

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

# Soil Conservation Guided Farm System (Philippines)

SCGFS, Guided Farm, Guided Farm Project

## DESCRIPTION

Soil Conservation Guided Farming System (SCGFS) is a land use management approach that integrates technologies: terracing, agro-pastoral technology, multi-storey cropping, 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.

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.

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)Conduct of season long farmer field school; and (12) 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;

### LOCATION



Location: Bulacan, Philippines

#### Geo-reference of selected sites

• 121.10526, 14.81255

Initiation date: 2002

Year of termination: n.a.

#### Type of Approach

traditional/ indigenous recent local initiative/ innovative

project/ programme based

- 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 BSWM;
- 2. Be willing to provide their own resources in the establishment of the demo farm;
- 3. Provide support and assistance to 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.



Farm Planning (Soil Conservation and Management Division Staff)

### APPROACH AIMS AND ENABLING ENVIRONMENT

#### Main aims / objectives of the approach

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.

# Conditions enabling the implementation of the Technology/ ies applied under the Approach

- Availability/ access to financial resources and services: Support from BSWM, Department of Agrarian Reform (DAR) & LGUs; Income Generating Technologies
- Institutional setting: Organized farmers association
- Knowledge about SLM, access to technical support: Capacity building, Farmers Field School
- Workload, availability of manpower: Provide additional labor

Conditions hindering the implementation of the Technology/ ies applied under the Approach

## PARTICIPATION AND ROLES OF STAKEHOLDERS INVOLVED

Stakeholders involved in the Approach and their roles

What stakeholders / implementing bodies were involved in the Approach?	Specify stakeholders	Describe roles of stakeholders
local land users/ local communities		
SLM specialists/ agricultural advisers		
local government	Local Government Unit	

## Lead agency

Land user groups

#### Involvement of local land users/ local communities in the different phases of the Approach

initiation/ motivation

planning

implementation

ref-monitoring/ evaluation

BSWM initiates the establishment of the project. Field surveys i.e site validation, topographic surveys etc. are conducted by BSWM technical staffs.

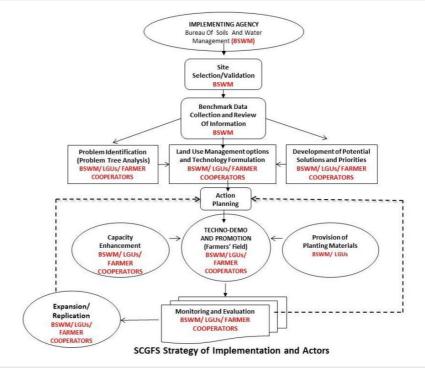
Planning involves both BSWM and LGUs, technology/ies to be established is/are dependent on the biophysical limitation of the area and the needs of farmer cooperators.

Implementation of the project requires participatory involvement amongst stakeholders.

BSWM, LGUs and farmer cooperators are responsible in the monitoring and evaluation of the established technologies, these will ensure continued adaptation of the technology.

#### Flow chart

SCGFS Stages of Implementation and Actors



## Decision-making on the selection of SLM Technology

#### Decisions were taken by

- land users alone (self-initiative)
- mainly land users, supported by SLM specialists
  - all relevant actors, as part of a participatory approach
- mainly SLM specialists, following consultation with land users
- SLM specialists alone politicians/ leaders

#### Decisions were made based on

- evaluation of well-documented SLM knowledge (evidence-based decision-making)
- research findings
- personal experience and opinions (undocumented)

# TECHNICAL SUPPORT, CAPACITY BUILDING, AND KNOWLEDGE MANAGEMENT

## The following activities or services have been part of the approach

- Capacity building/ training
- Advisory service
- Institution strengthening (organizational development)
- Monitoring and evaluation
  - Research

## Capacity building/ training

# Training was provided to the following stakeholders

- land users
- field staff/ advisers

#### Form of training

- on-the-job
- farmer-to-farmer
- demonstration areas
- public meetings
- course
- organization, capacity building

#### Subjects covered

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. Advisory service was provided on land users' fields at permanent centres Institution strengthening Institutions have been at the following level Describe institution, roles and responsibilities, members, etc. Needy family heads strengthened / established local regional no national yes, a little yes, moderately yes, greatly Further details Type of support financial capacity building/ training equipment Monitoring and evaluation FINANCING AND EXTERNAL MATERIAL SUPPORT Annual budget in USD for the SLM component The following services or incentives have been provided to land < 2.000 Government (technical assistance 2,000-10,000 i.e field surveys, provision of Financial/ material support provided to land users 10,000-100,000 Subsidies for specific inputs planting materials) 20%, local 100,000-1,000,000 Credit government (technical assistance, > 1,000,000 Other incentives or instruments planting materials) 60%, local land Precise annual budget: n.a. users (labor, care and maintenance) 20% partly f fully fir equipment: machinery agricultural: seeds 1 Greenhouse, Access Roads Labour by land users was voluntary food-for-work paid in cash rewarded with other material support IMPACT ANALYSIS AND CONCLUDING STATEMENTS Impacts of the Approach No Yes, little Yes, mode Yes, greatl Did the Approach help land users to implement and maintain SLM Technologies? 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. Did the Approach empower socially and economically disadvantaged groups? 1 The approach aids in income generation for needy family heads. Did the Approach lead to improved food security/ improved nutrition? 1 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. / Did other land users / projects adopt the Approach? Adjacent farms/ barangays and other sloping areas of the Philippines Main motivation of land users to implement SLM Sustainability of Approach activities increased production Can the land users sustain what hat been implemented through the

increased profit(ability), improved cost-benefit-ratio

Approach (without external support)?

reduced risk of disasters reduced workload

payments/ subsidies rules and regulations (fines)/ enforcement

prestige, social pressure/ social cohesion affiliation to movement/ project/ group/ networks

environmental consciousness

customs and beliefs, morals enhanced SLM knowledge and skills

aesthetic improvement conflict mitigation

well-being and livelihoods improvement



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.

# **CONCLUSIONS AND LESSONS LEARNT**

#### Strengths: land user's view

- New opportunities for other projects from government
- Learning center for other barangays
- Organization of farmers into cooperatives/associations

# Strengths: compiler's or other key resource person's view

- Participatory/Interactive method
- Serves as a learning center for other barangay or farmers
- Easy to adapt
- Multi-sectoral involvement
- Transfer of technologies to farmer beneficiaries

### Weaknesses/ disadvantages/ risks: land user's viewhow to overcome

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

### Weaknesses/ disadvantages/ risks: compiler's or other key resource person's viewhow to overcome

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

# **REFERENCES**

Compiler **Editors** Reviewer Philippine Overview of Conservation Deborah Niggli Approaches and Technologies Ursula Gaemperli

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## Resource persons

Philippine Overview of Conservation Approaches and Technologies (philcatsecretariat@gmail.com) - SLM specialist Samuel Contreras (sammycontreras@yahoo.com) - SLM specialist

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# Full description in the WOCAT database

https://qcat.wocat.net/af/wocat/approaches/view/approaches\_1973/

#### Linked SLM data

Technologies: Improved pasture under citrus https://qcat.wocat.net/af/wocat/technologies/view/technologies\_1321/ Technologies: Papaya production using plastic mulch and drip irrigation system

https://qcat.wocat.net/af/wocat/technologies/view/technologies\_4414/

## Documentation was faciliated by

#### Institution

• Department of Agriculture-Region VIII (DA-8) - Philippines

#### Project

Decision Support for Mainstreaming and Scaling out Sustainable Land Management (GEF-FAO / DS-SLM)

#### Key references

San Jose del Monte Soil Conservation Guided Farm Project: A success Story, Madrid Agribusiness Digest, 2012,pp 36: 1.28 USD

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