

Compensating Somalia for
The Damages of Climate Change
from Wealthy Countries



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Climate sensitive livelihood

Populations in East Africa are becoming extremely vulnerable to climate shocks due to the large dependence on rainfed agriculture and pastoral systems. Due to climate change, the GDP of Africa may drop up-to 30% in 2050 (Brooking, 2020). The sustainability in such a type of livelihood is further dependent upon the climatic conditions. Somalia has a warm desert in the north and a semi-arid region in the south. About 80% of the landmass of Somalia lies in arid and semi-arid climates where normal rainfall is less than that which evaporates. It creates drought-like conditions due to this imbalance. Somalia is one of the hottest countries of the world due to its presence near the equator, the high temperatures make the arid and semi-arid land masses very prone to heat. More than 70% of the population in Somalia is dependent on agriculture activities including: fishing, hunting and forestry (ILOSTAT, 2018).

The country has a long coastline where fishing is the main source of livelihood of the people living in surrounding areas. Tropical cyclones and other uncertain changes in the oceans have threatened the significant population engaged in fishing. Both the agriculture and pastoral livelihood are dependent upon the land resources which have been degraded due to climatic shocks and the process is still continuing. The pastoral system is totally dependent upon the rains and the sector is highly vulnerable to climate change. Such communities do not have or have very limited fixed

resources. Historically, agriculture has been the backbone of the country. It contributes 75% in GDP growth of the country and 93% in total exports from the country (World Bank and FAO 2018).

Somalia has been facing bad governance since January 1991 and the nation has been under war for the last 26 years. Therefore, violent conflict and economic decline are a result of the absence of a central government. The situation has reasonably improved with the Transitional Federal Government on August 20, 2012. The two prominent famines that devastated Somalia during 1991-92 and 2010-12 are results of the combined effects of drought and conflict. Household resilience was severely weakened from the legacy of conflicts and environmental damages. More than 90% of the nomadic population has been reported living under the line of poverty.



Major Climatic Damages

Floods, droughts, epidemics, storms, and earthquakes have been major disasters since 1980. The most prominent damages were from the floods, epidemics, and droughts. There have been 43

floods, 27 epidemic outbreaks, 12 droughts and 7 storms during the period of 1980-2020 (Climate Change Knowledge Bank, 2022). The following major damages from climatic hazards showed great vulnerability.

Droughts

Among the major threats of climate related disasters are droughts. It was reported that drought cycles in 2015/17 affected about 1.7 million people along with internal displacement of 800,000. The number of migrating people due to drought is so high that the United Nations reported 943,000 people were displaced due to drought during November 2016 to October 2017 (UN OCHA, 2017). Moreover, pastoral households lost 60% of their livestock (OCHA, 2018 and Federal Government of Somalia, 2018). Upon the consequence of drought in 2019, more than 50,000 individuals got displaced. This figure is in addition to the 2.6 million already displaced persons. Food security analysis estimated 50% reduction in crop harvest due to droughts in 2019. At this rate, it may put 5.4 million people in food emergencies (Eklöw and Krampe, 2019). The impacts of droughts are gradual, and the people cannot sustain their livelihoods. In this case, they migrate to other locations for livelihood. However, such types of migrations are temporary and can be reversed with onset of precipitation. The overall productivity of the rangeland and other pastoral systems will be depleted to support the livestock feed requirement.

Floods and Disease Outbreak

In 2019, floods displaced 412,000 people and in addition damaged crops (FAO, 2020). The subsequent floods in 2020 resulted in the death of 16 people (BBC, 2020). The severe flash flooding as a result of heavy

rains in May 2021 resulted in a displacement of 66,000 people and destroyed 40,000 hectares of crop land (Flood list, 2021). Disease outbreaks like malaria may be more frequent and severe in the future in response to changes in climate conditions. The flooding may increase the Rift Valley Fever (RVF) outbreaks in the country.

Future Climate Change Scenario

The events of climate change are adding pressure on the under equipped governance and judicial system. The projected climate changes highlights that sustainable economic development cannot be achieved without adapting the climate smart systems. The average temperature seems to increase towards the southern coastal band in all seasons under the influence of the Indian Ocean. The temperature may rise from 0.3°C to 0.7°C up-to 2035, however, it may rise upto 1.5 °C during late 70s of this centuries (Ogallo et al., 2018). Most of the economic activities in Somalia are dependent upon water availability. The rise in temperature may further increase the water requirement of already water stressed crops. It was appraised that precipitation is likely to decrease from 2016 to 2044. However, the precipitation was projected to improve during the April-June season in the late 21st century (Ogallo et al., 2018). The increase in precipitation may result in frequent and intensive floods in the region which could destroy the livelihood of people residing along the coast. It was also appraised that the current pace of climate change will bring 50% more lands of African countries under climate change threats which were previously free from damages of climate change (UNDP, 2014).

Climate Change Damages to Food Security and Livelihood

The capacity of agriculture was severely hampered by decades of conflicts in conjunction with regular events of climatic shocks. The food imports have increased dramatically since the 1980s and currently the country is dependent upon imports to meet its 60% food requirements (World Bank, 2018). Out of total population (12.3 million), the rural population accounts for 22.8%, nomads are 25.9%, internally displaced are 9% and urban population represents the 42% population (UNPFA, 2014). It shows that more than half of the population of the country is prone to food insecurity. The weekly expenditure on items for urban, rural, internally displaced persons and nomads is \$26.42, \$29.03, \$22.01 and \$33.52 (Hussein et al., 2021). It is very hard to meet the food expenses with an annual income of \$500 (FSNAU, 2018). The local transport system is poor, making food distribution very difficult in rural areas. The rural, nomads and internally displaced persons will have to face higher food prices because of the dilapidated state of the road network. These people will have to travel for hours to reach the markets. The climatic shocks have also key influences on the livelihood of the labor. The Gu off season and the Deyr off seasons are the peak labor requirement seasons in the year. The nomads along with their livestock migrate to the greener areas for grazing and unpredicted shifts may have cascading effects on the herders.



Climate Change Injustice and Climate Financing

Climate change is a central injustice because the countries with lowest greenhouse gas emissions suffer the most. East African countries are one of such typical examples. The 48 sub-Saharan African countries contribute only 0.55% in total CO₂ emissions in the world, while seven out of ten are very vulnerable to climate change. The projections made by the climate change model shows an increase in temperature between 3°C to 4°C by 2080 (UNDP, 2022). Somalia faced many challenges from the various damages of climate changes. The richest countries committed to pool US\$100 billion by 2020 at the Climate Change Conference of Parties 15 (COP 15) meeting to support the poor countries to scrub the greenhouse emissions. The target could not be achieved with a total collection of US\$ 79.6 billion. However, the poor countries showed concerns that the amount fixed is not enough to meet the various targets to cope with climate change. Many governments pledged \$413 million to fund the least developed countries like Gambia and Togo. The UN adaptation fund pledged \$356 million to reduce the impact of climate change. The developed countries are reluctant to take the responsibility of loss and damages which shows that

the rich countries are liable to losses. This is one of the big obstacles of climate change financing. The experts on climate financing are talking about the present and future but no one is ready to talk about the past. The dedicated funding mechanism must be decided for loss and damages for long term stability (Irfan, 2021). The report published by the global commission on adaptation in 2019 revealed a net benefit of US\$ 7.1 trillion against an investment of \$1.8 trillion between 2020-2030 (GCA, 2019). The global center on adaptation assessed that investing US\$ 800 million in various adaptation programs in developing countries may generate a benefit of \$3-16 billion per year (Brooking, 2020). The world food program recently contributed to the relief assistance of 4.8 million people in August (WFP, 2022).

Need for International Assistance

Climate change and three decades of conflicts made Somalia, as one of the poorest countries in the world with an individual annual income of \$500. The humanitarian needs in south Central Somalia have been high as a result of a worsened security situation. The people in this region lacked education, health, and other social services. These assistants are mainly aimed to reduce the risks associated with climate disasters. About 69% of the population in Somalia is living below the poverty line, making it the poorest country in Africa and in the world (UNDP, 2022). The conflict in conjunction with drought became a major driver of the food crisis. It was reported that more than 3.1 million people were facing crisis or emergency food insecurity in late 2017. The population under stress was also equal to that, making a total of 6.2 million looking for humanitarian assistance (FSNAU, 2018). Pregnant and lactating women were significant in this population. Women are already nutrient deficient and require emergent assistance. Food may be financially out of reach, or it may be the result of local conflicts and injustice. The health system of Somalia is not in a position to serve the

communities in case of any emergencies in the form of disease outbreaks and other uncertainties from climate change.

The report compiled by the United Nations Development Program in 2014 demonstrated the lack of any sustainable development practices being practiced by the local communities to reduce the devastating impacts of climate change and efficient resource management (UNDP, 2014). The report further elaborated that local communities do not have any finance and technology and access to information to build climate resilience. It might be the result of political instability and climatic shocks; the people have been threatened for the last few decades. The effects of climate change are further exacerbated due to lack of resources for effective management. Recently, the world food program identified that 6.7 million people in Somalia will face a food crisis between October and December 2022. It was further reported that that number of children facing severe malnutrition may be up to 1.8 million between August 2022 to July 2023 (WFP, 2022). Among the population groups, the women and children are at very high risk of climatic shocks due to unequal access to material and natural resources. Therefore, international assistance is crucial to minimize the risks associated with climate change.

Searching the vulnerable population and identification of the main cause is the prerequisite to meet the challenge of food insecurity. The information from already collected data may be very useful in this regard. Under these circumstances, both the government and local communities are unable to successfully run the adaptation programs.



International Assistance Programs

There are multiple approaches to address food insecurity, however, the food supply is one of the most common approaches. The assistance from cash to overcome the food crisis in Somalia is regular practice. Out of the total population under crisis, 50% receive monthly cash and amount received in this regard totaling \$48 million for May 2017 alone. It represents 17% of the international humanitarian assistance in 2017 and most of this assistance was delivered at individual level (Doocy et al., 2020a). The cash aid is attractive and practical which enables the beneficiaries to purchase food of their own choice for various groups. The cash and voucher system include transfer of fixed amounts to the vulnerable individual on a monthly basis. This system of humanitarian assistance got popularized among the communities which represents the 7% of international humanitarian assistance in 2015. It was preferred in subsequent aids and Grand

Bargain fixed a target of 25% of total packages to be distributed through this system in 2020 (Doocy et al., 2020b).

There is a risk of famine in Somalia due to recent climatic damages. The world food program delivered cash assistance to 1.1 million beneficiaries in August. It was further reported that US\$ 367.9 million will be required for the period of six months from September 2022 to February 2023 (WFP, 2022). The construction of a water reservoir would be required to cope with the challenge of the drought. In response to the last drought, the BRiCS invested US\$ 1.5 million for construction of storage tanks, solar pumping, water points for animals and local residents along with a trucking facility for drinking water. The organization also shows willingness to share 60% cost with the private sector for various infrastructures (Jerving, 2022). The USAID bureau of humanitarian assistance provided US\$ 1.2 billion to various NGOs and other collaborating partners for emergency assistance along with US\$ 5 million for risk reduction, early recovery, and resilience interventions (USAID, 2022).

END NOTES

The communities in Somalia are at the threat of climate change. The poor socioeconomic conditions and bad governance further intensified the issue. The number of people already facing the severe food crisis is very high and present damages of climate change would increase the figure to an alarming extent. The poor countries like Somalia and other East African countries cannot be held responsible for climate related disasters. These are actually the cross-border effects of rich countries. It is crucial to finance the poor countries for development of infrastructure and climate smart farming systems. The access to modern technologies and early warning systems may be

granted to poor countries for improving the adaptation strategies. A lot of assistance programs are in practice, but more is needed.

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