

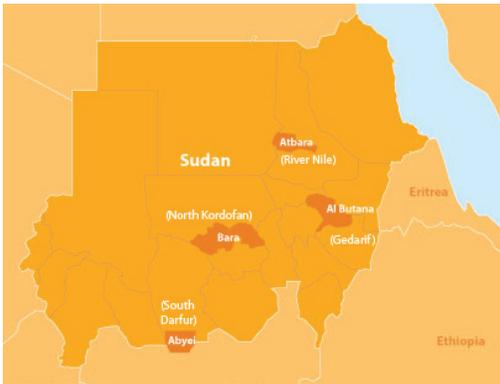


CANADA-UNDP
Climate Change Adaptation Facility



Empowered lives.
Resilient nations.

IMPLEMENTING PRIORITY INTERVENTIONS TO BUILD RESILIENCE IN THE AGRICULTURE AND WATER SECTORS TO THE ADVERSE IMPACTS OF CLIMATE CHANGE IN SUDAN



Climate change has been identified as a major threat to food security in Sudan's agriculture-based economy.



CONTEXT

Climate change poses significant challenges to Sudan's development priorities. 30% of the national GDP comes from agriculture, and 60% of the population depends on rainfed agriculture for their livelihood. Yet, the system is unable to cope with rainfall variability and prolonged drought events. A significant decrease in average rainfall over the last 60 years, and an increase in variability, has already threatened 19 million hectares of rainfed land, which affected over 10 million people. These conditions will only be exacerbated by further climate change, which has therefore been identified as a major threat to food security in Sudan's agriculture-based economy.

To build the resilience and adaptive capacity of rural communities, the Sudanese Government and UNDP launched an adaptation project in 2010, with support from the Global Environmental Facility's Least Developed Countries Fund (LDCF). Targeting the agriculture and water sectors, identified as priority sectors in the National Adaptation Programme of Action, various measures were implemented to strengthen food security and enhance the adaptive capacities of small-scale farmers and pastoralists. In 2013, the Government of Canada provided additional funds to build on the results of this LDCF project to achieve greater resilience in the most affected communities. The new project, included under the Canada-UNDP Climate Change Adaptation Facility (CCAF), aims at building the adaptive capacities of communities dependent on rainfed farming and pastoralist systems, especially women-led households that are resource-deficient and particularly vulnerable.



Proposed Interventions

Under the Canada-funded phase of this project, the following concrete and innovative adaptation measures are being implemented in four agro-ecological zones in Sudan:

1. **Delivering small-scale irrigation methods and water harvesting techniques to 1,000 farmers** and pastoralist households across the four regions;
2. **Introducing and delivering diversified, drought-resistant varieties of crops and animal breeds**, improving the food security situation in targeted communities;
3. **Introducing climate-resilient rangeland management methods**, such as reseeding, fencing, biomass production and management; and
4. **Ensuring women's associations have the relevant capacities, skills and knowledge** to undertake farm and household-level adaptation measures.

Haga Nimaa, an 80-year-old midwife, said that from her participation in the horticultural garden she earned 131 US\$ from tomatoes and her tomato plants are still producing. She happily said that she is now secure, and obtains her daily household requirements from vegetables from her own garden.



Key Achievements to Date

Key achievements under the LDCF project have been scaled up under the CCAF project as demonstrated below:

- **In South Darfur**, 500 women have been trained in the production and use of improved stoves and 250 women have benefited from small home gardens (Jubraka). 20,000 tree and fruit seedlings were planted in collaboration with the Forests National Corporation, along with the cultivation of 20 acres of demonstration farms;
- **In Gedarif**, 100 acres are being irrigated and 1,200 acres equipped with water harvesting structures to support climate-resilient crops; 120 women have been trained in handcrafts and food processing and 2 acres of farms prepared for women, to support alternative livelihoods;
- **In North Kordofan**, 6 demonstration fields have been established for supplementary feeding, 1,000 sheep vaccinated and 127 sheep fattened, 150 goats received milk production improvement and 2 wells have been drilled;
- **In River Nile**, 12 shelter belts have been constructed with distribution of 3,500 seedlings; improved goat breeds and new fodder species have been introduced; and
- **Sensitization and awareness raising campaigns about climate change** organized in all 4 targeted states (36 villages in total); Village Development Committees and subcommittees established to design and implement activities, and 4 farming schools established.

By demonstrating viable and cost-effective adaptation options and generating essential knowledge on good practices, the project will also assist the government to improve its food security policies and address critical social vulnerabilities that often underpin resource-based conflicts, aggravating human security conditions.

EMERGING LESSONS

Building on indigenous knowledge and local skills guarantees community participation and responsiveness, and ensures sustainability. For example, the use of indigenous methods of borehole construction or the distribution of climate-resilient local breeds of goats-sheep helped ensure community buy-in of project interventions and sustainability.

Partnership with local institutions can expedite implementation processes. For example, labour-demanding activities, such as micro-fencing and seedling planting were facilitated in partnership with local institutions more experienced in mobilizing the target communities.



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