SUCCESS STORY

Reducing rural emigration and supporting reintegration in the groundnut basin through the development of an irrigation based rural economy (PARERBA)



EU Trust Fund for Africa - Sahel & Lake Chad











Enabel successfully implemented the project, 'Reducing rural emigration and supporting reintegration in the groundnut basin through the development of an irrigation based rural economy (PARERBA)'1, from July 2017 to December 2022 in Senegal. The project aimed to support the development of the rural economy in five regions known as the groundnut basin (Diourbel, Fatick, Kaffrine, Kaolack and Thiès). Most of the people living in these regions are small-holder farmers² who rely on rainfed agriculture to grow vegetables and rice. PARERBA structured its intervention around complementary activities to help households transition to more profitable agricultural models: 1) invest in the construction of hydro-agricultural infrastructure to enhance water management; 2) improve the production, productivity and competitiveness of family farms in rice culture and horticulture; 3) develop rural micro-entrepreneurship and youth employment along the value chains of promising agri-food sectors; and 4) promote the professional integration of young people in agri-food micro, smalland medium-sized enterprises (MSMEs).

How did the EUTF help?

PARERBA improved agricultural productivity by increasing the number of growing seasons from one to three per year. In Senegal, agricultural activity traditionally occurs during the rainy season, allowing for only one growing season each year. PARERBA set up 31 irrigated areas with pumping, storage, and water distribution facilities to give farmers the opportunity to grow crops during the dry season.

Objective of the project

To support the development of the rural economy in the groundnut basin in Senegal.

Key successes

- > 691 hectares of fields irrigated, with pumping, storage and water distribution facilities.
- > Participants' monthly average income increased from €33 to €71
- > 349 MSMEs and 798 individuals participated in business coaching activities, increasing their income.

These areas spanned 342 hectares for horticulture and 349 hectares for rice (totalling 691 hectares). In addition, the project established 23 cooperatives and eight economic interest groups involving 3,510 members, to manage the irrigated fields collectively. By the end of the project, most producers benefited from three growing seasons per year. These actions were informed by watershed management plans³, developed through consultative processes facilitated by Regional Development Agencies (ARD)⁴, which outline collective priorities for land and water management and the rehabilitation of degraded land.

The project delivered innovative activities to producers to promote the sustainable intensification of farming and the diversification of crops. In each irrigated perimeter, PARERBA implemented a Farmer Field School (FFS). FFS members cultivated crops, testing a variety of agricultural practices (crops, spacing, fertilisation, treatments, etc.), to choose the best ones for upscaling. As a result of these demonstration plots, farmers diversified their crops, introducing onions, peppers, okra, aubergines, and tomatoes, among others. These changes in behaviour were reflected in the income of producers, which rose from an average of €15 to €60 between the beginning and the end of the project.



PARERBA also worked with MSMEs to increase the marketability of produce. The project delivered business coaching activities to 349 MSMEs and to 798 individuals to develop income-generating activities, in commerce and the processing of cereals, fruits, vegetables, fishery products, horticulture and arboriculture, as well as poultry, goat, sheep, and cattle farming. These activities led to the creation and consolidation of 2,525 jobs. In addition, the income of MSME managers reached around €300 per month and the income of those involved in income-generating activities reached nearly €76 per month.

Keys to success

Built on lessons learned from previous projects: The project's activities were based on lessons from Enabel's BARVAFOR⁵ project (2011–2017), which supported the Ministry of Agriculture and Rural Equipment⁶ in the same regions as PARERBA. Through BARVAFOR, Enabel established vegetable patches around existing water infrastructure and built 28 productive water infrastructures, such as dams and boreholes. However, these efforts did not lead to the spontaneous uptake of irrigation on new perimeters. Learning from this, Enabel focused PARERBA's activities on creating new irrigation areas and promoting behaviour change through the collective management of irrigated agricultural land.

Integration of sustainability considerations: The project incorporated sustainability into its initiatives to support the continuation of project benefits beyond the project's end date. For example, the project introduced fees for using water within the irrigated perimeters, to cover the costs of maintaining the new infrastructure. In addition, formal agreements between cooperatives, economic interest groups, and local authorities outlined how the irrigated areas would be managed. This ensured that these agreements would be upheld, with the supervision of local authorities.

Integration of the action into local development policies: Watershed management plans are local development documents that outline priorities for the collective management of land and water resources. To

implement these plans, local authorities rely on funding from national authorities and donors. PARERBA facilitated the drafting of watershed management plans. During the project's implementation, seven townships in the Kaolack region created a structure, the Entente de Keur Diatta, to jointly mobilise funding for implementation of their watershed management plans. The Entente organised a forum during which national authorities and donors committed to mobilise €45 million to support rural development.

Building on success

Replication of the action: To replicate PARERBA's activities in other geographical areas, it is important to understand the availability and replenishment rates of groundwater in the intervention areas. Further research may be necessary to define the environmental prerequisites to scale up such an intervention.

Building on PARERBA's experience: Despite the project's initial plan, connections between the supported MSMEs and the irrigated perimeters were not sufficiently established and should be strengthened in the future. In Senegal, the European Union is already encouraging the integration of producers into commercial value chains through the programme, "Agri-hubs of the future and value chain development for food systems".⁷



EU Emergency Trust Fund for Africa

Disclaimer

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The research for this success story was conducted from January to April 2024, was based on project documentation, and presents the situation at that moment.

¹ Projet d'Appui à la Réduction de l'Emigration rurale et à la Réintégration dans le Bassin Arachidier par le développement d'une économie rurale sur base des périmètres irrigués (PARERBA).

² The groundnut basin hosts 41% of the Senegalese population; 65% of the population in the groundnut basin live in rural areas, and 58% of households are small-holder farmers.

³ *Plans d'Aménagement de Bassin Versant* (PABV).

⁴ Agences régionales de Développement (ARD).

⁵ Projet Bassin de Rétention et de Valorisation de Forages (BARVAFOR).

⁶ Ministère de l'Agriculture et de l'Equipement rural (MAER).

⁷ Agropoles d'avenir et l'intégration des chaînes de valeur dans les systèmes alimentaires.