



OP6 SGP Innovation Programme on South-South Cooperation

Replicating good practices across Ghana,
Liberia and Sierra Leone
PROJECT DOCUMENT

OP6 SGP INNOVATION PROGRAMME ON SOUTH-SOUTH COOPERATION

Introduction

Following the successful implementation of smallholder farmers' investment in innovative climate-smart agroecology under OP6, there is the need to upscale and promote broader adoption, knowledge exchange, and encourage cross country replication of the good practices. Ghana, Liberia, and Sierra Leone intend to replicate these interventions through South-South cooperation utilizing the OP6 modalities.

The theme of the intervention is *“Replicating and promoting broader adoption of innovative climate-smart agroecology within community landscapes/seascapes in Ghana, Liberia, and Sierra Leone”*. The purpose is to:

- a) mobilize young organic climate-smart innovative farmers' into networks as smallholder investors, to support a transition to boost agroecology, strengthens local institutions for self-determination, facilitates a higher level of aggregation and diversify agricultural production and marketing of organic products;
- b) develop the capacities of these farmers as farmer-entrepreneurs to learn cultivations and propagation practices for alternative crops, integrated local business people to incorporate in small ruminant production for animal and
- c) upscale the establishment of **Rural Support to Service Centres** to serve as increased farmers access to services that support small scale business to improve access to organic fertilizers, seeds, technical advice, renewable energy, storage, microcredit, insurance;
- d) facilitate access to technologies and transformational processes, through communications and access to information technologies; and increased access to knowledge that will promote integrated research development and share learning through exchange field visits, SMS, and other Apps

Problem Definition

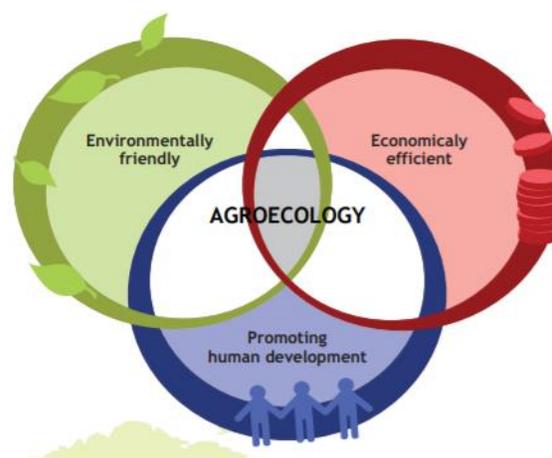
The Youth farmers in the three West African states are constrained by a lack of skills and competences for rural service provision to fight land degradation and climate variability. The rapid land degradation caused by years of harmful traditional slash-and-burn farming, open livestock grazing, and the recent ravage harvest and exportation of rare and threatened species of tropical hardwood by foreign companies in the West African countries. This situation has induced deforestation, and coupled with erratic rainfall reduced soil fertility such that the population faces

a steady decline in agricultural productivity thereby exacerbating poverty and widespread hunger and malnutrition in many regions.

There are unsustainable forest land-use practices (especially by poor farmers lacking alternative livelihoods) in all the three countries. Farming is still rudimentary based on high conventional external inputs. Poor tenant technical skills for land rehabilitation. Major changes are needed in skills training, access to farm inputs (especially improved varieties), rural agricultural financing at lower interest rates, and agro-technology development policy in order to reach out to/attract potential young farmers. There is poor adoption of technological innovations leading to poor agricultural and food systems that contribute to rural poverty and unsustainable incomes. The lives and livelihoods of forest-dependent communities are poor and their human rights have been violated severally. There is a need to support these farmers to invest in the environment as a business enterprise and not business as usual.

Project Objectives

The main objective of this intervention is to promote knowledge exchange, replication and broader adoption of proven technologies and good practices in agroecology and climate-smart agriculture among smallholder farmers in Ghana, Liberia, and Sierra Leone in order to improve farmers' incomes, food security and their dignity whilst promoting sustainable land management.



The specific objectives are:

- a) to promote knowledge transfer and build skills in proven technologies and good practices in inclusive-investment for agroecology and climate-smart agriculture as solutions to land degradation, hunger, and poverty within rural landscapes;
- b) to support smallholder farmers to invest in proven technologies in agroecology and climate-smart agriculture as business enterprises to create wealth and sustainable incomes in rural economies;
- c) to increase access and exchange communications among rural communities with the aim of creating greater awareness of common problems and adoption of technological innovations leading to more robust agricultural and food systems that facilitate rural economic integration and sustainable incomes;
- d) to support policymakers with appropriate recommendations for food security, poverty alleviation, and adaptation to climate change based on agroecology in order to respond to the problems most seriously affecting rural farmers in West Africa.

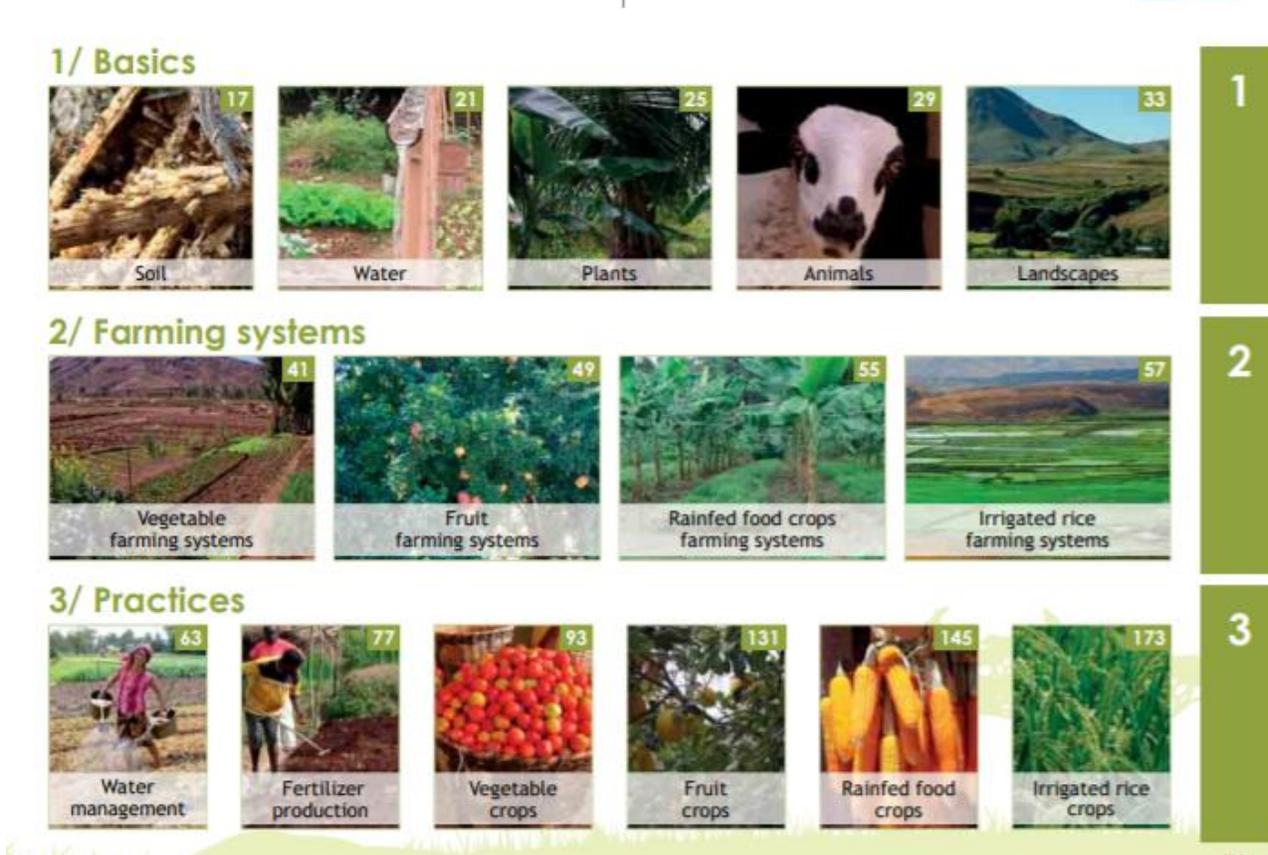


Figure 1 The Agroecology concept and practices

Justification

The SGP countries have over the years promoted a number of successful climate-resilient agriculture and food systems, organic and agroecology projects within the buffer zones of critical ecosystems and degraded landscapes. Much of the work has been done in promoting organic commercial farming and with this, SGP has innovated by integrating the elements of in-situ conservation of genetic resources, climate-smart agriculture, agroecological innovative farming and land-based organic providers (i.e. bio-deposit) to reduce the use of chemical-based fertilizers while reducing emission from ozone-depleting substances such as nitrites and nitrates (Figure 1). The projects have created major activities on forest corridors in sloping lands in danger from slash-and-burn cultivation with the dual purpose of preventing cover loss and erosion as well as forest fragmentation. These investments have contributed to UNDP SDC Outcome 5 and the GEF/SGP community landscape conservation, climate-smart innovative agroecology, and chemicals and waste management portfolios. The program has built new partnership mechanisms with funding for sustainable land management solutions at community and sub-national levels.

Innovative technologies, knowledge and skills to be promoted and exchanged.

Some of the proven innovations and smallholder investments in agroecology and climate-smart agriculture practices to be replicated and shared among the farmers in three countries include:

- a) The revival of traditional agroecological farming systems. This project protects traditional agroecological farming systems that are threatened by industrial agricultural practices (cashew, cocoa, and fruit orchards). Seed diversity and sovereignty for indigenous foods, vegetables, and threatened medicinal species are the key focus. The project practice is fully inclusive, driven by communities and involves activities such as the establishment of community seed banks and household seed storage systems; community ecological governance, seed festivals, community research groups, seed maps, exchange visits, community dialogues, seed exchanges, and sharing, seed selection, saving and multiplication, and much more. Currently, it has 340 farmers working on reviving seeds and has revived 10 varieties of seeds. Where they work, the poverty level has gone down. Farmers are less reliant on external inputs, have more food, have improved their health, incomes, and welfare, and are more able to send their children to school.

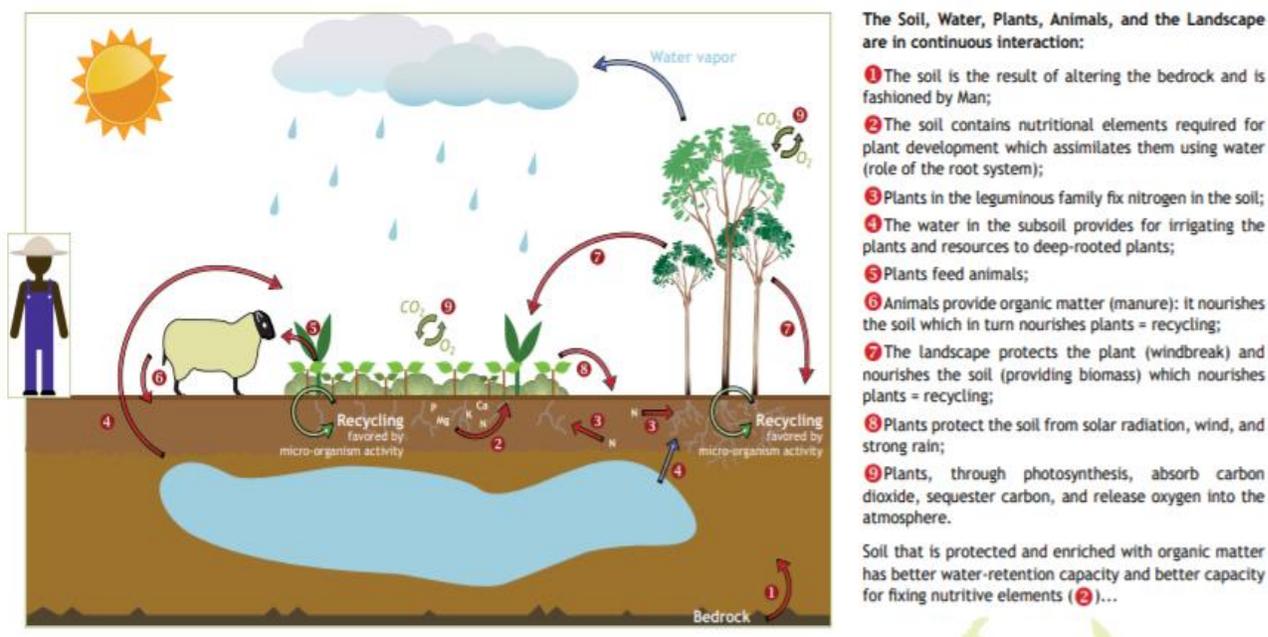
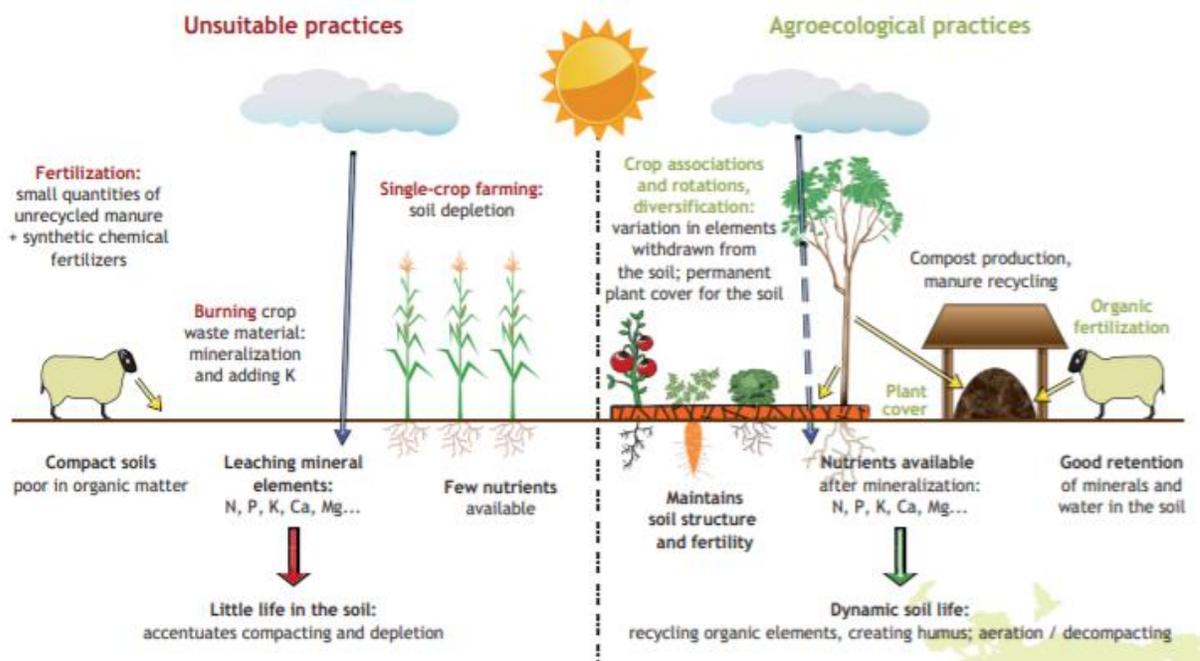


Figure 2 Agroecological system elements and interactions

- b) Integrated organic farming approaches that contribute to the minimization of the release of persistent organic pollutants (POP's) whilst producing poultry, fish, and rice within a safe environment. The project has built the capacities of rural communities to phase out the application and use of POP chemicals but improve on their irrigated land-use efficiency and productivity and through integrated organic farming approaches that contribute to the minimization of the release of persistent organic pollutants (POP's) whilst producing poultry, fish, and rice within a safe environment. The project has established integrated rural cottage

industries and strong commodity value chain linkages around rice and fish and poultry products-rice and fish marketing. It has increased the productivity of land and water resources effectively by integrating irrigation, aquaculture, and poultry. Rice, poultry, and fish are grown together on the same plot adjacent to each other and the by-products of one are used as inputs by the other. The project has built an enterprise made up of 150 farmers in poultry-rice-fish cultivation, through Farmer *Field Schools* (FFS) methods in Integrated Pest and Disease Management strategies.



- c) Community waste management, climate-smart sustainable agriculture, and livelihood development. The project involves developing local capacities in community waste management to prevent waste burning by learning how to collect waste from homes, segregating the waste into degradable and non-degradable; recycling the degradable waste into organic compost, using the compost to produce organic vegetable and establishment of agroforestry farms; focusing on preparation and use of POPs alternatives natural pesticides to control pests and establishing apiaries to assist pollination and produce honey. The main project business involves building the capacities of Youth as enviro-entrepreneurs to invest in compost preparation using the aerobic process to produce organic compost. The business involves collecting waste from the house to house and sorting them out; preparation and packaging of liquid fertilizer (folio) and granules (pellets) and pesticides using organic materials. The business process 200 tons of domestic waste weekly into organic fertilizer with 130 farmers investing in climate-smart vegetable production. Famers invest in a tree nursery, beekeeping, dry season vegetable, and agroforestry using the compost produced from the project. The agriculture inputs are supplied to the farmers on the credit system and the profits are reinvested in the business. Farmers' training schools have been set up to train farmers on farms.



Figure 3 Innovative Irrigation system

- a) Social enterprise community-supported agriculture network. This investment increases the capacity for self-regulation of pests and to increase the capacities of farming, specifically by diversification of the use of biological control agents, integration of soil management using rotation systems, soil laboratories, design and management of the cultivation with polyculture or mixed cultures, cultivation of natural enemy pest regulation and increasing biodiversity by enhancing the complexity of the production systems matrix. The pest management techniques increase the diversity and regulatory activity of natural enemies by 25-35%. The farmers are trained to reduce the costs of pesticides and pests in agrarian production. The project addresses the gaps in rural development, by focusing on conservation, organic production, social entrepreneurship, and marketing hubs. Agro-Eco farmers entail key features including but not limited to: seeds and plant genetic conservation, farmer-led and participatory plant breeding, community-based seed banks and learning farms, training of young farmers in organic product processing. The project has trained a total of 3,048 small-scale farmers in climate-resilient agriculture. It developed 73 farmer breeders and 420 farmer-bred lines (varieties) for rice/corn, initiated 22 farmer's organizations now engaging in social entrepreneurship, and established 5 marketing hubs. It has increased the regular income of farmers and influenced local policy.

Project Intervention Strategy

Project Strategy

This project will produce high impact and scaling up of the innovations and practices developed by SGP grantees, as well as other CSOs within Ghana and the participating countries. The project will strengthen the OP6 SGP South-South Community Innovation Exchange Platform to promote knowledge exchange among Ghana, Liberia, and Sierra Leone. The countries will first replicate the technologies in their respective SGP countries to encourage cross country/regional replication of good practices. The rationale for this is to promote broader adoption at the national level. This will be done by a) strengthening the capacity of local communities to form social enterprises that will invest in the technologies; b) support the social enterprises to promote knowledge transfer of climate-smart agroecology solutions among communities; c) increase and improve communications among the communities with the aim to create greater awareness of common problems and wider access to available knowledge, experience, and networks; d) support policymakers with appropriate recommendations for food security, poverty alleviation, and adaptation to climate change based on agroecology in order to respond to the problems most seriously affecting rural farmers in West Africa.



Neem treatment preparation



Neem treatment preparation



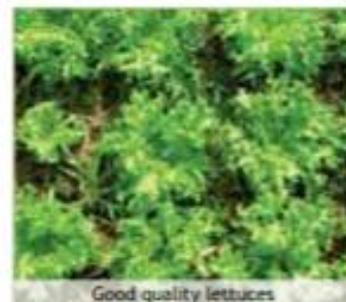
Jar containing bio-pesticides



Red scarid attacks on eggplant



Good quality beets



Good quality lettuces

Project Management

The innovative approach is a peer to peer–in-person exchange to learn and apply a solution/technology to address the challenges in land degradation. It shall be a strategic program led by Ghana. The grant recipients in Ghana shall collaborate with the “successful knowledge-based previous grantees” in Ghana to acquire the capacity and skills to replicate the practices

across the three countries and also become a trainer of trainers. Previous successful grantees in Ghana shall provide a center of excellence in the methodology for the technological infusion process. They will produce “How-to-do manuals” with step by step instructions and drawings on how to replicate and invest in the technologies. At the onset of the program, farmer representatives for Liberia and Sierra Leone (key innovators) will join their counterparts in Ghana to go through the manuals and visit best practice areas. The grant recipient in Ghana will organize residential training for the farmers from the three countries to facilitate replication. The selected grantees will have the opportunity to work with capacitated and second-level NGOs for higher impact like a cooperative, social enterprise, or association that can replicate the solution to hundreds of its members. The grantee will provide technical and financial support to the key innovators to replicate the models based on country experience.

At the end of the third phase, the key innovators from the three countries shall visit each country to learn and impact knowledge and new technologies to enrich the country programs. Based on demand, Resources Person Ghana shall visit the grant recipient countries to impact specialized knowledge and skills. Where required expertise is not available in either the three countries, efforts would be made to bring them from within the African countries.

Partnership

The project will receive technical support from the University of Organization and Development in Sunyani. They will assist the grant recipient to prepare the manuals, create knowledge and exchange platforms, monitor and evaluate and prepare the final reports. The University will provide co-funding to support the Ghanaian recipients

The GEF/SGP National Coordinators in Ghana, Liberia, and Sierra Leone will provide technical support and mobilize additional funding from other development partners.

The project will galvanize support from the Ministries of Agriculture and other state agencies in the respective countries to provide technical and financial support and to mainstream the model into regional and district/country level development planning.

The civil society networks in agriculture would be partners in the implementation of the project activities. They will help in the broader adoption of the best practices. A network of CSOs in Ghana, Liberia and Sierra Leone would be formed to exchange knowledge

A knowledge platform would be created from where the proven models with manuals will be provided for respective farmers to download and apply. Hotline services will be created to enable the farmers to interact with Resources Person on the “how-to” approach.

Conclusion

The theme for this collaboration is to promote climate-smart agroecology to conserve community landscapes. This will invariably address land-hunger buildups, poverty reduction (SDG 1), and extreme hunger (SDG 2) among rural populations in Ghana, Liberia, and Sierra Leone. The

program seeks to upscale and promote broader adoption of proven agroecology and climate-smart agricultural technologies, systems and practices in the three West African countries as follows: a) investing in proven technologies for small-scale farmers that lead to improving food security and climate change adaptation for both organic/agroecology and conventional farmers; b) promoting innovations and tested technologies jointly developed by farmers and researchers; c) adopting technological innovations that will lead to more robust agricultural and food systems to rejuvenate rural economic integration and sustainable incomes