



STUNG BY CLIMATE CHANGE

**HOW THE DRESS-EA PROJECT IS INCREASING RESILIENCE
OF SMALL HOLDER FARMERS AND PASTORALISTS IN THE
DIKHIL PREFECTURE OF THE REPUBLIC OF DJIBOUTI**



Four consecutive failed rainy seasons have left more than 122,000 people in acute food insecurity across the Horn of Africa region in Ethiopia, Kenya, Somalia, Sudan, Djibouti and parts of Uganda.

Djibouti being one of the world's most arid countries, is experiencing drought conditions having experienced rising seasonal temperatures and little to no rains in the last three years. Vegetation and ground water conditions are significantly below average in most of the country, negatively affecting pastoralists and farmers' livelihoods in rural areas.



ICPAC



ADAPTATION FUND



OBSERVATOIRE DU SAHARA ET DU SAHEL
SAHARA AND SAHEL OBSERVATORY

Global Water Partnership Eastern Africa, together with the Sahara and Sahel Observatory (OSS) are implementing, The “Strengthening Drought Resilience for Smallholder Farmers and Pastoralists in the IGAD region- DRESS-EA” project. The project, which is being executed in the four riparian countries of Djibouti, Kenya, Sudan and Uganda, focuses on increasing the resilience of smallholder farmers and pastoralists to climate change risks mainly those related to drought, through the establishment of appropriate early warning systems and implementation of drought adaptation actions in the IGAD region. The four-year project is funded by the Adaptation Fund.

FIELD VISIT TO DIKHIL GODAAD, IN DJIBOUTI

GWPEA conducted a field visit to one of the project sites in Djibouti, named Dikhil Godaad prefecture, to support the Project Management Unit to examine the main achievements, constraints encountered and corrective measures to fast track the execution of activities of DRESSEA in -Djibouti.





The Republic of Djibouti is a country in the Horn of Africa, bordered by Somalia to the south, Ethiopia to the southwest, Eritrea in the north, and the Red Sea and the Gulf of Aden to the east. The country has an area of 23,200 km² (8,958 sq mi). Djibouti is one of the four National executing entities of the DRESS-EA project, the others being **Kenya**, **Sudan** and **Uganda**



Djibouti has an arid tropical climate of semi-desert, except for the mountainous regions of the northern Gulf of Tadjourah. The country is characterized by high temperatures and high evaporation year-round.



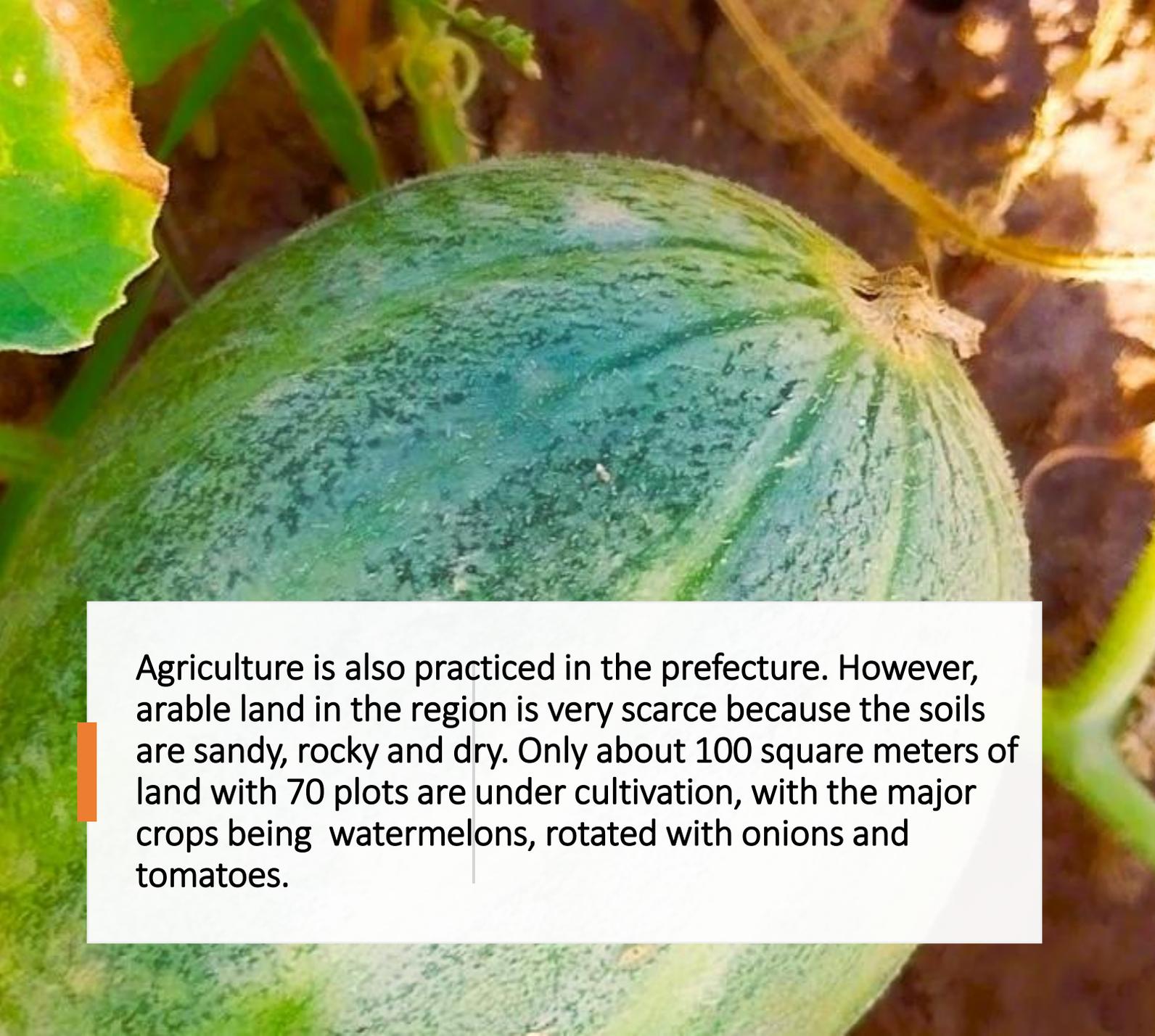
The Dikhil prefecture is in the western Dikhil Region of Djibouti, Lying east of Lake Abbe. It is one of the project sites where the DRESSEA project is implementing its activities in Djibouti. The region is very dry and hot, with temperatures reaching approximately 35^o



Dikhil is predominantly a nomadic pastoralists' town, where sheep, goats and camels are largely the main animals kept by the smallholder pastoralists. It is quite difficult for the farmers to harness forage and water for their animals, and sometimes it takes over 10 hours to reach the watering and feeding spots.



Pastoralists find it increasingly difficult to feed themselves and their livestock as conditions deteriorate because of the prolonged dry spell. Pasture and water availability are below normal, and livestock are showing extreme signs of distress and milk production has plummeted to below normal levels



Agriculture is also practiced in the prefecture. However, arable land in the region is very scarce because the soils are sandy, rocky and dry. Only about 100 square meters of land with 70 plots are under cultivation, with the major crops being watermelons, rotated with onions and tomatoes.



Because of the aridity of the land, farmers practice irrigation for their crops. Wells are constructed with concrete and stones to harvest run-off water from underground. It is then pumped using oil pumps to the gardens



However, since the water is pumped from underground which has high concentration of salts, soils become highly acidic, white, and end up damaging the crops. For this reason, the yields are always poor.

The population of Dikhil, Godaad locality solely depends on underground water and piped water. This is a water kiosk where piped water is kept for drinking





The farmers in the Dikhil prefecture are committed to work with GWPEA, OSS, IGAD as well as the Ministry of Agriculture, Animal and Aquatic resources in Djibouti to increase their resilience to climate change. This was revealed during the visit GWPEA and the DRESSEA Programme Management Unit of Djibouti, to Garsaleh-daba village which is one of the project sites in Dikhil Prefecture

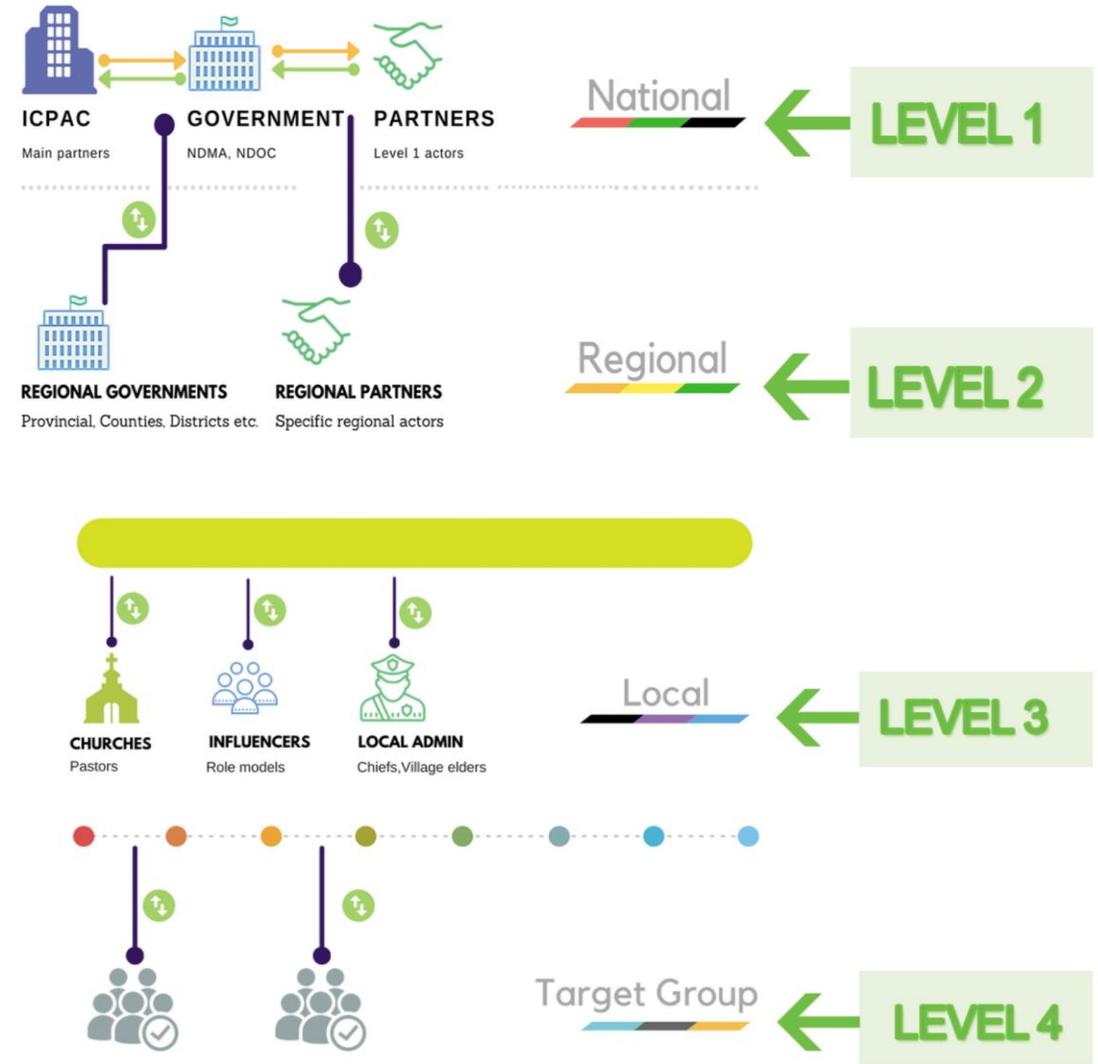
One of the outputs of the DRESSEA is to have an efficient and effective early warning system developed in the countries where it is implemented. In Djibouti, an M.O.U has been signed with Djibouti Meteorology Authority to assess the status of the local weather stations in order to upgrade them to modern technologies, such as this [TAHMO](#) weather station which was erected in Turkana in Kenya



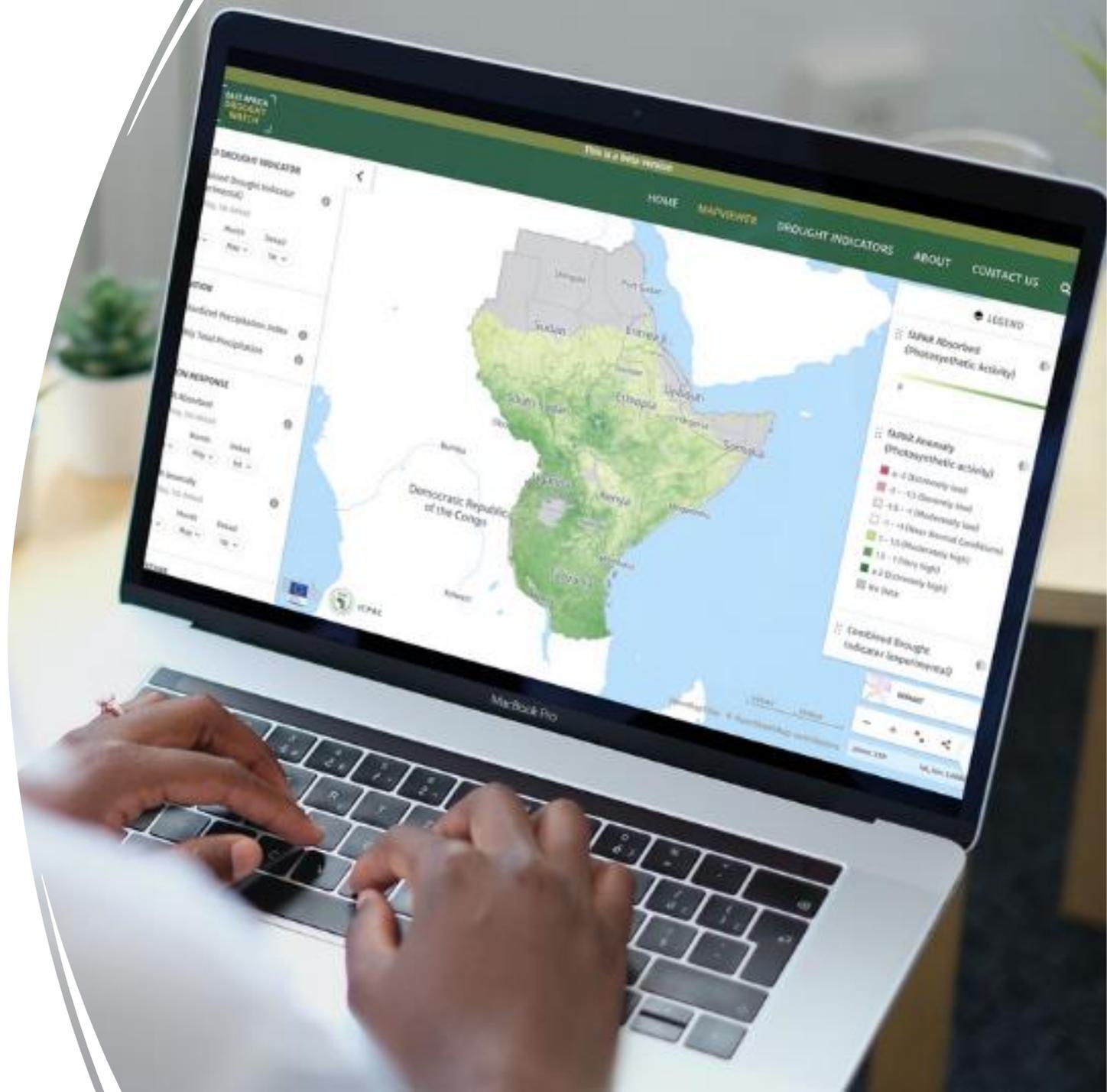
The DRESSEA project has developed a feedback mechanism to disseminate Early Warning information through a common platform called [HUSIKA](#) MIMS.

The HUSIKA is a common platform where users can share information and receive feedback. It was developed by the [IGAD Climate Prediction and Application Center](#) (ICPAC), in collaboration with the Sahara and Sahel Observatory (OSS) and funded by the Adaptation Fund to provide feedback and survey modules, featuring a web application, mobile application & SMS, bringing innovative & sustainable ICT solution towards disaster resilience in the greater horn of Africa.

Djibouti will also benefit from this system



The [East African Drought watch](#) was established in collaboration with ICPAC and the OSS to monitor drought conditions in the East African Region.





Mini irrigation systems have been constructed and further innovative water and soil conservation structures such as micro-irrigation systems and check dams are yet to be constructed to this effect.





Women bear the brunt of climate change and its punches. The project supports women and youth with inputs for income generating activities that help them increase their resilience to drought and climate change. Djibouti will benefit greatly because women there, like in any other setting are the major contributors to drought adaptation and resilience in various ways.



The overall objective of the project is to increase the resilience of smallholder farmers and pastoralists to climate change risks mainly those related to drought, through the establishment of appropriate early warning systems and implementation of drought adaptation actions in the IGAD region.

Concerted efforts of all stakeholders will have to be strengthened in order to tackle the drought issue which is transboundary in nature between the four riparian countries in the IGAD region. The alternative methods towards sustainable livelihoods will go a long way to ensure that communities are resilient to climate change and thus put a smile on every face in Djibouti, amidst the prongs of drought.



CREDITS

Photos by:

- Theobald Bizuhoraho- Programs Officer DRESSEA Project
- Mouktar Mahamoud- Coordinator DRESSEA Project- Djibouti
- istock photos

Compiled by

Jacqueline Zawedde-
Regional Communications
Officer-GWPEA



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