

Background



FAEC, is formally established and registered with Association and NGO Law on 17 January 2019, has its functions with dynamic and potential efforts to strengthen and support farmer's organization on the fields of organizational development; women and youth empowerment in the agriculture sector and managerial structure of farmer's organization; entrepreneurship, access to finance and market; collective business and Agri-technique; innovative irrigation and waste management; and environment.

VISION

Cambodian small-scale farmers, include women and youth farmers, live in better conditions and environments.

MISSION

Promote good governance, independence, and sustainability of farmer's organization and connecting them and their members to the knowledge, experience, and resources to help the small-scale farmers to build a better life and improve good environment.

About 73% of households in Battambang and indicated, 95% of population in Kampong Thom are engaged in the agriculture and they're the rice farmers. The heavier floods and longer dry season or drought are now the major problems hitting them and affecting their food security and exports after drought left much land in the Northwest dry and cracked. Usually, from May to August in the years, there was severe impact from the climate change to the dry paddy season, vegetables, and fruit trees. The consequence of climate change is unpredictable, but it affected soil erosion and the risk of losing topsoil. The survey in 2020 with more than 100 ACs, it showed that 30-40% of dry seasonal paddy was affected by drought and they're replanted. The remaining 60% was recovered but the yield decreased from 4 to 3 tonnes per hectare. Therefore, the harvest season in the years were lower and delayed until mid-October or November. Nowadays, the lower reaches of the Mekong River are also a concern for the farmers along the Tonle Sap Lake. The results of trials with 220 farms that using 23 different types of horticultural crops serve as solid evidence base for the intervention proposed in this project, aiming to integrate the use of biochar into practices. The results from these trials fit in perfectly with CCSP aims of increasing livelihoods through a 10% increase in crop production, it's showed that the marketable yield of horticulture crops increased by 29% on average with the application of biochar in both wet and dry seasons on different soil types.

Objectives

RAPESD project has its overall objective is to "reduce the vulnerability to negative impacts and risks of smallholder farmers through their participations in climate change response action and sustainable developments".

To be reached this overall objective, the RAPESD proposes three desired specific objectives as such following:

- 1) Increased climate resilience, agroecosystem sustainability and food and economic security of the smallholders through adaptation planning, training on climate smart agriculture techniques;
- 2) Access to affordable the carbon-based agricultural inputs (carbon-based fertilizers, biochar, and natural pesticides) to build long term soil resilience and increase yields for food security; and
- 3) Identify pathways for smallholder farmers to access international carbon finance in exchange for increasing the carbon content of their soil using carbon-based fertilizers and other biochar-based products.

Key technologies and approaches introduced

- Needs assessment and baseline survey and endline evaluation are proposed to be compared between the primary data and final results of the project.
- Strengthening capacity of practitioners, climate ambassadors, focal points and rural agents to become the potential representatives of FAEC and their farmer's organization in developing capacity of their farmer's organization and leading to develop and upscale the adaptation and resilience of climate change and economic & agroecosystem sustainability.
- Researching to seek the evidences on statuses of animal feed formula, carbon finance and it's tools to measure the carbon in rice and horticulture and yields after using the carbon-based products to improve the soil.
- Increasing biochar products to be used in the farms that this product is major improvement of carbon measurement in soil and option of additional revenue when they purchase this certified products.
- Identifying the ways for access to market and finance for the farmer's organization that these are the sources for them to improve their economic development and they're able involving in development of economic & agroecosystem sustainability.
- Encouraging to build networking between farmer's organization and their stakeholders (the state and non-state actors) to increase relationship and demanding responsibility and accountability to be addressed basic need and climate changes and to establish pilot carbon finance groups in Cambodia.
- Identifying potential pathway (include organizations, methodologies, certification systems) appropriate for Cambodian farmers to be able to access carbon finance opportunities.



Outputs and key activities

- The questionnaires were designed and 20 vulnerable members (include 10 women, 5 men and 5 young farmers) have been interviewed for needs assessment to collect the baseline, basic needs and measure general knowledge about family financial plans and adaptation and resilience to climate change.
- 100 farmers including 50 women and 50 young farmers in 10 ACs are selected as the climate ambassadors.
- 10 focal points (5 women, 3 men and 2 young farmers) are selected for coordination of adaptation and resilience of climate change and economic & agroecosystem sustainability.
- 1 facilitation skill manual is developed and 1 workshop is carried out to 10 facilitators on the skills of facilitation for each of the selected vulnerable groups that they have ability in facilitation of any other trainings and events of climate change, introduce climate resilience methods and improve financial planning abilities of the farmers in the selected agriculture cooperatives.
- 1 strategic and business plan format is designed and 10 focal points is trained on topic of AC's strategic plan development.
- 1 formula on the status of animal feed formula is designed.
- 200 farmers with gender disaggregation# of participants in model farm visits
- 10 model farmers (4 women, 3 men and 3 young farmers) are selected and 10 tonnes of the soil improvement products (biochar product of HUSK) are distributed to those selected-model farmers.
- 1 orientation workshop to the selected-model farmers to be dexterous in practicing the model farms as follow the designed format is conducted.
- 1 format of AC's meeting and management is established
- 10 trainings have been conducted to 100 youth & women ambassadors from 10 ACs about AC's meeting organization and management.
- 1 format of accounting management is designed and 1 training for 10 facilitators is conducted
- 13 AC's representatives are participated in annual AC's forums that organized by the NGO/CSO network in Cambodia.



Implementation progress

- Prepared needs assessment and baseline's questionnaires (did literature reviewed and extracted references from many sources and worked together with the selected model farmers in developing this questionnaire).
- Interviewed 20 farmers and conduct focus group discussion with the agriculture cooperatives' committee members for selecting basic information as required for need assessment and baseline survey. The model-selected farmers are taken roles to collect the information that they're supported by the project officers.
- Selected 100 women and young farmers for the role of climate ambassadors. The term of reference for the climate ambassadors is developed with the involvement of the model-selected farmers.
- Developed term of reference (roles and responsibilities) of focal points/persons.
- Selected 10 focal points/persons (core persons) to be representatives of vulnerable groups in each agriculture cooperative for coordination of adaptation and resilience of the climate change and economic & agroecosystem sustainability.
- Developed strategic plan format for agriculture cooperative that this is a model can be useful by the cooperatives to design their strategic and business plans. The business plan should be compromised and be consistent with the strategic plan.
- Developed the format of agriculture cooperative's meeting and management that can be useful by agriculture cooperatives to set their schedule of regular meeting and stages of cooperative management.
- Conducted kicks off project with the participation of CCCA3's representatives, local competent authorities and project's beneficiaries. Totally there've 30 participants.
- Selected 10 model farms and 10 farmers of these farms are given the biochar. Each of them got 1 ton of this biochar.
- Cooperated with NGO network and organized AC forum. Totally, 13 target ACs of this RAPESD project are participated, so that they have learnt the good experiences of AC management, policy dialogues and access to finance and markets.
- Conducted one orientation workshop to selected-model farmers to be dexterous in practicing the model farms as follow the designed format is conducted.



Key challenges and lessons learnt

The works and interactive communication with target communities through focal points who have been empowered and built their abilities and given them an in-depth understanding of objective of each project activity, indicators, outputs and outcomes of project and desired specific objectives or overall objectives of project is the option and then those focal points are oriented to get their roles and responsibilities and planning to participate in the implementation of this project these are the choices have been caught by the RAPESD project.