Wadi El Ku Catchment Management Project

The challenge

The United Nations Environment Programme (UNEP) has been providing environmental support to Sudan since the 1990s. Following completion of a major post-conflict environmental assessment of Sudan in 2007, UNEP has established an active country presence and developed an integrated environment programme for Sudan.

UNEP is working with federal and state governments, the international community, civil society, academia, the private sector, and communities to encourage the sustainable development of the country's natural resources with the aim of assisting the people of Sudan to achieve peace, recovery, and development in an environmentally sustainable manner.

Globally, increasingly unpredictable rainfall patterns are one result of climate change. Year on year, this is proving to be a threat to farmers' livelihoods.

With frequent droughts, high rainfall variability, and an economy heavily dependent on natural resources, Sudan is one of the most vulnerable countries to climate variability and climate change.

Our role

UNEP and the state government of North Darfur are now implementing the second phase of the Wadi El Ku Catchment Management project. It aims to expand and promote scientific information for improved integrated water resources management (IWRM) and early warning systems. It will also demonstrate and promote improved agricultural and natural resource management approaches and cooperation mechanisms.

The project will continue to serve as a demonstration project for uptake and replication in the wider Wadi El Ku, as well as in Darfur and Sudan in the future. It will also contribute to the overall objective of establishing climate-resilient livelihoods and reducing natural resource conflicts and displacement due to the loss of livelihoods in North Darfur.

The Wadi El Ku Catchment Management project is funded by the European Union and implemented by UNEP in partnership with State Government, Practical Action, and local communities.

Our work

As climate change drives desertification in much of the Sahel and zones on other continents, one strategy for the national authorities and the international community is to help local communities build more resilience at ground level. Water is the key. With support from the European Union and the United Nations, a combination of two things –water infrastructure and governance systems – are now making it possible for the citizens of North Darfur's Wadi El Ku basin to sustain their livelihoods and, within the limitations of these tough semi-desert conditions, even to prosper.

Our impact

Weirs, canals, and other forms of on-farm water management are now more efficiently spreading the waters of the seasonally-rained Wadi El Ku basin more broadly.More water, more equitably spread, has produced five main results:

Increased crop yield

In some cases, there has been a tripling of the yields for sorghum and millet – the staple food in the region – in places touched by the project.

Crop diversification

In addition to standard crops, farmers now also grow a wider variety of crops that have a higher market value such as tomatoes, beans, ground nuts, okra, and hibiscus.

Increased income for farmers

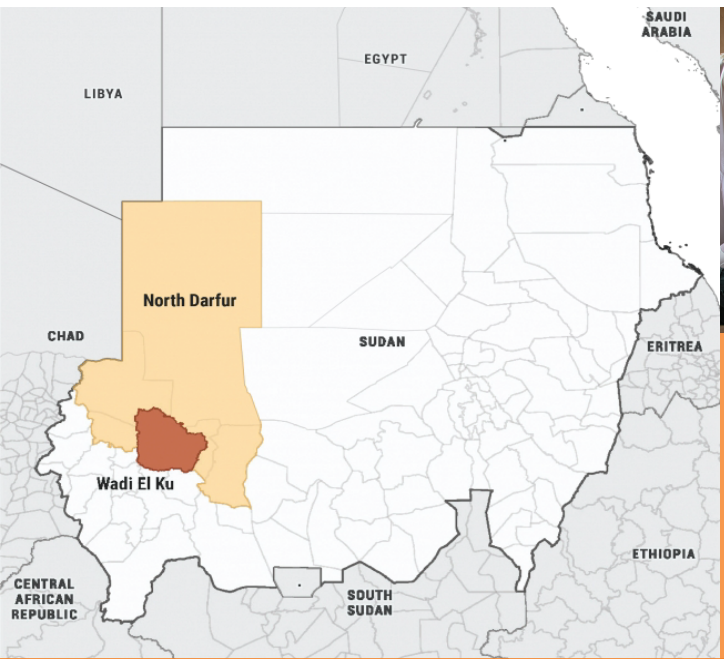
70% of farmers surveyed say that their income from agriculture has increased, which they directly credit to the project.

Community-based natural resource management

Communities along the watercourse – both upstream and downstream – have been involved in the decision-making. The result is a contribution to peace and stability in the region.

Resilience to climate change

Weirs ensure that enough water is stored in the soil to allow dry-season cultivation, thereby increasing the resilience to climate change and improving food security.



Contact information

kamaleldin.gido@un.org
www.unep.org/sudan
UNEPSudan

Funded by the European Union

Practical ACTION

UN environment programme