INNOVACC – Innovation for Climate Change Adaptation

Objectives of the project

The project INNOVACC seeks to enhance people's resilience to climate change in the North and Far-North regions of Cameroon. More specifically, the project aims to sustainably improve productivity of agro-sylvopastoral systems and rural households' income, while reducing their vulnerability to climate change effects.

Background

Climate change, mainly rising temperatures and irregular rainfall, is significantly affecting the North of Cameroon. Agriculture and livestock production are very vulnerable to the effects of climate change. Over time, rural households have developed a multitude of practices and strategies to adapt. Communities have put in place empirical approaches to reduce risks and plan farm activities in response to year-to-year variability in rainfall and temperature. Nevertheless, these adaptation strategies may not remain efficient under future climate scenarios. In addition, adaptation to climate change is further complicated by other factors such as demographics, security, internal migrations, reduced grazing land, and access to resources and finance. Climate information can help farmers develop better adaptation strategies. However, the already weak agricultural extension services in the project area do not provide the required support that would help farmers and pastoralists make informed decisions in response to climate change.

Another major concern related to climate change mitigation is the energy sector, with firewood representing two-thirds of the country's primary energy consumption, resulting in the degradation of the already fragile landscapes. In addition, access to and affordability of electricity remain low for a large part of the rural population. Therefore, there is a need to find alternative renewable energy sources, as well as to regenerate and plant trees for fuelwood.

Finally, climate change adaptation and mitigation may also foster the emergence of new businesses, particularly for women and youth. For example, tree protection and planting as a climate change adaptation and mitigation strategy can boost the supply of tree products for regional and national value chains where women often play a major role. Nevertheless, this requires structuring producer groups, training them in business skills and linking them to markets. In addition, climate-smart agriculture offers other interesting employment opportunities for young people, such as tree nurseries, manufacturing improved stoves, making environmentally friendly briquettes as an alternative for charcoal, etc.

Theory of change to achieve the objectives

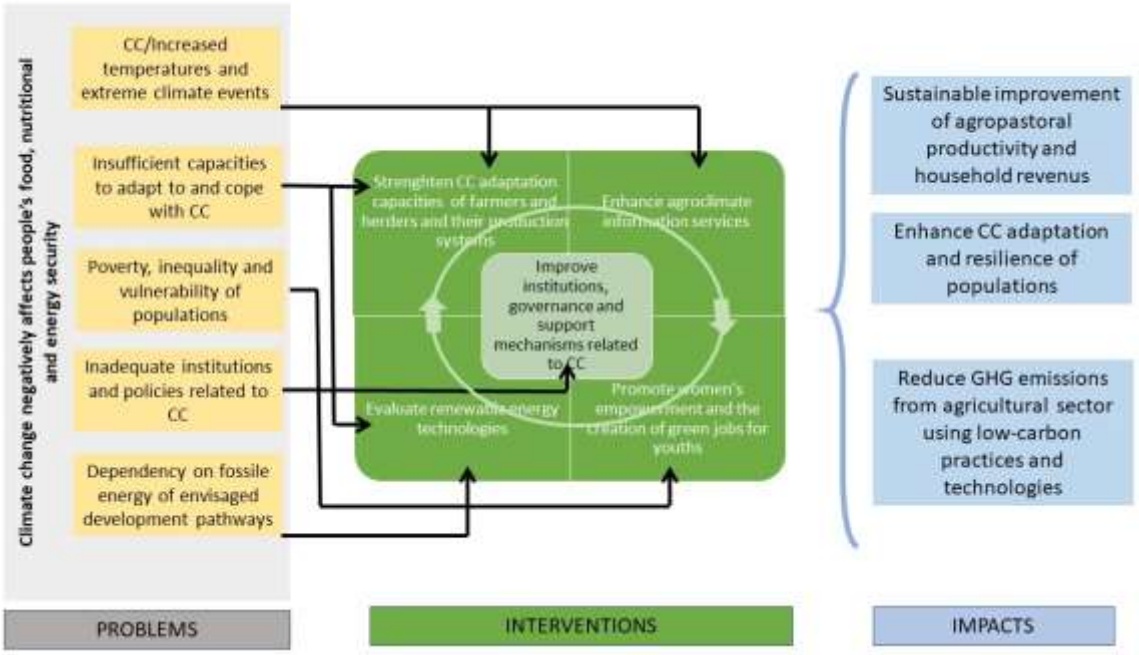
INNOVACC aims to improve farmers' and pastoralists' capacities to adapt to climate change and institutions' ability to enable this adaptation. Increased knowledge is essential to combat climate change. Five PhD students will be recruited to do in-depth research on specific topics there are significant knowledge gaps, namely the impact of climate change on crop production, the contribution of agroforestry to climate change adaptation and the role of the institutional and policy environment in promoting climate-smart practices. Estimating the impact of climate change on cotton and cereal production and evaluating different adaptation options through modelling and field experimentation will guide practitioners' recommendations to farmers.

The project will also work with farmer and pastoralist organisations to implement climate-smart practices in six climate-smart villages in the North (4) and Far-North (2) regions of Cameroon. A series of innovations – including improved crop varieties, agroecological and agroforestry practices, soil and water conservation techniques, natural regeneration, and fodder species – designed to combat climate change will be presented and applied in the field while adapting to the local context. The six villages serve as both pilots and demonstration and learning hubs. The project is expected to extend extension services and the work other development actors to other sites.

For the improvement of climate information services, the project will deploy the Participatory Integrated Climate Services for Agriculture (PICSA) approach with a particular emphasis on strengthening the capacity of stakeholders to collect, analyse and disseminate agro-climatic information adapted to the target populations. To this end, we will seek the collaboration of national meteorological services and other relevant actors.

In addition, renewable energy innovations will be assessed and pilot-tested to meet the growing energy needs of climate-smart businesses. The project also seeks to empower women through the development of climate-resilient non-timber forest and agroforestry value chains. To this end, a value chain analysis will be conducted, business plans developed, and women's groups will be trained in business techniques and linked to markets. The project will also identify initiatives aimed at creating jobs for young people and see successful and unsuccessful they are in enhancing youth participation in climate change adaptation and mitigation options.

Lastly, we will improve our understanding of the policy and institutional objectives, methods, constraints and opportunities for the generation, dissemination and adoption of climate-smart practices, in order to provide appropriate incentives and support measures for decision-makers through policy briefs, public events, and policy dialogues.



Main activities

Activities under this project are organised in 5 components, as follows.

Component 1: Strengthening the adaptive capacity of farmers and pastoralists and their production systems to climate change

- Analysing local knowledge on climate and existing adaptation and mitigation practices
- Evaluating intensification options for climate change adaptation and mitigation
- Disseminating technical recommendations in response to climate change
- Training local actors in the use of climate-smart modelling tools for climate change
- Co-developing, adapting and disseminate climate-smart practices and technologies

Component 2: Improving climate information services

- Assessing the climate information needs and preferences for rural households
- Strengthening the capacity of actors for the collection, analysis, and diffusion of climate information
- Planning and implementing climate change adaptation options using climate information

Component 3: Developing sustainable energy services based on renewable resources

- Evaluating the energy needs of climate-smart businesses
- Assessing alternative energy technologies
- Implementing pilot projects to test renewable energy services

Component 4: Promoting women's empowerment and creating green jobs for youth

- Strengthening women's involvement in climate-smart value chains
- Sensitising and training women in rational use and regeneration of firewood
- Improving women's participation in decision-making by strengthening their life skills
- Assessing green job opportunities for youth (boys and girls)

Component 5: Improving the institutional and governance frameworks, and support mechanisms for climate change action

- Assessing the institutional and policy conditions that enable or constrain the adoption of climate-smart measures
- Suggesting improvements to the institutional and governance frameworks
- Evaluating and/or testing support mechanisms and incentives for the adoption of climate-smart practices

Organisation

The project is divided into 5 work packages. The first component deals with adaptation to climate change, while the second component aims at improving agro-climatic information services. Both are implemented by CIRAD, ICRAF, and IRAD. The third component, led by FONDEM, assesses the potential for using of renewable energy to meet the needs arising from the development of climate-smart value chains. The objective of the fourth component is to empower women through entrepreneurship and life skills and to create green jobs for youth. Finally, the fifth component analyses the institutional and policy environment on issues related to climate change adaptation and mitigation with a view to proposing improvements and support mechanisms. These two components are led by CIFOR-ICRAF.

The project is implemented by a consortium of research institutes already operating in the project area and an external partner specialised in renewable energy. A project coordinator and two technical leaders manage the implementation of the different project components. In addition, the permanent project team will be assisted by a group of experts who will provide scientific and technical guidance. The project steering committee will ensure overall coherence, relevance of activities and facilitate the engagement of key stakeholders. The steering committee is composed of representatives of the EU, consortium members, civil society, the National Observatory of Adaptation to Climate Change (ONACC), the Ministry of Agriculture and Livestock, SODECOTON, and traditional leaders.

Implementing organisation

- International Centre for Forestry Research (CIFOR)

Partners of the project

- World Agroforestry (ICRAF),
- Centre de coopération internationale en recherche agronomique pour le développement (CIRAD),
- Institute for Agricultural Research and Development (IRAD),
- Fondation Energies pour le Monde (FONDEM)

Other key stakeholders

- Centre de ressources agroforestières, forestières et de formation continue (CERAF),
- Société de développement du coton **(**SODECOTON),
- National confederation of Cameroon Cotton Producers (CNPCC),

- Ministry of Agriculture (MINADER), Ministry of Livestock, Fishing and Animal Industries (MINEPIA),
- Programme Appui Conseil aux Exploitations Agricoles Familiales (ACEFA),
- Universities and agriculture colleges,
- Civil society organisations,
- Non-governmental organisations and development agencies
- Private sector.

Localisation: Cameroon, North and Far-North regions

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