
<tr>
<td>monitor dispersals</td>
<td>Ad hoc observations by project staff</td>
</tr>
</tbody>
</table>

Changes as result of monitoring and evaluation:
There were several changes in the approach. Land users developed active participation to the program. Market linkages were also established.

There were several changes in the technology. Other technologies were introduced and were developed in the CFV sites such as contour farming using different crops suitable to their needs as hedgerows.
Impacts of the Approach

**Improved sustainable land management:** Yes, moderate; Soil and water conservation measures were introduced to the landusers such as contour hedgerows of legumes that contribute in improving the quality of the soil and lessen soil erosion.

**Adoption by other land users / projects:** Yes, many; Eight barangays with fifteen model farms adopted the CFV approach in La Libertad, Negros Oriental. The program was also replicated by other neighboring municipality.

**Improved livelihoods / human well-being:** Yes, great; Before, land users planted rice and corn only but after the program was introduced, they are now planting high value crops that provide higher income to them.

**Improved situation of disadvantaged groups:** Yes, great; 80%-90% of the farmer volunteers and adaptors perceived that CFV led to an increase in their crop and farm yield resulting in increased income.

**Poverty alleviation:** Yes, great; Increase in per capita income of CFV farmers-volunteers from Php 7,973.00 in 2004 to Php 16,745.42 in 2013, representing 47.6% increase.

**Training, advisory service and research:**
- **Advisory service effectiveness**
  - Politicians / decision makers: good
  - Planners: good
  - Land users*: good
- **Research contributing to the approach’s effectiveness:** Moderately
  - Researches conducted were useful in the evaluation of the cost effectiveness of the technologies practiced by farmers.

**Land/water use rights:**
Help - low in the implementation of the approach.

**Long-term impact of subsidies:**
Positive long-term impact: Greatly
Subsidies were given to the landusers such as tools for their daily farming activities.

**Concluding statements**

**Main motivation of land users to implement SLM:**
Production
Well-being and livelihoods improvement
Increased profit(ability), improve cost-benefit-ratio
Environmental consciousness, moral, health
Trainings and study tours (Lakbay-Aral)

**Sustainability of activities:**
Yes the land users can sustain the approach activities without support.
The land users were capacitated by the LGU through trainings, cross visits so that they can manage their farms and to share the knowledge with neighboring farmers.

<table>
<thead>
<tr>
<th>Strengths and → how to sustain/improve</th>
<th>Weaknesses and → how to overcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong LGU support system wherein they are the forefront for the present and the future of the CFV programs or any development program. They are the only permanent local institution that could deliver services and support to development initiatives. → There is a great need for local government to participate and provide the foundation for farmers’ activities, especially for farmers in the marginal sloping areas, who are least helped by government in terms of program thrusts and development initiatives. In engaging rural communities for sustainable development efforts, the local government must take a major responsibility, along with the communities themselves, for developing and sustaining initiatives. Marketing support system with the establishment of barangay trading post in the CFV sites, support for the operations of the two livestock auction markets at two barangays, transport of farm products from CFV sites to Poblacion in time for the market day every Thursday and linkage with OURFOOD Program (AFOS) based in Cebu City for the marketing of organically-grown high value crops. → Provision of market information to match supply to demand resulting to better price which could led to a shift in cropping systems and patterns to take advantage of positive market indicators.</td>
<td>No clear zoning and proper delineation for the CFV and reforestation areas. → There should be a clear zoning through policy and ordinance by the national and local government to sustain and preserve the CFV sites.</td>
</tr>
</tbody>
</table>