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 ans 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.

left: Hedgerows planted in contour. (Photo: Engr. Djolly Ma. P. Dinamling)

right: Flemengia and banana planted as hedgerows. (Photo: Engr. Djolly Ma. P. Dinamling)

Location: La Libertad, Negros Oriental
Approach area: 3.31 km^2
Type of Approach: project/programme based
Focus: mainly on conservation with other activities
WOCAT database reference: A_PHI008en
Related technology(ies): Contour Farming Using Hedgerows (T_PHI051en), Rockwall Terracing (T_PHI049en), Seed Production of Forage Legumes (T_PHI050en)
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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

	Constraint	Treatment
technical	Lack of technical knowledge among farmers and technical staff.	Provided series of technical training on the concepts and practices in CFV to the Barangay Development Councils (BDCs), Farmer Association, Municipal Development Councils (MDCs) and other stakeholders to enhance awareness on land degradation in the uplands and other environmental issues.
social / cultural / religious	Attitudes of farmers wherein they want an immediate result	Selection of farmer volunteers to be included in the CFV program and establishment of model farms. Government executives were invited to participate in farmers' field day in remote upland villages to show to the farmers their intention to support the program.
institutional	Lack of unity among farmers	Farmers' organizations were organized and strengthened by mobilizing the 'Dagyaw Team' or Volunteers Group for the establishment of CFV model farms.
financial	No continuous funding	Incorporation of the CFV program in the Annual Investment Plan (AIP) of the LGU of La Libertad, Negros Oriental

Participation and decision making

Stakeholders / target groups


land users, individual


SLM specialists / agricultural advisors

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

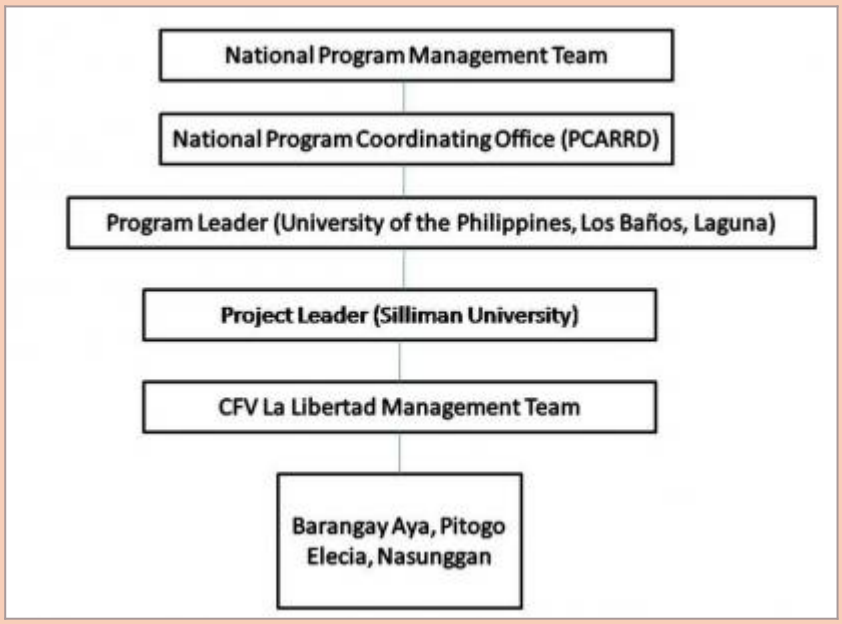
Implementing bodies: other (Academic Institutions (University of the Philippines Los Banos and Silliman University program and project management team)), local government (district, county, municipality, village etc) (Local Government Unit of La Libertad, Negros Oriental), local community / land users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

Land user involvement

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

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.



Organogram: Organizational structure in the implementation of CFV (Dr. Rex Victor O. Cruz)

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

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

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.

Strengths and → how to sustain/improve	Weaknesses and → how to overcome
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.	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.
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.	