The Horn of Africa is highly vulnerable to the risks of climate variability, such as temperature rises, heavy rainfall and drought. Over the last few decades, the vulnerability has affected especially the pastoral and agro-pastoral communities in this region with millions of people suffering from famine caused by drought which has worsened since 2015 due to El Nino.

Small farmers like Beatrice Nguru from Taita Taveta County in Kenya are especially at risk for food and income insecurity. As she observed the onset of more frequent droughts and floods ruining the condition of the soil on her farm and cutting her farm productivity, she urgently started to look for information on how to deal with this situation. A scenario planning workshop that she attended ahead of the long rainy season was a critical opportunity for her to learn about weather information and how to prepare for the planting season.

The workshop was part of local activities under a US$ 6.8 million regional project that is funded by the Adaptation Fund and implemented by the World Meteorological Organization (WMO) to enhance the climate resilience of pastoral and agro-pastoral communities, whose livelihoods depend on climate-sensitive resources. As the very first regional project of the Adaptation Fund, it targets three different countries (Ethiopia, Kenya and Uganda) and is linking regional activities to local adaptation action by taking a comprehensive approach. Given the lack of access to reliable climate information and capacity to disseminate it in individual countries, the regional approach complements individual country projects by facilitating the sharing of data and expertise among countries. This collaborative endeavor improves value, efficiencies and cost effectiveness in providing technical assistance through partnerships at the national and regional levels, and it also enhances knowledge management and capacity building in each country and the region. Since beginning as a pilot programme in 2015, the Adaptation Fund’s programme of regional projects has really taken off as countries find added value and effectiveness in collaborating between countries and networks to meet climate change challenges that cross borders, rather than going at it alone.

Recognizing the absence of information and technical support to cope with and adapt to climate change at the local level, this regional project focuses on building the capacity of vulnerable communities to understand and appropriately use climate information in decision-making to climate-proof their livelihoods, and thus enhance their food and nutrition security.

“I used to plant randomly and then wait for the rains, but I have learned that I can get information from the meteorological department at the onset which will keep my seeds from spoiling in the ground.”

— Beatrice Nguru, Farmer, Ronge Ward, Mwatate Sub County, Taita Taveta County, Kenya

Left: Weather equipment that supports weather data collection and dissemination at Voi Meteorological Station in Taita Taveta, Kenya. (Photo by WMO) Above: Pastoralists bring their herds of livestock to water at Lake Hawassa in Shelfo village, Ethiopia. (Photo by FAO)
A community-based approach is key to taking adaptation actions that are locally appropriate. Innovative ‘field schools’ have been built where farmers can develop their knowledge and practical farming skills based on field experiences and farmer-to-farmer learning. A total of 60 agro-pastoral field schools are engaging 9,000 farming households with targeted trainings in climate information and sustainable farming methods. Community efforts for adaptation planning in both the seasonal and longer terms are encouraged by providing community grants for field adaptation investments like disaster risk reduction. To improve institutional capacity on climate advisory services, 300 technical staff members from both the local and national levels participated in the trainings.

The project also is working with community-based climate service agencies to provide specific climate forecasts to farmers that help them make informed decisions about their agricultural products. Based on the partnership with WMO as a technical institution, the Inter-Governmental Authority for Development (IGAD) as a regional center for knowledge management and dissemination, the UN Food and Agriculture Organization and other relevant government agencies, tailored location-specific user-friendly agrometeorological advisories have been provided to support community adaptation planning at both seasonal and longer term levels.

This innovative approach focused on participatory learning and experimentation has brought significant improvements in economic, social and environmental conditions for the farmers in the target communities. With climate-smart practices and precision farming, farmers are able to plan and make the right decisions based on anticipated climate conditions and generate more income from the sale of surplus produce. The improved weather information further results in more efficient use of inputs and reduced economic losses that had occurred previously from wasted input among farmers. Productivity of crops like sorghum, maize, millet, beans, sweet potatoes and cassava has been increased at least threefold, which helps the farmers ensure food security for the season until the next harvest.

The field school approach played a broader role in local communities than simply as a vehicle for agricultural development. The farmers who participated in the field schools were not only able to investigate various topics such as their agricultural practices and adaptation actions in the field setting, but also connected with neighbors who share similar concerns. They now work together to fight against climate shocks and crises at the community level. Women’s participation has also been strongly encouraged throughout the project to empower women within the community.

The project has further brought positive impacts on the community environment. By using climate smart agricultural practices such as improved soil and water conservation practices, water harvesting and irrigation, bush fallowing, agroforestry and diversified agriculture, the project improved management of natural resources including soil, water and pastures.

BY THE NUMBERS

40,000 DIRECT BENEFICIARIES THROUGH PARTICIPATION IN COMMUNITY-MANAGED DISASTER RISK REDUCTION PLANNING OR INVESTMENT GRANTS

AND 40,000 RECEIVED WEATHER AND CLIMATE INFORMATION

1,800 FARMING HOUSEHOLDS (APPROXIMATELY 9,000 INDIVIDUALS) TRAINED AT FIELD SCHOOLS ON SUSTAINABLE AGRICULTURAL PRACTICES (AT LEAST 50% WOMEN)

32,400 HOUSEHOLD MEMBERS WITH SUSTAINED CLIMATE-RESILIENT ALTERNATIVE LIVELIHOODS CREATED

50% INCREASE IN PRODUCTIVITY OF LAND, CROP AND LIVESTOCK RESOURCES

30% INCREASE IN CROP/ LIVESTOK YIELDS IN PROJECT AREAS

100 TECHNICAL STAFF WITH ENHANCED SKILLS TO SUPPORT COMMUNITY LEVEL ADAPTATION STRATEGIES

4,500 HOUSEHOLDS ADOPTED NEW OR SCALING UP EXISTING CLIMATE ADAPTATION PRACTICES (23, INCLUDING INDIGENOUS KNOWLEDGE)