



Soil Conservation Guided Farm System

Philippines - SCGFS, Guided Farm, Guided Farm Project

Soil Conservation Guided Farming System (SCGFS) is a land use management approach that integrates technologies: terracing, agro-pastoral technology, multi-storey, and contouring within the socio-economic and bio-physical limitations of upland areas for optimum development of soil and water resource in a sustainable manner.

Aim/objectives: Generally, SCGFS aims to promote sustainable land use management that provides agricultural livelihood while protecting and maintaining environmental sustainability in the upland areas of the country. Its specific objectives: (1) Establish community-based and farmer - managed techno demo farms cum learning centers on soil and water conservation in marginal uplands and watersheds of Small Scale Irrigation Projects (SSIPs); (2) Promote and disseminate effective soil and water conservation approaches and technologies for broader adoption; and (3) Develop a strong linkage and partnership among local stakeholders and cooperators to protect our upland resources and watersheds.

Methods: Participatory Approach amongst Stakeholders as spearheaded by the Bureau of Soils and Water Management (BSWM) through the Soil Conservation and Management Division (SCMD)

Stages of implementation: (1) Coordination with the Local Government Units (LGU) and consultation with farmers; (2) Memorandum of Agreement (MOA) preparation; (3) Reconnaissance survey (a. Site selection/ identification b. Dialogue with farmer cooperators); (4) Field Survey/Ground Truthing (Topographic survey, Land Resources survey); (5) Maps Preparation(Topographic map, Soil Map, Land Use Map, Slope Map and Erosion Map); (6) Preparation of preliminary Farm Development Plan; (7) Presentation of Farm Development Plan to the LGUs and Farmer Cooperators (Discussion, Revision/modification); (8). Preparation of Project Study Report (Final Farm Development Plan); (9) Institutional Development/ Capacity Building; (10) Implementation Stage / Farm Development; (11) Monitoring and Evaluation including Operation and Maintenance.

Role of stakeholders: A. Bureau of Soils and Water Management (BSWM): 1. Provide the over-all direction in the preparation of plans and programs for the implementation of soil and water conservation through the SCGFS; 2. Provide technical support and assistance in the promotion and implementation of soil and water conservation and in the conduct of capacity building activities (i.e. in terms of training modules and resource persons); B. Partner agencies/institutions (e.g. LGUs and other concerned agencies): 1. Prepare and endorse request to the BSWM for the establishment of SCGFS as demo farm of soil and water conservation technologies; 2. Provide technical support and assistance to the co-operators in the conduct of field survey and investigation, preparation of soil conservation farm plan, establishment of the SCGFS, and undertaking the necessary training activities; 3. In coordination with BSWM, assist the co-operators in availing necessary farm inputs and facilities for the establishment of the SCGFS; and 4. Undertake monitoring and assessment of operation and maintenance of established SCGFS to immediately address on-farm problems. C. The Farmer Cooperators (i.e. interest groups/individuals): 1. Signify their interest to establish soil and water conservation demo farm through formal request to the DA-BSWM; 2. Be willing to provide their own resources in the establishment of the demo farm; 3. Provide support and assistance to the Department of Agriculture-Bureau of Soils and Water Management (DA-BSWM) in the conduct of field survey and investigation; 4. Act as extension agents in the local community to disseminate soil and water conservation technologies with the demo farm as the community learning center.

Adaptors of soil conservation technologies continue to increase as more upland farmers are convinced of the benefits of improved income and better natural environment brought by conservation farming. As part of the strategy to encourage more SCGFS adopters, SCMD is continuously conducting trainings for farmers and LGUs technical staff to capacitate them in implementing soil conservation farming.

left: Farm Planning (Photo: Soil Conservation and Management Division Staff)

right: Technologies applied under the Approach: Multi-storey, Intercropping (Photo: Soil Conservation and Management Division Staff)

Location: Bulacan,
Approach area: 0.1 - 1 km²
Type of Approach: project/programme based

Focus: mainly on conservation with other activities

WOCAT database reference: A_PHI012en

Related technology(ies): Improved pasture under citrus (T_PHI066en)

Compiled by: Philippine Overview of Conservation Approaches and Technologies, Bureau of Soils and Water Management

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Problem, objectives and constraints

Problems



Low agricultural production, lack of technical knowledge, lack of cash to invest, low income

Aims/Objectives

SCGFS aims to promote sustainable land use management that provides agricultural livelihood while protecting and maintaining environmental sustainability in the upland areas of the country. Its specific objectives: (1) Establish community-based and farmer - managed techno demo farms cum learning centers on soil and water conservation in marginal uplands and watersheds of SSIPs; (2) Promote and disseminate effective soil and water conservation approaches and technologies for broader adoption; and (3) Develop a strong linkage and partnership among local stakeholders and cooperators to protect our upland resources and watersheds.

Constraints addressed		
	Constraint	Treatment
technical	Lack of technical knowledge	Capacity building, Farmers Field School
workload	Labor Intensive	Provide additional labor
institutional	No Farmers organization	Organized farmers association
financial	Lack of cash to invest	Support from BSWM, Department of Agrarian Reform (DAR) & LGUs; Income Generating Technologies

Participation and decision making

Stakeholders / target groups	Approach costs met by:								
  <p>other (specify) SLM specialists / agricultural advisors land users, groups</p>	<table border="1"> <tbody> <tr> <td>government (technical assistance i.e field surveys, provision of planting materials)</td> <td>20%</td> </tr> <tr> <td>local community / land user(s) (labor, care and maintenance)</td> <td>20%</td> </tr> <tr> <td>local government (district, county, municipality, village etc) (technical assistance, planting materials)</td> <td>60%</td> </tr> <tr> <td>Total</td> <td>100%</td> </tr> </tbody> </table> <p>Annual budget for SLM component: US\$ 2,000-10,000</p>	government (technical assistance i.e field surveys, provision of planting materials)	20%	local community / land user(s) (labor, care and maintenance)	20%	local government (district, county, municipality, village etc) (technical assistance, planting materials)	60%	Total	100%
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Decisions on choice of the Technology(ies) mainly by SLM specialists with consultation of land users

Decisions on method of implementing the Technology(ies): mainly by SLM specialists with consultation of land users

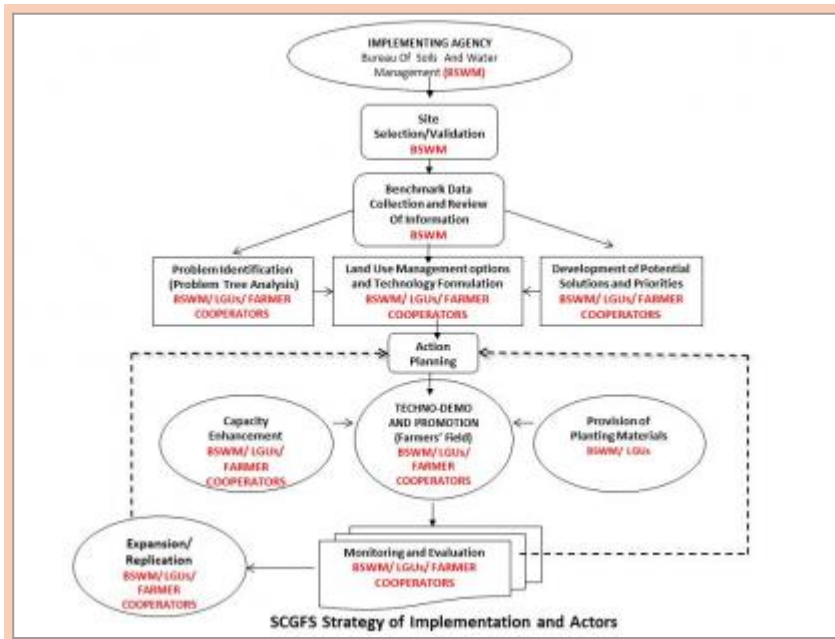
Approach designed by: national specialists

Implementing bodies: government (Bureau of Soils and Water Management (BSWM) through the Soil Conservation and Management Division (SCMD)), local government (district, county, municipality, village etc) (Local Government Unit of San Jose del Monte, Bulacan), local community / land users (San Roque Upland Farmers Agrarian Reform Cooperative)

Land user involvement		
Phase	Involvement	Activities
Initiation/motivation	Passive	BSWM initiates the establishment of the project. Field surveys i.e site validation, topographic surveys etc. are conducted by BSWM technical staffs.
Planning	Interactive	Planning involves both BSWM and LGUs, technology/ies to be established is/are dependent on the biophysical limitation of the area and the needs of farmer cooperators.
Implementation	Interactive	Implementation of the project requires participatory involvement amongst stakeholders.
Monitoring/evaluation	Interactive	BSWM, LGUs and farmer cooperators are responsible in the monitoring and evaluation of the established technologies, these will ensure continued adaptation of the technology.
Research	None	No research involved in the approach, it's main purpose is to showcase technology demonstration farm for soil and water conservation technology/ies.

Differences between participation of men and women: Yes, great
 Women are particularly involve in harvesting vegetables.

Involvement of disadvantaged groups: Yes, little
 Needy family heads



Organogram: SCGFS Stages of Implementation and Actors

Technical support

Training / awareness raising:

Training provided for land user, field staff/agricultural advisor
 Training was demonstration areas, organization, capacity building, site visits / farmer to farmer
 Training focused on Soil and Water Conservation Measures, Land Degradation, Soil Erosion Issues.

Advisory service:

BSWM is the implementing agency. Advises are coming from the experts/ specialists of BSWM.
 The extension system is quite adequate to ensure continuation of activities. BSWM mandate to protect our sloping lands from further degradation, its our mission not only to ensure the conservation and rehabilitation of our natural resource base but also its sustainable use.

Research:

No research.

External material support / subsidies

Contribution per area (state/private sector): No.

Labour: Voluntary.

Inputs:

- Equipment (machinery, tools, etc): Farm machineries. Fully financed
- Infrastructure (roads, schools, etc): Greenhouse, Access Roads. Fully financed
- Agricultural (seeds, fertilizers, etc): seeds and seedlings. Fully financed
- Irrigation facilities: Small Water Impounding Project (SWIP), Ram Pump,Solar pump. Fully financed

Credit: Credit was not available

Support to local institutions: Yes, great support with financial, training

Monitoring and evaluation

Monitored aspects	Methods and indicators
area treated	Ad hoc observations by project staff, land users
no. of land users involved	Ad hoc measurements by project staff
economic / production	Regular measurements by project staff

Changes as result of monitoring and evaluation:

There were several changes in the approach. (1) Site-specific application of technologies (2) Crop diversification and (3) Innovations in soil and water conservation measures.

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Impacts of the Approach

Improved sustainable land management: Yes, great; SCGFS involves the development of farming systems that adopts appropriate land uses, proper combination of crop and animal commodities, and the right mix of soil and water conservation practices. Thus, these measures ensures development in land use, livestock production and conservation measures.

Adoption by other land users / projects: Yes, many; Adjacent farms/ barangays and other sloping areas of the Philippines

Improved livelihoods / human well-being: Yes, great; Adaptors continue to rise, and with that more farmers generated more income, thus they were able to send their children to school and purchase properties.

Improved situation of disadvantaged groups: Yes, little; The approach aids in income generation for needy family heads.

Poverty alleviation: Yes, great; Crop diversification helps needy farmers increase their income. Farmers who have undergone SLM training have more exposure to sustainable land use management that would help them improve and widen their knowledge in their farming activities.

Training, advisory service and research:

- Training effectiveness

Land users*: excellent

LGU: excellent

Land/water use rights:

None of the above in the implementation of the approach. Land ownership does not hinder in any case the implementation of the approach.

Long-term impact of subsidies:

Concluding statements

Main motivation of land users to implement SLM:

Production: One of the main purpose of the approach is to help farmers increase their production.

Environmental consciousness, moral, health: Farmers will generate income while conserving the land.

Well-being and livelihoods improvement

Sustainability of activities:

Yes the land users can sustain the approach activities without support.

Technologies are already established and proven to be socially acceptable and economically viable. Farmer cooperators are equipped with technical knowledge they obtained from seminars and training provided by the approach, with these it ensures sustainability of the project with farmer's own initiative.

Strengths and → how to sustain/improve

New opportunities for other projects from government → Continued adaption of the SCGFS Project

Learning center for other barangays → Continued adaption of the SCGFS Project

Organization of farmers into cooperatives/associations → Strengthening the linkages between farmers and all other stakeholders concerned.

Transfer of technologies to farmer beneficiaries → Regular monitoring from BSWM and Local Government Units (LGU); Continuous support from BSWM for new adaptors in terms of planting materials

Multi-sectoral involvement → Regular meetings

Easy to adapt → Information dissemination through capacity building and IEC materials

Serves as a learning center for other barangay or farmers → Regular monitoring and field visit of the project/technical personnel; maintenance of the area

Participatory/Interactive method → Strengthening the linkages between farmers and SLM specialists

Weaknesses and → how to overcome

No major concern in the weaknesses / disadvantages of the approach.

Lack of research component particularly in economic and ecological analysis/assessment → Conduct on-site research studies; engage State/Universities and Colleges (SUCs) in research activity.

Low budget for the establishment of techno-demo → Establish linkages with Local and International funding institutions; development of research proposals for possible funding.



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