

2-3 JUNE 2022

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A HEALTHY PLANET FOR THE PROSPERITY OF ALL
- OUR RESPONSIBILITY, OUR OPPORTUNITY



Drought, Climate and Water in Somaliland

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1. Introduction to Disaster trends in Somaliland
2. Drought response, and Impacts
3. Climate variability, Climate change and Drought
4. Integrated water resource Management
5. Covid/green recovery,
6. Climate-Security nexus, and
7. the role of Gender and youth in Drought Management, Climate change, and Water resource development and Management
8. Discussion Questions



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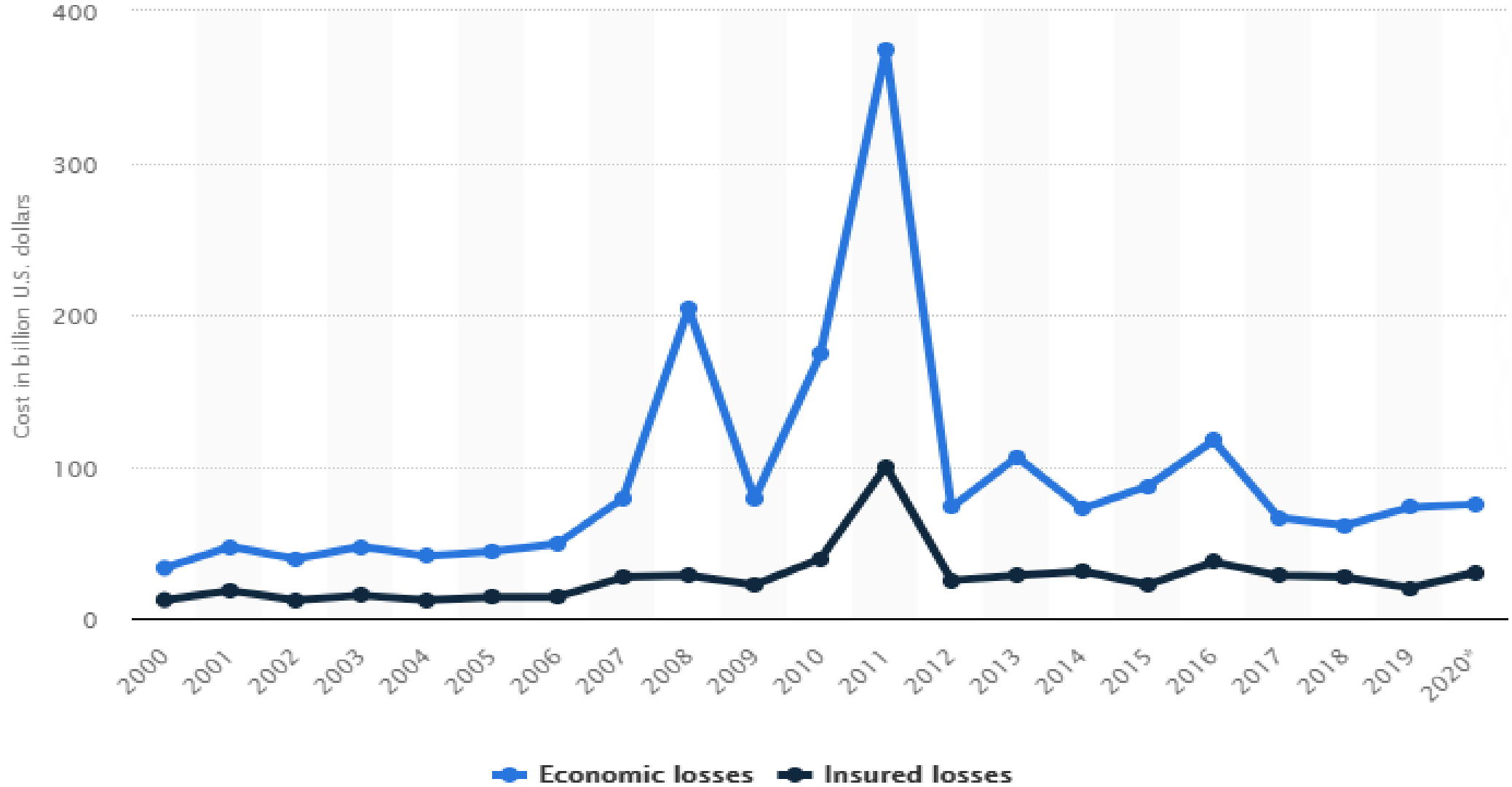
Disaster at Global perspective

- ❑ The Disaster have been on an increase globally, creating multi effects on livelihood, economy, environment, social and natural amenities.
- ❑ Between 1998 and 2017, climate-related and geophysical disasters killed 1.3 million people and left a further 4.4 billion injured, homeless, displaced or in need of emergency assistance. While the majority of fatalities were due to geophysical events, mostly earthquakes and tsunamis, 91% of all disasters were caused by floods, storms, droughts, heatwaves and other extreme weather events(UNDRR-2017).
- ❑ For instance, 409 natural catastrophe events of 2019 resulted in economic losses of USD232 billion. Of that total, private sector and government-sponsored insurance programs covered USD 71 billion In 2020(Weather, climate, and Catastrophe insight-2019-Annual report,2020).

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An overview of Disasters in Somaliland

- ❑ Disasters have been on increase in Somaliland, and new forms of natural disasters such as cyclones, tropical storms, and high variability of rainfall patterns, land degradation are frequently experienced in the country.
- ❑ A new forms of disaster such as cyclones, tropical storms, invasive species, pandemic such as Covid 19 have taken place in Somaliland.
- ❑ Drought remain the most common disaster that is frequently experiences by the country.
- ❑ The trends of drought occurrence has significantly increase, where each 2years drought hits in regions of Somaliland.
- ❑ The prevalence of climate change, social-economic and ecological factors drive the occurrence of the many disasters.
- ❑ Article 18, Verse 2 necessitates the country to get prepare to all forms of disasters e.g flooding, drought, disease outbreaks, fire etc, and ensure the lives and livelihood of the citizens are protected.

Drought Responses

- Drought is a period of precipitation deficit that persists until it results in significant water shortage in an area.
- The IPCC defines drought as a "period of abnormally dry weather long enough to cause serious hydrological imbalance(IPCC, 2014).
- WMO describes drought as a prolonged dry period in the natural climate cycle that can occur anywhere in the world. In the Somali context, drought occurs when rainfall is not received during a normal rainy season or for more than one rainy season resulting in critical water shortages for human, animal, and plant life.
- The responses taking each particular drought stage is relevant in minimizing drought impact, and sustainability of development trajectory.
- Responses should be guided by drought information produced.
- The Drought responses should be streamlined into humanitarian sectors(Food security, WASH, Health, Nutrition, Education etc) as it will have an impact on all of these sectors.
- The have to be an overall response strategy/ or plan that guides the responses, illustrating the priority interventions and resource required in each drought stage.
- The coordination mechanism that in place is an important factor for effective drought management at various stages.



Impact of Recent drought on food security in Somaliland

- ❑ The recent droughts 2016/2017(Sima drought) has created multi array impact on environment and socio-economic well-being.
- ❑ About 1.5 million people is being affected, resulting food insecurity, and in need for humanitarian assistance in Somaliland(NADFOR, 2017)
- ❑ In December 2018, more than 1.5 million people were assessed to be in crisis following the impact of the 2016/2017 drought and the failure of the deyr rains in 2018(FSNAU, 2018).
- ❑ In 2017 over 2.9 million people faced food insecurity crisis and emergency as a result of the 2016 drought. Additionally, more than 3.3 million people were classified as Stressed(FSNAU, 2018).

Economic losses in 2016-2017 Droughts

- ❑ According to Somali Economy Update report about **1.3 to 1.7 billion USD livestock related losses** have been encountered during 2016-2017 droughts across Somaliland and Neighboring Somalia((Somali Economic Update: Annual Report 2017).
- ❑ The 2017 drought increased trade deficit by 9 percent, as exports fell and imports rose(Somali Economic Update: Annual Report 2017).

Snapshot on Current Drought-2022 in Somaliland

- ❑ The assessment identified that there is a severe shortage of water and pasture in the assessed locations/districts of the Eastern regions (Togdheer, Sool, and Sanaag) and Hawd of Marodijeer region. In Guban districts, particularly the coastal and sub-coastal areas of Awdal and Sahil regions, water is adequate but face severe pasture and food shortages. Water access remains extremely limited.
- ❑ Currently, drought is affecting **810,000 people**, who require immediate assistance (Water, Food, and health services). If the drought continues in the coming four months, the report projects that the drought-affected population will climb to 49% increase, making **1,200,420** people affected.
- ❑ A resources worth of **\$ 41,876,877** from the government, private philanthropists, donors and UN and INGOs under the leadership of National Drought Management Committees.
- ❑ The required budget in each sector is as follows: Water (**7,233,000 USD**), Food (**\$ 24,319, 500**), Health care assistance to affected people (**\$ 114,740**), and livestock (**\$10,209,637**).

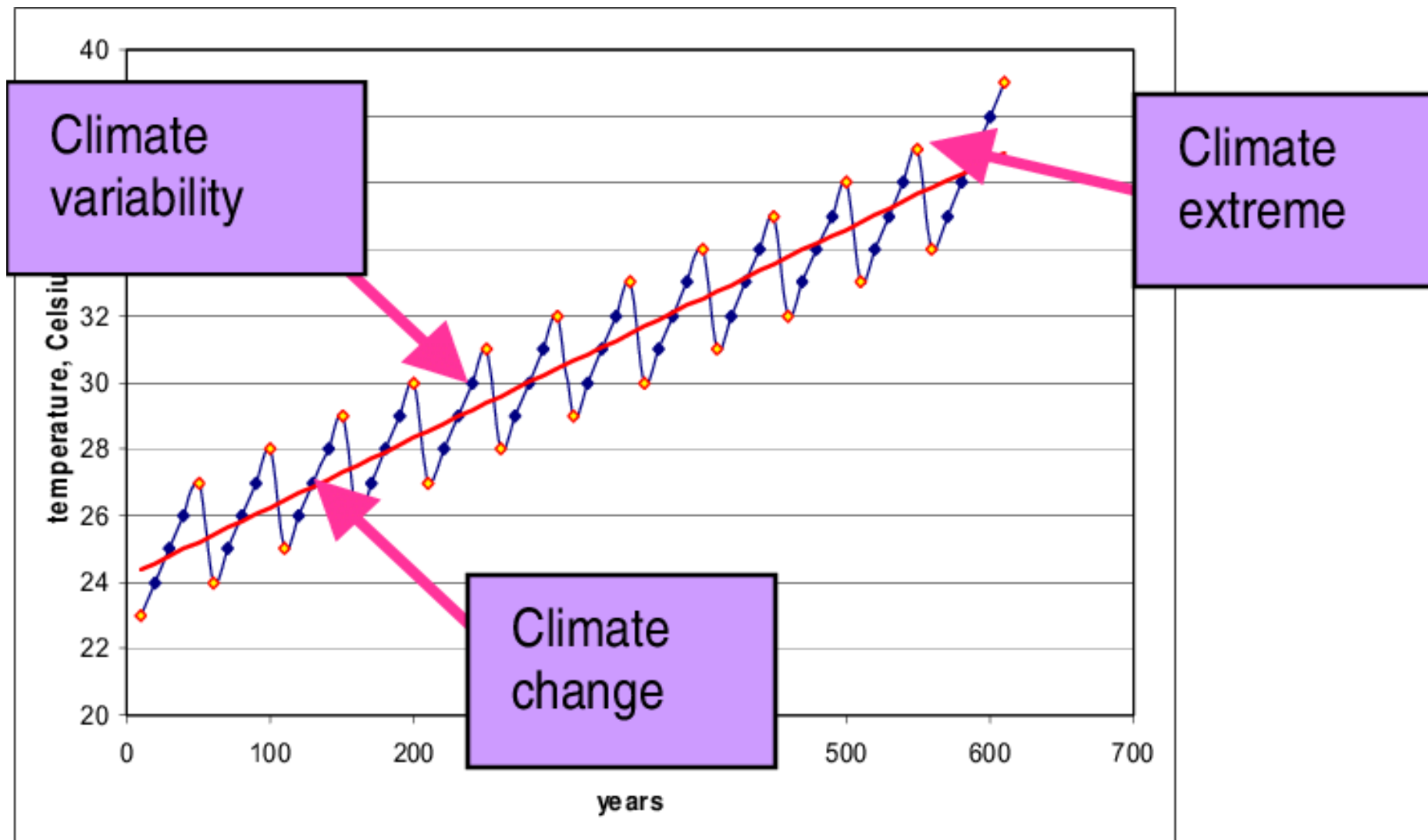
Climate Variability, Climate change and Drought

- Climate variability is often natural, however climate change is causing an increase in the probability of many extreme weather events, and those events contribute to climate variability(UCER, 2018)
- Approximately 70 per cent of the IGAD region is made up of arid and semi-arid lands, which receive less than 600 mm of rainfall annually; the rest of the region has a great variety of climates and landscapes, including highlands, mountains, valleys, rifts, rivers, ridges and lakes(.
- The growing climate change has resulted an increase of the variability of the climate events, including the changes in precipitation and rainfall patterns, thus drought occurrences.
- There are also human induced factors that have strong link with increase of climate variability and climate change, and thus recurrent climate related hazards/ Droughts and floods.

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Water sector in Somaliland

- The water is most precious resource on planet. Nearly all species rely on water. This sector is yet to be developed, and the country faces a lot challenges in meeting the required water in different sectors(Domestic, Agriculture and Industry sectors).
- Access to tap water is very challenges in Somaliland, and many location across the country don't have tap water including the capital city of Hargeisa.
- A press release from UNICEF, 2017 reveal that the disparity of water supply between urban and rural areas is significant. In rural areas, only 28 per cent of households can access an improved water source(UNICEF, 2017).
- The water sector is critically vulnerable to climate change and environmental changes.
- The population growth, also outstrips water supply, and thus creating water stress in many location.



Challenges in Water sector

- Growing climate change
- Recurrent droughts t
- Poor water rain water harvesting
- Deforestation and desertification process taking place in Somaliland
- Poor management of land and land cover resources
- Absence of relevant policy and legislation in water sector governance



Integrated Water Resource Management(IWRM)

- ❑ **Integrated Water Resources Management (IWRM)** by Global Water Partnership (GWP) as "a process which promotes the coordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.
- ❑ This concept aims to promote changes in practices which are considered fundamental to improved water resource management.
- ❑ **Principles of IWRM**
 - Social Equity: Ensuring equal access to water by all community members.
 - Economic efficiency in Water supply
 - Ecological sustainability

Measures required for implementation of IWRM

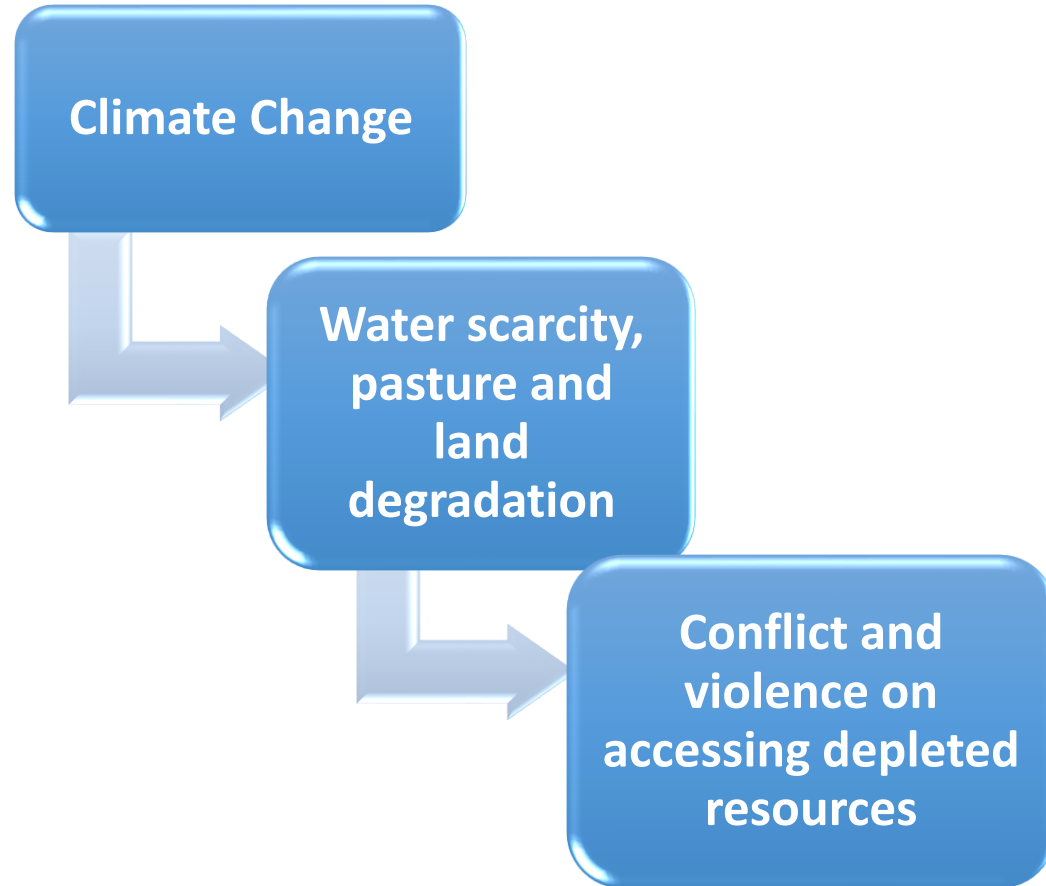
- Political will and commitment
- Water resources development coordinated among various sectors and users
- Capacity development for water management authorities
- Well-defined flexible and enforceable legal frameworks and regulation:
- Water allocation plan
- Adequate investment, financial stability and sustainable cost recovery
- Basin Management/Watershed management
- Monitoring and Evaluation

Covid 19- Impact on Food security and Economy in Somaliland

- ❑ Somaliland is one of the countries affected by the pandemic disease of COVID-19 .
- ❑ The outbreak of COVID-19 has had serious impact on health, education, safety of children and refugees, economy and the overall development trajectory of Somaliland.
- ❑ An estimated **710, 000 (0.71 Million)** people, largely in urban center, are in need of urgent humanitarian assistance as a result of loss of income (NADFOR, 2022).
- ❑ Approximately **1.1 Million** and **850,000 (0.85 million)** people are at Crisis (IPC 3) and Stress phase (IPC 2) respectively according to food security classifications, bringing a total of 2.66 million people in need for humanitarian assistance (NADFOR, 2020).
- ❑ The growth domestic product (GDP) has decreased 3.1% in 2020 due to COVID-19 pandemic which has hit the economy of the country (MoNPD, 2021).
- ❑ Number of measures taken by government to combat the spread of COVID 19 include closure of ceremonial halls, closure of ground crossing points for passengers, expansion of call centers capacity and activation of toll-free telephone lines for reporting suspected COVID-19 cases, effective mobilization of resources from all sectors of the Government to support the COVID-19 response and quarantine for individuals perceived to be at a very high risk.

Climate and Security Nexus

- The linkage of climate change to violent conflict or the climate-security nexus (C-S nexus) was popularized in 2003 with the release of two security strategies from the Pentagon and the European Council (Julie, 2019).
- This C-S nexus gained momentum when, in 2007, the Nobel committee awarded the Nobel Peace Prize to Al Gore and the Intergovernmental Panel on Climate Change (IPCC) for their work at raising the world's awareness of anthropogenic climate change (Julie, 2019).
- The work of Delby 2016, confirms the need for political ecology approach to addressing the issue, bringing in proximate causes of conflict, from environmental and climate factors, resulting social injustice and social movement.
- Strategic Foresight Group (SFG), a think tank and research institution in India, conducted an study in Somalia on climate and security nexus, and has critically recognized the water scarcity as critical factor for security in Somalia, and further explored protecting freshwater in difficult situation in Somalia to avoid security implications.



The Role of Gender and Youth in Drought Management, and water resource management.

- ❑ Worldwide, young people's health and wellbeing is threatened by continuing climate change and related phenomena, such as drought.
- ❑ Youth including sub-Saharan youth—are particularly vulnerable to drought-related risks and the impact of such risks on health and wellbeing. For instance, a study of 83,990 partnered women living in 19 sub-Saharan countries found strong associations between drought and intimate partner violence (IPV)—specifically physical and sexual violence—among adolescent girls (15 to 19-year-olds). Adolescent girls were also at higher risk than older women for reporting emotional violence during or after drought exposure(Linda, 2020).
- ❑ Despite the youth and women are among most vulnerable groups to droughts/water scarcity, and in general environmental challenges, however there are potentials, and they can participate significantly in drought and water resource management, and in general resilience against climate shocks.

The Role of Youth and Gender/Women in Drought and water resource management

- Awareness raising among community on rainwater harvesting, and sustainable grazing methods, use of early warning information
- Drought response by contribution of emergency responses and resilience building interventions.
- Volunteerism during drought response
- Community based early warning system
- Research and Education
- Participation in extension and DRR services providing by the government and other stakeholders.
- Household water demand management
- Promotion of sustainable farming methods that minimize water demand



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2. Julie Snorek, Daniel Abrahams(2019): An Article on Climate and security nexus: **DOI: 10.1093/OBO/9780199874002-0200.**
3. IPCC 2014: Climate change 2014: Impact, adaptation and vulnerability. Contribution of Working Group II to fourth Assessment report of the intergovernmental panel on climate change.
4. Weather, climate, and Catastrophe insight-2019-Annual report,2020.
5. Somali Economic Update: Annual Report 2017
6. NADFOR(2020): Flash report on impact of covid 19 on Food security.
7. NADFOR(2017): Flash report on drought situation
8. FSNAU(2018): Post Deyr Food security and Nutritional Assessment report.
9. GoSL(2021) 2021: Drought Response Plan report commissioned by National Drought Committee(NDC).
10. MoFD(2021): Economic performance report



Thank you

Discussion Questions

1. Measures for improving water sector resilience in Somaliland?(10min)
2. The long-term solutions required to address the impacts o climate risks on security, societal well-being, and environmental sustainability?(10min)
3. How the can be improved and mainstreamed the role of youth and gender in drought risk management, and climate change adaptation?(10min)