

Objectives of the project

The objective is to strengthen family farming in its capacity to contribute to food and nutritional security and its responses to sustainable development, in particular by identifying and testing the conditions for an agro-ecological transition for rice farmers and market gardeners in South Benin.

Background

Agriculture is the engine of Benin's economy and occupies the majority of the country's population. It is based on family farming, which is struggling to satisfy a growing urban population and in demand for products of constant quality. The lack of competitiveness of family farms does not allow them to respond to the changing needs and markets, which are more and more open and dynamic.



Climate change induces greater variability in rainfall and the development of phytopathology, which make crop success uncertain. The pressure on natural resources has reached its limits. Climate change is exacerbating the problems associated with the loss of soil fertility. The project intervention area is among the areas with the highest population density and with very strong pressure on land. 31% of households are food insecure. The intervention zone is located in the agro-ecological zones for which the government wishes to promote rice and market gardening, namely those of the fluvio-lagoon plateau of southern Benin and the Mono and Ouémé valleys. Aquaculture, rice cultivation and market gardening are the dominant activities.

To meet environmental challenges and meet the needs of populations in terms of food and nutritional security, it is necessary to strengthen the capacity of producers and development actors and to develop technologies better suited to local contexts, for sustainable agricultural systems, resilient to climate change and socially viable.

The theory of change to achieve the objectives

The project aims to improve the level of knowledge and change the attitudes and practices of rice and market gardeners for sustainable production, with a reasonable increase in the cultivated agricultural areas as well as an improvement in the position and workload of women in households, thanks to the agro-ecological transition.

In operational terms, the intervention will work on specific production systems in South Benin as part of an agro-ecological transition in agriculture involving changes at the level of agricultural holdings, water management methods but also to other levels downstream and upstream of production. The project will favor Participatory Action Research in collaboration with producers and in collaboration with researchers from several disciplines in the identification of issues. For this, innovation platforms will be set up. The search and popularization of solutions will be based on the networks of endogenous trainers within producer organizations. The project will take into account the socio-economic aspects at the farm and marketing level. Particular emphasis will be placed on the social and economic dimensions of innovations and will focus on the processes of dissemination of innovations.

The implementation of this strategy will make it possible to achieve the results targeted by the project, namely: the establishment of a concerted action mechanism between stakeholders in agricultural research, institutions in charge of advice, farmer organizations and private sector players; the



establishment of a consultancy / training system (through farmers' field schools, endogenous trainers from peasant organizations, use of social networks); better adaptation of irrigation infrastructure and water management systems to the economic and environmental realities of South Benin; and the development and dissemination of benchmarks on agro-ecological practices (rice, market gardening) adapted to environmental contexts and economically sustainable.

Among the main risks that could constrain the achievement of the targeted results, are: possible resistance of producers to changes and new practices (not convinced by the proposed solutions, fear of yield losses, etc.) or insufficient coordination between the main actors involved in agricultural research and advisory systems.

Main activities

The main activities that will be implemented by the TAERA intervention include:

For the diagnosis, monitoring of activities and dissemination of results:

- ✓ Carrying out an inventory at the level of the project intervention area (or pole), which will complement the studies carried out by INRAB to identify the players around Research and Development (RD) sites.
- ✓ Support for stakeholders in the identification, formulation and implementation of local action research projects.
- ✓ The organization of meetings between the actors at the pole level around the research results
- ✓ The dissemination of results through the publication of documents (note, guide).

For action research in sites

- ✓ The establishment of innovation platforms and communication channels via social networks bringing together producers, advisers and research stakeholders.
- ✓ The identification of "farmers' field schools" sites to experiment with new agro-ecological practices with producers, based on the results from the research center, and observe changes in the exploitation of producers by relying on producers "endogenous trainers" to train producers.
- ✓ A critical analysis of existing benchmarks for water management in the area of action.
- ✓ Capitalization of new agro ecological practices and innovative modes of water management.

For the strengthening of research capacities

- ✓ The development and implementation of skills acquisition pathways (SAP) for managers of research centers and teams at R&D sites and for INRAB researchers.
- ✓ Strengthening the capacities and skills of farmers' organizations.
- ✓ Recruitment and support for doctoral students and masters who will implement participatory research actions with water user groups and producers.
- ✓ The provision of R&D sites and "farmers' field schools" with small equipment to satisfactorily assume their roles and mandates.
- ✓ The organization of scientific support missions.

Organization

A Management Unit will be established, the technical team of which will include one intervention manager, a national expert in participatory action research and an international junior expert responsible for networking, capitalization and training. In order to ensure the smooth running of the project and the involvement of all stakeholders, a concertation committee, bringing together representatives of research demand (Farmer Organizations) and research supply (National System of Agricultural Research) on the themes addressed (water and agro-ecology) as well as a representative of the European Union, will be put in place from the start of the project. Finally, a Steering Committee will also monitor, at the strategic



level, the state of implementation of the project and the achievement of its results. It will be composed in particular of the Ministry of Agriculture, Livestock and Fisheries, the Delegation of the European Union, the National Water Program, the National System of Agricultural Research, the Federation of Producers' Unions of Benin (FUPRO), the National Association of Municipalities of Benin and of Enabel.

Implementing organizations

The action will be implemented under the responsibility of the Belgian Development Agency (Enabel).

Project partners

The action is combined with Beninese institutions investing in agricultural research grouped in the National System of Agricultural Research (SNRA). It's about :

- ✓ INRAB (Institute of Agronomic Research of Benin)
- ✓ Beninese public universities including the University of Abomey-Calavi, the University of Parakou, the University of Sciences, Technologies, Engineering and Mathematics and the National University of Agriculture of Porto-Novo
- ✓ The Catholic University of Louvain (UCL)
- ✓ The Ministry of Agriculture, Livestock and Fisheries (MAEP) and its central technical departments involved in agricultural training, rural development and the environment. At the decentralized level, these are the Territorial Agencies for Agricultural Development (ATDA) and the Departmental Directorates of Agriculture and Livestock (DDAEP);
- ✓ The National Water Institute for the implementation of the principles of Integrated Water Resources Management



MINISTÈRE DE L'AGRICULTURE,
DE L'ÉLEVAGE ET DE LA PÊCHE
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Other main stakeholders

- ✓ International Centers: AFRICA-RICE, IITA and the World Vegetable Center;
- ✓ Platforms of NGOs and Agricultural Organizations active in agricultural research;
- ✓ Organizations of market gardeners and rice producers such as the National Federation of Market Garden Producers (FENOMA), the Concertation Council of Rice Farmers of Benin (CCRB) and The Federation of Producer Unions of Benin (FUPRO);
- ✓ The National Water Partnership (IWRM).

Region

The project is implemented in Benin in the Mono department and the municipalities of Lalo and Dogbo Tota for the “rice” sector, located in the department of Couffo.

Funding and co-funding

EU	€ 1,500,000
Total budget	€ 1,500,000

Duration

2019 – 2024 (4 years)