**Input for Report on the Adverse Impact of Climate Change on the Right to Food**

**Introduction**

Like many African countries, Eritrea and Djibouti contribute very little to greenhouse emissions yet they suffer the most on multiple fronts from the adverse effects of climate change. Climate change threatens several human rights, especially the right to food with the unpredictable weather patterns that generate floods, droughts and more. Eritreans and Djiboutians are suffering the consequences but their governments are slowly yet steadily initiating programs and partnerships to help lessen the effects of climate change and attempt to guarantee that the people of these two countries and the following generations are food secure.

International cooperation was most certainly needed in these two countries where international aid organizations carried out programs in different parts of the country to decrease the issue of food insecurity and international financial institutions provided grants to kickstart short-term and long-term projects. Internal cooperation with different sectors and stakeholders was a strategy used by both the governments of Djibouti and Eritrea to counter the adverse impacts of climate change and secure permanent water sources that can increase food security.

**Djibouti**

As a result of climate change, rainfall patterns have changed and became unpredictable affecting agriculture. Djibouti already imports a large chunk of the food it needs, making it highly dependent on the international food market. Yet the smaller chunk of food it makes on its own soil, cannot be guaranteed as a result of adverse impact of climate change on water cycles. One of the worst climate-related emergencies of the past 40 years was felt in the Horn of Africa due to the successive years of below-average rainfall, which ultimately had a knock-on effect on the right to food in Djibouti and left thousands of people food insecure.

The World Bank has authorized a $20 million grant to improve food security and aid communities in Djibouti who have been affected by the drought. The money will support the Djibouti Emergency Food Security Crisis Response Project, whose goal is to build up an emergency food supply so that the government can react to any potential food shortages brought on by market shocks. The new project will support around 8,000 households, including farmers and livestock herders, through enhanced access to drinking and irrigation water as well as livelihood restoration activities, while also directly addressing drought-affected rural communities across the country. This will assist the country in safeguarding the accessibility to a minimum level of basic food commodities as one of the tools to fortify its capacity to survive future food supply shocks. Agricultural inputs for crop and fodder production, small greenhouses with drip irrigation to help enhance agricultural output and offer a way to adapt to climate change, assets and necessary inputs for animal production are all covered by this project’s activities. Programs for farmers and livestock herders on climate resilient practices and technologies will also be part of the project activities.

To increase the nation's resilience to upcoming shocks, the initiative will support technical assistance and capacity building in the public and private sectors. This involves enhancing the government's ability to foresee food security crises and respond quickly, including the administration of an emergency food stock, and improving the capabilities of both the public and private sectors in terms of managing price risk. According to the World Bank, the project is expected to serve about 21% of Djibouti's rural population overall, with women-headed households and young people receiving priority.

Djibouti farmers have tried to use groundwater for irrigation, but it is often too saline and not fit for use thus threatening food security. To fix this issue, Djibouti’s Ministry of Agriculture opened a wastewater treatment facility which works on purifying, filtering and disinfecting water that is then pumped into tanks that is distributed to each plant in each plot through a drip line system.

As a developing state, Djibouti often accepts the implementation of programs by aid organizations which also translates to international cooperation. One of the promising practices that is implemented in Djibouti are food-for-assets programs which are carried out by aid organizations such as USAID that have proven to help make citizens more food secure. In rural Djibouti, high rates of poverty and food insecurity affect almost 60% of the population. Food-for-asset programs take place by trading food assistance for labor farming and building up community assets; in Djibouti's case, these assets are usually ones that provide access to water, starting a positive cycle. For instance, one initiative that was carried out in the town of Douda enabled the recipient women to make about $140 per month selling food. It is sufficient to increase food security and nutrition while simultaneously managing natural resources when combined with food aid.

In exchange for work restoring four hectares of mangroves and planting 50,000 seedlings in the northern coastal town of Godorya, USAID has helped feed 400 people. This mini-ecosystem will help retain water and promote fishing. USAID has additionally assisted goat, cow, and camel herders reforest degraded land and construct water retention structures near Dorra in inland Djibouti. Women won't have to travel as far to fetch water as a result, and in the years to come, cows will have new grass and feed. Such initiatives not only help individuals get enough food, but they also boost their income, enabling them to support their families and pay for their children's tuition.

International cooperation could also be seen when Djibouti inaugurated a research observatory in the second half of October 2022 to study the impact of climate change. The observatory, which was set up with help from the International Atomic Energy Agency (IAEA), will assist the country, that is known for its susceptibility to drought and famine, in managing its water and food resources, which are becoming more and more endangered due to global warming. The new facility, the Regional Research Observatory on the Environment and Climate (RROEC), will use nuclear and related techniques to produce data and climate models that can help guide political decisions about climate adaptation and resilience for the nation and possibly for the entire East African region.

**Eritrea**

It is important to note that some of the programs implemented by the governments or aid organizations directly and indirectly contribute to ensuring the enjoyment of the right to food. Water-related projects are crucial for the enjoyment of the right to food, especially for countries that depend on agriculture. The Eritrean government has been turning to nature-based solutions to counter the effects of climate change on the right to food.

 In 2018, encouraged by the Water Action Decade, a project of “Climate change adaptation program” in water and agriculture in the Anseba region of Eritrea collaborated with vulnerable communities to strengthen their resilience to climate change via integrated water and land management. One of the most innovative features of the project was the construction of diversion structures on the Anseba River. During the dry spells, which were rather often, the structures increased water recharge, ensuring a steady supply of water to the farms within a seven-kilometer radius. In addition, flood water was harvested, placed in reservoirs and pumped using solar energy to irrigate crops.

To ensure sustainability, much like what happened in Djibouti, the project included local communities through cash-for-work initiatives in soil erosion control measures such as reforestation and check dam construction. The task of setting priorities, planning and facilitating activities as well as taking part in rangeland management fell within the purview of village development committees. Additionally, early maturing crops like sorghum and millet as well as drought-resistant seeds were distributed to the project's approximately 9000 target households. Farmers were given dairy cows, chickens, and beehives to promote alternative livelihoods and add much-needed protein to their diets. Farmers were also given financial assistance to buy agricultural inputs and replacement parts for the irrigation and water harvesting systems. A networking platform on climate change is currently being developed for stakeholders around the nation, with plans to replicate the same concept in the towns of Hamelmalo and Habero.

Usually in Africa, large water dams are constructed which become properties that require much care and expense and yield very little profit thus destroying small-scale farmers and micro-water dams used for local farming and the local economy. However, this network of water dams that is being implemented in Eritrea and is engaging communities in hard work for food and nutrition security with abundant amounts of water reserved, can serve as a model to several African countries. Building dams is a complete development strategy that boosts agricultural productivity and the economy of a nation. Additionally, it presents a chance for community settlement and the creation of new towns, which will lessen the impact of urbanization on important cities.

The Eritrean government's policy is to modernize traditional farming practices into commercial farming systems and to foster the growth of a thriving economy supported by a wide range of services offered by the government, including research, regulatory and advisory services, training, and education. To make agriculture more appealing to young people, the government is moving away from labor-intensive traditional agriculture and toward technology-driven modern agriculture. It is being introduced to irrigated agriculture, with a focus on pressured agriculture and alternative energy, mostly solar. As a result of this shift, the outcomes of dairy, poultry and other industries increased in amount and improved in quality. The farms near the large dams are adjusting their irrigation systems to show off contemporary commercial agriculture, which will, in due course, benefit young people and draw more of them into farming enterprises and careers along the value chain of agriculture.

Besides the introduction of agricultural technologies, another strategic intervention that the Eritrean government started towards the contribution of food and nutrition security and the promotion of the production of nutritious agricultural produce was the implementation of climate resilient Minimum Integrated Household Agricultural Packages (MIHAP) by the Ministry of Agriculture in 2018. The packages consisted of each household or family receiving one improved cross-breed dairy cow, 25 chickens, 2 bee hives, a vegetable plot and 20 trees as feed supplement to the cow and some for fire wood in addition to the land used for crop production. The total cost of establishing MIHAP for each beneficiary household was USD 4,000 and the payback period is a maximum of two years. This is a promising practice in the fulfilment of the full realization of the right to food in the context of adverse effects of climate change because not only will families make profits, they will be food secure all year around and will help other families become less food insecure.

**Possible strategy**

It is undeniable that the introduction and implementation of such policies and programs is crucial and beneficial to the people of Eritrea and Djibouti and other countries that enjoy the benefits of such projects. A point worth noting however is the need for more direct financing to local governments. When aid is given to federal governments, there is no guarantee that it could trickle down to the local governments fast enough to yield actual effects that could counter that adverse impact of climate change or that it trickles down to begin with. Local governments could be more in touch with the people and their needs and so directly financing them will help make sure that the money sent is going for the right cause to the right people.

**References**

Galler, Grace. “The World Bank approves $20 million grant for Djibouti”. New Food, 1 December 2022, <https://bit.ly/3FCcOrx>.

Ministry of Agriculture Staff. “Eritrea: World Food Day 2020.” Tesfa News, 18 October 2020, <https://bit.ly/3FCsN8J>.

Sawahel, Wagdy. “New observatory an asset for mitigating climate change.” University World News, 3 November 2022, <https://bit.ly/3uxOnoR>.

Seid, Semir. “Eritrea: Securing Availability of Water for Good.” Tesfa News, 7 April 2018, <https://bit.ly/3hej5Ae>.

Unknown. “Eritrea Introduces Minimum Integrated Household Agricultural Package (MIHAP).” Tesfa News, 21 May 2019, <https://bit.ly/3W1Q21p>.

Unknown. “In Driest Djibouti, Recycling Water is Key to Food Security.” Medium, 21 March 2019, <https://bit.ly/3FAVl2u>.