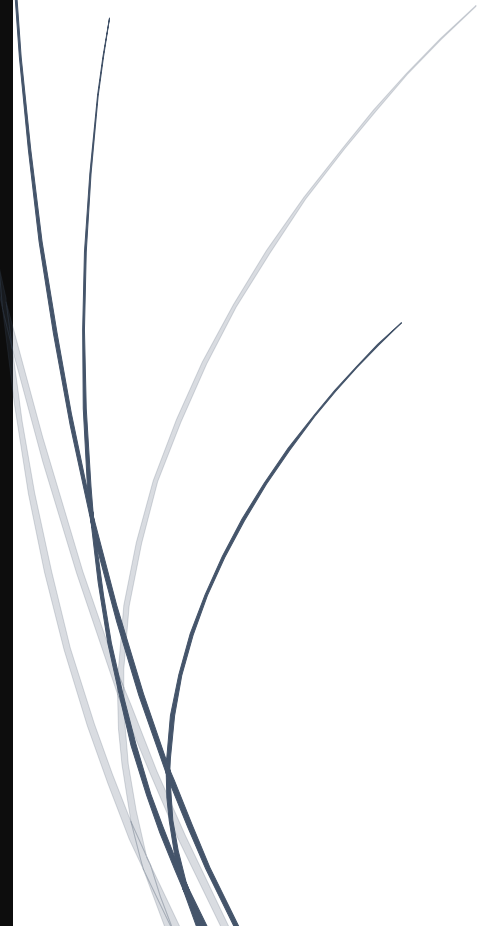




3/28/2021

Review of Disaster Risk Reduction and Management Initiatives in Eastern Africa with a Gender-responsive and Social inclusion Lens



Draft V2

Summary

Eastern Africa sub-region is predisposed to natural and human induced disasters such as droughts and floods, political and ethnic conflicts, and outbreaks of human, crop and livestock disease epidemics. When disasters occur, they do not discriminate, but their impact does. The gendered impact of disasters is context specific and has a connection to the overall situation of gender inequality and social exclusion of a society in the sub-region. Women and girls are often disproportionately affected by impacts of disasters due to existing gender inequalities that increase their vulnerability to disasters, heighten exposure to risk and restrain capacity, often resulting in a post-disaster downward spiral of poverty. Additionally, women, girls, people living with disability tend to be excluded from decision-making at all levels and have lower decision-making power in most societies.

This study aimed to elucidate the status of disaster risk reduction initiatives (policy, strategy, project and program) with a gender and social inclusion lens. Findings from the DRR initiatives mapping shows that countries in Eastern Africa are implementing various DRR initiatives as part of their disaster risk reduction and management. A total of 155 DRR initiatives were identified with projects comprising the largest number of DRR (37.4%). The others were Acts (10.3%), Bills (10.3%), Policy (9%), Program (5.8) and strategy/plans (23.9%). Out of the 155 DRR Initiatives, Kenya has the highest number of DRR initiatives (53 in total) being implemented while, Eritrea has the lowest at 3. The high number of DRR initiatives in Kenya is due to the devolved system of government whereby each County government develops its own DRR Act, strategy or policy.

The Sendai framework only identifies women, children and youth, PWD, older people, indigenous people and migrants as the most vulnerable people. Analysis of the 155 DRR initiatives show that 41.9% of the initiatives mention and/or target women, children, youth, PWD, elderly, migrants, Internally displaced persons, refugees, boys, girls, men, poor people and poor households. The rest of the DRR initiatives, that is 58.1% do not mention any vulnerable persons. Women are mentioned or targeted in all the DRR initiatives that identify vulnerable people. Children, youth, PWD and the elderly are also frequently mentioned in the 41.9% of the DRR initiatives. The least mentioned category of people are street people, beggars and commercial sex workers. This clearly indicates that national governments and other stakeholders recognize the importance of identifying and targeting different categories of people within a country or community.

Natural and human induced disaster affect men, women, children, PWD, the elderly and the Indigenous people differently. To address this, deliberate efforts must be put in place to ensure that everyone within the community participates and benefits equally from disaster risk reduction and recovery efforts. Review of the DRR initiatives in eastern Africa shows that 33.5% of them were informed by a gender and social inclusion situational assessment. Out of the 155 DRR initiatives identified, 25.6% of them conducted a GSI risk analysis and vulnerability profile. 8.4% of the DRR initiatives had a gender specialist in the organizational staff team. The gender specialist carried out gender and risk analysis and acted as liaison with community members especially women and PWD and helped develop the GSI DRR plans and activities. 15.8% of the DRR initiatives developed a GSI communication methods to reach men, women, children, PWD, the elderly and indigenous people.

22.9% of DRR initiatives identified used gender-sensitive indicators in their M&E frameworks to aid in tracking how different DRR measures or interventions impact the lives of men, women, children, PWD, the elderly and indigenous people. The gender-sensitive indicators are also used to assess whether progress is made towards gender equality and if corrective measures are needed. 18% of the identified DRR legislations mentioned training of staff on skills and knowledge in the various aspects of gender mainstreaming into DRR operations.

Finally, this report proposes a roadmap for mainstreaming gender responsiveness and social inclusion into DRR initiatives. The roadmap is largely informed by the overarching Sendai Framework, SDGs and national DRR policies and strategies aims to mainstreaming gender and social inclusion (GSI) into DRR policy development processes while at the same time strengthening the role of the national governments and other

actors in addressing gender and social inclusion perspectives in risks and hazard preparedness. The roadmap is expected to a) enhance resilience to natural and human induced risks and shocks on the social, environmental, political and economic aspects of the economy, b) contribute to the strengthening of governance and institutional coordination for effective GSI implementation of the DRR interventions at sub-national, national and regional levels and c) identify and incorporate 'best practices' on DRR strategies that can reduce vulnerability, increase adaptive capacity, address specific risks related to each hazard, explore GSI specific opportunities in the context of each hazard.

Key Policy Points

1

In eastern Africa, the risks and impacts associated with disasters are not equally distributed amongst women, men, children, people with disability, migrants, the elderly, youth, girls, IDPs, and refugees, since those with the least capacity to cope and adapt are often the most vulnerable

2

National governments and other actors must carry out a gendered analysis and profiling of risk and vulnerability to highlight the differential vulnerabilities of women and men, and girls and boys, based on their differential levels of exposure, sensitivity, and ability to cope, adapt, and respond to impacts. The equal and active participation of women and men in DRR will make it possible to achieve the overarching goals of gender equality

3

The inability for women, PWD and girls to participate in DRR decision-making processes (preparedness, response and recovery) at community and national levels can lead to a lack of specific protections for women and girls in DRM. Therefore, identification of the DRR needs of women and girls and other vulnerable people is necessary to develop gender transforming and socially inclusive strategies

4

National governments should design and implement DRR legislations and frameworks with a gender and social inclusion lens and/or engender existing ones so that the legislations are responsive to the needs, perspectives, and roles of women and girls in building more inclusive and equitable resilience

5

National governments and other actors must integrate Gender and social inclusion into DRR & management strategies, budgeting, monitoring and evaluation, and digital database systems (with sex and gender disaggregated data)

6

All DRR initiatives should contain elements of community driven early warning strategies and livelihood enhancement to help the most vulnerable (women, children, people with disability, migrants, the elderly, youth, girls and refugees) prepare and respond to disasters as well as broaden their livelihood base

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Acronyms

ASALs	Arid and Semi-Arid Lands
CBOs	Community based Organizations
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
FAO	Food and Agriculture Organization
GDP	Gross Domestic Product
GII	Gender Inequality Index
GSI	Gender and Social Inclusion
HDI	Human Development Index
IDMC	Internal Displacement Monitoring Centre
NDCs	National Determined Contributions
NGOs	Non-Governmental Organizations
PWD	People with Disability
SFDRR	Sendai Framework for Disaster Risk Reduction
SIDs	Small Island States
SDGs	Sustainable Development Goals
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNHCR	United Nations High Commissioner for Refugees
UNISDR	United Nations Office for Disaster Risk Reduction
USD	United States Dollar
CBOs	Community based Organizations
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
GSI	Gender and Social Inclusion
IDMC	Internal Displacement Monitoring Centre
NDCs	National Determined Contributions
NGOs	Non-Governmental Organizations
PWD	People with Disability
SDGs	Sustainable Development Goals
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNHCR	United Nations High Commission for Refugees
UNISDR	United Nations office for Disaster Risk Reduction
USD	United States Dollar

Glossary of Disaster Risk Reduction and Management

Terms ¹	Definition
Adaptation	The adjustment in natural or human activities in responses to actual or expected disaster or their effects which moderate harm or exploit beneficial opportunities.
Affirmative Action	A policy, program or measure that seeks to redress past discrimination through active measures to ensure equal opportunity and positive outcomes in all spheres of life
Climate Change	A change in the state of the climate that can be identified (e.g. by using statistical tests) by changes in the mean and/or the variabilities of its properties and that persist for an extended period, typically decades or longer. Climate Change may be due to natural internal processes or external forcings or to persistent anthropogenic changes in the composition of the atmosphere or land use
Disaster	A disaster is a serious disruption of the functioning of a community or society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community/society to cope using its own resources
Disaster Risk	The potential disaster losses, in lives, health status, livelihoods, assets and services, which could occur to a particular community or a society over some specified future time period
Disaster Risk Management	The systematic process of using administrative directives, organisations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster.
Disaster Risk Reduction	The concept and practice of reducing disaster risks through systematic efforts to analyze and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.
Empowerment	The process of gaining access to resources and enhancing one's capacities with a view to participating actively in shaping one's own life and that of one's community in economic, social and political spaces
Exposure	The situation of people, infrastructure, housing, production capacities and other tangible human assets located in disasters-prone areas
Gender	This refers to the roles and responsibilities of men and women that are created in our families, our societies and our cultures and the expectations held about the characteristics, aptitudes and likely behaviours of both women and men (femininity and masculinity).
Gender Analysis	This refers to the identification of different needs of men and women through collection and analysis of sex-disaggregated information to inform the design and implementation of policy and project
Gender Equality	This refers to women and men having equal conditions for realizing their full human rights and for contributing to, and benefiting from, economic, social, cultural and political development.
Gender Equity	This refers to fairness of treatment for women and men, boys and girls according to their respective needs and in terms of rights, benefits, obligations, and opportunities.
Gender mainstreaming	This is a process to integrate gender into existing policies, program, project and institutions to achieve gender equality
Gender norms	
Gender-responsive budgeting	The process of planning, approving, executing, monitoring, analysing and auditing budgets in a gender-sensitive way. Involves analysis of actual expenditure and revenue (usually of governments) on women and girls as compared to expenditures on men and boys.
Gender-responsive planning	This refers to assessing the implications for women and men, boys and girls of any planned DRR action, including legislation and policies.
Gender responsiveness	This refers to the identification and acknowledgement of the existing differences and inequalities between women and men and articulation of DRR policies and initiatives which address the different needs, aspirations, capacities and contributions of women and men.
Gender roles	The responsibilities that are assigned to women, men, girls, boys by society
Gender sensitive	Acknowledging and taking into account the specific gender needs of both men and women at all levels of DRR planning, implementation, monitoring and evaluation
Gender sensitive indicators	This refers to a set of indicators (checklist) that demonstrates whether policies, projects and programs are working towards achieving gender equality

¹ Definitions added from the AU Strategy for Gender Equality & Women's Empowerment

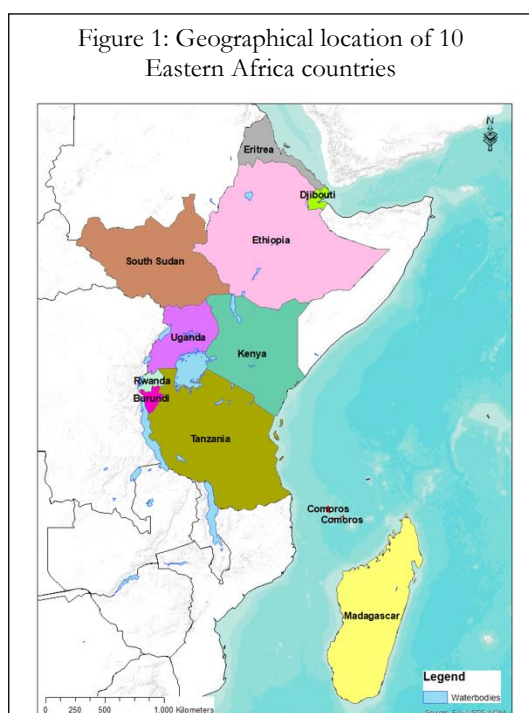
Gender transformative	These are interventions that create opportunities for women, men, boys and girls and aim to challenge gender norms, promote positions of social and political influence for women and girls in communities, and address power inequities between persons of different genders.
Geological Hazard	Geological process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.
Hazard	A hazard is a dangerous phenomenon, substance, human activity or condition that may cause the loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.
Human-induced hazards	These are hazards that are induced entirely or predominantly by human activities and choices
Natural Hazard	Natural processes or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.
Participatory	This refers to enabling and/or allowing women, men, boys and girls and other vulnerable groups to actively take part in or become involved in DRR activities
Resilience	The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.
Risk Assessment	A methodology to determine the nature and extent of risk by analyzing potential hazards and evaluating existing conditions of vulnerability that together could potentially harm exposed people, property, services, livelihoods and the environment on which they depend.
Sex-disaggregated data	This includes data that are collected and analysed separately on males and females.
Social inclusion	This is the process of conducting gender analysis to identify, address and respond to the diversity of needs of everyone through increasing participation in DRR and management while reducing exclusion
Technological Hazard	A hazard originating from technological or industrial conditions, including accidents, dangerous procedures, infrastructure failures or specific human activities, that may cause loss of life, injury, illness or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.
Vulnerability	The characteristics and circumstances of a community, system or asset that makes it susceptible to the damaging effects of a hazard.

1 Introduction

1.1 General information on Eastern Africa

1.1.1 Geography

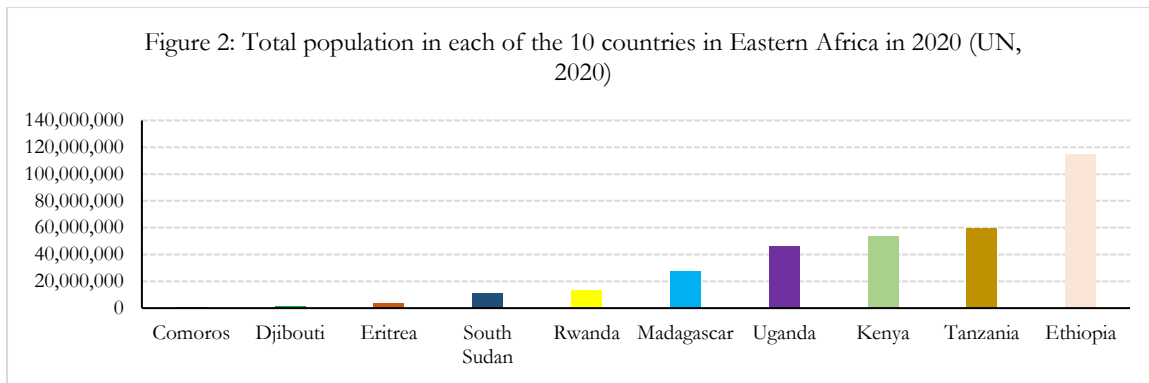
This report focuses on ten countries located in the Eastern Africa region namely, Tanzania, Rwanda, Djibouti, Kenya, Uganda, Ethiopia, Eritrea, Comoros, Madagascar and South Sudan (Figure 1). The Eastern Africa sub-region mainly consists of large plateaus and has most of the highest altitudes on the continent (Mts. Kilimanjaro, Kenya and the Ruwenzoris). The sub-region is covered by the Eastern great Rift Valley that runs from the junction of the red sea with the gulf of Barber southward through Ethiopia and Kenya's plateaus and moves across to Tanzania. Western Rift Valley covers the borders of Uganda and Tanzania from the western. Between the eastern and the western rift valleys lies a plateau that runs most of Uganda and western Tanzania, taking part of Lake Victoria, the second largest freshwater lake in the world.



The sub-region is an active volcanic areas and tremors are often felt in isolated places that lead to massive landslides, destruction of infrastructure, e.g., roads and buildings and loss of lives. The flat lying areas including the coastal regions experience frequent flooding events that affects millions of people. Eastern Africa is generally made up of tropical climate with average temperatures that decline with the altitude and high rainfall amounts. This varied climate creates a variety of vegetation in the region from the woodland and grassland in wet areas, scrubs, and thorn bushes in semiarid and arid lands (ASALs). The northern part of Kenya, Uganda and Ethiopia into Djibouti and Eritrea and most of South Sudan are ASALs areas that experience frequent rainfall shortage, drought and high temperatures that lead to hunger and death of both humans and livestock. The Small Island States (SIDS) of Comoros and Madagascar form part of this eastern Africa sub-region and are influenced by large ocean-atmosphere interactions such as trade winds, El Niño, monsoons and tropical cyclones (UN-OHRLLS, 2015).

1.1.2 Demography

According to the United Nations Population Division, Eastern Africa's population ranks number 1 in Africa among sub-regions and is equivalent to 5.71% of the total world population. The population density is 67 people per Km². In 2019, 132,520,364 people (29.8% of the population) were living in urban centers. The median age is 18.7 years, thus categorizing eastern Africa as a young population. The current population is estimated at 453,373,196 people, which has been steadily growing since 1950 (UNFPA, 2019). Populations range from less than 1 million in Comoros and Djibouti to more than 100 million in Ethiopia (Figure 2). The populations of Comoros and Madagascar are concentrated in the coastal zone and projected rise in sea-level will have significant and profound effects on settlements, living conditions and island economies (UNFCCC, 2007).



Eastern Africa has three distinct languages classified as Cushites, Nilo-Saharan language and the Bantus. The ethnic group with the largest population is the Oromo, speaking Cushite and who occupy much of southern and southeastern Ethiopia, distributed across Somalia and much of Djibouti. The second largest are the Afar group found in Eritrea and Djibouti. All the ethnic groups have cultural and social norms that govern the roles and responsibilities of women, men, youth, girls and the elderly as well as their access to resources. These cultural and social norms also dictate an individual's adaptive capacity to and response to disasters (see sub-section 3.3 for more details).

1.1.3 Economy

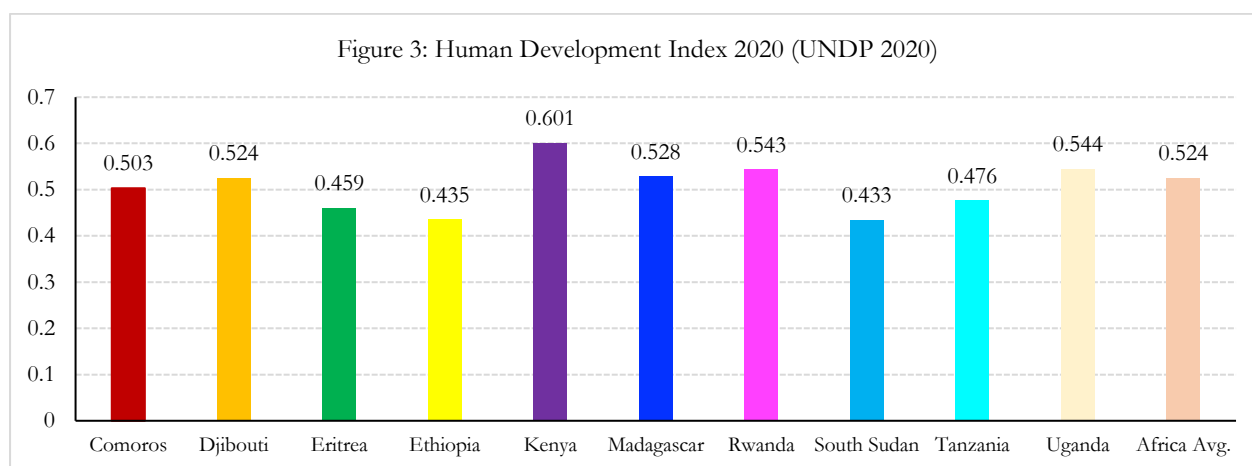
Economic growth across the sub-region is driven by services, industrial, and agricultural sectors. In 2019, real GDP in the sub-region grew by an estimated 6.1 % making it the highest among African sub-regions (AfDB, 2021). However due to the current Covid-19 pandemic, the escalating ethnic conflicts in Ethiopia (the largest economy), the GDP is expected to significantly drop in the subsequent years. Another critical risk factor confronting eastern Africa is persistent current account deficits and corresponding increases in external indebtedness. Additionally, large fluctuations in agricultural production and a high reliance on the agricultural sector, inadequate market competition and poor infrastructure, most of the economies of the eastern African countries are extremely vulnerable to natural disasters such as drought, conflicts, ethnic violence and floods (UNECA 2019). It is important to point out that presences of and active involvement of private sector has helped increase the growth of eastern African countries' economies by increasing reliability power access, creating jobs, increasing the standard of living, and managing the innovation tools to improve the region's trademark (UNCTAD, 2018).

1.1.4 Politics

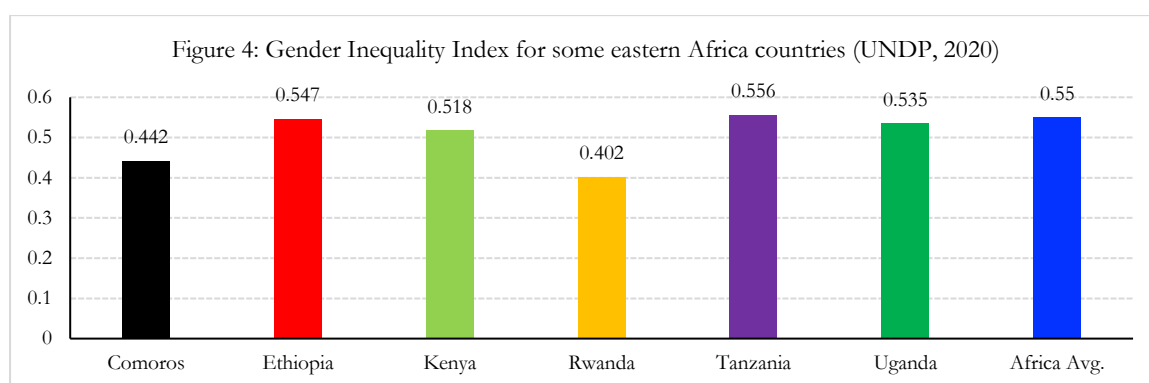
Despite all the countries professing multi-party democracies, East Africa is one of the most conflicted and poorly governed countries (CSIS, 2016). Issues of constitutionalism, corruption, unequal political developments and democracy, and ethnic and armed conflict seem to dominate the political landscape (CSIS, 2016). The region is a troubled political trajectory with poor and despotic leadership, corruption, terrorism, and electoral malpractice, among other political problems, as the common maladies causing insecurity (Bekoe, 2006; Thomson, 2016). For example, South Sudan, Ethiopia Kenya, Rwanda and Eritrea has experienced disasters of different magnitudes driven by political violence and cleansing (UN DESA, 2019). This political violence had led to deaths and displacement of millions of people. For example, political violence in Uganda, Eritrea Kenya led to displacement of 2.4 million, 132,000, 34,000 people, respectively (UN DESA, 2019). The highest number of people displaced due to political violence is in South Sudan where 1 in 3 people have been displaced (UN DESA, 2019).

1.1.5 Human development

About 50% of the eastern Africa’s population remains poor based on the dimensions of human development Index (HDI)², that is standard of living, education and health, and their relationship with public social spending to achieve the 2030 SDG Agenda. The HDI for the 10 countries is very low and only Kenya is listed as a middle-income country while the rest are listed as low income (Figure 3). Uganda, Kenya, Rwanda, Madagascar and Djibouti have HDI that is above the average in Africa.



Eastern Africa countries experience systemic and persistent and recurring challenges that leads to low human development in the sub-region. Systemic and persistent challenge include poverty, low income, HIV/AIDS and Malaria pandemic, political instabilities, restrictive cultural and social practices, while recurring challenges are drought, floods, preventable disease epidemics, and economic recessions. These affect the region's ability to prepared and respond to disasters (Fosu and Mwabu, 2010). Gender inequality is also prevalent and the Gender Inequality Index (GII)³ for these countries is very high (Figure 4). These implies that gender is acritical factor in DRR. GII is not available for Djibouti, Eritrea, Madagascar and South Sudan.

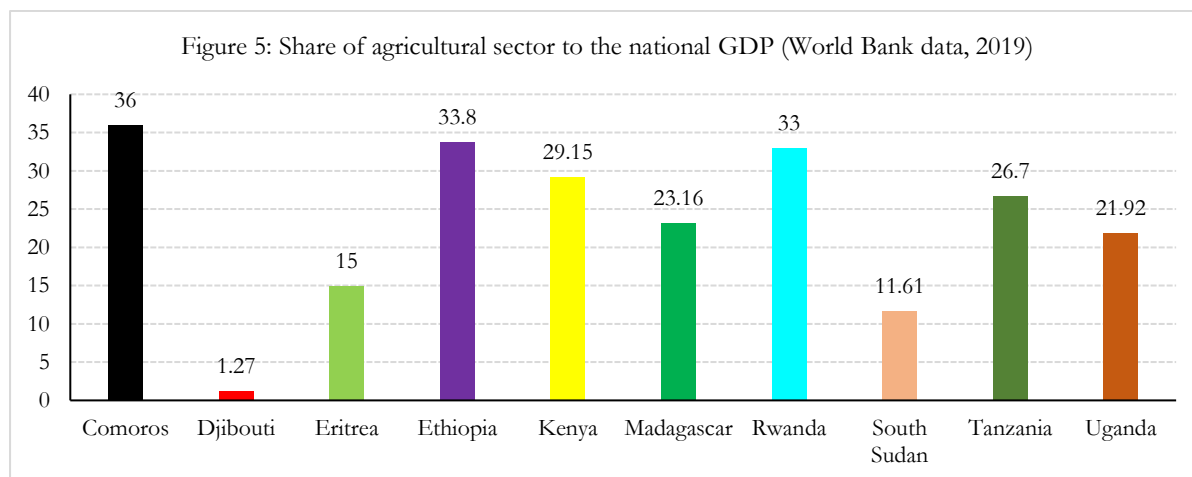


² UNDP defines human development as ‘the process of enlarging people's choices, allowing people to lead a long and healthy life, to be educated, to enjoy a decent standard of living, as well as political freedom, other guaranteed human rights and various ingredients of self-respect’ (UNDP, 1997)

³ Definition: A composite measure reflecting inequality in achievement between women and men in three dimensions: reproductive health, empowerment and the labour market (UNDP, 2020)

1.1.6 Agriculture, food security and nutrition

The economies of Eastern African countries are mainly agrarian though the service industry is the largest contributor to the GDP. The average contribution of agriculture to the GDP in eastern Africa is about 23% (Figure 5). The agricultural sector is experiencing low productivity due to increased land population pressures, low investment in agricultural research and development and agricultural extension, markets distortions, declining soil fertility and land degradation (Bjornlund et al. 2020). Additionally, cumulative impacts of climate change are adversely affecting the agricultural production and leading to food and nutrition insecurities (Vervoort et al., 2013).



In Comoros and Madagascar, the impact of climate change is fundamentally altering the fishing industry including loss of traditional fisheries, decreased in profits and jobs, conflicts over new fisheries that emerge because of distribution shifts, food security concerns and a large decrease in fish catch (Cheung et al., 2013). In recent years, the agriculture sector has been affected greatly by locust invasion, which has negative impacted the food security of Ethiopia, Kenya, Eritrea and Uganda (TNE, 2020).

1.1.7 Education and literacy levels

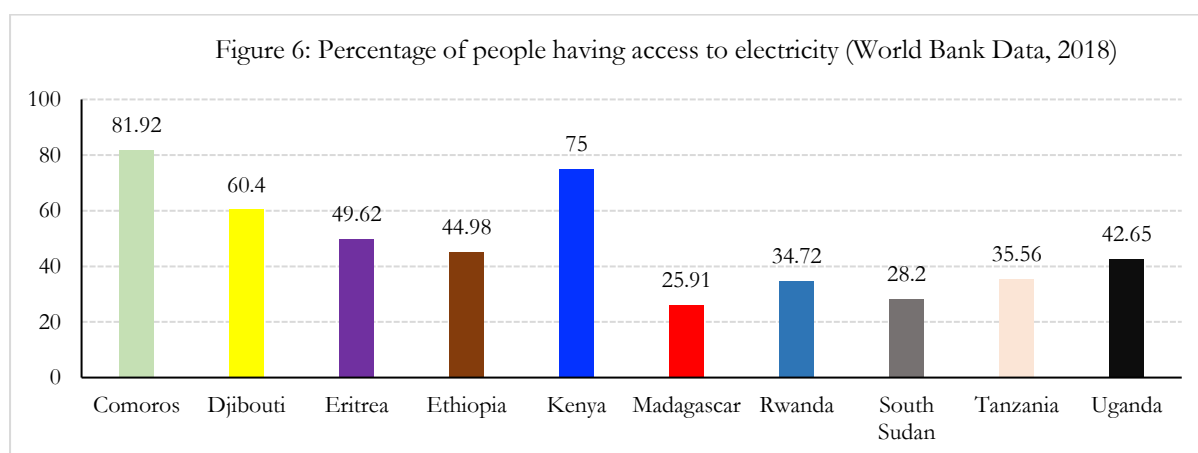
School enrollments have increased rapidly in Eastern Africa especially in Tanzania, Uganda and Kenya due to free primary education. However, some children do not attend school due to a number of factors including lack of clothing and books, local attitudes and/or traditional practices, health and nutrition, crisis and instability, distance to school, poor quality environment, political violence, poor legal enforcement of education policies and disease pandemics such as Covid-19 (UNESCO, 2016). The literacy rate for the eastern Africa countries is shown on Table 1. Amongst the eastern Africa countries, Kenya has the highest literacy rate at 81.5% while South Sudan has the least at 34.52% (UNESCO, 2018). The global average is 84 percent (UNESCO, 2018). There is no data available for Djibouti.

Country	Overall Literacy rate (%)	Literacy rate by sex for people aged 15 years and older (%)	
		Male	Female
Comoros	58.82	64.64	52.96
Eritrea	76.57	84.37	68.95
Ethiopia	51.77	59.2	44.42
Kenya	81.50	85.00	78.20
Madagascar	74.80	77.28	72.38
Rwanda	73.22	77.56	69.39
South Sudan	34.52	40.26	28.86

Tanzania	77.89	83.2	73.09
Uganda	76.53	82.66	70.84

1.1.8 Access to electricity

Electricity is becoming the backbone of eastern Africa’s economy. All the economic sectors depend on the reliable delivery of electricity. More than 75% of the population in sub-Saharan African lack access to electricity (IEA, 2019). Factors limiting electricity access include larger capital investment required to develop energy generation, transmission, and distribution services to non-urban consumers, sparsely distributed rural homes, which make extending the grid more expensive, poor conditions of transboundary and interconnections electricity in the region, poor energy infrastructure, and a small number of consumers who can pay for electricity service connection (Vervoort et al., 2013). However, a number of countries especially Comoros and Kenya have made great strides in both grid connections and deployment of off-grid system (Figure 6).



Natural hazards such as cyclones, floods and earth quakes can affect the electricity supply and result in power outages which can trigger accidents, bring economic activity to a halt and hinder emergency response until electricity supply is restored to critical services. Emergency recovery for electricity can take from a few hours to months in the sub-region and urban centers have better recovery than rural areas.

1.1.9 Trade

Trade in the sub-region has been boosted by the Common Market for Eastern and Southern Africa (COMESA) intra-regional trade bloc. This has enhanced economic development due to unrestricted goods and services within some of the Eastern and Southern African borders. In eastern Africa, the structure of trade⁴ and growth patterns are characterized by a lack of resource mobilization, lack of economic diversification; weak regional integration; low industrialization and high unemployment rates (AfDB, 2019). Almost all the ten countries depend on unprocessed commodities for exports, falling global commodity prices negatively affect their trade terms, resulting in persistent current account deficits (UNECA 2019). In recent years, the focus on agriculture as a driver of economic growth has diminished due to their low-value chain with little value addition (Vervoort et al., 2013). Therefore, the countries are becoming net importers of food despite having a vast potential for agricultural resources (Epeju, 2019). However, there is a thriving private sector, driven by domestic and foreign direct investment, particularly in mining, forestry, construction, manufacturing, and tourism (Vervoort et al., 2013).

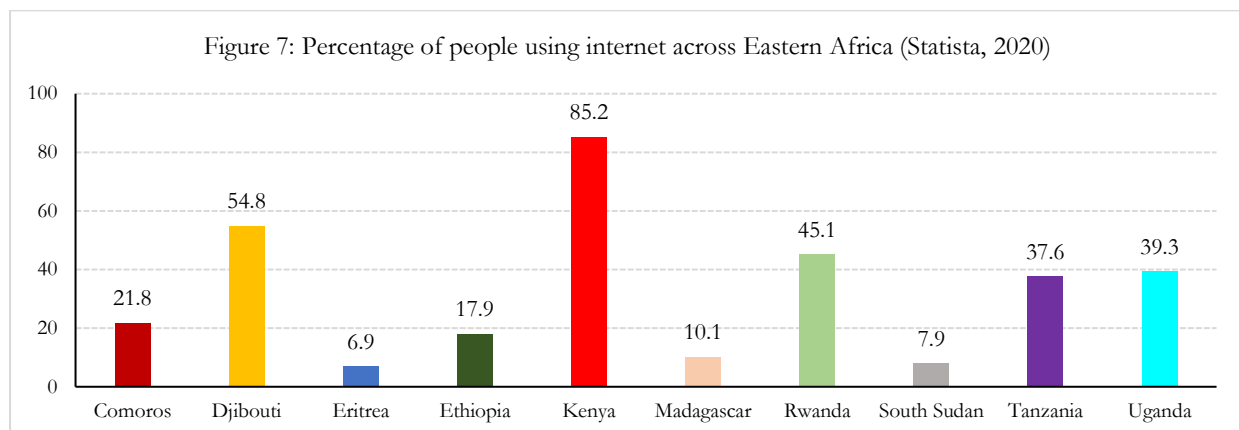
⁴ Trade refers to a system that allows the transfer of goods or services from an individual to another with an often exchange for the monetary term

1.1.10 Transport and infrastructure

Transport and infrastructure play a major role in development and supports economic growth and wealth development. Modes of transport such as roads and railway interconnect the countries of Eastern Africa, thus enabling easier movement of the goods between the countries. Lack of infrastructure, particularly in rural areas, is stalling economic growth and widening the poverty gap in the sub-region. In rural areas, farmers and other entrepreneurs cannot compete due to a lack of access to markets and electricity and the high input and production costs (Vervoort et al., 2013). In recent decade, regional road and rail networks and other infrastructural improvements have attracted investment from foreign private sector companies, creating employment and opening up most of the rural areas.

1.1.11 Information and Community Technology

Communication information technology infrastructure has improved significantly through public-private partnerships, leading to rapid industrialization in urban and industrial areas (Vervoort et al., 2013). For instance, more efficient information systems and e-commerce (including fiber optic cables' installation) has reduced communication and internet costs and advanced agricultural technologies (Baumüller, 2016). For example, access to market intelligence via mobile phones has enabled farmers to get better prices for their produce (Magesa et al. 2020). Kenya has the highest percentage of its citizens using internet at 85.2% while Eritrea has the lowest percentage at 6.9% (Figure 7). However, increased usage of internet and overall ICT transformation has not been even within a country. Educated urban dwellers have capitalized on the improved ICT to create innovate employment opportunities, e.g., establishing e-commerce to facilitate effective service delivery, while rural people do not have the technical skills nor knowledge to use ICT and are being left behind. This has created the digital divide (Vervoort et al., 2013).



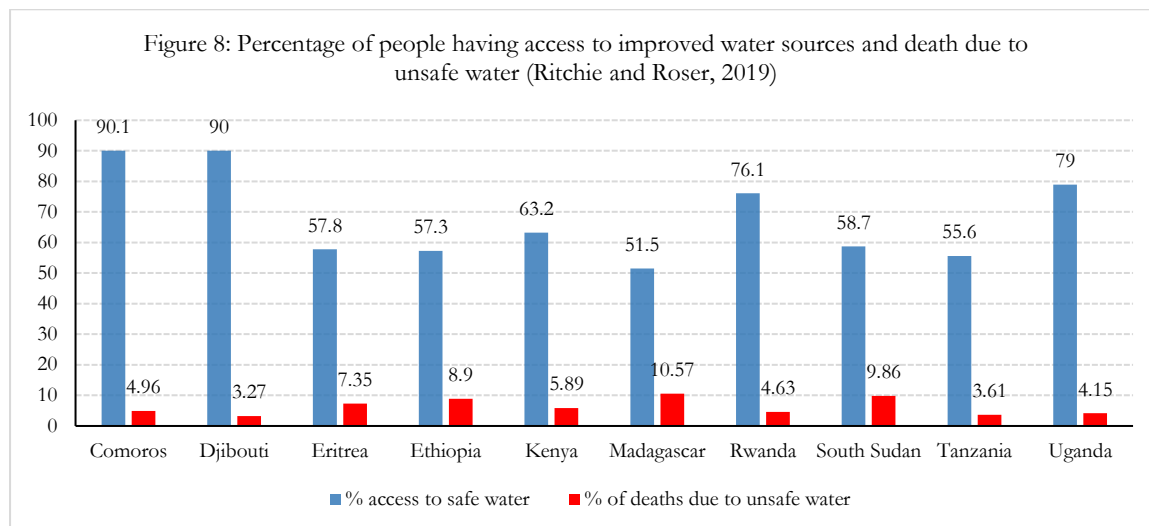
1.1.12 Water resources

Most notable water bodies and systems that are of outmost importance to the Eastern Africa region include Lake Victoria, Lake Tanganyika and the Nile River Basin. However, water's spatial distribution varies significantly, with Eastern Africa's western component considered to have a more water bodies. Access to water is critical, and water quality is declining significantly, mainly due to human activity in both the catchments and river basins (Opere et al., 2019). The water resources in the region face challenges like an increase in the rate of evaporation and inadequate supervision of groundwater aquifers.

29% of the world does not have access to safe drinking water and this number is higher in eastern Africa (Ritchie and Roser, 2019). Comoros and Djibouti have the highest number of people having access to improved water sources. An improved drinking water source includes piped water on premises, public taps or standpipes, tube wells or boreholes, protected dug wells, protected springs, and rainwater collection (Ritchie and Roser, 2019). The least are Madagascar and Tanzania. Human deaths⁵ from unsafe water

⁵ Death rates measure the number of deaths per 100,000 people in a given country or region.

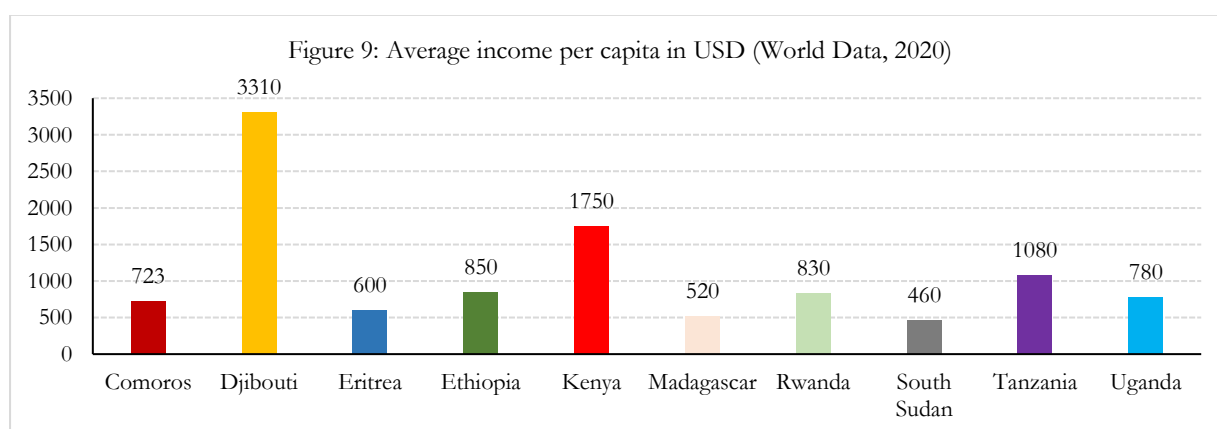
sources show that Madagascar, South Sudan and Ethiopia has a high percentage of deaths (Figure 8). The unsafe water is due to contamination after cyclones in Madagascar while in South Sudan and Ethiopia, it is due to lack of use of appropriate water sources and thus forcing people to drink dirty water, putting them at risk of waterborne diseases such as cholera and diarrhoea (UNICEF, 2018). The most affected are children under the age of five years (UNICEF, 2018).



In Arid and Semi-Arid lands of eastern Africa, water shortages are frequent, and a large population of women and children spend up to one-third of their day fetching water from a fresh water source (Graham et al. 2016; Koolwal and van de Walle, 2013; Davis et al. 2012). Trekking long distance in search of water exposes the women and girls to serious danger including sexual violence and also makes susceptible to water-borne diseases.

1.1.13 Livelihoods

Majority of people in eastern Africa are involved in a plethora of livelihood activities that ranges from farming, hunting and gathering, livestock keeping to fishing. Both mixed crop-livestock systems and cash crop farming are contributing to the food security in the sub-region (Weinreb et al 2020). Off-farm activities include formal employment in government, private sector, NGO and CBOs and informal medium and small enterprises. Average income per capita is highest in Djibouti and lowest in Eritrea (Figure 9).



Poor agricultural productivity, limited access to inputs such as fertilizers and improved seed, drought, floods, land and ethnic conflicts and the rise of largescale commercial agriculture are driving people out of rural areas into urban centers, seeking employment in the manufacturing and service industry (Weinreb et al 2020; Duda et al., 2018; Pickbourn 2018).

1.1.14 Development challenges in eastern Africa

The Eastern Africa sub-region faces numerous constraints that prevent countries from alleviating poverty, meet food security and nutritional needs; stimulate overall economic growth, and conserve natural resources. These constraints include natural factors (such as degradation of natural resources, climatic and weather unpredictability); poor and/or inadequate policy and regulatory frameworks, political insecurity and terrorism, inadequate access to productive resources especially for women and PWD, inadequate participation of local communities in decision making, poor physical infrastructure and utilities, weak institutional framework, and low public expenditure; rapid population growth rate; rapid urbanization; high incidence of poverty, inadequate social infrastructure, and gender inequality (Makame, 2012). All these factors make the economies and people vulnerable to internal and external shocks.

Eastern Africa countries depend on export revenues and industrial and these are adversely affected by a significant deceleration in major export markets. This was observed during the flare-up of trade tensions between the United States and China, two major countries that absorb most of the export from eastern Africa (World Bank, 2020b). The emergence of Covid-19 in 2020 and the tensions between the United States of America and China accelerated the downward pressure on both the demand and price of key export goods and that resulted in a dip in export sales (World Bank, 2020b). Weakening export revenues, including from cash crops and tourism, sustained imports were reflected in a deteriorating government current account balance (World Bank, 2020b).

1.2 Profiling Natural and Human Induced Disasters in Eastern Africa and their Causes

Globally there has been an increase in the number of natural and human induced disasters, that have negatively affected the economies and livelihoods of people around the world. In the past decade, a number of severe weather and extreme climate-related events and internal conflicts have led to disasters of devastating consequences to many societies, thus arousing even keener interest by the general public and policy makers. More recently, the Covid-19 pandemic is causing devastating economic losses and disrupting social lives with tens of millions of people being at risk of falling into extreme poverty. It is estimated that countries in Africa could lose up to 20 to 30% of its fiscal revenue, about 20 million jobs will be lost both in the formal and remittance flows are expected to fall by 23.1% (Deloitte, 2020; Gondwe, 2020; OECD, 2020).

In eastern Africa, disasters occur ranging from being highly localized to regional phenomena. UNISDR (2009) defines a disaster as *'a serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources'*. Disasters are categorized based on their origin, that is either natural or human induced in nature. Natural disasters, particularly those related to weather occur frequently accounting for 25% in Eastern Africa and more than 70% globally (Vinod, 2017; IPCC, 2012; Shiferaw et al. 2014). Natural disaster includes floods, cyclones, earthquakes, volcanic eruptions, tsunamis, landslides, droughts, tidal waves and high temperatures. Increased human activities have played an important role in influencing the frequency and severity of natural disasters (IPCC, 2007). Human induced disasters occur as a result of human activities and are divided into technological, chemical spillovers and leaks, man-made fires, politically and ethnic instigated violence (ILO, 2000).

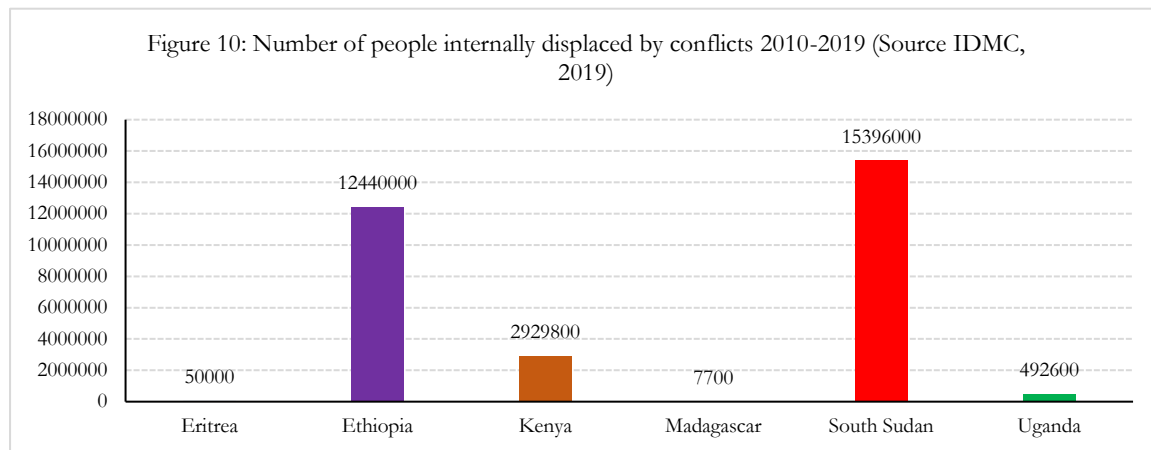
The Eastern African sub-region is prone to natural hazards such as floods, droughts, earthquakes, landslides, lightning and their secondary impacts of diseases and epidemics such as cholera. Drought, floods and landslides are the most frequent disasters in the sub-region that are heavily influenced by rainfall distribution and the physiographic of the region (ICPAC, 2020). For example, the Lake Victoria Region surrounded by Uganda, Tanzania and Kenya is known for its very active and convectional weather resulting in heavy thunderstorms, flooding, lightning and landslides in the low lying areas. The island of Madagascar experiences an average of 1.5 cyclones annually and each year an average of 700,000 people are impacted, damaging infrastructure, including homes, schools and roads (OCHA, 2020) (Appendix I). This leads to disease outbreaks, such as the bubonic and pneumonic plague (OCHA, 2020). In particular, the 2018 cyclone Ava in Madagascar caused about USD\$ 130 million in damages and USD\$ 156 million in losses (Randrianalijaona, 2018; World Bank, 2019). This loss accounted for 2.9% of the country's 2017 Gross Domestic Product (OCHA, 2020; ARC, 2020; World Bank 2019).

Associated with the short-term losses, are longer-term losses and recovery from these losses which are extremely challenging and devastating for most of the citizens of Eastern Africa who live on less than one US dollar a day. Majority of the citizens and the economy relies on agriculture which, most of time, gets destroyed during floods, drought, landslides and cyclones. More than 65% of the population live in rural areas which become inaccessible when the storms and floods hit and destroy the weak infrastructure (World Bank, 2018). Furthermore, citizens do not have insurance to claim on damage that is done to human life, crops, livestock and /or homes (Lassa et al. 2019; Raheem et al. 2013). Additionally, for the people working in informal sector, there is no government social protection or support to fall on when they lose their jobs and livelihoods due to disasters (van Niekerk et al. 2020; Olokesusi and Aiyegbajeje, 2019; Hinchberger, 2017).

1.2.1 Human induced disasters

Human induced disasters have led to conflicts in Eastern Africa. The conflicts include national violence and riots, ethnic conflicts and massacres. Between the years of 2010 and 2019, the total number of internally displaced people due to conflicts in Eastern Africa is about 31,316,100. The highest number of internally displaced due to conflicts is 15,396,000 and 12,440,000 people in South Sudan and Ethiopia respectively

(Figure 10) (IDMC, 2019). Since 2011, South Sudan has experienced ethnic violence, the Sudanese conflict in South Kordofan and Blue Nile, Sudan–South Sudan Border War commonly known as the Heglig Crisis and the South Sudanese Civil War. On the other hand, Ethiopia has had two major conflicts, that is the 2010 Eritrean-Ethiopian border skirmish and the ongoing Tigray Conflict. About 3,480,100 people were displaced in Eritrea, Kenya, Madagascar and Uganda (IDMC, 2019). According to IDMC (2019), there was no internally displaced people due to conflicts in Comoros, Djibouti, Rwanda and Tanzania.



Causes or triggers of conflicts in eastern Africa are due to structural, political, economic, social and cultural factors that lead to sporadic and endemic violence (Boone, 2017; Bellal, 2017). Conflicts also arise due to lack of power and basic resources (such as food and water) as well as denial of human basic needs such as identity, security, respect and recognition (Boone, 2017; Bellal, 2017). Though considered natural disaster, the changing climate is considered a “risk multiplier” that can exacerbate conflicts in already fragile countries where poverty, ethnic violence, social insecurity and social tensions are prevalent (Abrahams, 2020; UNEP, 2018; UN 2016; Huntjens and Nachbar, 2015).

1.2.2 Natural induced disasters

Climate and weather-related hazards account for more than 87 percent of all disaster displacement globally while geological disasters account for 12.73% (Figure 11) (IDMC, 2019). This is due to the increasing incidences of extreme climate events and associated impacts and the increasing concentration of populations in areas exposed to floods, storms and droughts (IDMC, 2019). Disasters increase people’s vulnerability through loss of homes, assets and income, reduced access to basic needs and services such as water, food, healthcare and education and disrupted social and cultural networks (IDMC, 2019). Additionally, there is increased social and economic insecurities associated with natural disasters, particularly amongst children (especially the girl child), women, People with Disability (PWD) and the elderly people (Seddighi et al. 2021; Koren et al. 2020; Stark and Landis, 2016).

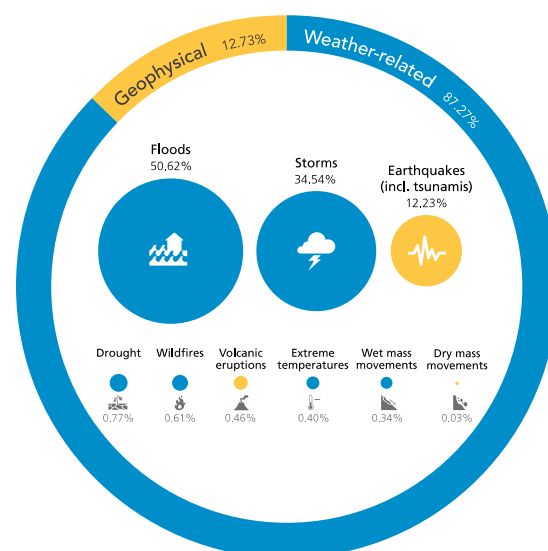
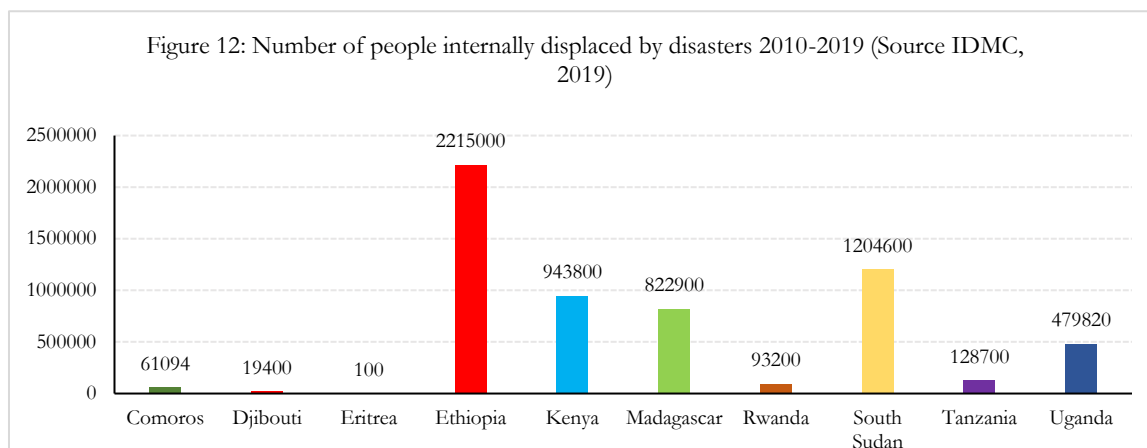


Figure 11: Global displacement by natural hazard category (IDMC, 2020)

Between 2010-2019, the number of people internally displaced by disasters was highest in Ethiopia at 2,215,000, followed by South Sudan (1,204,600), Kenya (943,800) and Madagascar (822,900) (IDMC, 2019). The least was observed in Eritrea with 100 people displaced (Figure 12).



1.2.3 Common disasters across the Eastern Africa sub-region

a) Droughts

Drought is one of the most common and significant disaster in eastern Africa, more so in Kenya and Uganda. Drought affects many key sectors, such as manufacturing, education, national security, tourism, health and nutrition, water and sanitation, agriculture and livestock and the environment. In 2011, a severe drought affected most of the countries in Eastern Africa and led to severe food crisis across Somalia, Djibouti, Ethiopia and Kenya (Haile et al. 2019; Winkler et al. 2017). The food crisis threatened the livelihood of 9.5 million people. With most of Kenya being arid and semi-arid land, droughts have affected over 3.7 million people and significantly led to reduction in economic growth of the country, with damages and losses that are estimated to be 12.1 billion USD, and the cost for recovery and reconstruction estimated to be 1.77 billion USD (GoK, 2010). Severe droughts have occurred in the Karamoja region, North Eastern Uganda, due to a combination of dry spells and high temperatures experienced in the months of June-July (Nakalembe, 2018). This leads to serious crop failures every five years (Akwango et al. 2017). In Tanzania, drought occurs roughly every four years, and affects more than 3.6 million people (Nicholson, et al. 2018; Winkler et al. 2017). In Rwanda, recurrent drought incidences have caused a serious deterioration in food security (Aremu et al. 2021; Rwanyiziri et al. 2019; Mukamuhirwa, 2016).

Climate change is a risk multiplier, and it is part of a complex matrix of peoples' lives in conflict and post- conflict contexts and is inherently gendered (Yoshida, 2020)

b) Floods

Flood is another common and significant disaster in eastern Africa brought by natural factors like hurricanes, flash floods, river floods, and coastal floods. Madagascar, Uganda, Rwanda, Tanzania, Ethiopia and Kenya are prone to floods due to heavy rainfall caused by a tropical disturbance (Finney et al. 2019; Rapolaki et al. 2018). Floods lead to death of human and animals, damage to crops and roads leaving villages isolated, destroyed infrastructure such as telecommunication lines and power lines, destruction of homes, schools and hospitals, erosion of productive layers of the soil rendering the soil less productive, mental and physical, increased diseases epidemics especially water related ones and increased conflicts over water resources (Okaka and Odhiambo, 2018; Wossen et al. 2018).

c) Landslides and mudslides

Landslides and mudslides usually follows heavy rainfall and high ground water flowing through cracked bed rock (Fenta et al. 2020). In Uganda, Tanzania and Ethiopia landslides are one of the most significant hazards especially on hilly slopes that are under cultivation (Broeckx, et al. 2018; Nakileza and Nedala, 2020).

d) Disease epidemics

Human and livestock diseases and pests are causing havoc in eastern Africa. The social and economic consequences of the human epidemic (malaria, HIV/AIDS, Cholera and the current Covid-19) are widely felt across the region, not only in the health sector but also in education, industry, agriculture, transport, human resources and the economy in general (Deloitte, 2020; OECD, 2020). The epidemics continues to devastate communities, rolling back decades of development progress. Livestock diseases have a large economic impact on livestock and livestock producers in eastern Africa. Twelve of the major animal diseases (such as Rift Valley Fever, East Coast Fever, Rinder pest Contagious Bovine Pleuropneumonia, Rabies, Anthrax, Blackleg, and Trypanosomiasis) are present in Eastern Africa that leads to 20% loss in production (Casey-Bryars et al. 2018; Muhanguzi et al. 2017), This has negatively impacted human health in terms of malnutrition and deficiency of protein and micro-nutrients derived from milk, eggs and meat (Oyas et al. 2018). Crops are also not spared from unwanted and destructive insects and animals that attack food both during the growing and post-harvest seasons, consequently leading to food shortages, famine and economic stress (Abera et al. 2018).

e) Earthquakes

Eastern Africa region is home to the Great East African Rift System that produces earthquakes in the Rift valley and the adjacent highlands (Alaneme and Okotete, 2018). Uganda is the most affected country by earthquakes in the region (UNDRR, 2014). Rwanda, Ethiopia, Tanzania and Kenya experiences tremors that lead to loss of lives, destruction of infrastructure (UNDRR, 2014).

f) Cyclones

Madagascar is the country that is hardest hit by cyclones. More recently in 2021, Tropical Cyclone Eloise, with wind speed of up to 95 kmh affected people, homes, schools and hospitals (OCHA, 2021) Accompanying the cyclones are heavy rains of between 200mm and 300mm that leads to flooding (OCHA, 2021). Economic losses from these cyclones are huge (Table 2). Though not hit directly by the cyclone, Kenya, Ethiopia, Uganda, Somalia and South Sudan are heavily impacted by the presence of cyclones in the Indian Ocean (ECHO, 2021).

Table 2: Cost of disasters in Comoros and Madagascar (UNDRR, 2016)

Hazard	Average annual loss (USD)		100-year return period loss	
	Total direct losses	Emergency costs	Total direct losses	Emergency costs
Comoros				
Tropical cyclone	3.6 million	830,000	43 million	9.9 million
Flood	2.0 million	460,000	10 million	2.3 million
Earthquake	99,000	16,000	1.8 million	280,000
Madagascar				
Tropical cyclone	87 million	20 million	810 million	190 million
Flood	23 million	3.1 million	120 million	27 million
Earthquake	1.3 million	200,000	15 million	2.3 million

g) Violence and unrest

The causes of ethnic conflicts, civil unrest, and generalized insecurity may lie in social, religious, cultural, gender, ethnic tensions arising from failures of governance and competition for scarce resources (Reuss

and Titeca, 2017; Christopher, 2013). In some parts of eastern Africa, areas of conflict often correspond with areas of environmental degradation, chronic food insecurity and overpopulation such as South Sudan, Eritrea, Ethiopia, Kenya and Uganda and Rwanda (van Baalen and Mobjörk, 2018).

1.3 Impact of disasters on women, children, elderly, Indigenous people and people with disability in eastern Africa

The occurrence of natural and human induced disasters in eastern Africa are showing a positive trend as annual incidents of disaster events have increased in the sub-region. At the global levels, the impact of disasters is equivalent to a global \$520 billion loss in annual consumption and drives an estimated 26 million people into poverty each year (Hallegatte, 2017). In eastern Africa, the number of poor people who live on less than \$5.50 per day is about 85%, most of who are women, elderly, Indigenous people, PWD and children who are disproportionately affected by natural and human induced hazards and disasters (Augular et al. 2019). This is because these categories of people are highly vulnerable to disasters and have lower ability to cope with and recover from the impacts of the disaster (Hallegatte et al. 2017a). Climatic shocks, conflict and economic instability continue to drive food insecurity in the eastern Africa sub-region with millions of women, children and the elderly experiencing acute levels of food insecurity and malnutrition. In 2018 where Ethiopia, Eritrea, Kenya, Rwanda, Tanzania and South Sudan more than one in five people were acutely food insecure (World Vision, 2019). During conflicts, women, children and the elderly are constantly on the move as ethnic and political instability rises. At the moment, the eastern Africa sub-region hosts the largest number of forcibly displaced persons on the African continent (IDMC, 2019). In disaster situations, water and sanitation sources are at a minimum, affecting the needs of women and girls (Heller, 2019). Women and girls also face physical and sexual violence during disasters (Heller, 2019).

In South Sudan, mothers fear malaria and water-borne diseases after floods (World, Vision 2019)

Gender inequality and social exclusion in the face of disasters has been widely reported (Karim and Noy, 2014; Harris et al. 2013) especially on women and children (Heller, 2019; Kousky, 2016). The destruction and loss caused by disasters affect multiple aspects of women's and children's well-being, both physically, economically, socially and culturally. Available literature on disasters and on gender and resilience, demonstrates that disasters negatively affect women and the shocks and stresses that disasters bring lead to changes that are detrimental to the well-being of women (Otzelberger, 2014; Enarson, 2000). Disasters especially disease epidemics and flooding that can cause widespread cholera leads to increased labor for women as they take care of the sick (Hallegatte et al. 2017b).

Case Study 1: Recovery support and increased disaster and climate resilience in Comoros

The Union of Comoros is generally threatened by tsunamis, cyclones, floods, droughts, seismic and volcanic activity. In spite of this, the Government of Comoros has demonstrated commitment in strengthening the country's resilience to natural and climate related disasters. This is in light of her experiences resulting from the category 3 Kenneth cyclone which hit the country on 24th April 2019. This cyclone was characterized by strong winds, high waves and torrential rains leading to the destruction of houses, crops, businesses and core infrastructure. Being one of the most devastating tropical cyclones in the country's history it prompted for improvement of emergency response measures and procedures which were integrated into the 2030 Emergence Plan. This disaster caused damages and losses amounting to USD 185 million coupled with destruction of important public services. In addition, the post Kenneth impact evaluation was supported by UNDP as the lead agency, the World Bank and International Federation of the Red Cross (IFRC) coupled with coordinated efforts by the Centre for Relief and Civil Protection (COSEP). The impact evaluation highlighted that recovery and reconstruction needs amounted to USD 34.1 million. The recovery and reconstruction needs focused on nine priority sectors including: urban, transport, housing, social protection, health, agriculture, fishery and energy and finance competitiveness and innovation. The housing sector had the highest needs totaling to USD 87.6 million.

In her commitment towards strengthening resilience to natural and climate related disasters the Government of Comoros (GoC) contributed to humanitarian emergency through her national budget coupled with donor support. In addition to the available national budget GoC raised USD 650,000 for emergency funding by holding on to a portion of her civil servants' monthly salary. This was specifically used to finance first aid for cyclone victims. This was further complimented with support from the UN Central Emergency Response Fund (CERF), UNICEF, WFP

and International Federation of the Red Cross (IFRC) offering meals, shelter, health water and sanitation assistance to affected people in Grande Comoroe Island, Southern Island of Mohéli and South eastern island of Arjouan.

The Comoros Post-Kenneth Recovery and Resilience Project which was generally supported by the World Bank coupled with resources from the International Development Association (IDA) sought to tackle the effects of the Kenneth cyclone by allocating USD 45 million under the crisis response window (CRW) component. This project supplements ongoing government processes and programs especially where there is limited or no donor support. In particular the project focused on activities connected to the results from the impact evaluation, coordination with development partners and analysis on agriculture and transport connections. Through the project awareness was raised and a climate resilient approach was introduced towards increasing reconstruction needs. Rehabilitation works of the primary road network was done towards facilitating the flow of agricultural products. This is because the agriculture provides employment for 38% of the total population which represents 36% of GDP. The intentions behind the project towards addressing the effects of Kenneth cyclone were further complemented by community associations who played a critical role in provision of community areas which acted as temporary shelters and schools. Women groups also came together to organize cleaning campaigns coupled with hygiene and sanitation kits that were distributed rapidly by the government. (Source: The World Bank, 2019).

In 2019, over 16 million children faced food insecurities in Eastern Africa as a result of floods, landslides, drought and cyclones (UNICEF, 2019). During disasters, schools and universities are hampered in their operation. In most instances, many schools are unable to open due to flooding. Parents with sufficient income can transfer their children to other schools while children from low-income households drop out of the education system. In some areas of eastern Africa, such as western Uganda and Kenya, going to school is a nightmare for students who have to either wade through flooded lands or board canoes that are dangerously rowed through the raging river (Erima, 2017). Compounding this is the hunger that the students have to endure the whole day. Students in such circumstances do not pay attention in class and can suffer from mental illness (Chuang et al. 2018; Conteh, 2015; Akello, 2014). The girl child faces additional burden than the boys during disasters. Increased girl child marriages and sexual violence have been reported during disasters (Spencer 2015). Child headed households are on the rise with children losing their parents or adults due to disasters (Sealza, 2019). And as a result, children who should be in school are forced to drop out to take care of their younger siblings (World Vision, 2018).

Children suffer from irreversible impacts of disasters on health and education in the long run. Such events lead to missed days at school and dropping out (Kousky 2019).

The elderly people are especially vulnerable to natural and human induced disasters (IASC, 2008). The elderly people have difficulty in adapting to challenges and coping with disasters (Jia et al. 2008). Age-related declines in mobility, vision and hearing can increase elderly people's vulnerability to disasters by making it harder for them to prepare for a potential disaster (such as cyclones) and by making it harder to evacuate and protect themselves (Jia et al. 2008). Most of the elderly people in eastern Africa do not have pension that can cushion them when disaster strikes (Guyen, 2019).

People with Disabilities (PWD) often lack adequate support, information and protection during disasters (Gutnik and Roth, 2017; WCRWC, 2008). Like the elderly people, PWD face mobility and other challenges that hinders them from preparing for disasters (Gutnik and Roth, 2017; WCRWC, 2008).

Most disaster relief packages such as most shelters do not adequately address the needs and conditions of older people, for example, lacking privacy, appropriate bedding (in terms of height and size of cots), and access for the disabled, and often having high noise levels and poor security (PAHO, 2016)

1.4 Why gender responsive and socially inclusion DRR measures matters

In Eastern Africa, the way disaster affects a community, and the response measures are always specific to the particular environmental and socio-cultural context in which that community lives. For example, the poorer the community, the more extreme the impact is likely to be. Furthermore, within a poor community,

or any community, the impacts will be different for children, men, youth, elderly, women and people with disabilities (PWD). This is due to persisting gender inequalities and social exclusion that makes certain categories of people more vulnerable to impacts of disasters. In eastern Africa, women and PWD are more likely to become direct victims of weather-related disasters. Studies have shown that during cyclones and heavy rainstorms that leads to flooding, women and girls are more likely to die because they do not know how to swim nor can they migrate (Mukuna, 2015; Wahlström, 2012; Campbell and Yates, 2010). During droughts and floods, women have to work harder to secure food, water, and fuel, and thus have less time for participation in DRM decision-making processes (Akwango et al. 2017; Ngcamu and Chari, 2016). In certain religious communities, women's and girls' mobility is sometimes strictly controlled and thus female-headed households and widows can be isolated during a disaster event. Additionally, women, youth and PWD tend to have fewer assets (land, finance, information and skills) to rely on than men thus making them extremely vulnerable to disasters. Due to isolation and high rates of illiteracy, women, the elderly and PWD are less informed about disaster and do not attend trainings on disaster management. This calls for gender responsive and socially inclusive DRR.

Gender responsive and socially inclusive (GSI) DRR is not just about responding to women's issues. It addresses the concerns of children, youth, women, men, the elderly, PWD and the migrants. GSI involves supporting empowerment of different categories of people and actively engaging with them to understand their roles and responsibilities in DRR. GSI entails working with children, youth, women, men, the elderly, PWD and the migrants to ensure that DRR initiatives uphold and strengthens gender equality and equity.

GSI in DRR is a process of ensuring that all activities, and the way the activities are planned, implemented and budgeted for contributes to gender equality by transforming the lives and livelihoods of children, youth, women, men, the elderly, PWD and the migrants. Therefore, this means support children, youth, women, the elderly, PWD and the migrants with greater access to and control over resources and, stronger participation and leadership in decision-making processes. It also means ensuring that the different concerns and priorities of children, youth, women, the elderly, PWD and the migrants fundamentally shape the whole cycle of disaster risk assessments, objective setting, planning, budgeting, identification of relevant stakeholders, implementation, and monitoring and evaluation. Finally, it also means, national governments, UN Bodies, NGOs and CBOs and other organizations involved in DRR initiatives ensure that their own internal systems and structures reflect an awareness of gender equality, and social inclusion and aim to strengthen it. This includes technical issues, such as policies, planning, budgets, monitoring and evaluation systems, recruitment, capacity building, gender balance of staff and performance management.

1.5 Rationale and Objectives of the Study

To address and effectively minimize impacts of disasters in the Eastern Africa sub-region, countries have developed national and ratified regional and international frameworks and commitment. Most of the Eastern Africa sub-region countries have realized the need to have both reactive (response actions) disaster risk management and proactive (Prevention actions) with a view to adapt to and mitigate the impacts of disasters. At the global level, the Sendai Framework for Disaster Risk Reduction (SFDRR) 2015 - 2030 aims to prevent new risk, reducing existing risk and strengthening resilience across countries (UNISDR, 2015). The SFDRR expect all countries to 'prevent and reduce disaster risk, all-of-society and all-of-State institutions engagement'. One of its guiding principles incorporate elements of inclusive and empowerment and *'paying special attention to people disproportionately affected by disasters, especially the poorest. A gender, age, disability and cultural perspective should be integrated in all policies and practices, and women and youth leadership should be promoted'*. The SFDRR recognizes that different categories of people are affected by disasters in different ways with *'women, children and people in vulnerable situations disproportionately affected'*. The SFDRR is a gender and socially inclusive framework in that it aims to engage and empower women, children and youth, persons with disabilities, poor people, migrants, indigenous peoples, volunteers, the community of practitioners and older persons in the design and implementation of country based DRR response, recovery, rehabilitation and reconstruction approaches.

Most of eastern Africa countries have developed country-based DRR policies, frameworks and strategies aimed at minimizing the impacts of disasters in line with the Sendai Framework for Disaster Risk Reduction

2015 – 2030. The policies and strategies focus on addressing both natural and human induced disasters. Additionally, national governments, non-government organizations, Community based organizations and other stakeholders are implementing projects and programs aimed at addressing disasters at various levels; community, sub-national, national and sub-regional level.

In Eastern Africa, both weather-related and geological hazards have happened in unexpected scale. Events such as the floods in Kenya and Rwanda, drought in the Greater Horn of Africa, the 5.9 magnitude earthquake that hit North West Tanzania are some of the recent disasters whose impacts are still being felt in the region. The high frequency of calamitous events and the often-poor official response seems to have created a deficit of trust between citizens and national authorities. A lack of disaster preparedness and technology has also challenged the regions for decades. One way of enhancing the overall awareness and responsiveness is to combine citizen science and modern technologies that would help bridge the distance, in time and space, between citizens and authorities in those crucial first few moments following the disasters. Technological advancement and innovation have created new opportunities for enhancing disaster resiliency and risk reduction. Developments in artificial intelligence (AI), big data – and innovations in areas such as robotics and drone technology are transforming many fields, including disaster risk reduction and management. In Eastern Africa, these technological innovations are limitedly used hampering efforts for the development and implementation of sustainable disaster risk reduction (DRR) and preventive solutions.

The UNESCO Regional Office for Eastern Africa is implementing a project aimed at supporting the development and integration of science-evidenced measures such as artificial intelligent (AI) innovations and citizen science into DRR policy instruments and programmes for schools, communities and public sector institutions in Eastern Africa. Among several outcomes, the project implementation is expected to enable the mainstreaming of gender-responsive actions into strategies and action plans for disaster risk reduction in schools, communities and public sector institutions in ten beneficiary countries - Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Rwanda, South Sudan, Tanzania, and Uganda.

Objectives of the study were to:

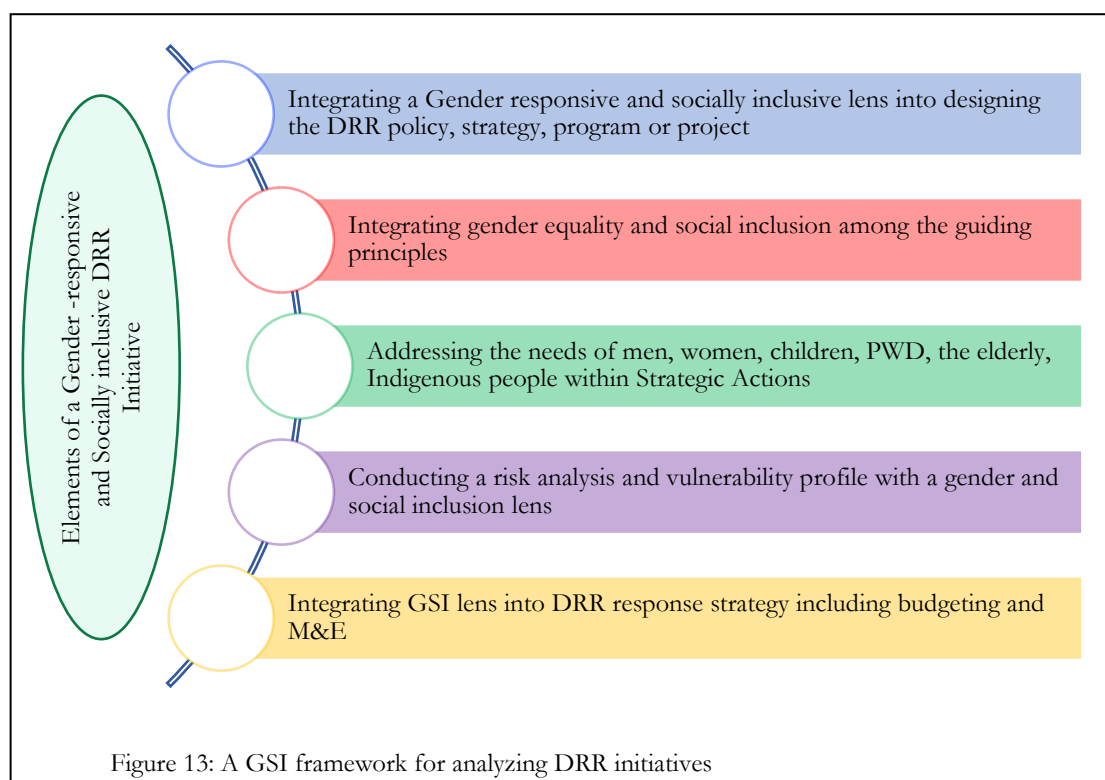
- a) Review the disaster profiles of the targeted countries taking into account major disasters (climate-related threats, natural disasters and geological hazards) occurring in the past ten years and their future projections,
- b) Review perceptions to disasters risks from a gender perspective,
- c) Review the impacts of natural disasters and hazards on livelihoods (from a gender perspective)
- d) Review past (5-10 years), on-going and future gender-responsive actions, initiatives, projects and programmes in the beneficiary countries,
- e) Conduct a gender analysis of current institutional, political and decision-support frameworks associated with DRR to allow the enactment or strengthening of gender-responsive regulatory frameworks, policies and institutions for DRR,
- f) Provide case studies of impactful gender responsive DRR actions, policies, leg framework to inform the promotion of north/south-south cooperation on disaster management.

2 Methodology

2.1 Analytical framework

Studies have shown that men, women, children, PWD, the elderly, Indigenous people are impacted by disasters in different ways and often have distinct coping strategies. A gender-responsive and socially inclusive (GSI) approach to DRR planning therefore means that gender-based differences and social inclusion issues are considered in the design and implementation of the policy, strategy/plan, programme and project. This implies that the design and implementation of the policy, strategy/plan, programme and project should be informed by the gender and sex-disaggregated analysis of how gender norms, roles and inequalities shape vulnerability and resilience of men, women, children, PWD, the elderly, Indigenous people. Such a detailed and comprehensive analysis will lead to a better understanding of what each category of person does within the community what assets they own or have access to, what their needs and priorities are, and the existing power differences. The findings from such an analysis will inform the design, implementation and monitoring of DRR actions so that the gender and social inclusion issues relevant to disasters are adequately addressed in the related plans, policy documents and programmes.

A GSI policy, strategy/plan, programme and project should aim at increasing the resilience of and reduces the workload of women and girls, PWD and the elderly. Finally, the GSI should include women, PWD, the indigenous and the elderly people in decision making positions in disaster risk management authorities/institutions. Adopting a framework developed by FAO (2016) and UNISDR, UNDP, and IUCN (2009), and guidelines from the globally agreed Sendai framework for DRM and the African Union's Gender Strategy, this study used five-point criteria to assess the gender-responsive and social inclusiveness of disaster risk reduction policies, strategies, programs and projects in eastern Africa (Figure 13). The framework allows for qualitative assessment of DRR initiatives to explore whether existing initiatives are gender responsive and socially inclusive: that they applied a gender lens to all activities for prevention, preparedness, response and rebuilding before and after a disaster strikes (See Appendix II for more details).



2.2 Key disaster and gender terms identified

UNISDR (2017) defines disaster as *'A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts'*. This study identified key disaster terms as defined by the UNDRR terminology (UNISDR, 2017) and disaster, risk, hazard, disaster risk reduction, disaster risk management, preparedness, mitigation, recovery, resilience, warning, safety, response and prevention. Additionally, the gender and gender related terms such as gender responsive, social inclusion, women, children, youth, people with disabilities (PWD), elderly/older persons, gender sensitive were also identified. UNESCO (2003) defines gender as the roles and responsibilities of men and women that are created in our families, our societies and our cultures and the expectations held about the characteristics, aptitudes and likely behaviours of both women and men (femininity and masculinity). In the context of disasters, gender responsiveness is defined as the identification and acknowledgement of the existing differences and inequalities between women and men and articulation of policies and initiatives which address the different needs, aspirations, capacities and contributions of women and men. UNESCO (2005) defines social inclusion as a process of addressing and responding to the diversity of needs of all learners through increasing participation in all learning, cultures and communities, and reducing exclusion within and from education. Therefore, In the context of disasters, social inclusion is the process of conducting gender analysis to identify, address and respond to the diversity of needs of everyone through increasing participation in DRR and management while reducing exclusion.

2.3 Document search and review

A rapid scoping review of literature was conducted with the aim of collating all documents that relate to DRR policies, strategies/plans, program and projects across the ten countries in eastern Africa. This involved using various databases including Google Scholar, Open Access Journals, websites of national governments, Non-Governmental Organizations (NGOs), Community Based Organizations (CBOs) and UN bodies (UN High Commission for Refugees, Office of the United Nations High Commissioner for Human Rights, United Nations Educational, Scientific and Cultural Organization etc.). Search of websites for available grey literature and information was done for Non-government organisations and Community Based Organizations dealing with issues related to DRR. Some of the organizations that were searched included HelpAge International, European Community Humanitarian Office, CARE International, World Vision, Oxfam, Merlin, WaterAid among others. Data generated was used to provide a description of the DRR policy landscape, strategies, projects and programs aimed at developing and building adaptive capacity and enhancing resilience of women, children, PWD, the elderly, Indigenous people.

2.4 Data analysis

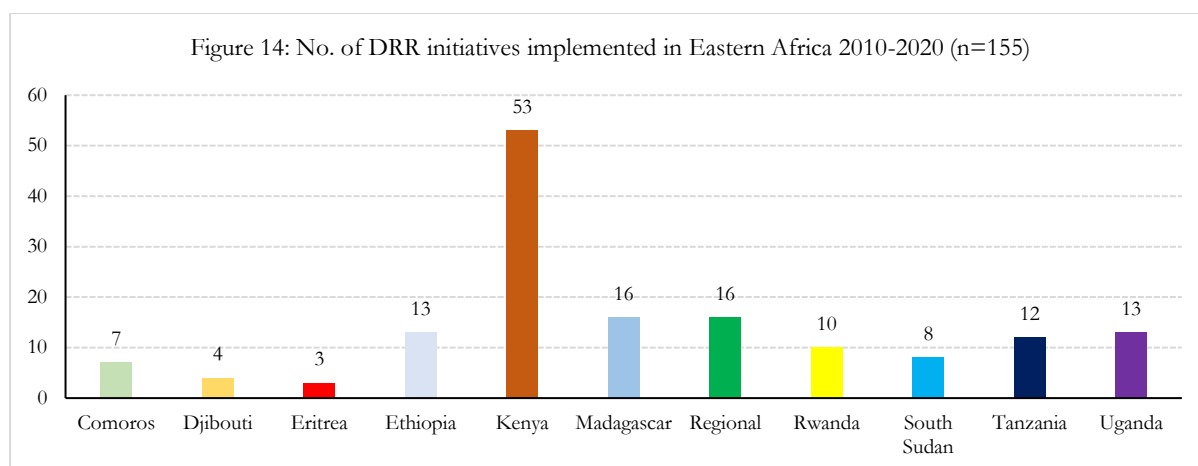
All the data collected was entered into a database. Data analysis involved a systematic keyword search and a content analysis of DRR initiatives across scales, including national, sub-regional and global levels. For the sub-regional and global levels, DRR initiatives that are implemented across more than one country in eastern Africa were considered. For example, the East African Community (EAC) disaster risk reduction and management strategy that is implemented across Tanzania, Rwanda, Uganda, Burundi and Kenya, and the Sendai framework at the global level. Content analysis (using the framework on Appendix II) of the documents provided an assessment of the extent to which gender responsive and social inclusion key terms are considered in DRR initiatives, and how and in what ways women, children, the elderly, PWD and Indigenous people are included qualitatively. The findings were subsequently summarised using descriptive statistics (frequencies and percentages) for each country.

3 Results

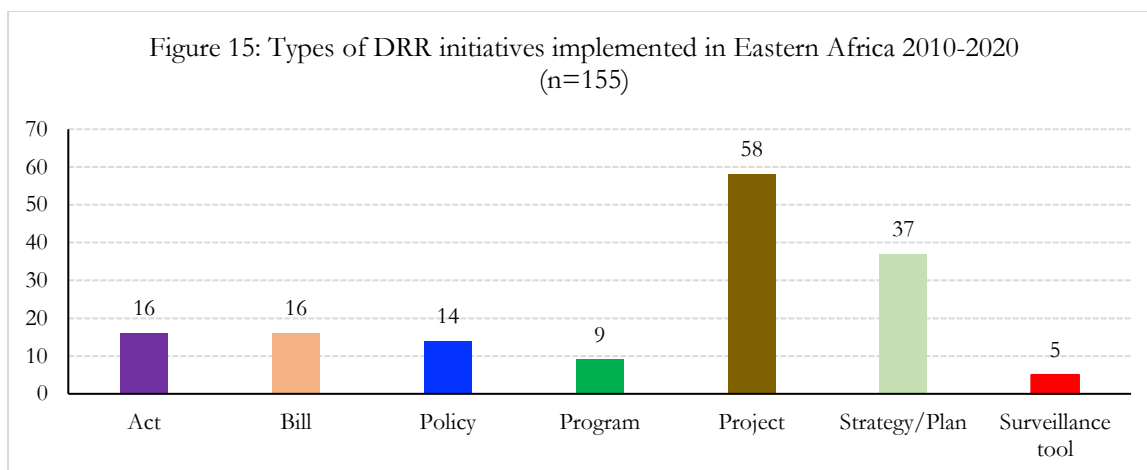
3.1 Gender outlook of DRR initiatives being implemented in Eastern Africa 2010-2019

Conflicts, droughts and floods are some of the major factors that trigger disasters in eastern Africa. Additionally, the sub-region is equally predisposed to manmade disasters such as urban fires, water pollution, HIV and AIDS and outbreaks of disease epidemics (Appendix III). Findings from the DRR initiatives mapping shows that countries in Eastern Africa are implementing various DRR initiatives as part of their disaster risk reduction and management. These initiatives are implemented by different stakeholders including but not limited to: National and sub-National Governments, NGOs, CBOs and UN Agencies. This provides diverse contexts and ways in which each stakeholder is navigating and addressing disasters across the region to achieve resilience.

A total of 155 DRR initiatives, that is policy, strategy/plan, projects, program, surveillance tool and Networks/Partnership/Alliance, were identified (Appendix IV). Out of the 155 DRR Initiatives, Kenya has the highest number of DRR initiatives at 53 being implemented while, Eritrea has the lowest at 3 (Figure 14). The high number of DRR initiatives in Kenya is due to the devolved system of government. There are 47 sub-national County governments, and each County government has developed its own DRR Act, strategy or policy.



For the period between 2010-2020, a total of 155 DRR initiatives were identified that are on-going or completed. Out of 155 DRR initiatives, the highest number comprise of projects (37.4%) while disaster surveillance tools were the least (3.2%) (Figure 15). The other DRR initiatives included Acts (10.3%), Bills awaiting ascendancy to law (10.3%), Policy (9%), Program (5.8) and Strategy/plans (23.9%). The high number of DRR projects can be attributed to the various stakeholders that are implementing DRR activities amongst communities in Eastern Africa. Additionally, 2-3 projects can emerge from one strategy/plan or policy. For example, Comoros' Disaster Risk Management strategy has 3 priority actions that were implemented as stand-alone projects.



3.2 Targeting vulnerable people

As discussed earlier, when disasters occur, certain segments of the population are hit the hardest and recovery for such people can take years. Women, youth, elderly, PWD, migrants and indigenous people are not only more vulnerable to disasters shocks, but they also have fewer resources to prevent, cope with, and adapt to disasters (Hallegatte et al. 2016; Neumayer and Plümper, 2007). These category of people have less access to social safety nets, do not participate in decision making and in some instances, are totally invisible (Diehl and Dzubinski, 2016; Nordling, 2017). For example, Parsitau (2021) reported that as countries are fighting the Covid-19 pandemic, women and girls are largely invisible in or are missing from decision making, policy, and governance circles. And yet, *'women and girls have largely borne the brunt of the pandemic, as the virus has exacerbated already-existing gender inequalities, laying bare serious fault lines in safety, physical and mental health, education, domestic responsibilities, and employment opportunities'* (Parsitau, 2021).

The Sendai framework only identifies women, children and youth, PWD, older people, indigenous people and migrants as the most vulnerable people. This clearly indicates that national governments and other stakeholders recognize the importance of identifying and targeting different categories of people within a country or community. These stakeholders recognize that they should not be limited to the list of vulnerable people mentioned in the Sendai framework, but identify more vulnerable people depending on the location they are implementing DRR initiatives. Analysis of the 155 DRR initiatives show that 41.9% of the initiatives mention and/or target women, children, youth, PWD, elderly, migrants, Internally displaced persons, refugees, boys, girls, men, poor people and poor households. The rest of the DRR initiatives, that is 58.1% do not mention any vulnerable persons. Women are mentioned or targeted in all the DRR initiatives that identify vulnerable people. Children, youth, PWD and the elderly are also frequently mentioned in the 41.9% of the DRR initiatives (Table 3). The least mentioned category of people are street people, beggars and commercial sex workers.

Table 3: The category of vulnerable people targeted in DRR initiatives in eastern Africa (n=65)

Categories of vulnerable people	No. of DRR initiatives that mention specific vulnerable people	Categories of vulnerable people	No. of DRR initiatives that mention specific vulnerable people
Women	65	Illiterate	22
Children	55	IDPs	27
Students	12	Refugees	14
Ideginous people	29	Commercial sex workers	9

Poor people	18	Men	11
Migrants	13	The sick	24
Youth (female & male)	49	Mentally challenged persons	11
Elderly	33	Street people	4
Business women	8	Beggars	4
Farmers and livestock keepers	16	Pregnant/ breastfeeding mothers	15
Homeless	13	Girls	21
People with Disability (PWD)	43		

A GSI situational analysis, which is a preliminary assessment of a particular situation where the project/program is to be implemented in a particularly geographic area, is a scoping and analyzing process which helps project team to develop a common understanding on their project's context. Such an analysis can also help project team to identify the different categories of people, their needs and problems and are able to define what kind of interventions can respond to the identified problems and needs. Analysis of use or mention of gender and social inclusion terminologies within the 155 DRR initiatives shows that the word Gender equality is the commonly used word, and it is mentioned in 88 of the DRR initiatives (Table 4). The least mentioned term is gender transformative.

Table 4: Mention of gender and social inclusion terminologies in DRR initiatives in eastern Africa (n=155)

GSI terminologies	No. of DRR that mention GSI terminologies	GSI terminologies	No. of DRR that mention GSI terminologies
Gender equality	88	Sex-disaggregated data	33
Gender equity	65	Participatory	62
Inclusive	34	Gender norms	19
Gender analysis	23	Gender roles	32
Gender mainstreaming	19	Gender transformative	7
Gender sensitivity	23	Gender- responsive budgeting (GRB)	18
Gender sensitive indicators	49	Gender- responsive planning	13
Gender alone	91		

The frequent mention of gender, gender equality, gender equity and gender analysis and targeting of women within the DRR initiatives is due to increased acknowledgment that disasters hit women the hardest because of their exposure to disaster risks. Additionally, national governments and development organizations including the United Nations are accepting that women can bring unique experiences and skills to disaster risk reduction and management and therefore their skills and knowledge needs to be tapped.

Gender analysis, gender mainstreaming, gender responsive planning and budgeting for DRR are not highly considered (Table 4). This implies that over 80% of the DRR implemented in eastern Africa do not recognise the difference between the situations, needs and opportunities of women, men, youth, PWD, migrants and the indigenous people and as such possibilities of not planning and budgeting for the gender

differentiated DRR activities can skew resources in favor of men. Mainstreaming a GSI perspective into DRR initiatives especially during planning and budgeting will ensure that the needs of women, men, youth, PWD, migrants and the indigenous people are taken into consideration at all stages of the DRR cycle. A GSI planning, investments and budgeting process can facilitate National and sub-National governments in allocating resources efficiently and equitably.

Case Study 2: Supporting the return of IDPs and expellees to communities of origin or new resettlement in Eritrea.

The Eritro-Ethiopia war has destroyed agricultural assets which were critical in for the livelihood of the IDPs. The war caused severe damages to shelter, water systems, education and health systems. In addition, most areas were made unsafe due to landmines. It is in this regard that a joint programme between UNDP, UNICEF, WFP and the Government of Eritrea was initiated a project with a budget of USD 60, 975,000 towards returning and resettling 30,000 IDPs either to their communities of origin or government designated areas. This initiative commits to support vulnerable families, women and children especially in regard to access of adequate social services such as water, education food/nutrition, health and shelter. This coupled with long term sustainable livelihood opportunities. Given that agriculture is the main source of livelihood especially for returnees, the programme seeks to rehabilitate rain-fed cropping, irrigated cropping for households and restocking of small ruminants for vulnerable households. This is coupled with the provision of water wells equipped with solar pumps and permanent water reservoirs and delivery system. Further, shelter is provided with extra support being given for households headed by women towards covering labour costs coupled with training and supervision of construction models. Education and awareness was also carried out towards empowering people on the dangers of land mines towards reducing their related accidents. Through this programme about 19,000 IDPs were resettled successfully in their village of origin (Gash Barka) region, Western Eritrea from Adi Keshi camp in 2005. Further a reviewed and extended joint programme on IDPs between UNDP, UNICEF, UNHCR, UNFPA and the Government of Eritrea saw 45,345 people resettled over a three year period from 2006. As a result there are no IDP camps in the country (UNDP et al, 2006).

3.3 Perceptions to disaster risks from a gender and social inclusion lens in Eastern Africa

This section focuses on how disasters are perceived from a gender and social inclusion perspective and will explore concepts such as sexual and domestic violence, death especially amongst women and children, early marriages, nutrition, poverty, sanitation, gender roles, and cultural norms. The section provides existing data in terms of numbers of people affected and some of the existing policies that aim to protect individuals and mitigate the risks before, during, and after disaster situations and mediate the risks. Despite the increased call and recognition of gender issues in development, limited policies and strategies exist that significantly and increasingly address gender and social inclusion in disaster risk, reduction, and response. Limited policies and strategies were identified in this study that have a GSI lens and yet national development agendas for the countries in Eastern Africa push for disasters, especially climate related disasters to be understood in terms of the strengths and weaknesses within a society that will determine how a society and its people will respond to any risk.

Eastern Africa countries have GSI neutral framework of disasters and the consequences of these are often observed after disasters occurs, such as increased mortality rates of pregnancy, breastfeeding mothers, children, elderly and PWD (Wagner et al. 2019; UNICEF, 2019; FAO et al, 2019; WHO, 2019c, UNISDR, 2014) and increased sex and domestic abuse (Spencer, 2015; La Mattina, 2012). In recent years, there has been calls for both disaggregating people exposed to disasters in terms of sex, gender, age, disability, poverty, location, religion, and other social, cultural and economic determinants as well as drafting disasters legislations and frameworks with a GSI lens. Through this process, national governments will be able to hear the voices of the unheard and invisible people before, during and after a disaster, document them and identify and implement lasting gender responsive and socially inclusive DRR and management policy and technical interventions.

The increased occurrences and intensity of natural and human-induced disasters underscore the need for an increased understanding of the perceptions of disaster risks from a gender and social inclusion perspective. In more recent years and with future predictions, climate change will contribute to the greatest disasters through increasing the frequency and severity of floods and droughts and by increasing people's vulnerability to these hazards (Boko et al 2007). For instance, heavy rainfalls/cyclones in eastern Africa often cause flooding that creates a conducive environment for the outbreaks of water-borne and infectious diseases that affect expectant and breastfeeding mothers, toddlers, and young children (FAO, 2010). Women, girls, children, PLWD, and the elderly are more likely to be negatively impacted by disasters than men due to the intertwining of several factors including gender inequalities, social exclusion, decreased food security and nutrition, dependence on natural resources, low literacy levels and a lack of access to formal employment, entrepreneurial opportunities, and credit facilities.

There is differential impact of cyclones on women and men, poor and rich, young and old in Madagascar. This country experiences an average of 1.5 cyclones annually, the highest number in Africa, and each strong cyclone on average affects 700,000 people. Cyclone Ava in 2017 affected more women (25,950) than men (17,300). Cyclone Eloise devastated the livelihoods, homes, and lives of a million people in 2021, displacing over 8,000 women, children and elderly to live in temporary shelters. During this period, maternal mortality rates are high and more than 50% of children under the age of 5 become malnourished (OCHA, 2020).

Disasters exacerbate existing vulnerabilities of women, girls, children, PLWD, and the elderly and tend to play along social and generational lines. Peterson (2007) estimates that women, girls, and boys (aged below 13 years) are 14 times more likely than men to die during a disaster. In times of war, more men and young adult boys are more likely to die than women and girls (Wagner et al 2019). For example, in Eritrea, Burundi, and South Sudan, more men and young boys have died from war than women and girls (Blanc, 2017; Bundervoet et al. 2009). On the other hand, during the war and ethnic cleansing, women, PWD, the elderly, children, and girls lose their livelihoods and adaptive capacity, experience increased physical violence and psychological trauma (Cottyn, 2018; Corbin and Hall, 2018). For example, the ethnic cleansing of 1994 in Rwanda, the political cleaning of 2007 in Kenya, and the ongoing Tigray armed conflict in Ethiopia has killed more men than women, while more women and girls faced increased trauma post the conflicts (Harroff, L. 2019; La Mattina, 2012; UN News, 2021).

Case Study 3: Promoting sustainable disaster risk management in a cost effective manner in Tanzania.

Dar-es-Salaam is prone to floods with the most vulnerable being those residing in informal settlements dominated by low income especially in Tanadale and Buguruni kwa Makanda settlements. These areas are unplanned, under resourced and unmapped spanning about 80% of the city. The Ramani Huria is an initiative that has allowed community members from informal settlements, volunteers and university students to be trained on the use of platforms that create opensource maps of the most flood prone areas of their city. The use of novel technologies including unnamed aerial vehicles (UAV) commonly known as drones have been employed to gather vital information in an accurate and timely manner and sharing it with Ward Executive Officers and other decision makers towards reducing community vulnerabilities, enhancing community preparedness, response capabilities and recovery mechanisms. Raw data gathered is fed into publicly accessible tools such as OpenStreetMap and InaSAFE where relevant authorities can identify areas at greatest risk of flooding and further simulate disaster scenarios.

In addition, residents are also able to know well in advance which structures in their neighbourhood will be affected the most in the event of a looming disaster allowing them to take appropriate action and also make a credible case for resource allocation for future disasters. The project has not only harnessed the power of community but has realized an effective and more pragmatic way to manage disasters in their neighborhoods. This also goes a long way in opening up opportunities for future disaster risk managers, computer scientists and cartographers. Before this initiative was introduced it was very costly and laborious to acquire the much needed datasets as tens of thousands of dollars were required to hire chartered flights. Currently, communities in 21 wards of Dar-es-Salaam have cooperated in the delivery of the same information at a fraction of the cost accounting for 1.3 million of the city's 5.5 million residents. The model of this initiative has been replicated by similar projects in other parts of country with the Tanzania Commission for Science and Technology (COSTECH) applying the same technology towards assisting the Ministry of Lands, Housing and Human Development set a course for conferring around 300,000 land titles on rural farmers. In turn it has allowed farmers to access loans towards investing on their farms

and livelihoods. (Source: GFDRR: <https://www.gfdr.org/en/feature-story/taking-disaster-risk-management-new-heights>).

Across eastern Africa, women and girls are traditionally tasked to care for the old and the sick (Schatz et al. 2015; WHO, 2012). During disasters, women and girls are overwhelmingly tasked, with caring for the affected, chronically sick, children, the elderly, and people with disabilities (Ritchie, 2015). Therefore, decisions to evaluate before, during, or after a disaster is a difficult choice for most women and girls. The health implications for staying to provide care are numerous and severe and include sexual and domestic abuse and mental and physical health issues that affect them for years to come. For example, Le Masson et al. (2016) and Davis et al. (2005) reported that more women and girls become victims of domestic and sexual violence at home while those that seek refuge in temporary shelters and refugee camps are frequently sexually assaulted and are exposed to higher risks compared to male refugees. Social strains in these temporal shelters and refugee camps aggravate stress levels in the family, which in most cases results in incidences of domestic violence (Krause, 2020); Listo, 2018). Another example is that during droughts women and girls walk long distances to collect water for domestic, spending about 8 hours/day and end up expending more than 85% of a woman's daily energy intake (UNESCO, 2020). The strain of walking eight hours carrying water usually on their head or back, leads to physical health problems (Geere et al 2018; Geere et al. 2010).

On the extreme side, girls are increasingly becoming vulnerable during and after disasters. As earlier stated, girls also experience sexual and domestic abuse before, during, and after disasters. Girl child marriages have slowly been on the rise (Spencer, 2015; and North, 2010). In Madagascar, Kenya, Uganda, and South Sudan, climate change is driving early girl-child marriages. In this country, families, especially those living in rural and marginalized places face financial difficulties from disasters like floods, droughts, and storms and decide to marry off their daughters, as young as 13 years (UNICEF, 2019; Lilian et al. 2015). More recently, the Covid-19 pandemic will force more than 13 million girls into early marriage (NYT, 2020).

Every two seconds an underage girl (12-15 years old) is forced into marriage across the globe. Covid 19 will add an extra 13 million child marriages (NYT, 2020).

In eastern Africa, disasters affect people (both men and women, youth, PLWD, and the elderly) of low socioeconomic status in both rural and urban settings. People living in unstructured housings usually in urban settings and peri-urban environments are more prone to flooding, sewage spillage, and pollution due to both poor infrastructure development, and inadequate sanitation facilities. The most affected are cities such as Nairobi, Kampala, Dar es Salaam, Addis Ababa, Djibouti, Moroni, and Antananarivo that are rapidly expanding with poor or lack access to sanitation and use unsafe drinking water, which leads to about 88% from diarrheal diseases outbreaks especially in the slum areas (Ssemugabo et al. 2021; Njuguna, 2019; Oyekale et al. 2018; Bastaroud et al. 2018; Beyene et al. 2015; Thomas et al. 2013; Prüss-Üstün et al 2008).

Case study 4: Bee keeping for woman and youth to curb early girl child marriages and build resilience in Uganda

Alternating drought and heavy rains are wreaking havoc on families in drier areas of Uganda. Conflicts for scarce resources is straining relations amongst ethnic groups. In such situations, families experience food shortages and starvation and diseases outbreaks. Desperate families turn to early marriage for their daughters, usually too much older men. Church World Service (CWS) in collaboration with communities initiated a bee keeping income generating activities and established village savings and loans groups (VSLGs). Bee keeping is an agricultural activity that can be carried out in arid and semi-arid areas, limited environmental footprint, and families earn significant income by harvestin, processing and selling honey. Part of the income is saved in the VSLGs which builds financial stability and families can access it during droughts or floods and use to purchase food and drugs and thus accelerate their recovery after the disaster. This has stopped the families from marrying their girls at an early and the girls are continuing with their schooling. Through this initiative, more community members have started bee keeping and established 14 savings groups, whose members re mostly women from female and widow-headed households.

Poverty, nutritional status, gender roles, and cultural norms shape survival capabilities during disasters in eastern Africa. For example, in most of the communities in eastern Africa, women and girls are expected to stay home while men and young men can venture out in search of alternative livelihoods (more often in urban centers). This makes women and girls poorer and vulnerable, and studies have shown that poverty is a determinant of nutrition and ill health. Poor people, especially women, children, girls, PWD, internally displaced persons, child-headed households, the landless, and the elderly do get predisposed to infectious diseases as they tend to work in harsh and polluted environments (especially after flooding) as well as tend to the sick (Waller et al. 2019; Suri et al. 2018).

Globally poor sanitation costs the economy an estimated US\$ 223 billion. In Madagascar, Tanzania, Uganda and Kenya, the estimated costs are about US\$ 103 million, US\$206 million, US\$177 million and US\$324 million annually (Lixil et al. 2016)

Due to poverty levels, the nutritional status of the above-mentioned people/groups is very poor, and it affects their capacity to deal with disasters. Women and teen mothers fall ill very fast during and after disasters because they have specific nutritional needs when they are pregnant or breastfeeding. Additionally, in some cultures, women and girls are prohibited from eating certain nutritious foods and adhere to food-eating hierarchies (Kariuki et al. 2017; Golden et al. 2019; Chakona and Shackleton, 2019; FAO et al. 2018). For example, in eastern Africa, women of reproductive age in eastern Africa experience anemia and are below their normal weight (Teshale et al 2020; Kibret et al. 2019; WHO, 2019c). Therefore, poverty and nutritional status makes women, girls, and children at greater risk to their survival and recovery in the aftermath of disasters.

Globally, persons living with a disability represent 15% of the world's population (with with 80% found in developing countries) and are usually among the first victims of natural disasters (iDAD, 2014). A study by UNISDR (2014) identified six major disaster risks faced by people living with disability (PWD) and in order of greatest impact, as floods, extreme weather, drought, earthquakes and cyclones. In eastern Africa, there is limited information on disasters and people living with disabilities (PWD). Generally, this is due to lack of sex-disaggregated data more so on PWD as well as how to define people with disability (Lunga et al. 2019). Furthermore, PWD are often considered under medical model of disability, hence conceptualising disability as an individual health issue (Lunga et al. 2019) and solutions are geared towards cure rather than building resilience before, during and after a disaster. This study did not identify a policy legislations or framework for PWD in all the ten countries. Some of the policies that mention PWD as a target group include the East Africa Disaster Risk Reduction and Management Strategy for Burundi, Rwanda, Uganda, Tanzania and Kenya; under education sector, Kenya addresses disasters management for PWD under the Sector Policy for Learners and Trainees with Disabilities and the national Policy for Disaster Management.

Case study 5: Pastoral People with Disability are shifting from relief to resilience in Ethiopia

Intermon Oxfam is collaborating with PWD amongst pastoral communities in Borana district, Ethiopia to shift from emergency relief to resilience. The aim is to ensure inclusive food security and early recovery during and after drought events. Working with village leaders and local government authorities, conducted a baseline survey and identified PWD in each household. Through the program, PWD are receiving improved drought tolerant cattle, drought resistant crop seeds and re-stocking their goat herd. For the PWD who are able to undertake manual labor, they are employed as laborer in digging pond and rehabilitating roads for cash.

3.4 Critical stakeholders in disaster risk reductions initiatives

The Sendai framework calls for a people-centred preventive approach to disaster risk and urges national governments to engage a wide range of stakeholders including women, children and youth, persons with disabilities, poor people, migrants, indigenous peoples, volunteers, the community of practitioners and older persons. The framework also calls for a multi-hazard and multisectoral, inclusive approach that targets private sectors, civil society organizations, academia and scientific and research institutions as well. **In the next sub-sections, this study**

Children and youth are agents of change and should be given the space and modalities to contribute to disaster risk reduction, in accordance with legislation, national practice and educational curricula..Sendai Framework 2015-2030

analyses how the DRR initiatives in the 10 countries in eastern Africa are targeting the above-mentioned categories of people.

3.4.1 Women

Disasters have different effects for men and women. Their response to disasters is equally different. This reflects gender inequalities and social exclusion issues caused by socioeconomic conditions, cultural beliefs, and traditional practices that have repeatedly put women at a disadvantage. The situation is exacerbated by the multiple roles that women play within the society that also intensifies pre-existing response and recovery inequalities. These are especially true in eastern Africa, where women typically depend on subsistence agriculture—a sector highly dependent on weather conditions; while formal remunerated jobs are often the exclusive domain of men. The systematic social and economic marginalization of women is also mirrored in the leadership sphere, where they are often excluded from decision-making processes and fora at multiple levels. The problem is that DRM efforts tend to be gender blind, set at a male default, which often leaves women and in most cases girls suffering greater consequences. This exclusion reinforces inequalities, as women's voices and perspectives are not represented in decisions made on disaster risk reduction and preparedness.

Women have critical contributions to make towards disaster risk management.

Case Study 6: Gender mainstreaming and social inclusion perspectives are part of Kenya's National Policy for Disaster Management

Kenya is highly prone to both natural (floods and droughts) and human induced (accidents, fires, civil unrest and conflicts, terrorism and industrial accidents) disasters. Therefore, reducing the impacts of disaster is high on the list of national priorities. The policy recognizes and acknowledges a wide range of vulnerable people including women, widows, children, visually, physically and mentally challenged, the elderly, and orphans; the sick; and those in need of psycho-social support, forensic/ health services, and other specialised needs/services during and after disasters. The policy makes provisions to enhance protection, safety and other needs of women and children in any disaster situation. In its monitoring and evaluation plan, the policy aims to integrate a gender and social inclusion lens in the monitor, evaluate, and analyse for the strategic proactive planning of DRR and throughout the management process of the disaster cycle. The policy is also linked to other legislations that target vulnerable groups in Kenya such as the Gender policy, Public Safety Act, Children's Act, HIV/Aids policy, Social Protection Policy, the Arid & Semi-Arid Lands Development Policy, National Peace Building and Conflict Management Policy. The policy also aims to mainstream disaster management education and build capacity of students at primary and secondary schools, colleges and universities and training colleges for uniformed forces and enhance capacity of vulnerable communities to withstand the adverse effects of disasters.

Out of the 155 DRR initiatives, identified and analyzed, 65 of them mentioned the word women. However, the women are further disaggregated into female-headed households, widows, single mothers, pregnant and lactating mothers who due to their multiple roles and responsibilities within the household and community, meaningful engagement and participation of women is a critical ingredient in enhancing adaptive capacity and building resilience before and after a disaster event. This resonates well with the Sendai Framework that calls for promotion of leadership, capacity building and empowerment of women to enable them to prepare for and build their capacity after a disaster.

Some of the DRR activities that target women before and after a disaster include:

- Provision of basic social services and security especially during conflicts, drought and floods
- Support for income generating activities
- Enhancing their skills and knowledge in resource management and sustainable livelihoods
- Capacity building to enhance their leadership capabilities
- To improve women's preparedness, response capabilities and recovery mechanisms
- Ensuring women and their children have access to clean water
- Training on nutrition especially for pregnant and breastfeeding mothers
- Counselling to relieve social and psychological stress

3.4.2 Children

In recent years, there has been call to place children at the centre of efforts to reduce disaster risk. Reports indicate that children can, and do, play an active role in reducing disaster risks and therefore, protecting and engaging children before and during disasters should be an integral part of DRR and responses (Benson and Bugge, 2018). Since most of the children are expected to be in schools, UNESCO recommends promoting DRR through educational curriculum and programs (UNESCO/UNICEF, 2014). This will benefit not only the children, but their families, schools and wider communities (Hore et al. 2018). DRR initiatives should incorporate a child centered approach drawing from the notion that when children are

Children can both design and implement DRR initiatives to reduce risks and vulnerabilities (Hore et al. 2018)

empowered and supported, they can be better prepared to protect themselves and others, and also generate positive changes among their family and communities after a disaster (Hore et al. 2018; Benson and Bugge, 2018; UNESCO/UNICEF, 2014).

Out of the 155 DRR initiatives identified, 55 of them mentioned children as target population.

DRR activities for children identified include:

- Establishment of school programs especially amongst the refugees and migrants
- Training teachers to prepare for disasters
- Training students to prepare for disasters
- Development of school curriculum on DRR to be taught to school children
- Training of emergency and relief staff on effective child protection responses in emergencies
- Providing students with the opportunity to continue their education during emergencies through provision of temporary classrooms (tents) and supplies
- Counselling to children to relieve social and psychological stress
- Involving school attending children in food aid distribution and distribution of disaster-related materials, such as pamphlets and flyers to educate the community

Amongst the children, girls are specifically mentioned as a separate target groups. The ages of the girls targeted ranges between 8-18 years. 21 of the DRR initiatives identified are targeting girls with the following activities:

- Provision of feminine sanitary products to girls
- Training on safety measures before, during and after a disaster
- Training on hygiene practices especially for refugees and migrants

Case Study 7: Girls get Equal: Responding to the needs of adolescent girls in refugee camps in Tanzania and South Sudan

Plan International is implementing a program called 'Girls get Equal' across 42 countries. Plan International works to strengthen communities' resilience and support the girl child's right to dignity and protection before, during and after disasters and conflicts. This is because girls are among the most at risk when disasters strike. Compounding effects of existing gender inequalities and discrimination and negative impacts of disasters, girls are more likely to drop out of school, suffer from violence and discrimination, marry early, become pregnant and lose their livelihoods. Additionally, girls take on adult responsibilities and roles during and after disasters.

Plan International support girls' immediate needs and their rights by introducing girl-friendly spaces within the community and at school keeping them safe and allowing them to openly discuss key issues that affect them. The spaces are used by school attending girls, dropouts, pregnant or young mothers. Girls are provided with sanitary pads and training on sexual reproductive health and emotional support they need to recover from their trauma.

Due to high dropout rates for girls during disasters, Plan International provides DRM measures before, during and after a disaster. For example, girls get quality formal and non-formal education, teachers are trained on DRM

especially for girls, opinions and participation of girls in decision making is increased, provision of adolescent girl-friendly health information and services, to include mental health issues and sexual and reproductive health and rights and addressing gender-based violence in all its forms to improve security for adolescent girls.

3.4.3 The Elderly

Ageing populations presents a challenge in Eastern Africa. Currently less than 5 percent of sub-Saharan Africa's population is aged 60 years, with projections of the elderly expected to rise to 10.4 percent of the total population by 2030 (UNPF, 2019). The rate of change will have significant implications for socio-economic conditions within sub-Saharan African countries and the challenge is heightened by the concurrent issues of increased disasters especially those that are weather related. Due to cultural practices, care for the elderly still continues in eastern Africa, though tendencies of invisibility and marginalization of the elderly is emerging. During disasters, emergency responses strategies and allocation of resources may be uneven, and the invisibility often results in the elderly being deprived of critical DRM resources. A study carried out by HelpAge International shows that less than 5 percent of humanitarian projects mentioned older people as a vulnerable group, and less than 1 percent included at least one activity that targeted older people (HelpAge, 2018). Additionally, older people are frequently sidelined from DRR training and other activities

33 of the DRR initiatives specifically mentioned targeting the elderly in disaster preparedness and responses. However, the elderly people are not disaggregated into male or female, which can lead to isolation and neglect for some of the elderly people especially women. Some of the activities that the elderly are involved in are:

- Provision of early warning information
- Training the elderly people to help their community in disaster preparedness and response
- Sharing their experiences with young children on how to cope with disaster situations
- Working as older volunteers after disasters strikes

Case Study 8: Intergenerational engagement between the elderly and youth in identifying needs and developing DRR strategies in Ethiopia.

HelpAge International is working with the elderly to collect age-and gender disaggregated DRR qualitative and quantitative data aimed at building community resilience to drought in Ethiopia. In this community, the elderly people have a wealth of knowledge on traditional strategies for managing drought that was getting lost as the older people died and were not passing the knowledge to younger generation. To ensure that the elderly people are not isolated and not invisible, the elderly are working alongside the youth to undertake risk assessments and DRR action planning. The elderly people are able to share their traditional knowledge especially on experiences on livestock management, restocking of livestock and rangeland rehabilitation and combine with 'modern' technologies that the youth have learned in schools and colleges. The elderly people play a critical role in identifying the most vulnerable as beneficiaries of the DRR activities, while prioritising interventions that would be most beneficial in building community resilience especially for women and widows.

3.4.4 People with Disability

Article 11 and 32 of the UN Convention on the Rights of Persons with Disabilities (PWD) requires that PWD benefit from and participate in disaster relief, emergency response and disaster risk reduction strategies (CRPD, 2007). However, due to stigma and various challenges that disability presents, PWD are often overlooked throughout the disaster management cycle, are seldom considered as important actors in disaster prevention and are excluded from the DRR decision making and planning processes (Gutnik and Roth, 2017; WCRWC, 2008). And yet, PWD are among the first category of victims of natural and human induced disasters (iDAD, 2014). They often do not receive early warnings and those that do receive, get the information too late. A UN global study revealed that less than 25% of PWD are able to evacuate immediately without difficulty in the event of a sudden disaster, have someone to help them to evacuate and are aware of their

PWD are not a homogenous group. It comprises of a wide range of people that cut across all other at-risk groups such as women, men, children, migrants, elderly and the youth.

community's disaster preparedness plan while only 14% are consulted during the preparation of disaster preparedness plans (UN, 2013).

43 DRR initiatives mentioned targeting PWD with the following activities

- Engaging PWD in planning DRM activities
- Empowering PWD through training on various DRM and responses
- Provision of disability equipment such as wheelchairs, walking sticks and hearing aids
- Building disability accessible infrastructure
- Training of emergency and relief staff on emergency aid and rehabilitation of PWD
- Creating self employment through provision of credit to start up income generating activities.
- Developing special evacuation plans with the PWDs and engaging them in evacuation training.
- Training and creating awareness to the community of the situation of PWDs and what can be done

3.4.5 Indigenous people

Indigenous⁶ people of Eastern Africa are often excluded in development and DRR processes. Within eastern Africa, they reside in areas that are arid and Semi-arid lands that are ecologically fragile with fewer opportunities, experience droughts that lead to food insecurities and lack access to early warning systems and information to reduce risk (UNESCO, 2018; Mamo, 2020; Izugbara et al. 2020; Kamanzi, 2019; Bahal'okwibale, 2017). These factors intensify disaster risks amongst the Indigenous people. The political landscape in eastern Africa does not provide space for Indigenous people to participate in decision making processes and hence their needs and capacities to manage risks are often not taken into consideration (Jegade, 2015; Makoloo, 2015; ACHPR, 2005; Sigurdarson, 2009). The Sendai Framework underlines the importance of recognizing the roles and contributions of indigenous people in addressing disaster risk, particularly through their experience and traditional knowledge (UNISDR, 2017). This is because Indigenous people are marginalized people, and the most likely to suffer serious and extreme impacts of disasters. Due to limited opportunities, the effects of disasters on indigenous people (especially the women, children and elderly) are far-reaching, on food security, education, mental and physical health.

Review of the 155 DRR initiatives found that 29 of them mention and target indigenous people. Some of the DRM interventions targeting indigenous people are

- Establishing platforms for indigenous people to share traditional knowledge on disaster management
- using participatory approaches to identify interventions and tackle disasters
- Advocacy programs to reduce girl child marriages and child soldiers
- Providing clean and safe water
- Building schools for children

3.4.6 Migrants

In 2019, UNHCR reported 3.6 million refugees and asylum seekers and by mid 2020, the Eastern Africa sub-region⁷ hosted 7.7 million international migrants (UNHCR, 2020; UN DESA, 2020). Several factors are driving the migration including political tensions, conflicts (e.g., South Sudan, Ethiopia and Eritrea), extreme climatic events such as droughts and floods, food insecurity and poverty. The Sendai framework calls for governments to empower migrants in disaster risk management because they can '*contribute to the resilience of communities and societies, and their knowledge, skills and capacities can be useful in the design and implementation of disaster risk reduction*'. However, migrants who comprise of women, men, children and the youth, elderly and the poor are often ignored during DRR design and implementation. According to Guadagno (2015), these migrants face barriers to accessing early warning information, resources, and opportunities, which

⁶ Indigenous people are defined as "distinct social and cultural groups that share collective ancestral ties to the lands and natural resources where they live, occupy or from which they have been displaced (World Bank, 2020) such as Majang and Anuak in Ethiopia; Benet, Batwa, Karamojong and Basongora in Uganda; Ogiek, Sengwer, Yaaku Turkana and Samburu in Kenya.

⁷ Statistics provided are from 18 countries, that is, Burundi, Rwanda, South Sudan, Uganda, Ethiopia, Eritrea, Djibouti, Kenya, Somalia, Malawi, Mozambique, the United Republic of Tanzania, Zambia, Zimbabwe Comoros, Madagascar, Mauritius and Seychelles

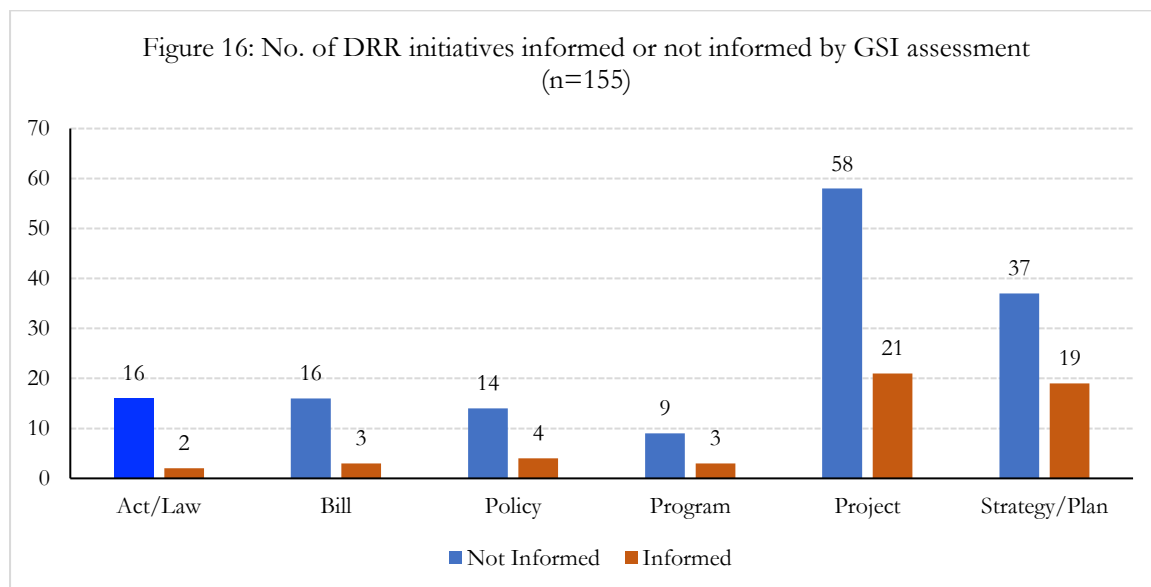
reduce their ability to prevent, mitigate, prepare for, cope with, and recover from natural disaster. Thus, they are often disproportionately affected by both natural and human induced disasters (Collins, 2013). Migrants who end up living in refugee camps are much more likely to be displaced by disasters because refugee camps are often located in remote areas with limited access by road and to infrastructure and the shelters cannot withstand natural disasters. For example, due to the floods of 2014 that destroyed roads to the camp, 47,000 refugees in Leitchuor camp in Ethiopia faced starvation because aid could not reach them (UNHCR, 2014).

Out of the 155 DRR initiatives identified, only 14% mention targeting migrants in Kenya (4), Ethiopia (2), South Sudan (5), Uganda (2) and Tanzania (1). Some of the DRR interventions that are provided to migrants by different organizations include:

- Access to basic services and opportunities in camps
- Entrepreneurship/vocational training especially for women, PWD, youth and men
- Psychosocial counselling
- Life skills training
- Opportunities for children and adult education by establishing schools
- Empowering and creating the conditions for them to actively participate in DRR efforts

3.5 Integrating a Gender responsive and socially inclusive lens into designing the DRR programs

Natural and human induced disaster affect men, women, children, PWD, the elderly and the Indigenous people differently. To address this, deliberate efforts must be put in place to ensure that everyone within the community participates and benefits equally from disaster risk reduction and recovery efforts. Gender responsive and social inclusive situational analysis or baseline is the first step in understanding the roles and responsibilities, and risk and vulnerability of each gender. This activity must be done before the design and roll-out of any specific DRR programme or project activities to ensure gender concerns are taken into consideration. Review of the DRR policies, programs, strategies and projects in eastern Africa shows that 33.5% of them were informed by a gender and social inclusion situational assessment (Figure 16). All of the five surveillance tools were not informed by a GSI analysis.



Out of the 155 DRR policies, projects, strategies and programs identified, only 24.3% conducted a participatory process and included perspectives of men, women, children, PWD, the elderly, Indigenous people in DRR planning/steering committee. 8.4% of organizations implementing DRR initiatives hired a

gender and social inclusion expert to collect, analyze and use sex-and gender disaggregated data and these were in Rwanda, Uganda, Ethiopia, Kenya, Tanzania and Comoros. The gender analysis conducted identified different roles and responsibilities that men, women, children, PWD, the elderly, and the indigenous people are involved in and used the data to inform the design and implementation of the DRR initiatives.

Capacity-building is essential to ensure that gender equality and social inclusion issues are effectively taken into account in DRR programs and project activities. The national governments and stakeholders involved in the DRR projects and programs need gender competence in order to make it possible for them to integrate a gender and social inclusion perspective, from the initial analysis, to planning and setting objectives, in the implementation process and in monitoring and evaluation. The capacity-building efforts may also need to include stakeholders and beneficiaries. A needs analysis of the type of capacity-building which is necessary for different actors needs to be carried out and a plan for implementation drawn up. Out of the 155 DRR, 28.5% have provision of capacity building of the implementation staff and target beneficiaries.

Case Study 9: Community driven isolation and contact tracing during epidemics in South Sudan

Communities, especially the elderly people have extensive knowledge of livestock and human local seasonal, endemic and epidemic diseases, their transmission, pathologies and symptomatic processes. Some of the diseases include tuberculosis, yellow fever, measles, cholera and sleeping sickness. Traditional, communities in Aweil, South Sudan have tested methods of infectious disease management, isolation and hygiene practices and the interruption of surface viral transmission that are adaptable during disease emergencies. These practices became very useful to manage, prevent and interrupt transmission of the current Covid-19. For example, when a new disease breaks out, herbalists look at the symptoms and compare it with past disease and how that disease was treated. While this is happening, all community members are advised to isolate in their homes and avoid sharing food and utensils between families. The sick are put in quarantine sites used to colloquially be known as 'the coughing house' and are cared for by an elderly woman.

Communities use different signals to show households that are under quarantine such as poles placed across the path, ashes sprinkled in a circle around the quarantined household. In 1998, communities used these methods to contain breakout of yellow fever and cholera within a very short period of time. For example, the cholera of 1997, people organized rehydration salts, isolated infected people, buried their vomit and faeces, and used water and ash to wash people in contact with the sick. Traditionally, communities have extensive methods for case identification, contact tracing and minimizing surface transmission of viruses and bacteria, which became very useful during Covid-19 management. In Aweil, post-partum women and their babies were assigned specific cups and utensils, and discouraged from social gatherings for a month after birth to avoid Covid 19.

Lessons learned from this community practices that can assist DRM is that a) tap into existing community epidemic management practices and histories, b) build community epidemiological knowledge that can support frontline caregivers.

3.6 Risk analysis and vulnerability profiling with a gender and social inclusion lens

Risk analysis and vulnerability profile means exploring the risks, vulnerabilities and capacities of different categories of people in society that can be impacted by a disaster. The inequalities and disadvantages faced by women, children, youth, elderly, migrants, PWD and indigenous people, particular their unequal access to resources, protection, decision making and power means that they are more vulnerable to impacts of disaster. However, women, elderly and indigenous people also show remarkable resilience in the face of risk and disaster. Their knowledge of and responsibilities within the household and wider community can be critical in mobilizing communities to prepare for and to respond to disaster. Therefore, conducting a risk analysis and vulnerability profile with a gender and social inclusion lens will identify specific vulnerabilities to risk and disaster for men, women, children, youth, elderly, migrants, PWD and indigenous people, as well as aid in identification of their opportunities and coping strategies.

Out of the 155 DRR initiatives identified, 25.6% of them conducted a risk analysis and vulnerability profile. For example, Tanzania Emergency Preparedness and Response Plan (TEPRP) conducted a social and gender dimensions assessment and documented how rural women, youth, the elderly and men's livelihoods are affected by floods and drought. A program in Uganda titled '*Community Managed Disaster Risk Reduction Approach in Managing Disaster in Uganda*' conducted a gender-based differences in how decision-making power and ownership of and access to assets influences how women and men respond to conflicts and ethnic violence. In Madagascar, a DRR project identified what sources of early warning information women, youth, PWD and the elderly have and how they use it to better prepare for a cyclone.

Case Study 10: Community Resilience Planning Committees for disaster preparedness in South Sudan

South Sudan continues to face unprecedented levels of food insecurity, displacement of people, depletion of livelihoods and natural resources, intense and frequent climatic disasters including drought and floods. A project implemented by ACTED in collaboration with BRACED is working with communities especially women, youth and PWD to develop inclusive contingency plans to better prevent and respond to crises. Participation of vulnerable people is through formation of Community Resilience Planning Committees. The committees established Agro-Pastoral Field School (APFS) model in 27 villages (3540 members) which engages and trains farmers and livestock keepers in climate resilient crop and livestock practices. The committees are also involved in participatory risk assessments and are collectively reaping the benefits of engaging in participatory disaster risk mapping and planning. Through a Cash for Assets activity about 3.500 households (including female-headed households, youth and widows) have set up Village Loans and Saving Association groups and have benefitted from cash transfers. The youth are involved in establishing dykes to prevent flooding and are rearing fish that they sell in the village (Source ACTED & BRACED: <http://www.braced.org/>)

3.7 DRR initiatives addressing the needs of men, women, children, PWD, the elderly, Indigenous people within Strategic Actions

The Sendai framework specifically target G calls for '*increasing the availability of and access to multi-hazard early warning systems and disaster risk information and assessments to people by 2030*' (UNISDR, 2015). Early warning systems must take into account gender differences thus reducing the need for women, the elderly and the Indigenous people to be 'rescued' (Fordham, 2011). In 1991 Bangladesh, early warning information about the cyclone and the subsequent floods was transmitted by men to men in public spaces. Women were not targeted, thus leading to more women dying than men (GFDRR, 2013; Ferris, 2010). On the other hand, no deaths were reported after Hurricane Mitch in Honduras because women were given early warning information (UNISDR, 2007). Therefore, engagement of women in early warning systems and other preparedness activities can go a long way in reducing the mortality rate amongst women, children and the elderly.

36.2% of the DRR initiative developed DRR actions in close consultation with target communities to integrate local knowledge and address the specific needs (both practical and strategic needs) of women, children, PWD, the elderly, migrants and indigenous people to access resources, assets and knowledge to be able to successfully take on new DRM approaches. In South Sudan and Eritrea, some of the DRR programs and projects worked closely with target communities to ensure that the hard-to-reach categories of people, such as women, PWD, the elderly, and indigenous people have access to preparedness initiatives. 34.3% of the DRR initiatives made concerted efforts to identify the needs of and involve women, PWD, the elderly, and indigenous people in local DRM committees to increase their access to early warning messages and ensure that the most vulnerable people receive emergency relief. Composition of the DRM committees was done to ensure that the views of women, PWD, the elderly, and indigenous people were captured in institutional mechanisms for DRR planning and implementation. In Rwanda, during developing of the National Determined Contributions (NDCs), the government went as far as to provide leadership training especially for women who were part of the team that wrote the NDCs.

Case Study 11: African Risk Capacity's Gender-responsive insurance payment for disaster in Africa

The African Risk Capacity (ARC), a specialized agency of the African Union was established to assist African governments to ‘improve their capacities to better plan, prepare, and respond to extreme weather events and natural disasters’. This is done through mainstreaming a gender perspective throughout its operations, from ARC to communities that are hit by disasters. The ARC upholds the gender equality principle and systematically builds a gender perspective into its operations and policies with the goal of transforming DRM approaches to ensure gender equality for vulnerable women and men in Member States. In 2020, ARC distributed more than USD 61,000,000 in payouts for early responses and more than 2,100,000 vulnerable people assisted, of which 45% of the target population were women. In 2020 ARC paid Madagascar USD 2,13 million to cover anticipated losses to livelihoods of its vulnerable population from the crop failure. Since women and children provide most of the agricultural labor, 66% of the beneficiaries targeted women. ARC conducts gender mainstreaming capability building for the staff and national governments to enable them effectively integrate gender in their DRM processes. ARC also engages in sustained policy dialogue and advocacy for a gender transformative DRM policy environment across its member states. Rwanda, Kenya, Madagascar and Eritrea are members of the ARC.

3.8 Integrating gender and social inclusion lens into DRR response strategy including budgeting and M&E

Integrating a gender responsive and socially inclusive lens into DRR response strategy implies that gender-based differences and social exclusion issues are considered in the design of the policy, strategy, plan or programme, and gender equality is promoted in its response measures as well. Review of the collated DRR initiatives shows that only 33.8% of them were prepared using a collaborative approach based on inclusive consultation with a range of national, and sub-national stakeholders from government, private sector, civil society, NGOs, CBOs, and academic organisations. The overarching principles and DRR actions were informed by a gender analysis, vulnerability assessment and needs for different categories of people was carried out at community level. This is important because a gender responsive and socially inclusive DRR must start with a clear understanding of the community and their needs, and work from that knowledge to develop effective, and inclusive responses.

8.4% of the DRR initiatives had a gender specialist in the organizational staff team. The gender specialist carried out gender and risk analysis and acted as liaison with community members especially women and PWD and helped develop the GSI DRR plans and activities. The DRR initiatives were mainly projects and programs that created a staff position for a gender specialist to ensure that gender and social inclusion issues are integrated into DRR actions.

15.8% of the DRR initiatives developed a GSI communication methods to reach men, women, children, PWD, the elderly and indigenous people. For example, the project in northern Kenya trained women to be first responders during disasters. Their main responsibilities are to ensure that women and girls and the elderly receive information on disasters and actively participate in DRM project activities. In Rwanda, a NGO uses local women’s organizations as an entry point to engage the hard-to-reach women such as widows, female-headed households.

22.9% of DRR initiatives identified used gender-sensitive indicators in their M&E frameworks to aid in tracking how different DRR measures or interventions impact the lives of men, women, children, PWD, the elderly and indigenous people. The gender-sensitive indicators are also used to assess whether progress is made towards gender equality and if corrective measures are needed (i.e., numbers of men and women and their forms of participation, such as whether they hold decision-making positions, who takes up the resilience-enhancing practices and their perceptions of the success of the practice). For examples, Turkana County in Kenya has outlined a GSI monitoring and evaluation framework that comprehensively and explicitly integrates gender in their County monitoring and evaluation (M&E) systems. The framework provides guidance to ensure that gender is fully integrated throughout the M&E system for appropriate collection, compilation, analysis, dissemination, and use of gender data for decision making.

Defined as the “*application of gender mainstreaming in the budgetary process that involves conducting a gender-based assessment of budgets, incorporating a gender perspective at all levels of the budgetary process, and restructuring revenues and expenditures in order to promote gender equality*” (EC, 2001), a GSI budgeting process is an important tool to improve the transparency, accountability, effectiveness and efficiency of the management of finances

(UNWomen, 2014). A GSI budgeting process also provides for a more equitable distribution of financial resources for men, women, children, PWD, the elderly and indigenous people (UNWomen, 2014; UNDP, 2018) and an opportunity to systematically identify gender inequities and social exclusion attributes of DRR measures and allocating adequate resources to activities to addresses these inequities.

Review of the 155 DRR initiatives, only 9.4% of the initiatives mainstreamed a GSI budgeting process in their projects. This demonstrates that not much substantial progress has been made in budgeting for GSI interventions into disaster risk reduction processes. The DRR initiatives that included a GSI budgeting process had a separate budget lines for gender-related actions, for example to conduct awareness-raising on the importance of including women, children, PWD, the elderly, Indigenous people and men as part of DRR decision-making bodies. These DRR initiatives are implemented in Ethiopia Kenya, and Rwanda.

Case Study 12: Mainstreaming GSI into DRR governance structures in Kenya

The disaster landscape in Kenya is characterized by various natural hazards, particularly drought and floods. Other common hazards include landslides, epidemics, HIV/AIDS and human conflict. Over time, the frequency and intensity of disasters has increased due to a number of factors including climate change, widespread poverty and rapid population growth especially in the urban centers.

With support from UNDP, a national gender responsive DRR platform was established to support the Government in coordinating disaster issues at the national level. The principal disaster risk management institutions are the National Drought Management Authority (NDMA) and National Disaster Operation Center. All staff in the two institutions are trained on skills and knowledge in the various aspects of gender mainstreaming into DRR operations. A gender expert seconded from the Ministry of Gender forms part of the staff. The NDMA provides a contingency funding during emergencies for women, children, elderly and PWD. The institutions make deliberate efforts to ensure that both women, men, elderly, PWD, girls and boys participate and benefit equally from disaster risk reduction and recovery efforts. Gender analysis is done before the roll-out of any specific programme or project activities to ensure gender concerns are taken into consideration. To address historical marginalization and the burden of disaster impacts on women and indigenous people, some stand-alone disaster risk reduction and recovery projects are considered.

The two DRR institutions works with several partners to design and implement DRR interventions such as public and private sectors, civil society and grass root organizations. Communities, especially women and PWD who are direct beneficiaries of DRM activities actively participate in the design, implementation and monitoring of DRR projects. There is public participation in developing policy, guidelines and DRM information through various communication channels so that women, youth, PWD, indigenous and the elderly people can actively participate. The communication channels include local radios, local chef barazas, videos, religious places, social media, SMS and door-to-door campaigns. The institutions have developed an elaborate integrated and gender responsive monitoring and evaluation mechanism (Source: UNDP, 2020).

4 Strengthening of gender-responsive regulatory frameworks, policies and institutions for DRR in Eastern Africa

The Eastern Africa sub-region is vulnerable to natural and human induced disasters such as cyclones, drought, earthquakes and floods. Every year a variety of disasters occurs in eastern Africa and these are becoming more prevalent (Molua et al. 2020). For example, since 2008, drought has claimed many lives with more than one third of the population affected in Eritrea, Kenya and Djibouti. The cyclones experienced in Madagascar and Comoros have had a devastating impact on the country and its people, including the displacements of over half a million people of which 55% are women, the destruction of homes, schools and health facilities (Saholiarisoa, 2018). Since 2013 conflicts in South Sudan has killed about 383,000 and nearly four million people have been internally displaced or fled to neighboring countries as refugees (CFR, 2020).

An estimated 31% of the displaced and refugees in South Sudan are children (UNHCR, 2020). More recently, the Tigray conflict in Ethiopia has claimed over 52,000 lives and more than 3 million (more than 45% are female) have been forced to flee their homes (Marks and Gebre, 2021; UN 2021). While still recovering from the various disasters, Covid-19 hit affecting the livelihoods and economics of Eastern Africa Countries (Gondwe, 2020). It will take years and sometimes decades to recover from such disasters. In some instances, recovery from economic loss cannot be recouped because of existing poverty levels, gender inequalities and limited access to quality services (CARE, 2019).

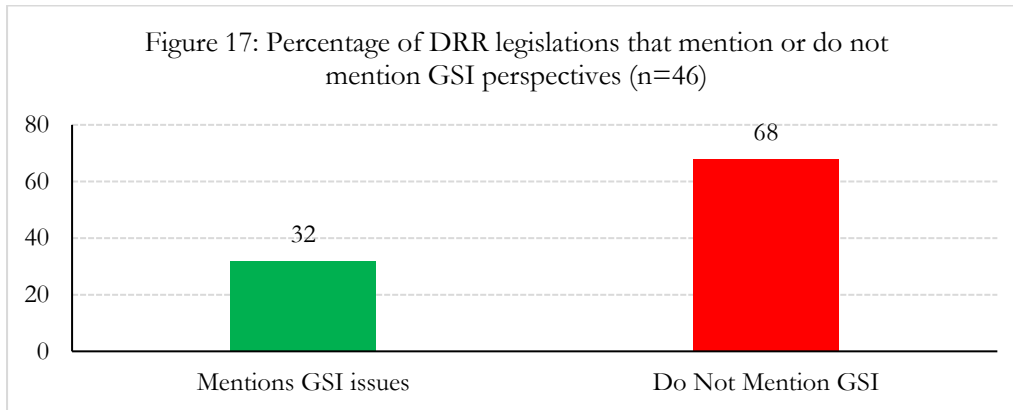
Before, during and after a disaster, the needs of girls, boys, women and men, PWD, and the elderly people are different and distinct. Women and girls are affected differently than men and boys, as such their vulnerabilities are often exacerbated by other factors such as age, disability, caste, ethnicity and/or religion. Gendered social norms, roles and responsibilities and persisting social structures contribute to heightened risks for children, adolescent girls, PWD, the sick, single women, female-headed households, pregnant and lactating women, elderly and indigenous people.

The Sendai Framework for Disaster Risk Reduction (SFDRR) commits to targeting the most vulnerable in situations of disasters especially, women, children and youth, PWD, the elderly, migrants and indigenous people. The SFDRR further stresses that the participation of people disproportionately affected by disasters (especially women and the poorest) in DRR is critical to effectively manage the disaster risk. Countries that are signatory to the Sustainable Development Goals (SDGs) have also committed to reach and transform the lives of women, girls and other people who are highly vulnerable to disasters. The UNISDR Strategic Framework (2016-2021) equally commits to making disaster risk reduction gender responsive and socially inclusive, including persons with disabilities and targeting all stakeholder within DRR spaces. Additionally, the UNISDR strategic framework aims to enhance operational performance based on appropriate gender-sensitive structure and staffing.

Eastern Africa countries have enacted DRR legislations that are linked to SFDRR, SDGs and the UNISDR Strategic Framework. Therefore, it is important that the legislations place greater emphasis on gender responsive and socially inclusive DRR. Evidence from implementation of various policies, projects and programs in eastern Africa, demonstrates that increasing women's participation and leadership in all economic sectors is critical for sustainable development (Agarwal, 2018; Dhatt et al 2017). Legislations and regulatory frameworks are therefore needed to build on and harness the knowledge of women and other socially excluded groups, identify their needs and actively engage in implementing DRR interventions.

Review of DRR legislations and regulatory frameworks in Eastern Africa shows that they are based on integrated and comprehensive procedures providing for prevention, warning, preparedness, management, relief, recovery and development measures. A total of 46 legislations were identified in the 10 eastern Africa countries. Kenya had the highest number of legislations (29) due to the devolved system of governance. Uganda, Rwanda and Ethiopia each have 3 legislations, while Comoros and Tanzania have 2 each. The rest of the countries, that is Djibouti, Eritrea, Madagascar and South Sudan have one DRR legislation.

Despite that all the 10 countries recognizes the SFDRR and the SDGs, there is limited gender mainstreaming and social inclusion aspects in the DRR legislations. Out of the 46 legislations identified, only 32% of them mention the words, gender, gender mainstreaming/integration, inclusion, women, youth, PWD, elderly, the poor, migrants, indigenous people and children (Figure 17).



Out of the 32% that mentions gender and social inclusion issues, 35.6% of them pledges to mainstream gender into DRM interventions and explicitly recognizes gender as an important component for successful implementation. These legislations emphasize on conducting a gender analysis, an engendered risk and vulnerability profiles capacity building and women and youth leadership, inclusion of traditional DRR knowledge, increased participation of women and other vulnerable groups and the collection and use of sex and age disaggregated data. The rest (67.4%) mention the words gender and women but have no clear implementation mechanisms provided to integrate a GSI into the DRR legislations.

In terms of institutions and implementing structures, all the national government institutions for implementing DRR are governed from the designated Ministry or Prime Minister’s office. A permanent body or Institution exists for management, coordination, implementation and support of DRR programs and actions under the authority of the Minister or Prime minister e.g., National Disaster Risk Management Commission and the Fire and Emergency Prevention and Rescue Authority in Ethiopia, and the National Drought Management Authority and the National Disaster Operation Center in Kenya. These institutions have the responsibility of implementing the DRM and post-disaster recovery policies, plans and strategies.

18% of the identified DRR legislations mention training of staff on skills and knowledge in the various aspects of gender mainstreaming into DRR operations. In terms of gender experts, only Kenya’s policy recommends secondment of a gender expert from the Ministry of Public Service and Gender to support the institutions in mainstreaming gender and social inclusion into DRR.

It is evident that GSI gaps exist in the current DRR legislations and policy frameworks. However, as eastern Africa sub-region continues to experience disasters, there is an urgent need to integrate GSI into DRR, incorporate risk reduction measures in current and future plans. There is also an urgent demand to train and empower institutions, to be able to mainstream GSI into DRR and eventually eliminate pre-existing vulnerabilities and increase resilience towards future hazards and the effects of natural disasters.

5 Roadmap for mainstreaming gender-responsive and socially inclusive actions into DRR policy development processes

The proposed roadmap is largely informed by the overarching Sendai Framework, SDGs, review of scientific literature on gender responsive and socially inclusive DRR; policies, projects and programs documents on DRR; and related reports from governments and development partners, that is, NGOs and CBOs. The roadmap aims to mainstreaming GSI into DRR policy development processes while at the same time strengthening the role of the national governments and other actors in addressing gender and social inclusion perspectives in risks and hazard preparedness (Figure 18).

The gender responsive and socially inclusive DRR provides important insights into the foremost significance of women, PWD, the elderly, IDPs and migrants in DRR and management, and their risks and vulnerabilities. The roadmap proposes key DRR actions that can be implemented at different levels, sub-national, national and regional levels to ensure resilient communities, build the enabling institutional environments that can promote GSI mainstreaming, promote the centrality of GSI for the DRR interventions and develop capacity that can strengthen national efforts for an inclusive and equitable adaptive, resilient and transformative economy.

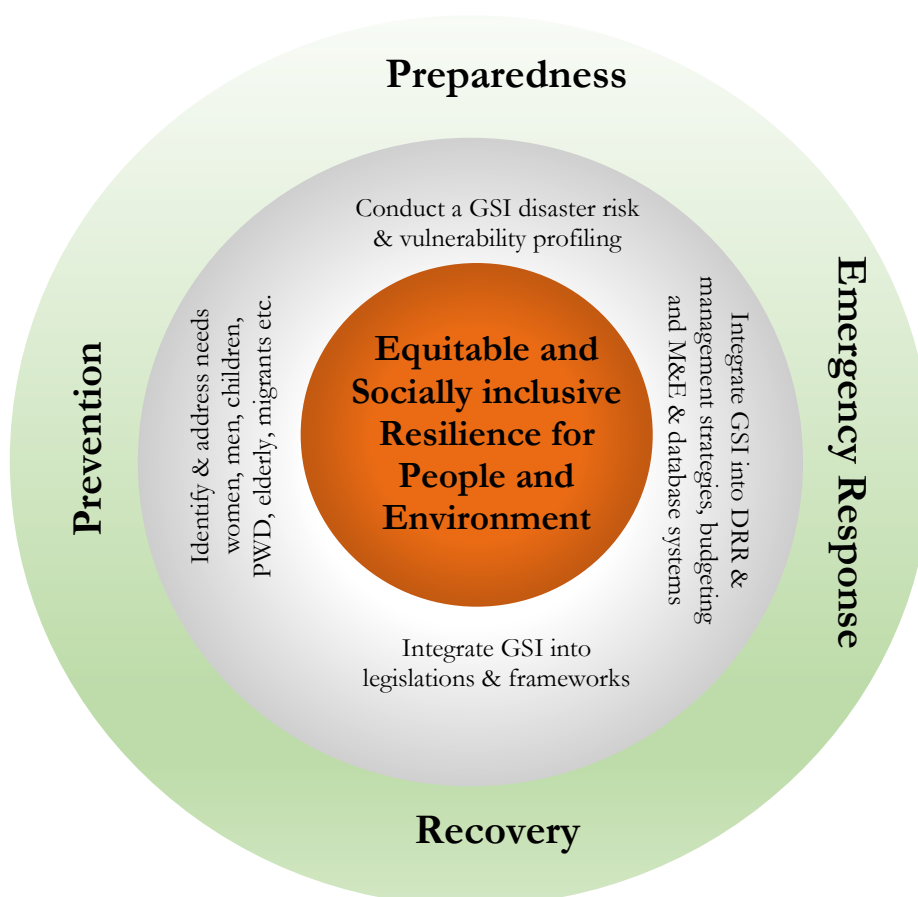


Figure 18: Roadmap for mainstreaming gender-responsive actions/measures into DRR policy, program and project development processes

The roadmap is expected to:

- Enhance resilience to natural and human induced risks and shocks on the social, environmental, political and economic aspects of the economy
- Contribute to the strengthening of governance and institutional coordination for effective GSI implementation of the DRR interventions at sub-national, national and regional levels
- Identify and incorporate ‘best practices’ on DRR strategies that can reduce vulnerability, increase adaptive capacity, address specific risks related to each hazard, explore GSI specific opportunities in the context of each hazard

Figure 18 above illustrates gender equality and social inclusion elements that need to be considered when designing national DRR policies. It is aligned to the Sendai framework, SDGs and some of the national DRR policies and strategies identified during this study. The inner most circle represents the overall goal of DRR and management policies, projects and programs. It aims at ensuring an equitable and social inclusive resilience (capacity to absorb and recover from disasters) for the people and the environments in which they derive their livelihoods. The middle circle provides the four main areas that national governments can integrate GSI (see Table 5 for more details). The outer circle represents the four priority areas of DRR and management, that is understanding disaster risk, strengthening disaster risk governance to manage disaster risk, investing in disaster risk reduction for resilience and enhancing disaster preparedness for effective response and to “Build Back Better” in recovery, rehabilitation and reconstruction (UNISDR, 2015).

Some national governments and organizations have mainstreamed GSI into DRR strategies and policies. At the Eastern Africa regional level, IGAD’s has a *Regional Strategy and Action Plan for Mainstreaming Gender in Disaster Risk Management and Climate Change Adaptation* (IGAD, 2020) and a *Gender Strategy and Implementation Plan 2016– 2020* (2015). The gender strategy and implementation strategy are both aligned to the IGAD DRM strategy (2019), the Sendai Framework and the SDGs. At the national level, Uganda National Policy for Disaster Preparedness and Management acknowledges that women and children are most vulnerable to the effects of disaster and they bear the brunt of the disasters. The policy aims to conduct gender analysis and understand the implications of gender roles in disaster preparedness and management. Kenya’s DRR policies and strategies do mention gender equality and inclusion of different people such as women, youth, PWD and marginalized people (GoK, 2019). In so doing, Kenya’s DRR plans are devolved to the Sub-national level to enable community participation. Equally, Ethiopia had decentralized her DRR strategies with the aim of strengthening households, communities and local authorities to manage and adapt to disasters and other risks, thus reducing their vulnerability, humanitarian and economic impact, as well as irregular migration and forced displacement (FDRE, 2013).

Table 5: Roadmap for ensuring equitable and socially inclusive resilience for people and environment before, during and after a disaster	
Strategic Problem 1: Lack of evidenced based gender and social inclusion data on vulnerability and risks to inform policies, plans, programs and projects	
1. Conduct a gender responsive and socially inclusive disaster risk and vulnerability assessment/ profiling	1.1 Carry out gender and social inclusion analysis as part of the vulnerability and risk profile and collect sex and gender disaggregated data 1.2 Document the cultural and social dimensions of disaster management and responses (e.g., How are rural and urban women, widows, teen mothers affected by floods or droughts? 1.3 Document the age and gender-based differences/similarities in decision-making and power 1.4 Document ownership of and access to assets especially those needed for disasters prevention and preparedness 1.5 Identify the different sources of information especially early warning information for different people/groups 1.6 Identify the existing coping strategies for different people/groups 1.7 Document the different roles that women, youth, the elderly, migrants, refugees, girls, children, boys, PWD and men play in disaster preparedness, prevention, management, response and recovery

	<ul style="list-style-type: none"> 1.8 Document the different stakeholders involved in DRR and management and their mandates 1.9 Hire GSI experts to undertake the vulnerability and risk assessment with a GSI lens 1.10 Train the DRR team on gender responsive and socially inclusive DRR 1.11 Create awareness and strengthen the capacity of policy makers (from grassroots to national) to always ensure that gender equality and social inclusion is mainstreamed throughout the DRR processes
Strategic Problem 2: Lack of understanding who is the most vulnerable to the impacts of disasters and how to reach them	
<p>2. Identify and address the needs women, men, children, PWD, migrants the elderly, etc.</p>	<ul style="list-style-type: none"> 2.1 Identify the different vulnerable people/groups at different levels (community, sub-national, national) and in different locations (urban, rural and peri-urban) undertaking different livelihoods (farming, fishing, formal and informal employment, manufacturing etc. 2.2 Identify and address the needs and opportunities of all the different people/groups 2.3 With community members, establish community led DRR management committees that are gender balanced and socially inclusive 2.4 Strengthen the capacity of women, elderly PWD to be actively involved in the grassroots, sub-national and national DRR and management committees 2.5 Identifying NGOs, CBOs, religious groups, private sectors and other relevant stakeholders that are working on DRR and are representing the interests of women, children, PWD, youth, the elderly etc. 2.6 After identifying the hard-to-reach people (such as widows, extremely poor and the elderly), design equitable and socially inclusive DRR strategies with them. 2.7 Develop a sex and gender disaggregated database to document damage loss. This will assist in revising DRR and management strategies
Strategic Problem 3: Lack of equitable and socially inclusive policies, projects and programs that addresses the needs of different people/groups that are vulnerable to the effects of disasters	
<p>3. Integrate GSI into legislations and frameworks</p>	<ul style="list-style-type: none"> 3.1 Develop and implement a gender and social inclusion DRR policy 3.2 If a DRR policy already exists that has some elements of GSI, develop and implement a GSI implementation framework to support the policy 3.3 Create awareness and/or capacity the policy makers on how to design DRR policies with a GSI lens 3.4 National governments should ensure that gender equality and social inclusion is one of the guiding principles of the DRR policy or strategy 3.5 The vision, mission, objectives, outputs and outcomes of DRR projects and programs should outline how they will achieve gender equality and social inclusion especially for women of all ages, social and economic status. literacy levels in order to build their resilience 3.6 National governments should make a commitment to reduce the gender and social inclusion gap between women, youth, PWD, elderly, children, migrants, refugees and men by detailing actions to empower each and everyone 3.7 The DRR and management strategies should make a commitment identify and finance specific interventions for women and girls in all social and economic spaces 3.8 The DRR policies and strategies should make commitments to include hard-to-reach people, women, youth, PWD, elderly, children, migrants, refugees and men throughout the decision-making processes 3.9 The DRR policies and strategies should make commitments to include hard-to-reach people, women, youth, PWD, elderly, children, migrants, refugees and men with DRR and management strategies and interventions 3.10 The DRR policies and strategies should increase their women and girls, PWD and the elderly's access to early warning messages through appropriate channels 3.11 The DRR plans should ensure that prevention, preparedness, recovery and response interventions are developed in close consultations with affected populations especially women and girls 3.12 The DRR plans should integrate traditional and local knowledge on DRR management identified during gender and social inclusion analysis

	<p>3.13 The DRR plans and strategies should aim to identify interventions that ensure increased access to resources and eliminate labor burdens especially for woman, PWD, the elderly and girls</p> <p>3.14 Develop a GSI checklist that policy makers can use to monitor implementation of DRR interventions at all stages</p> <p>3.15 Develop a sex and gender disaggregated DRR digital database to enable policy makers monitor implementation of DRR interventions at all stages</p>
<p>Strategic Problem 4: Limited consideration of GSI perspectives in DRR strategies, budgeting and Monitoring and Evaluation systems</p>	
<p>4. Integrate GSI into DRR & management strategies, budgeting and M&E & database systems</p>	<p>4.1 National governments should ensure that GSI work is part of the DRR design and implementation plan</p> <p>4.2</p> <p>4.3 Develop GSI indicators (checklist) for implementing, monitoring and evaluating DRR plans and,</p> <p>4.4 Build the capacity of governments officers and other relevant stakeholders on how to implement and monitor DRR plans with a GSI lens and use the GSI indicators (checklist)</p> <p>4.5 Cultivate a gender sensitive and socially inclusive culture within the responsive Ministry, departments and institutions by conducting training and re-training programs to ensure that new staff are well versed in mainstreaming GSI into DRR</p> <p>4.6 Ensure that the DRR plans, and interventions are informed by the gender and social inclusion analysis and, the vulnerability and risk assessment</p> <p>4.7 Categorise allocation of financial and technical resources as follows: a) resources to address the gender inequalities and social exclusion, b) resources to address the promotion of gender equality, c) resources allocated towards capacity development for mainstreaming GSI in DRR, d) resources towards increased participation for women, youth, PLWD and other vulnerable groups in DRR</p> <p>4.8 Hire a GSI expert to work closely with the DRR team</p> <p>4.9 Ensure that everyone in the society is represented, that is, women, youth, PLWD, elderly in the DRR management committee</p> <p>4.10 Organize DRR committee meetings suitable to all the public members e.g., different meetings for women, youth, elderly, civil society and private sector</p> <p>4.11 Develop appropriate early warning and communication messages and channels to reach all the public especially the women, PLWD and other vulnerable people</p> <p>4.12 Monitor the DRR plans by using GSI indicators, to track how different interventions impact the lives of women, youth, children, men, PWD, girls, boys and different socio-economic groups</p> <p>4.13 Use the GSI indicators (checklist) to assess whether progress is made towards gender equality and social inclusion and evaluate whether corrective measures are needed</p> <p>4.14 Set up mechanisms for collecting feedback from women, youth, elderly, men, PWD and other vulnerable people</p> <p>4.15 Identify 'best practices' case studies to identify who is benefiting the most from the DRR activities and scale it up</p>

Conclusions

Review literature shows that loss and damage due to disasters is on the rise in eastern Africa grave consequences for the survival, dignity and livelihood of the citizens. This is more so amongst the women, men, children, people with disability, migrants, the elderly, youth, girls, IDPs, refugees and the poor where disasters are deepening and entrenching poverty, gender inequalities and social exclusion. Disasters, especially those related to climate change and political and ethnic conflicts are eroding most of the developmental gains made. This, compounded by increasing vulnerabilities related to changing demographic, unplanned urbanization especially within high-risk zones, environmental degradation, geological hazards, competition for scarce resources and the impact of epidemics such as Covid-19 points to a future where disasters could increasingly threaten the economies of eastern Africa countries and its population, especially the ones that are already vulnerable.

The complexity of disaster induced problems requires an engendered comprehensive and coordinated disaster risk reduction and management policies, projects and programs. This report identified various DRR policies, projects and programs (initiatives) being implemented across the ten countries eastern Africa. Findings show that most of the DRR initiatives do not have a gender and social inclusion lens. The few that have mainstreamed a GSI lens are ensuring that DRR interventions address the gender-differentiated needs of women, children, youth, PWD, the elderly, men, IDPs and the refugees and take measures to transform their lives. This means taking action to address both immediate practical needs of women, children, youth, PWD, the elderly, men, IDPs and the refugees and their longer-term strategic interests. The actions also entail taking measures to ensure that women and girls are protected from violence, particularly since this threat is known to increase during and after disasters, both within and outside the home.

In conclusion, DRR initiatives, especially the policies and legislation framework should re-orient local, sub-national and efforts to address disaster in a more gender responsive and socially inclusive approach. The proposed roadmap constitutes the fundamental basis for achieving gender equality and social inclusion policy goal and promoting sustainable development through disaster prevention, preparedness, response and recovery.

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Appendices

Appendix I: Recent Disasters and their effects in the Ten countries in Eastern Africa

Country	Type of Disaster	Impacts
Comoros	Cyclone/ Flood	<p>2019</p> <ul style="list-style-type: none"> ▪ On 24th April and 2nd-5th December 2019, Cyclone Kenneth and Tropical Cyclone Belna respectively landed passed through threatened Anjouan (population: 38,944), Mohéli (population: 50,854) and Ngazidja Island (Grand Comore), ▪ Entire Comoros national territory was affected by heavy rainfall and strong winds. ▪ Tropical Cyclone Belna affected 2,996 people, of which 978 were male, and 2,018 were female. There were 3 and 9 male and female fatalities (IFRC, 2020). A total of 2,655 people (699 male and 1956 female) were displaced from their homes (IFRC, 2020). ▪ Besalampy and Soalala experienced a shortage of safe drinking water, as some water points and wells had been submerged. This created a crisis for women and girls who had to wade through muddy waters to collect water from emergency water points ▪ Storms widely damaged schools, farming, and residential infrastructure nationally. ▪ 345,130 people were affected (142,413 male and 202,717 female), with 185,880 needing immediate multisectoral assistance while Cyclone displaced 19,372 people. ▪ The cyclone also destroyed 3,818 houses and partial destruction of 7,013 houses. ▪ 63% of food crops were damaged, 35 % of cash crops and 34% of fruit trees, and 2,055 cattle were destroyed. ▪ The cyclone also damaged 465 classrooms, including 213 that were destroyed. ▪ The area of Anjouan has the greatest loss from flooding due to cyclones, with an average annual loss of \$1.3 million. ▪ The 100-year loss direct loss to Comoros from flooding is \$10 million.
	Covid-19	<p>2020</p> <ul style="list-style-type: none"> ▪ There are 3,473 confirmed cases with 142 deaths⁸. ▪ Schools were closed
Djibouti	Cyclone/ Flood	<p>2019</p> <ul style="list-style-type: none"> ▪ On 21st November, Djibouti experienced heavy rains, which triggered flash floods across the country. ▪ Approximately Over 30,000-40,000 families (150,000-250,000 people) were somewhat affected, 200,000 people (21% of the total population) were affected (and 120,000) require immediate relief support, while about 10 people (7 children) were reportedly killed. ▪ From November 2019, around 250,000 people were somewhat affected countrywide (26% of the population), and 150,000 (including migrants and refugees) required immediate humanitarian assistance. ▪ Widespread destruction of infrastructure, homes, and livelihoods resulting from flooding, made access to affected areas more difficult. <p>2018</p>

⁸Communiqué #10 : Couvre feu". Stop Coronavirus.km (in French). Accessed on Feb 3, 2021

Country	Type of Disaster	Impacts
		<ul style="list-style-type: none"> ▪ Tropical Cyclone Surge left a trail of widespread flooding, destruction of infrastructure, homes, and livelihoods⁹. ▪ About 50 % of Djibouti City, where an estimated 150,000 people live, was severely affected by flash floods and heavy rainfall. ▪ The government estimates that some 50,000-10,000 families (25,000-50,000 people) were affected? ▪ 16 school buildings were damaged by flooding ▪ Exams for 135,000 students were postponed while schools were cleared of water and cleaned. ▪ 500 square meters along the seashore were contaminated by oils which, negatively impacted fishery ▪ Vulnerable groups affected were children, widows, the elderly and the disabled due to limited mobility and/or inability to repair their damaged homes. ▪ 15% of the Djibouti population is female-headed households who are mostly widowed and heavily affected than the rest of the population. ▪ Cases of unaccompanied children who are at risk of insecurity were reported ▪ 1,865 shelters housing 9,350 people (3567 were male and 5783 were female) sustained extensive damages ▪ 630 households (3,150 people) were displaced as a result of the flooding. ▪ The cyclone heavily impacted 4,500 people (2022 male and 2478 female) living in the Damerjog IDP camp.
Eritrea	Flood	2013 and 2020 <ul style="list-style-type: none"> ▪ Heavy rainfall and the damaging of a significant diversion canal in the Hashenkit area caused flooding that destroyed 20 residential houses ▪ More than 49,065 people were affected by flooding in the Afar region in 2020 ▪ There is no data on the number of male and female affected
	Drought	<ul style="list-style-type: none"> ▪ Every three to five years, Eritrea suffers a drought. ▪ These natural disasters destroy crops, kill livestock, and drive food insecurity across the country. ▪ There is no data on the number of male and female affected
	Desert locust invasions	2020 <ul style="list-style-type: none"> ▪ Around 1150 hectares of land were infested with desert locust swarms ▪ 12,600 members of the military and the farming community participated in practical training programs with a focus on Desert Locust management and pesticides safety
Ethiopia	Landslide	2018 <ul style="list-style-type: none"> ▪ Landslides caused by heavy rains killed 22 people in Tullu Gola kebele of Nansebu woreda in West Arsi zone, Oromia region. ▪ At least seven injured people were hospitalized, while 53 people (21 men and 32 female) were displaced and required immediate food, shelter, and non-food item support. ▪ At least 23 people in the Sidama zone and nine people in the Gamo Gofa zone of the Southern Nations Nationalities and Peoples were injured. ▪ Over 50,000 households were displaced due to flooding nationwide.
	Flood	2018

⁹ UN. 2018. Cyclone Sagar and subsequent flash floods. Humanitarian Needs Assessment Report. Accessed on Feb 4, 2021 from <https://reliefweb.int/sites/reliefweb.int/files/resources/Djibouti%20Humanitarian%20Assessment%20Sagar%20Cyclone%20-%20May%202018.pdf>

Country	Type of Disaster	Impacts
		<ul style="list-style-type: none"> ▪ The country experiences flash flood incidences in Afar (Awwsi), Oromia (Arsi, East Shewa, East and West Hararge zones), and Somali (7 zones) regions. ▪ More than 35 displacement incidents were reported during April alone, displacing 170,760 people. ▪ Floods destroyed more than 15,643 houses and 12,911 hectares of farmland and damaged 76 health facilities, mostly health posts, and at least 123 schools were interrupted. ▪ Flooding in the Somali region affected 43,887 families/households (263,322 people), of which 25,238 households (151,428 people) were displaced. ▪ Houses, crops, and livestock were reportedly washed away, leaving people displaced and homeless.
	Drought	<p>2019</p> <ul style="list-style-type: none"> ▪ Severe droughts in early 2019 left at least 8.3 million people in need of food due to delayed long rains. ▪ Vulnerable groups continuously suffered consecutive years of drought as food security situation deteriorated while the numbers in need were exacerbated by internal mass displacement due to inter-communal violence – affecting some 2.6 million. <p>2017</p> <ul style="list-style-type: none"> ▪ 1.3 million people of which 64% were children, were displaced due to conflict and drought. ▪ About 5.6 million people in Ethiopia required emergency food assistance in 2017. ▪ About 2.7 million children, pregnant and lactating mothers were in dire need of supplementary feeding. ▪ About 9.2 million people needed support to access safe and clean drinking water. ▪ About 1.9 million agro-pastoral households needed livestock support. ▪ Over 300,000 children between 6-59 months were treated for severe acute malnutrition ▪ Disease outbreaks, a large-scale loss of livelihood assets, and displacement were experienced.
	Violence	<p>2018-2019</p> <ul style="list-style-type: none"> ▪ The latest inter-communal violence has displaced nearly 960,000 from April to July 2018. ▪ By 2019, over 3 million internally displaced persons (IDPs) had been reported
Kenya	Flood/ Landslide	<p>2019</p> <ul style="list-style-type: none"> ▪ Floods frequently occur in Kenya, and on average, 150,000 people and around 200 education and healthcare facilities are affected by river flooding each year. ▪ Floods led to the death of about 132 people, and a further 17,000 had been displaced and affected approximately 330,000 people across the country. ▪ Croplands and irrigation infrastructure, such as pumps and pipes, were extensively damaged. ▪ About 28% of the total crop in Turkana was destroyed. In other counties, the loss of cropland was as follows: 10,000 acres in Tana River, 12,355 acres in Embu, Kitui, and Makueni, 200 acres in Narok, 1,507 acres in Taita Taveta, and about 4,500 acres in Kilifi. ▪ Health facilities, schools, markets, and roads were destroyed, affecting access to health and education, the supply of food commodities and medical provisions, and food prices. ▪ Approximately 3,700 small livestock were lost across Wajir, Tana River, Garissa, and Marsabit. ▪ Women, children, and the elderly experienced deteriorating health conditions due to waterborne diseases and poor sexual health. ▪ Landslides affect over 350 people per year, causing displacement of people and damages of about 1.5 million USD.

Country	Type of Disaster	Impacts
	Drought	<ul style="list-style-type: none"> Kenya experiences drought on a cyclic basis. The major ones coming every ten years, and the minor ones happen almost every three to four years. Drought increases vulnerability to food security and poor livestock productivity among the pastoralists and small-scale farmers (30 % of the country's total human population) who depend on rain-fed agriculture. On average, around 5.5 people (including acutely malnourished children, pregnant and lactating mothers) are in dire need of food, lack access to clean water, and experience unusually high food prices each year. <p>2019</p> <ul style="list-style-type: none"> More than two million Kenyans were staring at a food crisis, unusually high food prices, and worrying levels of malnutrition, especially in the Counties of Turkana, Marsabit, Baringo (East Pokot), Wajir, Garissa, Tana River, and Isiolo <p>2017</p> <ul style="list-style-type: none"> About 2.7 million people were food insecure, with 357,285 acutely malnourished children, pregnant and lactating mothers. High levels of malnutrition were prevalent among children, and elderly across the arid and semi-arid lands. Approximately 3.0 million people lacked access to safe and clean water. Insecurity linked to resource-based conflicts worsened. Unusually high food prices and worrying levels of malnutrition.
	Earthquake	<ul style="list-style-type: none"> Damaging earthquakes are infrequent. However, around 90,000 people could experience at least light ground shaking every 50 years. Structural damage could cause death. Most affected areas include Southwestern and Northwestern parts of Kenya
	Volcano	<ul style="list-style-type: none"> Around 1.3 million people are potentially exposed, especially in the Menengai volcano in the rift valley
	Crop Pest	<ul style="list-style-type: none"> Fall Armyworm and African Armyworm infestations continued to threaten crops in marginal agricultural counties, further worsening the next harvest prospects. Locusts infested 175,000 hectares of crop and pastureland, upsetting the livelihoods of nearly 164,000 households.
Madagascar	Cyclone/ Flood	<ul style="list-style-type: none"> On average 1.5 cyclones affect Madagascar annually, the highest number in Africa, and each robust cyclone on average affects 700,000 people¹⁰ In 2019, Cyclone Kenneth and Idai hit the northern part of the country, causing widespread devastation, flooding and displacement. Due to significant poverty and instability caused by complex conflict dynamics, women, men, boys, and girls have limited resilience to withstand the shock of a cyclone¹¹ The most affected groups were female-headed households, pregnant and lactating women, people with disabilities, the elderly, and boys and girls. Entrenched gender inequalities within the communities contribute to women and girl's high vulnerability to cyclones.

¹⁰ OCHA, 2020. Humanitarian Snapshot. Accessed on Feb 23, 2021 from <https://reliefweb.int/report/madagascar/madagascar-humanitarian-snapshot-december-2020>

¹¹ Center for Strategic and International Studies event discussing social, political and religious conflict drivers: <https://www.csis.org/events/understanding-extremism-northern-mozambique>

Country	Type of Disaster	Impacts
		<ul style="list-style-type: none"> After the cyclone disaster, women and girls are subjected to food insecurity, increased risk of gender-based violence¹², disruption and displacement of supportive social structures and relations Schools and educational materials were damaged, and teaching was disrupted. Literacy rates are much lower among women than men due to high school dropout rates for girls, early marriage and early pregnancy that occur after disasters.
	Drought	<p>2015 and 2018</p> <ul style="list-style-type: none"> Severe drought conditions in November 2017 to April 2018 during rainy season led to nearly dry dams in many parts of southern Madagascar. According to the Crop and Food Security Assessment (CFSAM) of August 2018, rainfall deficits and fall armyworm attacks significantly impacted food production levels (particularly staple crops such as maize and cassava), while compromising access to food for the majority of households. Data shows 1.3 million people suffered a food crisis due to droughts.
	Flood/ Landslide	<p>2020</p> <ul style="list-style-type: none"> At least 6 deaths and widespread damage. 4 people died in Antananarivo (central Madagascar), and approximately 400 were affected while several buildings were destroyed, including the University of Antananarivo. While in Andapa Municipality (north-east Madagascar), 2 people died as a result of flooding. Following widespread floods and landslides across several areas; Alaotra Mangoro, Analamanga, Betsiboka, Boeny, Melaky, and Sofia regions, 13 people were confirmed dead. Heavy rainfall and floods caused by a tropical cyclone affected about 107,000 people, including more than 16,000 displaced, and caused at least 31 deaths in Madagascar. The estimation of infrastructure damage is as follows: 67 public schools were destroyed, 28 public schools partially destroyed, 18 schools were used as evacuation centres.
	Malaria outbreak	<p>2011-2012 and 2020</p> <ul style="list-style-type: none"> Above-average malaria outbreak was reported in some part of the country¹³ Infections were higher in 6–14-year-old children, in rural areas and amongst the low-income populations¹⁴
	Crop pest attack	<p>2013</p> <ul style="list-style-type: none"> The country faced a locust attack in 2013
Rwanda	Flood / Landslide	<p>2018</p> <ul style="list-style-type: none"> 3.34% of the country's population is living in areas considered very high susceptibility, 11% at high susceptibility, and 25% at moderate susceptibility. About 14% of the exposed population comprises children aged <20 years and elderly aged >64 years.

¹² CARE Rapid Gender Analysis A Commitment to Addressing Gender and Protection Issues in Cyclone- and Flood-Affected Malawi, Mozambique and Zimbabwe: <https://reliefweb.int/sites/reliefweb.int/files/resources/Regional-RGA-Cyclone-Idai-29032019.pdf>

¹³ Arambepola, R., Keddie, S.H., Collins, E.L. et al. Spatiotemporal mapping of malaria prevalence in Madagascar using routine surveillance and health survey data. *Sci Rep* **10**, 18129 (2020). <https://doi.org/10.1038/s41598-020-75189-0>

¹⁴ Kesteman et al. 2016. Multiple causes of an unexpected malaria outbreak in a high-transmission area in Madagascar *Malar J* (2016) 15:57

Country	Type of Disaster	Impacts
		<ul style="list-style-type: none"> Exposure of health facilities to landslides is high at 43% (or a total of 23,426 health facilities) exposed at varying levels of susceptibility. A total of 147, 827 schools are exposed to landslides at varying susceptibility levels. On 3rd March 2018, around 5,000 households (25,000 people) were affected by the floods, of which 4,750 people from 950 households were directly affected. At least 24 people (200 in four months) were killed due to floods and landslides triggered by the heavy rain.
	Drought	<ul style="list-style-type: none"> Agricultural exposure to drought is apparent mostly in the eastern province. The districts of Kayonza, Kirehe, and Gatsibo are areas of primary concern since the exposure of cultivated areas, and crop production is consistent in these districts from moderate to very high susceptibility. Bananas, cassava, and Irish potato are the main crops that are affected by drought.
South Sudan	Flood	<p>2019</p> <ul style="list-style-type: none"> Considerable flooding triggered population movement and displacement in three (3) counties. The floods resulted in substantial destruction of houses and road networks. Livelihoods of 10,892 households were destroyed¹⁵. An estimated 100 fedans of crops have been destroyed, with other hundreds of cattle heads reportedly dead.
	Drought	<p>2018</p> <ul style="list-style-type: none"> Conflict and severe 2018 droughts have created a disastrous situation leaving 7.1 million people in need. Based on drought recurrences, some 6.9 million people close to 60% of the population are currently dire need of food security, with an estimated 50,000 people in famine-like conditions. Malnutrition levels remain critical, with some 860,000 children under five estimated to be severely malnourished.
	Violence	<ul style="list-style-type: none"> Approximately 1.67 million people were displaced internally within South Sudan (displaced since 2014 to end of 2019) mainly due to national conflict (62%), communal clashes (20%), and natural disasters (15%). Additionally, 2.2 million South Sudanese refugees were living in other countries, mostly in Sudan, Ethiopia, Kenya, and the Democratic Republic of Congo.
Tanzania	Flood	<p>2019</p> <ul style="list-style-type: none"> Floods caused a significant impact leading to damage of properties and livelihoods and putting the affected population at risk. A total of 1215 households (HH) were displaced (from the 1560 HH affected). There was also widespread destruction of physical infrastructure, particularly roads and bridges. <p>2018</p> <ul style="list-style-type: none"> In Arusha, 548 households were displaced due to the floods, and 203 houses were damaged¹⁶. In Dar es Salaam, about 2,151 households were displaced, 42 houses and 21 latrines wholly collapsed, and 342 houses were severely damaged 191 households were displaced, and 225 houses damaged on the island of Zanzibar,

¹⁵ OCHA, 2019. South Sudan: Humanitarian Snapshot (November 2019). Accessed on Feb 4, 2021 from <https://reliefweb.int/report/south-sudan/south-sudan-humanitarian-snapshot-november-2019>

¹⁶ DARMAERT & TRCS assessment. 201).

Country	Type of Disaster	Impacts
	Droughts	<ul style="list-style-type: none"> ▪ Droughts affect rain-fed agriculture production (both crop and livestock) ▪ Consistent droughts result in food insecurity and a shortage of clean drinking water. ▪ On average, about 5.5 million people (10% of the total 2016 Population) are annually affected by droughts under the present climate.
Uganda	Flood and landslide	<p>2019</p> <ul style="list-style-type: none"> ▪ Bududa District's landslides caused six (6) deaths and injured 27 persons (13 males & 14 females). ▪ 80 households were displaced (480 people) ▪ Flash floods damaged houses of 111 households, with a population of 426 persons. ▪ The floodwaters destroyed crops, merchandise, animals, and properties worth millions of shillings. ▪ On average, at least 45,000 people, relatively few (around 40) education and healthcare facilities are affected. ▪ School-going children, youth, sick people, the elderly, men, and women are directly affected. ▪ Floods damaged houses and crops adjacent to it.
	Drought/High temperature	<ul style="list-style-type: none"> ▪ On average, around 4.5 million people are affected by food insecurity and water scarcity each year. ▪ Areas in the Southeast, North-eastern, and central regions of Uganda are prone to drought.
	Earthquake	<ul style="list-style-type: none"> ▪ Earthquakes are common on the western border where active seismic exist. ▪ Around 150,000 people could experience at least a light ground shaking at least once every 50 years.
	Volcano	<ul style="list-style-type: none"> ▪ A quarter a million people are exposed to volcanic hazards. ▪ Around 44,000 are exposed with a potential total replacement of \$400 million, of which \$57 million in education and health facilities.

Appendix II: Framework for analysis for a gender-responsive and social inclusiveness of disaster risk reduction

Actions	Measurement
<p>Integrating a Gender responsive and socially inclusive lens into designing the DRR policy, strategy, program or project</p>	<ul style="list-style-type: none"> • Recognizing that risk and vulnerability have a gender and social inclusion dimension, for example, that men, women, children, PWD, the elderly, Indigenous people differ in relation to disasters and this should guide all work related to DRR planning and implementation. • Include perspectives of men, women, children, PWD, the elderly, Indigenous people in planning/steering committee. • Hire a gender and social inclusion expert to collect, analyze and use sex-and gender disaggregated data. • Capacity build the staff with knowledge and skills to integrate GSI in their work.
<p>Conducting a risk analysis and vulnerability profile with a gender and social inclusion lens</p>	<ul style="list-style-type: none"> • Documents the different roles and responsibilities that men, women, children, PWD, the elderly, Indigenous people play in different sector of the economy • Assesses the social and gender dimensions of the risks addressed in the DRR policy, strategy/plan. For example, how are rural women and men’s livelihoods affected by a specific hazard? How could gender-based differences in decision-making power and ownership of/access to assets lead to different abilities to respond to hazards? What kinds of information do women, youth, PWD have and need to better prepare for hazards? What does this imply in terms of differences in vulnerability and coping capacity?
<p>Integrating gender equality and social inclusion among the guiding principles</p>	<ul style="list-style-type: none"> • Pledges to include men, women, children, PWD, the elderly, Indigenous people in DRR decision-making processes and in action implementation. • Makes a commitment to reduce the gender gap by detailing actions to empower women, children, PWD, the elderly, Indigenous people and meet the different priorities to disasters. • Including, within the vision of the plan, the achievement of equality and inclusion between men, women, children, PWD, the elderly, Indigenous people in order to build their resilience.
<p>Addressing the needs of men, women, children, PWD, the elderly, Indigenous people within Strategic Actions</p>	<ul style="list-style-type: none"> • Involving women, PWD, the elderly, Indigenous people in local DRR management committees and in related training to increase their access to early warning messages. • Identifying stakeholders that represent the views of women, children, PWD, the elderly, Indigenous people in institutional mechanisms for DRR planning and implementation. • Developing DRR actions in close consultation with target communities to integrate local knowledge and address the specific needs (both practical and strategic needs) of women, children, PWD, the elderly, Indigenous people to access resources, assets and knowledge to be able to successfully take on new approaches. • Designing DRR measures to ensure that hard-to-reach groups, such as women, PWD, the elderly, Indigenous people will have access to preparedness initiatives.
<p>Integrating GSI lens into DRR response strategy including budgeting and M&E</p>	<ul style="list-style-type: none"> • Defining who will be responsible to ensure that gender and social inclusion issues are integrated into DRR actions e.g., include gender specialists in the teams or committees who liaise with communities or develop the DRR plans. • Monitoring the DRR plan, by including gender-sensitive indicators, to track how different interventions impact the lives of men, women, children, PWD, the elderly, Indigenous people and assess whether progress is made towards gender equality and if corrective measures are needed (i.e. numbers of men and women and their forms of participation, such as whether they hold decision- making positions, who takes up the resilience-enhancing practice and their perceptions of the success of the practice).

	<ul style="list-style-type: none">• Including separate budget lines for gender-related actions, for example to conduct awareness-raising on the importance of including women, children, PWD, the elderly, Indigenous people and men as part of DRR decision-making bodies.• Identifying gender-responsive communication methods to reach men, women, children, PWD, the elderly, Indigenous people (i.e. train women responders, collaborate with local women's organizations)
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Appendix III: Disaster Profiles of Eastern Africa Countries

Comoros

Annually, Comoros experiences nearly USD 5.7 million direct losses from earthquakes, floods, and tropical cyclones (UNDRR, 2016). Tropical cyclone is the most significant risk of the three disasters causing 64% average loss per year, followed by flooding, which accounts for 35% (UNDRR, 2016), affecting the 80% of the residential sector. The average annual direct loss from flooding is \$2.0 million (WHO, 2019). Flood prone areas include Anjouan, Ouani, Comore, Moheli, and Grande Comore regions. Wind hazard occurs in the Anjouan region's southeast regions. Storm surge is greatest along the southern and eastern coasts of the country. Comoros is seismically active. However, damage from the earthquake is not common. The average annual direct loss from earthquakes is \$99,000 (Lemoine et al. 2020).

Djibouti

Djibouti has a very high degree of risk to natural hazards making it highly vulnerable to floods, droughts, heatwaves, and earthquakes (Razack, et al. 2019). Drought events are further exacerbated by climate change. Rising sea-level rise poses a significant threat to the country's coastline and increases the risk to port infrastructure and tourism along the coast (Razack, et al. 2019). 33% of the population lives in high hazard risk zones, and 35% of the economy is chronically vulnerable to floods and drought (World Bank, 2021). The country is expected to become hotter and drier in projected future climates (Girvetz et al. 2019). Sea level rise is projected and is expected to contribute to loss of agricultural land, infrastructure, and urban settlements (Kireyev, 2018).

Eritrea

Conflicts, floods, droughts, earthquakes, volcanic, disease epidemics and desert locust infestations afflicts Eritrea (WHO, 2019a). These natural disasters destroy crops, kill livestock, and drive food insecurity across the country ((WHO, 2019a). Eritrea also suffers a drought every three to five years constraining the economy (FAO, 2015). Refugees escaping from Somalia (2,426 refugees) and other countries is adding extra stress on the economy (Human appeal, 2018).

Ethiopia

Ethiopia is severely threatened by disasters induced by drought, floods, conflicts and other natural and human induced hazards. In the last 10 years, disasters have, in varying degrees, occurred every year. These have cost the Ethiopian government heavily in terms of both human lives and resources. Ethiopia shows a high vulnerability to drought conditions and records the highest number of droughts in the region. The areas worst hit have been on the border between Ethiopia-Djibouti, northern-Kenya, central and south Somalia, and Eritrea. The drought conditions in Ethiopia have a significant impact on food security, leaving more than 2.6 million people in need of emergency assistance (WHO, 2019.). The worst hits are the pastoralist in the southern and eastern regions where most communities are dependent on the rain-fed pastoral systems.

Madagascar

Annually, Madagascar experiences over 100 million USD direct losses from earthquakes, floods, and tropical cyclones (UNDRR 2016). Tropical cyclones and associated floods, storm surges and winds are by far the most significant risks, accounting for 98% of the annual average loss (UNDRR 2016). Tropical cyclones are common in the Southwest Indian Ocean region, the Northern half of Madagascar, particularly in the coastal region. Floods are experienced in the extreme north of the country, northern section, and southern zone along the eastern and western sections. Earthquakes are frequent but generally of low to moderate magnitude in local areas with active seismic such as Antananarivo, Mahajanga, and Toliary and Antsiranana. The highest loss occurs in the Toamasina region, which experiences nearly 30% of the average annual losses from the three disasters combined (UNDRR, 2016). Madagascar and the entire Indian Ocean region is at risk of a tsunami (UNDRR, 2016).

Kenya

Most parts of Kenya experience river floods which are slow onset and mostly predictable. However, the Kenyan government is inadequately prepared to deal with the impacts of disaster events (Nyakundi et al. 2010). Some parts of the Western and Coastal areas experience more severe floods that destroys crops, livestock and homes over vast areas. The country also registered a high death toll. Thousands of people living in the lowlands are forced to move to higher grounds or to temporary shelters. The problem has been perennial each time, taking back years of development and costing the government millions of shillings in reconstruction and recovery (WHO, 2019). A much smaller number of people are at risk of earthquakes, conflicts, landslides, and volcanic activity. Projected changes in climate-related changes are expected to increase droughts and floods in Kenya that will negatively affect the increasing population and expanding economy (GoK, XXX). To deal with disasters, the Kenyan government has enacted DRR legislations at national and sub-national level that are focussed on disaster preparedness and risk management.

Rwanda

Rwanda has limited disaster cases resulting from natural hazards but has sometimes experienced localized floods, strong winds, landslides, earthquakes and droughts that sometimes culminate in losing lives and property and people's displacement (MIDIMAR, 2015). The effects of the 1994 Rwanda genocide are still felt today, especially amongst adults who were children at that time (HRW, 2003). There are also disasters resulting from disease epidemics, road accidents, forest fires, and social conflicts that affect men, women, children, the elderly, the poor, and female-headed households (MIDIMAR, 2015). Disasters have had significant environmental and socio-economic impacts, posing a serious threat to livelihoods, food security, and economic growth (MIDIMAR, 2015).

Uganda

Water scarcity and floods pose a significant and recurring risk to Uganda. Drought is a recurrent hazard in Uganda, with the recent drought events occurring in 2010 and 2017 affecting areas near Lake Victoria and in the northeast. The arid and semi-arid regions of Uganda in the north and high population concentration in and around Kampala are susceptible to hydrological drought. Drought has had significant negative impacts on the economy and food security, although the impact is not as profound as in Ethiopia, South Sudan and Eritrea. On average, around 10% of the population experiences water scarcity each year with millions of people affected substantially higher in drier years. The 2017 drought left one million people in urgent need of food assistance (FAO, 2017). The most significant flood potential occurs during and following the most intense and sustained rainfalls in the March to May rainy season. Over 1000 flood events coupled with 480 deaths, 50,000 hectares damaged cropland, over 4 million indirectly affected people, and over 20,000 people have been evacuated or relocated since 2011 (Winsemius et al. 2018). Averagely, 45,000 people are affected by floods each year (WHO, 2019). A much smaller number of people are at risk of earthquakes, landslides, and volcanoes. A landslide on the slope of Mt Elgon in 2010 killed over 350 and relocation of up to 500,000 people (WHO, 2019). Earthquakes in active seismic areas like Western Uganda pose danger to infrastructure.

Tanzania

Tanzania experiences two major hazards: floods and droughts. Floods affects about 0.26% of the country's total population (UNISDR, 2018). Under future climate conditions, this percentage is expected to increase to 32% (UNISDR, 2018). The most affected sectors are agriculture (crop and livestock) and transport sectors, which results in food insecurity, shortage of clean drinking water and damaged infrastructure. For example, in 2019 uninterrupted rainfall caused serious flooding in the city of Dar es Salaam leading to displacement of 1,215 households, 1,560 homes swept away and destroyed roads and bridges (Bird, 2019). The loss was estimated between US\$107-227 million (Bird, 2019). This is a recurring event as similar incidents occurred in 2009, 2010, 2011, 2014, 2015, 2017 and 2018 (Elia, 2018).

South Sudan

Conflicts, floods, drought, storms and wildfires cause widespread damage across South Sudan. For example, the conflict and severe droughts of 2018 left 7.1 million people in need of emergency response (Anyadike, 2019). Recurring drought events affects about 60% of the population (Nimir and Elgizouli, 2017). Malnutrition levels are critical, with about 860,000 children under the age of five estimated to be severely malnourished (UNICEF, 2019).

Appendix IV: List of identified DRR initiatives in the ten countries in eastern Africa

Country	Initiative	Title of Initiative	Status	Level of GSI integration ¹⁷	Amount of Funding (USD)
Comoros	Project	Strengthening Infrastructure Resilience in the Comoros	Ongoing	1	300,000
Comoros	Project	Support to Comoros damage assessment from cyclone Kenneth	Ongoing	2	99,948
Comoros	Program	Disaster risk profiling of Comoros	Ongoing	1	Unavailable
Comoros	Project	Comoros Post-Kenneth Recovery and Resilience Project	Ongoing	2	45,000,000.00
Comoros	Strategy/Plan	The Arab strategy for disaster risk reduction	Ongoing	1	Unavailable
Comoros	Strategy/Plan	Disaster Risk Management in the Islands of the Indian Ocean	Closed	1	Unavailable
Comoros	Strategy/Plan	National Determined Contributions	Ongoing	2	Unavailable
Djibouti	Project	Strengthening Djibouti's National Response Capacity to Natural Hazards	Ongoing	1	600,000
Djibouti	Project	Drought Post Disaster Needs Assessment	Closed	3	119,982.00
Djibouti	Project	Pursuing low climate adaptation disaster risk reduction in Djibouti	Closed	1	2,700,000.00
Djibouti	Strategy/Plan	National Determined Contributions (NDCs)	Ongoing	1	Unavailable
Eritrea	Strategy/Plan	Support the Return of IDPs & Expellees to Communities of Origin or New Resettlement	Closed	2	60,975,000
Eritrea	Strategy/Plan	National Determined Contributions (NDCs)	Ongoing	2	Unavailable
Eritrea	Project	Crisis Prevention & Recovery	Closed	1	60,975,000
Ethiopia	Policy	National policy and strategy on disaster risk management	Ongoing	3	Unavailable
Ethiopia	Policy	Policy and Institutional Framework for Effective Disaster Risk Management in Ethiopia	Ongoing	3	Unavailable
Ethiopia	Program	Disaster Risk Management Strategic Programme Investment Framework	Ongoing	3	Unavailable
Ethiopia	Program	Enhancing Urban Resilience in Addis Ababa, Ethiopia	Closed	1	Unavailable
Ethiopia	Project	Decentralisation of Disaster Risk Management in Ethiopia	Ongoing	1	40,968,825.00
Ethiopia	Project	Capacity Building in Post Disaster Needs Assessment	Closed	1	46,682
Ethiopia	Project	Building Capacity for Woreda Disaster Risk Reduction and Climate Change Adaptation	Ongoing	4	744,051
Ethiopia	Project	Disaster Risk profiling Ethiopia	Ongoing	1	Unavailable
Ethiopia	Strategy/Plan	Local Disaster Risk Reduction Planning	Closed	2	66,737.44
Ethiopia	Strategy/Plan	Ethiopia Drought Risk Management	Closed	4	Unavailable
Ethiopia	Strategy/Plan	National Determined Contributions (NDCs)	Ongoing	3	Unavailable

¹⁷ **Level 1:** No reference to gender responsive and social inclusion; **Level 2:** Gender responsive and social inclusion mentioned in overall objectives but absent from subsequent implementation levels; **Level 3:** Gender responsive and social inclusion clearly presented as one relevant entry point in relation to main objective, but absence of clear road map leading to implementation; **Level 4:** Gender responsive and social inclusion included in action plan, but absence of clear earmarked resources for implementation; **Level 5:** Gender responsive and social inclusion included in DRR initiative from objective to action plan, with clear resources identified for implementation

Country	Initiative	Title of Initiative	Status	Level of GSI integration ¹⁷	Amount of Funding (USD)
Ethiopia	Strategy/Plan	National Adaptation Plan (NAPs)	Ongoing	2	Unavailable
Ethiopia	Project	Battling Hunger in Ethiopia	Closed	1	Unavailable
Kenya	Act/Law	Tana River County Disaster Risk Management Act	Ongoing	1	Unavailable
Kenya	Act/Law	Garissa County Emergency Fund Act	Ongoing	1	Unavailable
Kenya	Act/Law	Samburu County Disaster management Act	Ongoing	2	Unavailable
Kenya	Act/Law	West Pokot County Disaster Management Act	Ongoing	1	Unavailable
Kenya	Act/Law	Embu County Emergency Fund	Ongoing	1	Unavailable
Kenya	Act/Law	Kwale County Disaster Management Fund Act	Ongoing	2	Unavailable
Kenya	Act/Law	Nyeri County Emergency Fund Act	Ongoing	1	200000
Kenya	Act/Law	Makueni County Emergency Fund	Ongoing	5	Unavailable
Kenya	Act/Law	Meru County Disaster Management Act	Ongoing	1	Unavailable
Kenya	Act/Law	Kilifi County Disaster Management Act	Ongoing	1	Unavailable
Kenya	Act/Law	Nandi County Disaster Management Act	Ongoing	1	Unavailable
Kenya	Act/Law	Kakamega County Disaster Management Regulations	Ongoing	2	Unavailable
Kenya	Act/Law	Bomet County Disaster and Emergency Management Act	Ongoing	1	Unavailable
Kenya	Act/Law	Kajiado County Disaster Management Act	Ongoing	1	Unavailable
Kenya	Act/Law	Kisumu County Disaster and Emergency Management Act	Ongoing	1	Unavailable
Kenya	Act/Law	Kisii County Disaster Management Act	Ongoing	1	Unavailable
Kenya	Bill	Nairobi City County Disaster and emergency management Bill	Ongoing	1	Unavailable
Kenya	Bill	Vihiga County Disaster Management Bill	Ongoing	1	Unavailable
Kenya	Bill	Bungoma County Emergency Fund Bill	Ongoing	1	Unavailable
Kenya	Bill	Taita Taveta County Emergency Fund Bill	Ongoing	2	Unavailable
Kenya	Bill	Kitui County Emergency Fund Bill	Ongoing	2	Unavailable
Kenya	Bill	Isiolo County Emergency Fund Bill	Ongoing	1	Unavailable
Kenya	Bill	Wajir County Disaster Management Bill	Ongoing	1	Unavailable
Kenya	Bill	Trans Nzoia County Disaster and Emergency Management Bill	Ongoing	1	Unavailable
Kenya	Bill	Mombasa County Disaster preparedness and emergency management bill	Ongoing	1	Unavailable
Kenya	Bill	Siaya County Disaster management bill	Ongoing	1	Unavailable
Kenya	Bill	Nakuru County Disaster and Emergency Management Bill	Ongoing	1	Unavailable
Kenya	Bill	Kericho County Disaster Management Bill	Ongoing	1	Unavailable
Kenya	Bill	Busia County Disaster Management Act	Ongoing	2	Unavailable
Kenya	Bill	Homa Bay County Disaster and Emergency Management Act	Closed	2	Unavailable
Kenya	Bill	Baringo County Disaster Management Bill	Ongoing	1	Unavailable

Country	Initiative	Title of Initiative	Status	Level of GSI integration ¹⁷	Amount of Funding (USD)
Kenya	Bill	National Disaster Management Authority Bill in Kenya	Ongoing	3	Unavailable
Kenya	Policy	National policy for Disaster Management in Kenya	Ongoing	3	340000000
Kenya	Policy	Laikipia County Disaster Risk Management Policy	Ongoing	1	Unavailable
Kenya	Policy	Turkana County Disaster Risk Management Policy	Ongoing	1	Unavailable
Kenya	Program	Disaster risk profiling	Ongoing	1	Unavailable
Kenya	Project	Disaster Risk Management Project	Closed	1	305000
Kenya	Project	Drought Recovery Project	Ongoing	1	200000
Kenya	Project	Refugee Host Community Project	Closed	2	709036
Kenya	Project	Effective governance for disaster risk reduction in Kenya	Ongoing	1	1,000,000
Kenya	Project	Kenya Integrated Climate Risk Management Project	Ongoing	3	110,000.00
Kenya	Project	Strengthening Local Resilience to Climate Change and Conflict in Kenya	Ongoing	4	100,000
Kenya	Project	TA Kenya - Fortifying Institutional, Planning and Policy Frameworks to Manage Climate and Disaster Risk	Ongoing	2	400,000
Kenya	Project	Devolution and Locally-Led Disaster Risk Management	Ongoing	2	424,844
Kenya	Project	Climate Resilience of Kenya's Coastal Communities	Ongoing	1	250,000
Kenya	Project	Integrating Resilience into Urban Infrastructure and Services in Nairobi Metropolitan Region	Ongoing	1	199,932
Kenya	Project	Fortifying Institutional, Planning and Policy Frameworks to Manage Climate and Disaster Risk	Ongoing	1	400,000
Kenya	Project	Post Election Violence (PEV) Livelihoods Recovery Project	Closed	2	694,044.12
Kenya	Project	Kenya Integrated Climate Risk Management Project	Ongoing		254,675.05
Kenya	Strategy/Plan	Narok County Flood Early Warning Communication Strategy	Ongoing	1	Unavailable
Kenya	Strategy/Plan	National Adaptation Plan (NAPs)	Ongoing	5	Unavailable
Kenya	Strategy/Plan	National Determined Contributions (NDCs)	Ongoing	5	Unavailable
Kenya	Strategy/Plan	Kalobeyei Integrated Socioeconomic Development Plan (KISEDIP)	Closed	3	Unavailable
Madagascar	Policy	Madagascar Disaster Risk Management Policy	Ongoing	2	61,700,000.00
Madagascar	Program	Madagascar's Efforts to Reduce Disaster Risk	Ongoing	2	61,700,000.00
Madagascar	Program	Training to incorporate disaster and risk reduction into educational plans and strategies in Madagascar	Ongoing	1	Unavailable
Madagascar	Project	Natural Disasters and Social Protection Systems in Madagascar	Ongoing	2	100,000
Madagascar	Project	Building Urban Resilience in Greater Antananarivo, Madagascar	Ongoing		500,000

Country	Initiative	Title of Initiative	Status	Level of GSI integration ¹⁷	Amount of Funding (USD)
Madagascar	Project	Adapting Madagascar's Safety Net Programs to Climate Change	Ongoing	3	250,000
Madagascar	Project	Social Resilience in Southern Madagascar- Inclusive Community Resilience Initiative	Ongoing	3	850,000
Madagascar	Project	Reducing the effects of hazards and protected from damage for sustainable development	Ongoing	1	Unavailable
Madagascar	Project	Effective measures to build resilience in Africa to adapt to climate change	Closed	1	Unavailable
Madagascar	Project	Law and Regulation to Supports Disaster risk reduction	Ongoing	1	Unavailable
Madagascar	Project	Supporting disaster prevention and risk management in Antananarivo, Madagascar	Closed	2	Unavailable
Madagascar	Project	Support the Establishment of a Technical Centre for Disaster Risk Reduction and Climate Change Adaptation	Closed	1	897,399
Madagascar	Strategy/Plan	National Disaster Risk Management Strategy	Ongoing	1	Unavailable
Madagascar	Strategy/Plan	National Determined Contributions (NDCs)	Ongoing	2	Unavailable
Madagascar	Project	Tracking public investments for disaster reduction and recovery	Ongoing	1	471,000,000.00
Regional	Policy	Climate Change Policy, Strategy and Master Plan	Ongoing	2	Unavailable
Regional	Program	Promoting effective resilience investment delivering peace, agriculture led growth and socio-economic transformation in the Horn of Africa	Ongoing	3	1,000,000,000.00
Regional	Program	African Disaster Risk Financing Initiative	Ongoing	5	Unavailable
Regional	Project	Regional Disaster Risk Reduction capacity building project	Closed	1	Unavailable
Regional	Project	Mitigating Ethnicity, Land and Conflict in Eastern Africa	Closed	2	391,135.00
Regional	Project	Reducing displacement risk in the Greater Horn of Africa: A baseline for future work	Ongoing	1	Unavailable
Regional	Project	Disaster risk reduction for resilience and sustainable development in the Arab region	Ongoing	1	Unavailable
Regional	Project	Regional Disaster Resilience and Sustainability Program	Closed	1	Unavailable
Regional	Project	Catastrophe Risk Profiling and Financing Initiative	Closed	2	1,269,077
Regional	Project	Regional Risk Financing Framework for Agriculture and Food Security in Southern Africa	Ongoing	3	364,000
Regional	Project	Strengthening Disaster Prevention Approaches in Eastern Africa - (STEDPEA)	Ongoing	1	1,000,000.00
Regional	Strategy/Plan	Protocol on Environment and Natural Resources Management	Ongoing	1	Unavailable
Regional	Strategy/Plan	East Africa Community Peace and Security Strategy	Ongoing	3	Unavailable
Regional	Strategy/Plan	National coordination mechanisms, legal frameworks and national plans for disaster risk reduction in Africa	Closed	1	Unavailable
Regional	Strategy/Plan	Aqaba declaration on disaster risk reduction in cities	Ongoing	1	Unavailable
Regional	Strategy/Plan	International Red Cross Plan	Closed	3	2,188,902.00
Regional	Strategy/Plan	Regional Strategy for Integrated Disease Surveillance and Response	Ongoing	1	Unavailable

Country	Initiative	Title of Initiative	Status	Level of GSI integration ¹⁷	Amount of Funding (USD)
Rwanda	Policy	Environment and Climate Change Policy	Ongoing	2	Unavailable
Rwanda	Policy	The National Disaster Management policy	Ongoing	2	Unavailable
Rwanda	Project	Development of Comprehensive Disaster Risk Profiles for Enhancing Disaster Management	Closed	1	652,221.00
Rwanda	Project	Green Growth and Climate Resilience National Strategy for Climate Change and Low Carbon Development	Ongoing	2	Unavailable
Rwanda	Project	Disaster Risk Reduction and Prevention in Rwanda	Closed	2	52,635.00
Rwanda	Project	Public Investment Planning for Disaster Risk Reduction	Ongoing	2	224,111,773.00
Rwanda	Project	Building National and Local Capacities for Disaster Management in Rwanda	Ongoing	2	3,710,249.00
Rwanda	Strategy/Plan	National Disaster Risk Management Plan (NDRMP)	Ongoing	1	Unavailable
Rwanda	Strategy/Plan	National Development Plan of Rwanda	Ongoing	2	Unavailable
Rwanda	Strategy/Plan	National Determined Contributions (NDCs)	Ongoing	1	Unavailable
South Sudan	Program	Disaster Risk Management (DRM) programme	Ongoing	2	Unavailable
South Sudan	Project	Transforming Communities through investment in Disaster Risk Reduction	Ongoing	1	Unavailable
South Sudan	Project	Reducing hunger and malnutrition and promoting food production in Cueibet County, South Sudan	Ongoing	1	Unavailable
South Sudan	Strategy/Plan	MHADM strategic plan	Closed	1	Unavailable
South Sudan	Strategy/Plan	National Disaster Management Strategic Plan for South Sudan	Ongoing	2	Unavailable
South Sudan	Strategy/Plan	New National Disaster Risk Management Strategy for South Sudan	Ongoing	1	Unavailable
South Sudan	Strategy/Plan	Community-Based Disaster Risk Management Planning	Ongoing	2	Unavailable
South Sudan	Strategy/Plan	National Determined Contributions (NDCs)	Ongoing	1	Unavailable
Tanzania	Policy	The Disaster Management Act	Ongoing	1	Unavailable
Tanzania	Policy	Zanzibar Disaster Management Policy	Ongoing	1	Unavailable
Tanzania	Project	Strengthening Drought Resilience in Tanzania	Ongoing	1	200,000
Tanzania	Project	Floods Post Disaster Needs Assessment	Ongoing	1	50,000
Tanzania	Project	Ramani Huria Initiative	Ongoing	1	Unavailable
Tanzania	Project	Strengthening Tanzania's Disaster Response Project (STDRP)	ongoing	2	Unavailable
Tanzania	Project	Disaster Management	Ongoing	1	Unavailable
Tanzania	Strategy/Plan	Building Disaster Resilience to Natural Hazards in Sub-Saharan Africa regions, countries and communities	Ongoing	1	Unavailable
Tanzania	Strategy/Plan	Disaster Risk Reduction	Ongoing	1	Unavailable

Country	Initiative	Title of Initiative	Status	Level of GSI integration ¹⁷	Amount of Funding (USD)
Tanzania	Strategy/Plan	Tanzania Emergency Preparedness and Response Plan (TEPRP)	Ongoing	3	Unavailable
Tanzania	Strategy/Plan	National Determined Contributions (NDCs)	Ongoing	2	Unavailable
Tanzania	Strategy/Plan	Tanzania Disaster Communication Strategy (TDCS)	Closed	2	Unavailable
Uganda	Policy	The National policy for disaster preparedness and management	Closed	2	Unavailable
Uganda	Policy	A Guide to conflict and disaster risk management in educational institutions in Uganda	Closed	1	Unavailable
Uganda	Policy	The National Policy for Disaster Preparedness and Management	Closed	2	Unavailable
Uganda	Project	Governance of disaster risk reduction and management in Uganda	Closed	1	Unavailable
Uganda	Project	Building Urban Resilience in Uganda	Ongoing	1	200,000
Uganda	Project	Strengthening Capacities for Disaster Risk Management and Resilience Building project	Closed	1	3,968,708.00
Uganda	Project	Disaster risk management and oil production in Uganda	Closed	1	Unavailable
Uganda	Project	Community Managed Disaster Risk Reduction Approach in Managing Disaster in Uganda	Ongoing	1	Unavailable
Uganda	Project	Making Cities Resilient: Supporting Cities In Uganda Towards The Development Of Local Disaster Risk Reduction Strategies	Ongoing	1	Unavailable
Uganda	Strategy/Plan	Risk Assessment and Resilience Action Plan	Ongoing	2	950,000
Uganda	Strategy/Plan	National Determined Contributions (NDCs)	Ongoing	2	Unavailable
Uganda	Project	Disaster Risk Reduction And Climate Change Adaptation Programme (DRR & CCA)	Ongoing	2	Unavailable
Uganda	Project	Agriculture Development For Enhanced Livelihoods Programme (AGRID)	Closed	2	Unavailable