

# **Undertake cross-border analysis of the gendered impacts of climate-induced hazards in Malawi, Mozambique, and Zimbabwe**

## **Combined Final Report ( Draft)**

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## Acronym :

AAP	Accountability to Affected Population
ADP	Annual Development Programme
AfDB	African Development Bank
AIP	Affordable Inputs Programme
CBFEWS	Community Based Flood Early Warning Systems
CBO	Community based Organizations
CBOs	Community Based Organization
CERF	Central Emergency Response Fund
CFSVA	Comprehensive Food Security and Vulnerability Assessment
CPC	Civil Protection Committee
CRVA	Climate Risk and Vulnerability Assessment
CSO	Civil Society Organization
DCCMS	Meteorological Agency
DCP	department of Civil Protection
DCPC	District Civil Protection Committee
DDPs	District Development Plans
DDRMC	District Disaster Risk Management Committee
DEC	District Executive Committees
DEM	District Education Manager
DIS	District Information Systems
DNA	Designated National Authority
DNCC	District Nutrition Coordination Committee
DRM	Disaster Risk Management
DRMA	Disaster Risk Management Act
DRMIS	Disaster Risk Management Information System
DRP Act.	Disaster Relief and Preparedness Act
DRR	Disaster Risk Reduction
DRVA	Disaster Risk and Vulnerability Assessment
DSWO	District Social Welfare Office
DWR	Department of Water Resources
EAD	Environmental Affairs Department
EOC	Emergency Operations Centre
EUMETCast	EUMETCast Europe
EWS	Early Warning System
FAO	Food and Agricultural Organization
FEWS	Flood Early Warning System
FEWSNET	Famine Early Warning System Network
FFS	farmers field school
FGD	Focus Group Discussion
FISP	Farm Input Subsidy Programme
GAM	Global Acute Malnutrition
GBV	Gender Based Violence
GCF	Green Climate Fund
GDP	Gross Domestic Product
GFDRR	Global Facility for Disaster Reduction and Recovery

GFS	Gravity Fed Systems
GHI	Global Hunger Index
GiHA	Gender in Humanitarian Action
GIS	Geographical Information System
GNI	Gross National Income
GoM	Government of Malawi
GSD	Geological Survey Department
GVH	Group Village Headmen
HCT	Humanitarian Country Team(UN)
HIV	Human Immunodeficiency Virus
ICS	incidence command system
ICTZ	Inter-Tropical Convergence Zone
IDP	Internally Displaced Persons
IDSR	International Strategy for Disaster Reduction
IEC	Information Education and Communication
IFAD	International Fund for Agriculture
IFM	Integrated Farm Management
IGA	Income Generating Activities
ILO	International Labor Organization
INFORM	Index For Risk Management
INGD	Instituto Nacional de Gestão e Redução do Risco
INGO	International non-governmental organization
INM	Integrated Nutrition Management
IOM	International Organization for Migration
IPCC	Intergovernmental Panel on Climate Change
IVR	Interactive Voice Response
KII	Key Informant Interview
LDF	Local Development Fund
MDF	Malawi Defense Force
MDG	Millennium Development Goals
MGDS	Malawi Growth and Development Strategy
MICS	Multiple Indicator Cluster Surveys,
MIS	Management Information System
MoA	Memorandum of Understanding
MoAIWD	Ministry of Agriculture, Irrigation and Water Development
MOH	Ministry of Health
MoLGRD	Ministry of Local Government and Rural Development
MPHC	Malawi Public Health Committee
MRCS	Malawi Red Cross Society
MSMEs	Micro Small and Medium Enterprises
MVAC	Malawi Vulnerability Assessment Committee
NABOP	National Accounts and Balance of Payment
NAP	National Adaptation Funds
NCIC	National Construction Industry Council
NDC	Nationally Determine Contribution
NDMO	National Disaster Management Organization
NDPRC	National Disaster Preparedness and Relief Committee

NEOC	National Emergency Operations Centre
NEP	National Environment Policy
NER	Net Enrollment Rate
NFIs	Non-Food Items
NGOs	Non-Governmental Organizations
NHP	National Housing Policy
NMHS	National Meteorological Hydrological Organization
NNPSP	National Nutrition Policy and Strategic Plan
NRS	National Resilience Strategy
NRU	Nutrition Rehabilitation Unit
NSO	National Statistical Office
NWP	Numerical Weather Prediction
ODF	Open Defecation Free
ODSS	Operation Decision Support System
OPC	Office of President and Cabinet
PDNA	Post-Disaster Needs Assessment
PDNA	Post Disaster Needs Assessment
PiN	People in Need
RENA	rapid emergency needs assessment
REOC	Regional Emergency Operations Centre
SADD	Sex, Age and Disability Disaggregated Data
SAM	Severe Acute Malnutrition
SARCOF	Southern Africa Regional Climate Outlook Forum
SDGs	Sustainable Development Goals
SEA	Sexual Exploitation and Abuse
SEP	Social Economic Profile
SGBV	Sexual and gender-based violence (SGBV)
SGBV	Sexual and Gender Based Violence
SME	Small and Medium Enterprise
SMES	Small and Medium-Size Enterprises
SMS	Short Messaging Service
SoD	Standing Orders on Disaster
SoP	Standard Operating Procedures
STI	Sexually Transmitted Infection
SVADD	Shire Valley Agriculture Development Division
TA or T/A	Traditional Authority
TCF	Tropical Cyclone Freddy
TWG	Technical Working Group
UBR	Unified Beneficiary Register
UN	United Nations
UN Women	United Nations Women
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNOPS	United Nations Office for Project Services
UNRCO	United Nations Office of the Resident Coordinator's Office.
MVAC	Malawi Vulnerability Assessment Committee

VAC	Vulnerability Assessment Committee
VDC	Village Development Committee
VHF	Very High Frequency
VSLA	Village Savings and Loans Associations
WASH	Water, Sanitation and Hygiene
WLO	Women Led Organization
WMO	World Meteorological Organization
WOLREC	Women's Legal Resources Centre
WRD	Women Resilience to Disaster
ZimVAC	Zimbabwe Vulnerability Assessment Committee

## Executive Summary of Cross-border Analysis:

The Women Resilience to Disasters (WRD) the wholistic issues of addressing intricacies of gender and climate insecurities and how to improve and retrofit the Disaster Risk Management (DRM) governance with a shift from traditional DRM paradigm to tools, methodology, process, and engagement driven robust risk management system where most vulnerable group ( women, girls, youth, children, disable population, elderly ) at the frontline be able to sustain from climatic shocks and enabling them in subsistence livelihoods over the changing climatic phenomena.

Women and gender groups face daunting challenges for their livelihood sustainability, e.g., persistent and protracted food & human insecurity, poverty, social inequalities, and limited access to basic service deliveries of women and other gender groups because of a systematic masculine dominance governance system and top-down bureaucracies. The assessment countries (Malawi, Mozambique, Zimbabwe) are geographically positioned in most sub-tropical hydrometeorological hazard-prone regions and have landscape vulnerabilities those being induced by terrain, geographical, and topographical settings, narrow and shallow river and drainage systems, floodplain agroecology, etc., making these regions multi-hazard risk-prone, and socioeconomic structures, settlements, and croplands are being impacted. Over the hydrometeorological settings, again those areas falling under multiple risk factors, viz., the West Indian Ocean cyclonic zones, subtropical climatology, and rainfall variabilities, including both torrential rainfalls that induce flash flooding and hydro-meteorological droughts. In any given circumstance, heavy rainfalls could trigger tremendous flash flooding, river flooding due to the terrain landscape, shallow river and drainage system, and insufficient flood control mechanisms in the cross-border downstream country/region. Other recurrent hydrometeorological phenomena, such as hydrometeorological droughts, agricultural droughts, and flash droughts, significantly impact crop yields in the region, leading to agricultural yield loss and persistent food insecurity and famine.

Within the context of demographic and socioeconomic vulnerability, roughly 60% of the agricultural workforce are climate frontline women at the last mile, and a significant portion are single mothers and widows, whose livelihood security is tied to the climate-hindered landscape ecosystem's productivity and dependency on agroecology and natural resources. The socio-economic vulnerabilities are persistent and stem from protracted poverty, extremely limited access to agroecology, and inadequate agricultural value chains for subsistence livelihoods. The service deliveries of central and local governments, as well as other stakeholders, to the last mile are insufficient for making frontline livelihoods adaptive to climate-induced hazards and enhancing coping capacities to absorb climate change shocks.

The gender empowerment governance process requires much-needed gender machinery to mandate and inform planning, decision-making, and gender-responsive intervention, but the assessment identified systemic gender inclusivity gaps for instrumentalizing the gender machinery with proportionate gender participation in legislation and governance processes, inclusivity of gender dimension in every sphere of governance and decision-making process and gender-responsive risk reduction and development planning & budgeting and interventions. The assessment proposed several methodologies, tools, and processes to inform every sector department on identifying entry points to reinforce policy, strategy, and actionable planning that must consider gender equality, empowerment, socioeconomic vulnerability, and community-level disaster risk reduction measures. Recommendations are being proposed for improvements to the traditional paradigm of the disaster risk management structure and process into risk-informed, gender-responsible, robust DRM/DRR/CCA intervention planning and decision-making.

The assessment proposed several strategic methodologies, ICT tools, and processes on how to improve the climate and multi-hazard risk and vulnerability assessment capacity, participatory roadmap, and stakeholder( assessment committee, civil protection committee, local level CSOs, youth group, and frontline vulnerable community as a whole ) management methodology, process and tools for conducting multi-level risk and vulnerability assessment for essentially meeting the demands of the risk-informed and gender-responsive planning process. The assessment identified areas where capacity enhancement of key state actors and non-state actor stakeholders is essential for effective DRM/DRR service delivery.

The assessment identified various systemic gaps in technical, methodological, forecasting preparation, bulletin development, forecast impact analysis, and dissemination to every remote corner, etc., for making early warning

available for all. Considering the early warning for all (EW4ALL) for system development, deployable and actionable to reaching out to the remotest corner, the country level needs an enhanced institutional capacity in early warning development, impact forecasts, dissemination in local languages, and understandability by the vulnerable community living in the hard-to-reach areas and the tools for receiving the warning (radio/TV/Pager/Wireless Loop/Drone Radio, etc.). A comprehensive methodological approach is being proposed on how to upgrade the early warning system with service delivery at the community level.

Assessment revealed inadequate DRM coordination structures, stakeholder engagement, and processes at the country level, which hindered effective government management at the local level. The evaluation recommended strategic solutions to bridge the gaps in risk capture, risk analysis, vulnerable group-based risk communication, and dissemination to end-users, triggering forecast-based anticipatory early actions, particularly for saving women, girls, youth, children, and other vulnerable groups. The assessment systematically recommended how to improve the entire DRM value chain and nexus (DRM structural process, stakeholder partnership mapping, coordination structure, Tools, methodology, process, and engagement) with standing orders to undertake effective engagements and take timely action for disaster emergency preparedness and response mechanisms at the local level. The UN cluster system needs to be proactively engaged in country-level stakeholder capacity-building mechanisms, Loss and damage (L&D) assessment, preparedness, and response planning.

## 1.0 Introduction

The cross-border assessment is intended to analyze the gendered impacts of climate-induced hazards in Malawi, Mozambique, Zimbabwe and seeks to explore how gender groups ( women, girls, children, persons with disability, men, and elderly) those Southern Africa are differently impacted by climate change in terms of the physiological, political, economic and societal causes for the differences experienced, the current coping and adaptation strategies and capacities to climate-induced disasters that the variability the group adopts, the capacity of women and men be strengthened to better adapt to climate change and climate variability, explore the role of women and women-led organizations in disaster preparedness and response planning, and to review key DRM policies in target countries and identify key entry points for gender integration.

### 1.1 Gender dimension of the assessment countries

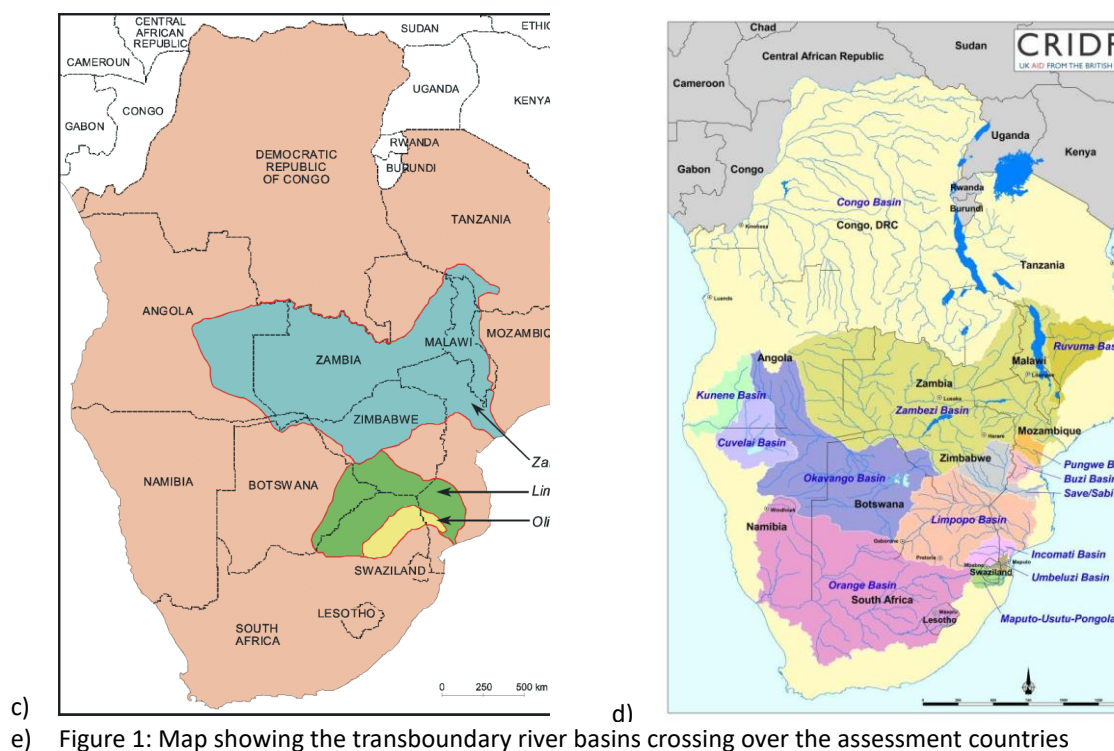
Gender dimensions in government system structures are processes that recognize countries as prototypes and predominantly feature gender-affirmative characteristics when it comes to mainstreaming gender issues across all policies and programs. On the other hand, at the intervention level, it is less instrumentalized as the policy, program, and interventions are inadequately addressing the priorities of gender groups and also inadequately climate risk-informed. The root causes appear to be the low number of women and the underrepresentation of the gender group in the governance system, development planning, and decision-making processes, mainly because gender is not well represented in government power domains, such as legislation, administrative bureaucracy, financial management, local governance systems, and entrepreneurship development. The assessment identifies that the government service delivery systemic structures and processes are fundamentally centralized and bureaucratic, and the local-level development decision-making paradigm is not adequately participatory and inclusive. Therefore, the devising and the gender dimensions of achieving the broader aspect of Women's Resilience to Disasters (WRD) need to incorporate the gender dimension into government domains, structures, and development decision-making processes. However, the assessment proposed a gendered risk management framework, strategy, and approaches for improving the types of machinery used in gender-specific disaster risk management programs and interventions.

### 1.2 Multi-hazard Background of the study area

The country's diverse geographical & geological settings, proximity to the Indian Ocean, terrain topography, and positioning over the Subtropical climatological zone make it highly vulnerable to hydrometeorological hazards. The part of the transboundary Zambezi, Limpopo, Olifants, and country-level internal river basins, catchments, and hydrologically active flood-prone zones triggers the flooding. In any given circumstance of a cyclone accompanied by constant rainfall, the sudden occurrence of heavy rainfall is likely to trigger flash flooding in downstream settlements.

#### **The climate risk and vulnerability factors of the cross-border countries.**

- a) Proximity of the Indian west coast of the Indian Ocean: Vulnerability to western Indian Ocean tropical cyclones. The Indian Ocean is spawning strong and deadly tropical cyclones.
- b) Positioning of Intertropical Convergence Zones or Doldrums area: Largely impacted by ICTZ, sub-tropical metrologies, Sub-tropical climatology, El Niño -During the October-November-December (OND) season, erratic rainfall alternated between below and above-average patterns in the region, etc. Several studies indicate that the warm Mozambique Channel becomes favorable for the development of tropical cyclones due to specific synoptic conditions. The buildup of settlements, basic utility structures, and other elements in vulnerable, lower flood-prone areas caused the larger loss and damage from the rapid-onset cyclone, accompanied by thundershowers, which induced heavy rainfall and other torrential downpours.



### 1.3 Overview of historical disasters

#### Malawi :

Malawi has been experiencing increased frequency, intensity, and magnitude of extreme weather events. From 1975 to 2024, over 50 disaster incidents caused by extreme hydrometeorological hazards and the aftermath of disaster shocks have reached another level of disaster, including outbreaks of disease/, caused by the ripple effects of floods/waterlogging. The table below displays the number of disaster events that have occurred over the past 48 years.

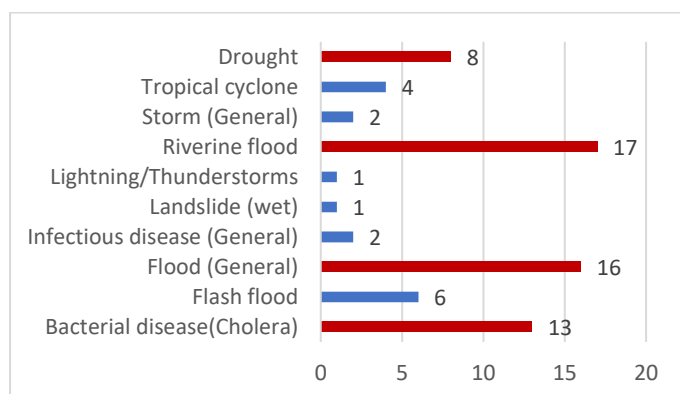


Figure: Malawi Disaster events (1975-2023) : Source EM-DAT

The above disaster incidence graph shows that over the last 48 years, Malawi has experienced floods, droughts, and tropical cyclones, and incidentally, the post-disaster flooding induced cholera/diarrheal outbreaks, which also cause mortalities of children, women, and youth due to inadequate emergency WASH and hygiene services at the last mile. In the Gender Development Index 2022, Malawi ranked 172nd out of 193, indicating poverty, inequality, and inadequate stakeholder interventions for gender empowerment.

#### Mozambique :

Mozambique has been experiencing increased frequency, intensity, and magnitude of extreme weather events. Since 1975, over 50 disasters have been triggered by hydrometeorological events.

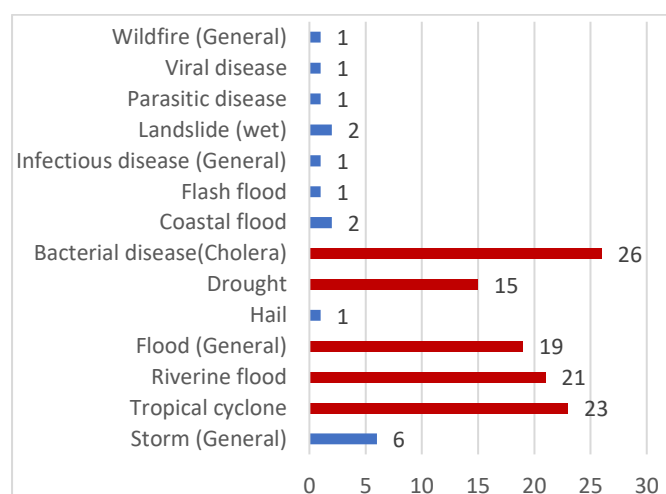


Figure: Mozambique Disaster events (1975-2023) : Source EM-DAT

The table above shows the number of disaster events, showing that over the last 48 years, Mozambique has experienced tropical cyclones, floods, droughts, and incidentally, the post-cyclone/flooding-induced cholera/diarrheal outbreaks, which also cause mortalities of children, women, and youth for inadequate emergency WASH and hygiene services at the last mile.

#### Zimbabwe:

In the Zimbabwean Population of 16.2 million (2023), 68% currently reside in rural areas, while only 32% of the population live in urban areas (ZimStat, 2017). In the gender development index, 2022 reveals that Zimbabwe ranked 159 out of 193, which shows that the country's most significant female population lives in abject poverty, gender inequality, and an inadequate level of gendered risk-informed development and DRR interventions at the local level.

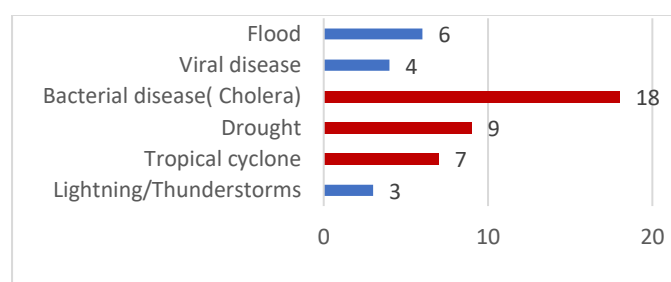


Figure 2 : Zimbabwe, Disaster events (1975-2023) : Source EM-DAT

The EM-Dat database (1975-2023) shows that over the last 48 years, Zimbabwe has experienced droughts, floods, and tropical cyclones, and incidentally the highest incidence of cholera/diarrheal outbreaks, the aftermath of the heavy rainfall and cyclone-induced flooding, which represents inadequate disaster preparedness and response mechanisms at the last mile.

#### 1.4 Analysis of Disaster trends:

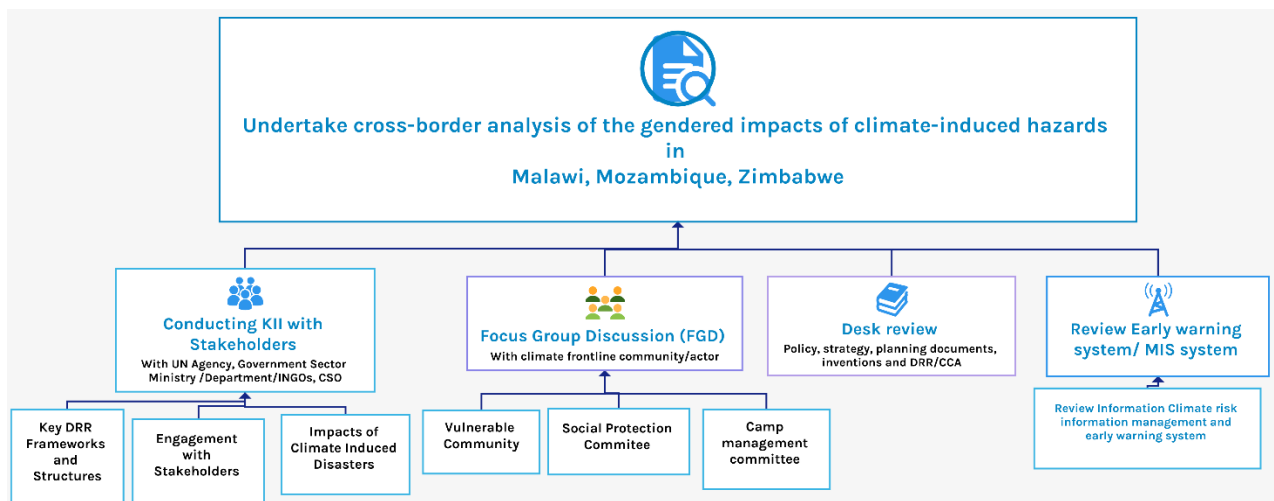
The last 50 years of disaster analytics, show that riverine and flash flooding, cyclone disaster events are largely occurring by tropical depressions (cyclones) accompanied by thundershowers and rapidly developing thundershowers induced heavy rainfall immediately trigger flash flooding, landslides the colossal damages of high-value elements (settlements, agriculture, infrastructure, and basic delivery structures/facilities), on the other hand, the hydrometeorological droughts trigger famine. Another critical hazard phenomena are the ripple effects of

flooding, which induce outbreaks of cholera and diarrheal disease, claiming human tolls. Consequently, ICT tools-based risk capture, risk communication and dissemination, and risk-informed DRM mechanisms can save lives and properties at the frontline of women, girls, and other vulnerable gender groups.

## 1.5 Assessment Methodology

The methodological approaches of assessment follow through several strategic tools e.g., semi-structured Key Informant Interview (KII) interviews with key stakeholders (sector *ministries/departments*, *UN Agencies*, *INGO*, *CSOs*) for investigating the Key DRR Frameworks and Structures in place, what are the stakeholder engagement and coordination mechanisms, the impacts of climate-induced disasters on the gendered group, etc. Comprehensive Desk reviews of all policy, strategy, and sectoral documents, reports, studies, etc., on DRM, DRR, and CCA.

Conducted Focus Group Discussion (FGD) with semi-structured interviews with the climate frontline vulnerable community in remote vulnerable areas and investigated the Impacts of Climate-Induced Disasters on the gendered group (women, girls, children, persons with disability, men, and the *elderly*), etc. Desk review of all policy strategies, and Review of early warning ICT and MIS systems relating to disaster risk management and informed planning.



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## 2.0 Main Summary Report: Findings of the assessment (guided by the questionnaire)

### 2.1 Key policies/strategies frameworks in DRR in assessment countries

The DRM policy paradigms of the assessment countries, by nature, are centralized, gender affirmative rather than gender proactive, and lack adequate and insufficient gender machinery, informed tools, mandates, and guiding principles, resulting in less instrumentalized policy translation into actionable DRM gendered action planning at the district and local levels. Multi-hazard risk, gender inequality, poverty, food insecurity, and spatial climate risk indicators are not adequately considered in DRM policy bindings and policy actions. Inadequate sectoral coherence, stakeholder roadmap in instrumentalized DRR, and gender dimension, and in actionable planning. The assessment identified that gender action plans are currently missing in all cluster/sector departments. Gender mainstreaming guidelines, action plans, and frameworks for Gender are required in the sectoral planning and budgeting process.

#### Key recommendations:

- DRM Policies and strategies must consider the gender dimensions, inform gendered climate risk and vulnerabilities, and mandate local-level actors delivering gender-responsive DRM/DRR/CCA planning and interventions.
- Developing a gendered climate fiscal framework and influencing government fiscal budgetary allocations for women-led smallholder farming, green entrepreneurship development, and supporting individual women-headed households in DRR resilience building and more GDP contribution from the productive rural growth sectors (agriculture, livestock, fisheries, farming, value chain development, etc.)
- Gender-responsive National DRM Frameworks, policy action, and translating policy into local actions and propagating through a decentralized local governance system, instrumentalization of strong institutional presence at the very local level, and mandating all stakeholders' coordination and engagement to drive the gender-responsive DRM services to the last mile sufficiently.

### 2.2 Early Warning, Prevention, and Preparedness information being accessed at the community level.

The assessment countries (Malawi, Mozambique, Zimbabwe) are geographically positioned over the Intertropical Convergence Zone (ITCZ) area, which is impacted by the Intertropical Convergence Zone (ITCZ), sub-tropical climatology, and the impacts of El Niño during the October-November-December (OND) season, resulting in erratic rainfall patterns alternating between below- and above-average levels in the region. Several studies indicate that the warm Mozambique Channel becomes favorable for the development of tropical cyclones due to specific synoptic conditions. Sprawling/scattered, and poorly structured settlements in lower flood-prone areas and downstream regions cause the highest susceptibility to multi-hazard risks and vulnerabilities, including cyclones, flooding, and landslides, which impact rural livelihoods and food security. Assessment countries have rapid-onset hazard-triggering geographical, terrain, topographical, and landscape settings. The most vulnerable elements are settlement and fertile agricultural lands that fall within the lower floodplain/wetlands, as well as flood-prone and river catchment areas affected by flood hazards. The terrain landscape creates flash floods during any torrential/heavy rainfall. Addressing all those daunting challenges and ensuring that the frontline (a gendered vulnerable group) is informed in a timely manner about the quick onset of impending hazardous events requires an early warning system for all systems in operation.

#### Challenges:

- Traditional weather forecasting system – what the weather would be rather than what the weather will do and what the impacts would be on the ground level elements.

- Weather forecast bulletin is not comprehensive, localized impact intensive, and has capacity limitation in numerical weather prediction of rapidly developing weather conditions (thunderstorms, heavy rainfall), limited ground-level observations, and inadequate short and medium-range forecasts.
- Not having any consensus of forecast interpretations by the Met agency, NDMO National Hydrometeorological Agency (NHMS), and sector departments for interpretations of forecasts into risks and impacts over the elements (settlement, agricultural lands, and other high-value elements)
- WhatsApp and social network group-based weather warnings are not appropriate in rapidly developing weather conditions (thunderstorms, tornadoes, heavy rainfall) and warnings of the rapid onset hazards like flash flooding, landslide, etc.
- Community radio dependency dissemination methods have frequency limitations to reach broadcasts to remote rural areas.

#### **Recommendations:**

- Developing integrated weather forecasting, warning, alerting, and impact-based weather forecasts for the vulnerable sectors and sectoral elements, operational forecasts with long, medium, and short-range bulletins, and nowcasting services with weather bulletins and advisories at a precision level.
- Real-time dissemination of weather forecasting and nowcasting to every remote individual with national radio( AM Radio) broadcasts, so that broadcasts can be tuned from any geographical location of the country, TV and cell phone broadcasts with local language are highly demanded by the vulnerable gender group (women children, youth, elderly and disabled population) of the frontline in the given rapidly developing weather conditions, tropical storms and localized thunderstorms, tornadoes and triggering flash flooding causing the mortalities in flood-prone zone of Malawi. Zimbabwe and the lower floodplains of Mozambique.
- Developing operational forecasts for the sectors, women, and girls on the damaging impacts of onset hazards on the lives and livelihoods of women, girls, and youth groups. When, where, and how they will take shelter to safe ground, what evacuation route, and the distance to the evacuation center, etc.
- Developing impact-based weather forecasts on damaging weather phenomena over agriculture (seedling, sapling, and standing crops, soil moisture, soil water holding capacity, soil dryness, agriculture droughts), water stress (ground and surface water level), vegetation index, heatwave, dry spell, flash flood impact on surface water resources, etc.
- Multi-lingual cell phone messaging, toll-free cell broadcasts, and Interactive voice response (IVR) messaging for accessing early warning easily and updated.

### **2.3 Existing DRM coordination structures at national, sub-national, and local levels**

The national disaster management nodal agencies (*DoDMA in Malawi, INGD in Mozambique, and Department of Civil Protection in Zimbabwe*) in assessment countries are leading the DRR process. However, the challenges include inadequate multi-stakeholder engagement (state and non-state actors) at the provincial and district levels for effectively governing DRM/DRR functionalities. Most government respondents highlighted the inadequate roadmap and policy framework for institutional cohesion in the sector-specific DRM/DRR planning, budgeting, and intervention design process. The main hurdles identified are bureaucratic control over the annual fiscal budgetary allocation for DRR interventions, inadequate fiscal budgetary allocations for sectoral DRR interventions, and inadequate DRR risk financing allocations for the local government (at the provincial, district, and local levels). The country level has an inadequate gender dimension and gendered climate risk information system, national risk financing framework, and policy instrument for advocating external climate finances (Green Climate Funds) to

mainstream the DRR/CCA and green climate interventions at the local level.



The assessment identified the key challenges of the DRM coordination process as being derived from inadequate policy actions, DRM laws inadequately mandate policy actions, devising a cohesive sectoral DRM policy action, inadequate gendered climate risk integration in sectoral planning, lack of sector-integrated planning, and stakeholder coordination roadmap over the DRR and CCA planning process in assessment countries. The DRM coordination structures work on an ad-hoc basis, which is less decentralized, and most of the weightage is given to post-disaster humanitarian response efforts. The much-needed sectoral preparedness requires an ex-ante risk financing facility for demand-driven DRR and CCA planning and interventions.

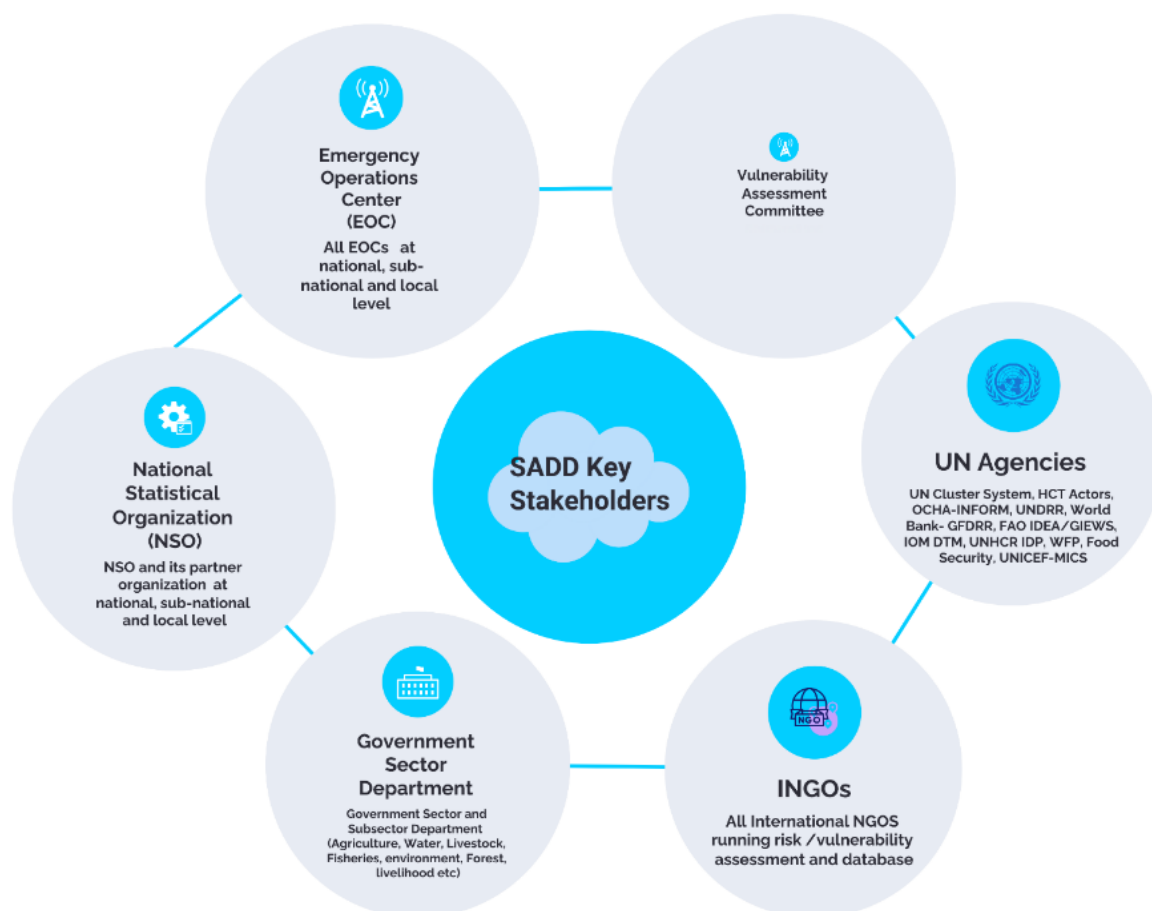
- Develop a DRM coordination framework and structures at the national, provincial district, and local levels (*stakeholder map, roles and responsibilities during normal time and disaster emergencies, standing orders, etc.*)
- Improved timeliness and effectiveness in disaster response and recovery with the development of full-time DRM staffing at the district level.
- Developing multi-hazard contingency plans, budgets, and funding allocations for the implementation of DRR interventions at the local level.
- Enhancing institutional (state and non-state actors) capacity in DRM service delivery to all levels.
- Improved information flow for better coordination and assessment.

#### 2.4 UN/government support for collection and access to SADD

Most respondents acknowledge the indispensable priorities of gathering sex, age, disability, and socioeconomic disaggregated data (SADD) for climate risk and vulnerability databases, as well as sectoral disaggregated climate risk and vulnerability databases, to support gendered disaster risk reduction (DRR) and climate actions at the local level. The assessment identified inadequate methodology, tools, processes, roadmaps, and stakeholder coordination structures for determining who will do what and how to address household-level climate risk and vulnerability, demographic profiles, sectoral risk and vulnerability, gendered socioeconomic datasets, and household and community-level multi-hazards risk and vulnerability datasets.

Major barriers and challenges identified include the inadequate engagement of national statistical organizations as nodal agencies and the need to align the national energy operations center (EOC) as technical wings to govern the

SADD process in Malawi, Mozambique, and Zimbabwe. Inadequate methodology, tools, guidelines, and methods for SADD data collection.



#### Key recommendations:

- Installation of EOC at Every District level for the development of SADD data collection functional ICT system and network, engaging the National Emergency Operations Center (EOC) for disaggregated disaster risk and vulnerability data collection, vulnerability assessment committee, disaster management organizations (NDMO, INGD, DCP), and other sector ministries and departments in the SADD process
- Anchoring the Disaster Risk Management Information System with the SADD -EOC/Vulnerable Assessment Committee information management system.
- Develop a district-wise gendered climate risk information network and a collection of gendered SADD from the household level.
- Developing web-based and app-based tools for SADD data collection from the household level.
- Enhance institutional/stakeholders' capacity (district level), mandate, methodology tools, and guidelines, management of Stakeholders in SADD data collections, conducting post-disaster rapid emergency needs assessment (RENA), PDNA, etc.
- Development of improved coordination structure and management of stakeholders at Area/TA/administrative post and Group village level to conduct CRVA, DRVA, PDNA, and RENA at the local level, data processing, database development, and informed tools development for supporting gender responsive DRR/CCA interventions at the regional, district, and local community level.
- Anchoring UN/INGOs information network with SADD database/information portal.
- Functioning District level EOC as an information hub with the capacity for risk assessment, risk communication, SADD and Risk repository development and maintenance, risk-informed planning tools development, early warning dissemination, and awareness-raising campaigning.

## 2.5 The UN engaged at national, sub-national, and local levels.

The Humanitarian Country Team (HCT) of the United Nations Country Team (UNCT), led by UN-OCHA, is responsible for coordinating UN emergency preparedness and response in support of the Government plan. Under the guidance of the HC, the United Nations Country Team (UNCT) is responsible for the effective and efficient implementation of Inter-Agency disaster risk management activities. Coordinate in combating the Camp-based ESA, and SGBV during disaster emergencies. Coordinate the national DRM platform and operationalize the Central Emergency Response Fund (CERF) by conducting emergency humanitarian assistance through the UN Cluster system.

The UN-led DRM coordinating mechanism operates on an ad-hoc basis for post-disaster crisis response, including conducting PDNA and mobilizing some humanitarian support through the UN cluster system at the local level. The UN organs, including the HCT, the UN Cluster system, INGOs, and the World Bank's Global Facility for Disaster Reduction and Recovery (GFDRR), support needs assessments and conduct humanitarian response. The UN-government coordination mechanism needs to be improved in developing a gendered DRM framework and strengthening the ex-ante risk financing mechanism, as well as enhancing coordination in the localization of NAP and gendered DRM, DRR, and resilience building.

**UN Agencies support for central and local governments:** UNICEF engaged in WASH, Nutrition, and Education service deliveries, WFP in emergency food assistance in most valuable districts and also handles food security clusters, IOM works on displaced people and maintains displacement tracking mechanism, UNHCR on handling climate refugees, UNDP supporting the government in DRM/DRR service delivery capacity building, UN Women in women empowerment, FAO in food security and climate adaptive agriculture development, WHO in health emergency relating to disease/outbreaks/epidemics.

## 3.0 Engagement with Stakeholders

### 3.1 : The main stakeholders in the DRR sector in order of priority

The national disaster management nodal agencies (*DoDMA in Malawi, INGD in Mozambique, and the Department of Civil Protection in Zimbabwe*) in assessment countries are leading the DRR process. However, the challenges include inadequate multi-stakeholder engagement (state and non-state actors) at the provincial and district levels for effectively governing DRM/DRR functionalities. Most government respondents highlighted the lack of a roadmap and policy framework for institutional cohesion in the sector-specific DRM/DRR planning, budgeting, and intervention design process. The main hurdles identified are bureaucratic control over the annual fiscal budget allocation for DRR interventions, inadequate fiscal budget allocations for sectoral DRR interventions, and DRR risk financing for local governments (provinces, districts, and local levels). The country level has an inadequate gender dimension and gendered climate risk information system, national risk financing framework, and policy instrument for advocating external climate finances (Green Climate Funds) to mainstream the DRR/CCA and green climate interventions at the local level.

The district local governments need to be the most functional local authority, and the process of decentralized central government sector ministries and departments exclusively needs to be replicated at the district level to handle local development, DRR, and CCA functionalities at the last mile. However, assessment countries do not have elected local government representatives to synergize the people's representation with local government bodies. Currently, the sector department-led District Executive Committees (DEC), which are chaired by the deputy commissioner as the focal point, exist, along with other ad-hoc committees on DRR/DRM governing at the district level. Similarly, elected local bodies are also absent at the Traditional Authority (Malawi), Administrative Post (Mozambique), Ward (Zimbabwe), and Group Village & Village levels (Malawi), instead having some extension officers and selected ad-hoc DRM/Civil Protection committees to govern DRM/DRR functionalities to the last mile. The ad-hoc local government structure and governance process inevitably formulate gender-responsive legislation and create a level playing field for other non-state actors (UN Agencies, INGOs, CSOs, Women-Led Organizations) to interplay with local government system in inclusive DRM/DRR/CCA planning and decision-making process at the local level and ensuring that women, girls, and other gender group's livelihood are enabling as climate resilient.

**Recommendation:**

- Gender responsive Legislation and local governance process, decentralized local government system, transfer of government sector departments at the district level, district-level stakeholder coordination roadmap, and responsibilities for governing DRM, DRR, CCA planning and interventions, and community engagement in DRR/CCA resilience-building actions.
- Implementation of District-level climate risk finance framework, annual fiscal budgetary allocation for the district and local level for DRM, DRR, and CCA interventions at the community level.
- District Climate and multi-hazard risk management framework, DRM contingency plan, CCA Plans, Gender development plan, gendered climate risk management framework for the district, District level DRM/DRR plans, Standard Operating Procedure(SOP), Standing Orders on Disaster (SOD), Multi-hazard and disaster contingency and preparedness plans, Disaster Emergency Response & Recovery Plan for District, Traditional Authority (Malawi), Administrative Post(Mozambique), Ward(Zimbabwe), Group Village & Village level(Malawi).
- District-level resource mobilization (revenue) framework, District-level DRM/DRR/CCA planning and budgeting system.
- District-gendered risk financing framework, District-level stakeholder (state, non-state, CSO, CBO) engagement roadmap, DRM/DRR risk management framework (early warning coordination, preparedness and response planning, humanitarian coordination, gendered DRM/DRR framework).
- The district-level local government sector department and disaster management agency pointed out inadequate funding and resource mobilization (internal/external) strategies and a lack of a gendered risk finance framework at the Province/District level.

**3.2 UN/Government structures engaging women and women-led organizations in DRR and resilience initiatives.**

The stakeholder discussions outline the persistent gaps and challenges that are being identified as DRM policy inadequately addresses the policy actions, gender dimensions, and a gendered risk management framework for engaging women and women-led organizations in DRR and resilience initiatives.

Inadequate efforts of the UN / Government-led multi-stakeholder in nexus building amongst the stakeholders, and an inadequate gendered DRM/DRR risk management framework at the national and sub-national level. The respondent mentioned the persistent central government control over DRM/DRR planning, which extends up to the local level, and inadequate fiscal mobilization strategies, hindering the decentralization and coordination mechanisms for decentralized and participatory DRM interventions.

The women-led organizations at the district level (Malawi) pointed out the weak institutional settings, coordination roadmap at sub-national institutes (province, District), and lack of persistent District level gender dimension & District level gendered climate/multi-hazard risk information network, lack of SADD repository for devising the gendered DRR interventions at the local level to consider the women as the most significant demographic vulnerable population at the last mile.

**Recommendations:**

- Development of District-level stakeholder engagement framework/ roadmap, strategy, shared functional responsibilities, 5 W (who will do what, where, when, and how) work plan for DRM/DRR/CCA process and Capacity development.
- DRM/DRR/CCA Policy, planning, and strategies need to clearly define the mandates for state and non-state actors (government, UN, CSO) on how to engage women and women-led organizations in DRR and resilience initiatives at the sub-national and local level.
- Instrumentalizing gendered climate and multi-hazard risk/vulnerability as priority issues in long-term Policy and Strategies
- Persistent DRM/DRR planning and annual fiscal budgetary allocations at the district level for women and women-led organizations in DRR and resilience initiatives.
- Participatory District level local governance, sectoral engagement, multi-stakeholder engagement strategy (women-led organization/right-based organization), and create a level playing field for other non-state actors (UN Agencies, INGOs, CSOs, Women-Led Organizations) to interplay with the local government system in inclusive DRM/DRR/CCA planning and decision-making process at the regional level.

- Develop District-level risk-informed gender development strategy, District gendered risk management framework, climate and multi-hazard risk information network/SADD repository based on gendered needs and priorities, and inclusivity in the local planning process.

### 3.4 Key gaps in gender integration within DRR and resilience-building initiatives.

The respondents of the assessment countries pointed out institutional capacity gaps, inadequately informed tools for gender integration within DRR, and resilience-building initiatives at the local level. The persistent gaps and challenges are being identified as inadequate policy actions and mandates, inadequate gender dimensions, a gendered risk information framework, classified sectoral disaggregated datasets, and repository hurdles at both the national and sub-national levels, hindering the integration of gender in DRR and resilience-building processes.

Inadequate government central fiscal budgetary provision for DRR and resilience building, and inevitable national fiscal budgetary segmentation for the (Province, District, TA, Administrative post, Group village level, and village level) for district level for gendered DRR interventions/planning and financing system. Lack of a Risk-informed gender development plan at the district level. Inadequate gendered (women, Girls, Youth, elderly, disabled population) inclusive participatory local governance system at the TA/Area/Group Village and village level for regional development.

Lack of a women's disaster/climate resilience framework, inevitable legislation, laws, mandates for Women and girls to have access to government power structures, governance system, gendered inclusive participation at the local level DRR and development planning, and financing decision-making system. Inadequate community level

## 4.0 Differential Impacts of Climate-Induced Disasters [Cyclones, Floods, Drought]

- Cyclone, Flood Disaster-induced displacement, and climate refuge-taking.
- Drop in schooling and engaging children and adolescents in household income-generating activities, fetching water, and firewood for sustainable living.
- Recurrently becomes a victim of the incidence of SGBV and SEA

- Falling in epidemic, outbreaks/diseases/infections, and loss of lives
- Discrimination in accessing post-disaster humanitarian assistance
- Male ownership of agricultural lands
- Loan defaulter.
- Discrimination in accessing government sector department services
- Inadequate access to inclusive finance for homestead-based IGA
- Less scope and access to education, access to agricultural lands, and agroecology, and little/no women's access to other governmental services for having climate refugee status.
- The camp management committee pushes evacuees from the schools just after 2-3 weeks to reopen the school and stop the emergency humanitarian food supply.
- Cultural norms, male domination over the household, and irresponsibility of male family members to stay away from home and letting every pain holder to female members of the family.

#### **Differential impact of women/ girls:**

- Women and girls are the last people to take refuge in disaster shelters in the difficult onset conditions of hazards that already turn into disasters; eventually, the largest tolls are from this group.
- Less understanding of the extreme weather events, impending nature and anticipatory impact, magnitude and intensity of hazardous weather events, accessibility to precision level, and timely weather forecast/warning in the local language.
- Around 60% of the frontline community are women and girls, and single mother and their agriculture-dependent livelihoods and food security are recurrently being impacted by the climate extremes, which drag themselves into a protracted poverty cycle, hunger, and famine; therefore, climate adaptive alternative livelihood IGA options are being highly demanded.
- Engaging women and girls in fetching water from long distances increases their vulnerability to gender-based violence.
- Limited access to agroecology, agricultural lands, basic service deliveries, AVC, and inclusive finance for livelihood sustainability IGA.
- Cultural stigma of social negligence to women/ girls and patriarchal societal paradigm of men are owners of agricultural lands, taking all disaster preparedness and evacuation decisions.
- Extreme poverty, single young mothers, women-headed households, child-headed households, girls-headed households, acute food insecurity, malnutrition due to climate change, and recurrent disaster events.

#### **4.1 The different coping mechanisms adopted by women and men to climate-induced disasters.**

##### **Coping Mechanism in Climate-induced disaster:**

- Peace work, business.
- Selling productive assets
- TCF social cash
- Transactional sex
- Charcoal making and selling firewood.
- Post-disaster recovery Social Cash transfer Department of Disaster Management Affairs (NDMO)

##### **The positive coping mechanism:**

- Piecework - Day labor, casual job, South Africa, to feed the households.
- Small business
- 50KG /year of Govt/CSO food assistance is not enough
- Small business, peace works, begging for food,
- Support from relatives.

##### **Negative coping mechanism:**

- Cutting trees and making charcoal, selling firewood, etc.
- Selling productive assets, belongings, etc.
- Transactional sex
- Adolescent girls are being forced into early marriage.

- Trafficking of girls and children
- Migration
- Selling of humanitarian assistance, hygiene kits/food bags, selling stuffs,

### 4.3 key barriers to effective women's engagement in DRR and resilience building

- Inadequate gendered disaggregated data and tailor-made informed tools determining the needs and priorities of women, girls, and youth, inclusive of disaster emergency preparedness, contingency plan, and humanitarian assistance mobilization.
- Lack of a collective AAP Framework for monitoring and creating accountability of actors /stakeholders in sectoral DRR interventions.
- Inadequate climate risk information for gender groups, and a lack of operational forecasts for women, girls, and youth. children, the elderly, and the disabled age groups to get them prepared for the impending multi-hazards.
- Insufficient gendered climate risk and vulnerable information, informed tools to define gender entry point in risk-informed DRR /LDP planning because of sector departments inadequately being informed by the gender disagreed and gender-differentiated climate and multi-hazard risk and vulnerability information.
- Inadequate tailor-made informed tools on multi-hazard risk and vulnerability information on differential gendered impacts and developing risk-informed GiHA in EAP, Early Warning Early Action (EWEA), Forecast-based early schemes, and interventions.
- Activation of Forecast-based SGBV, Prevention of sexual exploitation and abuse (PSEA), reporting sexual exploitation and abuse (SEA) incidence reporting.
- Lack of WRD (Gender DRR and Resilience Framework) framework, stakeholder coordination, and action plan for improving Gender Machinery addressing the DRM, DRR, NAP, and NDC
- Inadequate methodology, tools, and guidelines, and stakeholder engagement (MVAC, ZimVAC, and other relevant stakeholders) in the Assessment of the socioeconomic vulnerability of women-headed households.
- Implementation of DRR projects for 5 years to harmonize the impacts of interventions.
- People's mindset, culture, religion, and patriarchal paradigms discourage women from speaking and letting their voices be heard. Women's participation in the local-level decision-making process is being discouraged, and Women's inadequate influence capacity.
- Promoting Women's education, developing a legal framework mandating women's education, and providing cash for female-headed households.
- Access to Assets, women should own the land, economic decision of use of land by women,
- Key gaps in Gender integration in DRR /resilience-building initiatives:
- Gender action plan in every cluster/sector department.
- Risks and recovery plan, gender information, gender integration, NDMO officers promoted to director, and training.
- Raise awareness at the district, gender-segregated gender tools (local languages)
- The national fiscal budget system focuses on the social cash transfer program for food security.
- Lack of base case scenarios, Gender action plan in every cluster, lack of gendered recovery plan, gender information, informed tools (with local languages), gender integration, NDMOC officers promoted to director, and training.
- National budget: Not having a systematic national risk financing mechanism over the national budgetary system for prioritizing the DRR interventions at the local level.
- Lack of Risk-informed gender development plan at the district level
- Inadequate institutional structure limited decentralized governance (climate) mechanism, inadequate participatory scope of women, girls, and youth access to local DRM/CPC, and local authority level decision-making process.
- Lack of gender machinery, gendered network /Gendered climate risk information network for supporting local government cluster (department) for gender risk consideration in gender-responsive DRM/DRR-related scheme implementation process

#### 4.4 Recommendation on strengthening the resilience among vulnerable women and girls to climate-induced disasters.

The summarized recommendations of respondents on strengthening the resilience of vulnerable women and girls to climate-induced disasters depend on multiple issues. The vulnerable women and girls are the last-mile community living at the climate frontlines. Resilience building depends on the improvement of governance, risk-informed last-mile livelihood resilience planning, access to precision-level climate early warning, GIHA, and gendered needs-based contingency mobilization, social protections, food security, SafetyNet's climate-adaptive livelihood options, access to agroecological resources, and the agriculture and farming value chain.

**From the assessment following key recommendations were proposed by the respondent: -**

- Reform of land tenure policy and Women's access to agricultural lands, wetlands, agroecology, agroforestry, and fellow lands for women-led GDP growth from the productive sector (agriculture, fisheries, livestock, agroforestry development)
- Distance adult learning (radio/TV) on climate change and disaster education.
- Gendered climate risk-informed tools on multi-hazard and vulnerability information on differential gendered impacts and developing risk-informed GIHA in EAP, EWEA, weather operational forecast for women marginalized farmers, smallholder farmers, women-led cooperatives, women-led green entrepreneurship development, and integrated farm management (IFM)
- Women's access to green financing (Soft loans and credit facilities) for smallholder farming, entrepreneurship development, and value chain operations.
- Activation of SGBV, SEA incidence reporting network
- Access to basic health care services



## 5. 0 key findings from the Focus Group Interview with the community

### 1) How do communities receive early warning of cyclones, floods and droughts, and is the information understandable

At the individual and community levels, the early warning messages undergo a domino effect through the group-based consultation (Civil Protection Committee) and ultimately alert the frontline community, which is delayed. Other sources of information e.g. WhatsApp groups, road shows, loudspeakers, megaphones, indigenous cultural shows, etc., are not accurate, and time-critical warning messaging causes the mortalities of women, children, and girls. Mobile-free SMSs are effective, but less than half of the population has access to cell phones, and people living in hard-to-reach areas often receive alerts through personal contact.

### 2) What suggestions would the community propose to the government about (improving) early warnings for cyclones, floods, flash floods, heavy rainfall, and drought?

- The civil protection committees and vulnerable communities of Malawi, Mozambique, and Zimbabwe recommended free radio sets( Wind Up and solar PV powered) for the household and precision level and timely early warning, instant messaging, common alerting with Local Language
- The community demanded understandable impact-based multi-hazard early warning being broadcast through national Radio (AM), Community Radio, TV channels, and relevant agencies/actors to frequently broadcast special weather bulletins on cyclones, heavy rainfall, flash flooding, landslides, debris falls, thunderstorm, hailstorm, dry spell, heatwave, flash droughts etc., about intensity, anticipatory impacts, loss and damage and advisories for the high impact areas.
- Instant SMS/ Cell Broadcast/IVR etc., in local language

### 3) In what ways climate induced disasters impact?

Category of climate-induced disasters impact	Risk drivers	Type of impacts
<b>Indirect impacts of climate shocks:</b>	The anomaly of weather patterns (drought, flash-droughts, agricultural drought, hydrometeorological drought, flooding, heatwave, thunderstorm etc.) stresses over surface and groundwater bodies, crop failure, yield loss, the stress of surface water bodies, depletion of the groundwater table, diseases /outbreaks, etc	<ul style="list-style-type: none"> <li>• Climate change and disaster-induced factors contribute to the Protracted Poverty.</li> <li>• Hunger, Famine, and food insecurity around the year.</li> <li>• Drinking water crisis-induced outbreaks of cholera, diarrheal and other waterborne diseases, vector-borne infectious diseases, and viral infections. Malaria, infectious fever, etc., those causes of significant mortalities, and incidentally, the large victims are women, children, and girls</li> <li>• Crop failure, crop yield loss, household food insecurity, famine, hunger.</li> </ul>
<b>Direct impacts of climate shocks:</b>	<ul style="list-style-type: none"> <li>• The anomaly of weather patterns and climate change impacts on the livelihood of productive assets</li> <li>• Protracted poverty and social inequality</li> <li>• Food insecurity</li> <li>• Lack of access to WASH and other basic services</li> </ul>	Impacts on agriculture, including recurrent incidences of crop failure, yield loss, drought, flash floods, and thunderstorms, continue to hamper agricultural cropping, leaving households with Chronic food insecurity, Water scarcity for household gardening, and subsistence farming. Internal displacement (IDP) and climate refugee status entitle less access to state and non-state-run basic service deliveries. Water is scarce for homestead gardening, Protracted Poverty, Hunger, Famine:

Category of climate-induced disasters impact	Risk drivers	Type of impacts
<b>Impact over Women</b>	<ul style="list-style-type: none"> <li>• Protracted poverty and social inequality</li> <li>• Food insecurity</li> <li>• Lack of access to WASH services, drinking water, and other basic service deliveries</li> <li>• Little/no access to agricultural lands, agroecology, agricultural input supplies, and access to value chains</li> <li>• Inadequate, understandable, and timely early warning on multi-hazard and disaster</li> </ul>	Social insecurity, the victim of SGBV and psychosocial trauma, forced to negative coping mechanism, Vulnerable to human trafficking, the highest level of divorces, child marriage, adolescent motherhood, child trafficking, SGBV, PSEA,SEA, transactional sex for survival, women loan defaulter because husband taking their all the wallet ( mobile money) money, Highest level of social, political, economic discrimination against women, gender unfriendly evacuation centers. Pregnant women face difficult situations during disaster-induced forced displacement
<b>Impact over adolescent girls</b>	<ul style="list-style-type: none"> <li>• Protracted poverty and social inequality</li> <li>• Engagement of adolescent girls in household income generation and household support.</li> <li>• Drop of schooling</li> <li>• Food insecurity</li> <li>• Gender-based violence and unwanted adolescent pregnancies.</li> <li>• Sexual Exploitation and Abuse (SEA) and drop in education</li> </ul>	<ul style="list-style-type: none"> <li>• Harder accessibility to schools/institutes and Inadequate access to primary and secondary education</li> <li>• Gender-based violence, Sexual Exploitation, and Abuse (SEA) at schools/institutes.</li> <li>• The highest level of unwanted adolescent pregnancies is due to climate-induced protracted poverty and limited livelihood productive assets, Lack of Adolescent-friendly emergency Shelter and protection.</li> </ul>
<b>The Men</b>	<ul style="list-style-type: none"> <li>• Internal Displacement, IDP, and Migrant workers as means of livelihood</li> <li>• Climate refuge and displacement</li> <li>• Little access to agricultural lands, agroecology, and the agriculture value chain</li> <li>• Inadequate access to climate risk information and impending early warnings.</li> <li>• Protracted poverty, social inequality, and socioeconomic vulnerability</li> </ul>	Disaster-induced poverty /food insecurity pushes males/heads of household to migrate as labor for a long time to feed their families. Migrant workers/casual labor – less time for taking care of family, Climate refuge, IDP status, and for a more extended period, Longer term dependency on humanitarian support :
<b>Persons with disability :</b>	<ul style="list-style-type: none"> <li>• Climate refuge and displacement</li> <li>• Little access to agricultural lands, agroecology, and the agriculture value chain</li> <li>• Inadequate access to climate risk information and impending early warnings. Protracted poverty, social inequality, and socioeconomic vulnerability</li> </ul>	Lack of disability-friendly shelter, lack of transport for evacuations, inadequate government support for disability IGA

#### 4) In what ways can the protection of women after disasters be enhanced?

Post-disaster building back better interventions	Women and girls' protection mechanisms
Access to inclusive finance, soft loan & micro-credit (VSLA), green finance	<ul style="list-style-type: none"> <li>• Startup capital for running a small business, starting poultry/livestock farming.</li> <li>• Access to inclusive finance for startup livelihood activities</li> <li>• Inclusive financial support for group/cooperative women-led green entrepreneurship development (Integrated Farm Management, Fenced area development for livestock farming, Poultry farming, mini</li> </ul>

Post-disaster building back better interventions	Women and girls' protection mechanisms
	<p>pond-based fish farming, Fruit gardening, agroforestry development, high-value cropping etc.)</p> <ul style="list-style-type: none"> <li>• Green financing for group/cooperatives-based green entrepreneurship development.</li> <li>• Inclusive financial support for the startup of IGA (bank account for women, social cash transfer, cash grant, VLSA, microcredits, mobile money for development, etc.), agriculture inputs supply, support for livestock and poultry, fish culture, etc) for livelihood restoration, starting household-based IGA for generating productive assets</li> </ul>
Training on productive assets development in farming	<ul style="list-style-type: none"> <li>• Technical and vocational training (animal husbandry, poultry rearing, fruit growing)</li> <li>• Technical Training in SMES development (food processing, small business, marketing, input value chain supplies for livestock, agriculture, poultry, vegetables, fruits, etc.)</li> <li>• Technical and vocational training for lean period works.</li> <li>• Technical training on climate adaptive farming, rainwater harvesting, soil health improvements, IFM, FYM, INM, etc., for round-the-year cropping, and agriculture value chain development.</li> <li>• Vocational training on agroforestry development</li> <li>• Capacity building training for Income Generating activities (IGA) activities, group/cooperative-based smallholder farming, green shed for year-round homestead-based gardening,</li> </ul>
Women's access to agricultural land	<ul style="list-style-type: none"> <li>• Access to agricultural land, surface irrigation facilities, drip irrigation facilities, rainwater harvesting facilities, veterinary services for poultry/livestock, and seedling/sapling support.</li> </ul>
Support for post-disaster recovery (rebuilding the houses)	<ul style="list-style-type: none"> <li>• Insurance/financial support for Women rebuilding their destroyed houses within weeks/months.</li> </ul>
Village-based farmers' field school (FFS), Horticulture center	<ul style="list-style-type: none"> <li>• Department of Agriculture, livestock and Fisheries and other NGOs/CSOs to set up Farmer's Field schools for the climate-vulnerable community, women lead farmers, and women smallholder farmers to access all agricultural input supplies ( seeds, seedlings, saplings, drip irrigation, organic fertilization, IFM, etc) , plot demonstrations of climate tolerant varieties, early harvesting varieties, high-value cropping, livestock farming, poultry farming, fish culture etc.</li> <li>• Set up a climate kiosk for women smallholder farmers.</li> <li>• Protection from SGBV, social security, psychosocial support for IDPs</li> </ul>
Elimination of all Forms of Violence against Women	Stakeholder engagement and developing SGBV at the district level for tracking EVAW.
Gender response to humanitarian contingency mobilizations	Strengthening Gender in Humanitarian Action( GiHA).
Development and deployment of Early warning for all	<ul style="list-style-type: none"> <li>• Impact-based weather forecasts for the livelihood sectors(agriculture, livestock, poultry farming, fish farming, adaptive cropping, conservational agriculture, subsistent agriculture, etc.</li> <li>• Operational forecasts for the women and girls during cyclones, floods, droughts, landslides, thunderstorms, tornadoes, etc.</li> </ul>
Forecast-based early financing for the women-headed households	Longer-term recovery support for Women in food security, social security, and startup capital for starting an IGA.

## 5) What coping mechanisms were adopted by the gender group?

Most of the respondents mentioned diverse and self-sustaining coping mechanisms with livelihood and local context. The livelihood diversification and using indigenous knowledge, in which some strategies used in coping are unsustainable and degrade the natural environment.

**Positive coping mechanism:**

- Peace work, casual labor, seasonal labor, construction workers, technician jobs, and other countries.
- Staring livelihood income-generating activities (maize cropping, fruit trees, poultry, livestock, to some extent, etc.)
- Dependency on the government running food supply (Mazie of bag), aftermath of cyclone and floods.
- Dependency on Social Cash Transfer
- Dependency on Village Savings and Loan Associations (VSLAs) for starting small businesses.

**Negative coping mechanism:**

- Sales of productive assets (poultry, livestock, belongings)
- Transactional sex in exchange for money, support
- Cutting trees and making charcoal, selling charcoal, and selling firewood are contributing to deforestation.

**Recommendations:**

- Need technical and vocational training for income-generating support: Welding, electrician, plumbing, and mechanical technician jobs for livelihood-sustaining income generation.
- Agriculture support – Seasonal cropping, seedling, sapling of winter vegetables
- Support for small businesses
- Support for growing season (Winter season) cropping – Input supply (irrigation, fertilizer, seedling, sapling)
- Financial/seedling/sapling Support for livelihood productive assets
- Agriculture Farming(winter)

**a] Women \_\_\_\_\_**

Positive coping mechanism:

- a) Peace work – from casual labor, which is not enough for purchasing maize for everyday meals.

Negative coping mechanism:

- Sales of productive assets (poultry, livestock, belongings)
- Transactional sex in exchange for money for survival
- Cutting trees and making charcoal, selling charcoal, and selling firewood are contributing to deforestation and environmental degradation.

**b] Men \_\_\_\_\_**

Positive coping mechanism:

- b) Peace work – from casual labor, which is not enough for purchasing maize for everyday meals.

Negative coping mechanism:

- Sales of productive assets (poultry, livestock, belongings)
- Cutting trees and making charcoal, selling charcoal, and selling firewood are contributing to deforestation.
- Trafficking children

Recommendations:

- Need technical and vocational training for income-generating support: Welding, electrician, plumbing, and mechanical technician training.
- Extra care for children
- Pregnant women – water cholera, diarrhea,
- Need psychosocial support to avert the emotional distress of losing everything.
- A person with disability needs disability-friendly sheltering support

**6) To enable affected communities to recover faster, what would your priority needs be?**

- Capacity development for Human capital in DRR-related rural development funding.
- Access Financial capital
- Access to Natural Capital
- Access to inclusive finance for startup livelihood activities
- Training on productive assets development farming

- Technical and vocational training (animal husbandry, poultry rearing, fruit growing)
- Technical Training in SMES development (food processing, small business, marketing, input value chain supplies for livestock, agriculture, poultry, vegetables, fruits, etc.)
- Technical and vocational training for the lean period works.
- Startup capital for running a small business.
- Engaging women in the agriculture value chain development
- Inclusive financial support for group/cooperative women-led green entrepreneurship development (Integrated Farm Management, Fenced area development for livestock farming, Poultry farming, mini pond-based fish farming, Fruit gardening, agroforestry development, high-value cropping, etc.)
- Technical training on climate adaptive farming, rainwater harvesting, soil health improvements, IFM, FYM, etc., for round-the-year cropping.
- Vocational training on agroforestry development

## **7) What are the key barriers in recovery here at the community level?**

### **a) Government regulatory measures over the land and water management:**

- Inadequate institutional decentralized technical support services for the remote rural community for boosting growth from the productive rural sector, e.g., Water supply and irrigation for Agriculture and drinking, Livestock farming, Poultry farming and fish culture, agroforestry development, homestead gardening, value chain development, etc.
- Government control over land management, land ownership, and land control policies is the most institutional barrier to getting rural communities access to agricultural land for cropping, fallow land for agroforestry development and fruit gardening, and other productive farming.
- Most indicative barrier against the inadequate irrigation infrastructures, integrated water resource management infrastructure and services, and drainage network for producing surface irrigation access to rural farming.
- Malawi has a lot of fresh water bodies (rivers, channels, lakes, wetlands) but inadequate rainwater harvesting structures, rural water control structures, drainage networks, and services for rural communities for access to surface irrigation for boosting rural agriculture.

### **b) Inadequate access to climate risk finance, DRR/CCA finances:**

- Inclusive financial support for group/cooperative women-led green entrepreneurship development (Integrated Farm Management, Fenced area development for livestock farming, Poultry farming, mini pond-based fish farming, Fruit gardening, agroforestry development, high-value cropping, etc.)
- Startup capital for running a small business.
- Engaging women in the agriculture value chain development
- Access to inclusive finance for startup livelihood activities
- Access Financial capital
- Access to Natural Capital

### **c) Inadequate disaster recovery framework for rural income-generating productive sector (agriculture, livestock farming, poultry farming, fruit gardening etc.):**

- Inadequate intervention package for individual farmers, smallholder farmers
- Inadequate sectoral climate risk and vulnerability assessment, local agroecology, soil health, ecology-based DRR/CCA scheme design, plot demonstration, and commercial farming
- Inadequate/insufficient DAE/Agriculture/water sector initiative for essential irrigation support
- Inadequate farmer's field school (FFS) and horticulture development in every village, and supporting individual and stallholder farmers for round-the-year subsistence and conservational farming
- Inadequate disaster risk finance, incentives, subsidies, financial package, green shed/greenhouse structure support for marginalized farmers for round-the-year cropping, etc.

### **d) Inadequate Sectoral support for the productive farming:**

- Lack of farmers' field schools, horticulture, and agriculture input supply trigger points for supplying seedlings to remote rural communities for subsistence and conservative farming.

### **e) Capacity building on income-generating activity (IGA) , household-level productive asset building:**

- Technical Training in SMES development (food processing, small business, marketing, input value chain supplies for livestock, agriculture, poultry, vegetables, fruits etc.)
- Training on productive assets development farming
- Technical and vocational training (animal husbandry, poultry rearing, fruit growing)

- Technical and vocational training for the lean period works.
- Technical training on climate adaptive farming, rainwater harvesting, soil health improvements, IFM, FYM, INM, etc., for round-the-year cropping.
- Vocational training on agroforestry development
- Technical training for the development of Human capital
- f) **Inadequate knowledge and understanding of the changing climate and impending multi-hazards.**
- Lack of a government mass education campaign (media outlet – Radio /TV-based) for knowledge and awareness raising of the marginalized rural community for DRR/CCA and resilience building.

**g) Inadequate Gender Resilient Framework:**

- Lack of organizational interventions for marginalized women in scheme design, scheme financing, value chain development, and cooperatives framing for more GDP contribution from productive rural growth sector (Agriculture, Livestock and Fisheries, Poultry farming, small business, and entrepreneurship development)



**8) What are climate induced disasters impact women, men, girls, and boys differently?**

**Justification**

- Lessons from Cyclone Fredy, Idai, Kenneth etc., release that the patriarchal domination over the critical evacuation at the household level also contributes to larger casualties of women and children because they were the last people to leave.
- Women and vulnerable members lack of awareness, and understandability about the intensity and destructive nature of impending cyclones, and flash floods in their locality as because they do not have access to Radio/TV broadcasts driven mass education campaigns about climate change, multi-hazards, disaster-related awareness dissemination factored the high impacts, loss, and damages of livelihoods assets, properties, and mortality.

**9) What are the key recommendations for enhancing resilience opportunities for women and girls**

- Strengthening and implementing GiHA ( gender inclusive humanitarian action) at full scale until women-headed households, single mothers, and girls are building better and more sustainable livelihoods
- Access to a climate and multi-hazard risk information system
- Access to DRR/CCA planning and decision-making process.
- Access to inclusive finance
- Access to Agroecology, agricultural land, and farming
- Access to the Farming value chain and inputs.
- Access to the Disaster and Climate Risk Management Governance system
- Social Protection, reducing SGBV and SafetyNet's
- Access to climate change and multi-hazard education and knowledge

- Development of the Gender climate risk network

**10) What would you like to suggest to the government for making your household resilient to disasters and climate change?**

- Liberalization of government land control policy, amendment of the local government land management and land leasing act, and allocation of the category of lands to rural women for agriculture, livestock farming, Integrated farming, agroforestry development, fruit gardening, fish culture, etc.
- Green banking facility, Access to inclusive finance, soft loan & micro-credit (VSLA) facility, green finance, green bonds, access to green climate finance for women-led green entrepreneurship development, Startup capital for running small business, smallholder adaptive farming, IFM, livestock, and poultry farming.
- Technical training on climate adaptive farming, animal husbandry, poultry rearing, fruit growing, rainwater harvesting, Integrated Farm Management, Farmyard Manure production, etc., for round-the-year cropping, agriculture value chain development.
- Agriculture department to develop village-based farmers' field school (FFS), Horticulture center for supporting marginalized and smallholder farmers in round-the-year climate-adaptive farming,
- Impact-based forecasts and operational forecasts for rural sectors, elements, and farming, etc.
- Forecast-based financing package for the women-headed smallholder farmers in productive asset protection from the hazards (crops, poultry farms, livestock farms, fish culture, integrated farms, high-value crops etc.)
- Strengthening and implementing GiHA (gender inclusive humanitarian action) for women-headed households, single mothers, and girls for starting livelihoods, productive assets, and income-generating activities immediately after the disaster recovery phases
- Ensure Social Protection, reducing SGBV and forms of outbreaks of violence, food security, and SafetyNet's



**11) In what ways can your voice be better heard by the authorities to enhance the prevention of disasters?**

- Improving local governance structure (TA, Administrative post and Group Village/ and engagement of Women, girls, and youth in local development planning, local DRR/CCA planning, disaster preparedness, contingency planning, and humanitarian actions at the local level.
- Inclusive community participation in every DRR/DRM/CCA planning, and develop community leadership.
- Enhance community DRR, and climate change learning via national media outlets, AM Radio, FM Radio, TV etc
- Develop community/village-based climate and multi-hazard risk and vulnerability atlas, social / community risk map, contingency plan, DRR /CCA plans.
- Develop village-level DRR plans, and design productive income-generating schemes for households and smallholder farmers.
- Community based Technical Working Group(TWG) for coordinating local government basic service deliveries

- Local DRM/DRR Technical Working Group(TWG)
- Forecast-based Anticipatory Early Action Protocol (EAP)
- Development of the Community-level Risk Assessment Committee
- Development Youth Climate Action Group
- Community-level DRR cooperative group
- Development of a youth climate action group
- Development of a youth humanitarian action group
- Development Youth Humanitarian Group Community-based TWG for coordinating local government basic service deliveries
- Development of a Women/girls/youth (gendered ) climate risk information network for informing DRR/CCA planning at the local level planning process.
- Developing forecast-based early action protocol for the community: Local government and humanitarian actors need to understand impending cyclones, floods, flash floods, droughts, landslides, outbreaks, and diseases (cholera, diarrhea, infectious diseases, malaria, yellow fever, and other communicable diseases)
- Developing a forecast-based financing protocol and sensitizing humanitarian actors about the anticipatory finance and humanitarian assistance that need to be mobilized.
- Develop forecasts on medium-slow onset hazards, e.g., hydrometeorological drought, agricultural drought, flash drought, water stress situation in drinking water crisis, etc., for early actions.
- Develop a gender DRM network/framework for supplying tailored information to sector ministries, departments, and other state and non-state actors for risk-informed gendered DRM/DRR/CAA action planning targeting the most vulnerable women-headed rural households.

## 6.0Chapter: Overall Technical Recommendations for the Women's Resilience to Disasters (WRD)

### 6.1 Gendered DRR Frameworks and Approach

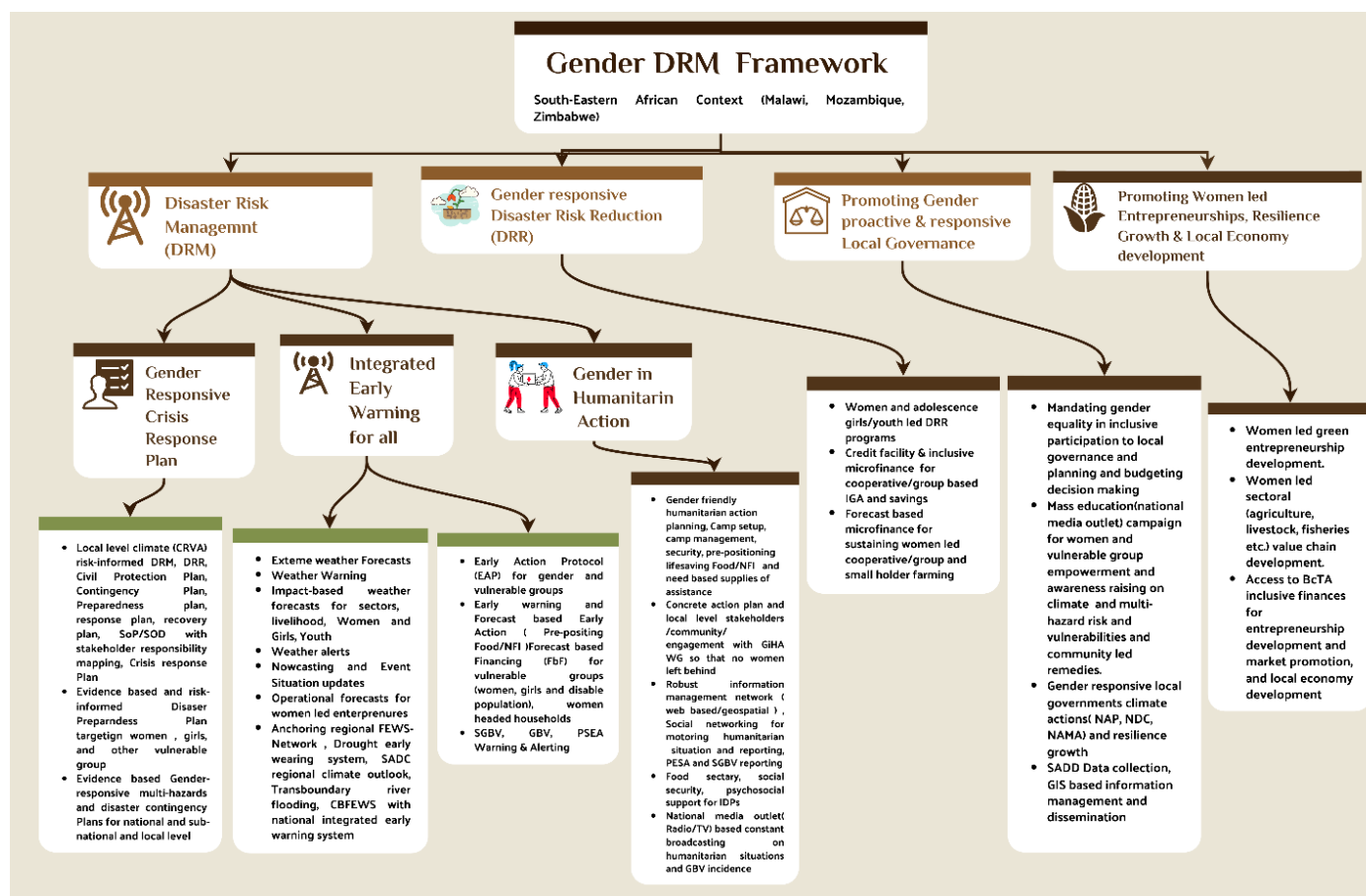


Figure : Proposed Gender DRM Framework

#### a) Establish DRM gender framework :

Without having the gendered DRM framework supported by the gendered climate risk information, it is apparently difficult to find the entry point and tangled bureaucratic system to understand the importance of the gender dimension of local economy development, potential investment for the gendered productive sector e.g., agriculture, livestock, poultry, fisheries, agroforestry, high-value cropping, food process enterprises, local green entrepreneurship, NAP, NDC localization and full scale climate adaptive rural growths being carried out largely be driven by the women population living at the frontline.

The proposed gendered climate resilient framework outlined the functional components of local-level functionaries.

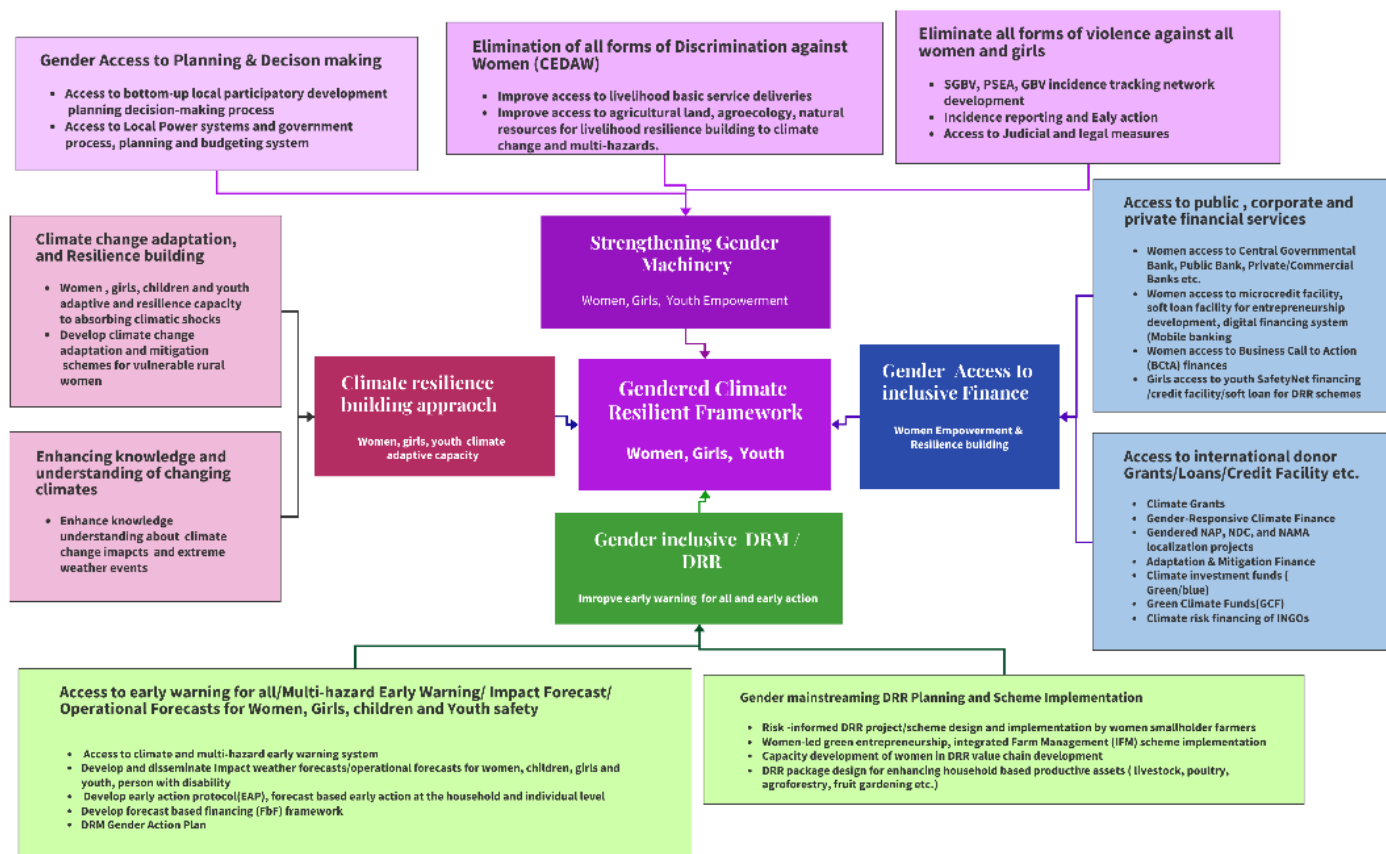


Figure: Gender-responsive climate resilient framework

- Establishment of a Gendered Risk Management Network (Framework)
  - Improving Gender machinery, Gendered DRM coordination at the local level
  - District-level Gendered DRM Information Network
  - District-level SGBV information network
- a) **Capacity enhancement of the government planning Ministry and the planning commission in risk-informed planning, strategy development, and the decision-making process**
- Risk-informed Policy, strategy, planning, and institutional capacity of the Planning Ministry, Planning Commission, and planning officials.
  - DRR/CCA program planning by relevant line ministries and sector line departments.
  - Identification of the Entry point for the Differential gendered impact of multi-hazard and climate risk and vulnerability integration in the planning process
  - Capacity development of district-level stakeholders in developing the gender dimension, gender machinery, gender risk management framework, SADD tools, methodology, and guidelines.
  - District-level EAP, EWEA, Forecast-based early action.
- b) **Formulation of District Gender Risk Management Framework/ District Women Resilience Framework**
- Capacity building of District local governments in developing of District Gender Risk management framework/ District Women Resilience Framework
- c) **Gendered risk-informed Responsive District Development Planning Framework (DDPF)**
- Capacity building of District duty bearers for transforming and transitioning from ad hoc-based disaster emergency interventions to long-term disaster risk reductions for enhancing actors and vulnerable community capacity for averting the slow-onset ripple effects aftermath of significant hazards and disasters

- Improve coordination and decentralized structure of comprehensive community engagement in the local DRM/DRR process.
- District DRM program (DRMP) essentially has to be a five-year strategy and needs to address/ consider the recurrent and persistent multi-hazard risks and vulnerabilities, residual/cascading and ripple effects of major disasters ( floods, landslides, induced water-borne disease, and epidemics ).
- DRMP needs to articulate the legal framework to tackle SGBV. The DRM laws also need to mandate state and non-state actors to strictly follow the legal procedures against SGBV during disaster emergencies.
- District-level Annual development programming (ADP) and interventions from the government DDP/DRMP and budgeting allocations need to set the annual targets of community-based DRR with pivotal milestones in the council's commitment to enhancing resilience, preparedness, and response capacities of women-headed households.
- Unique District council coordination structure and functionaries for developing DDP/DRMP/Contingency Planning at the district level
- District risk management governance needs to establish a stakeholder-integrated M&E framework for regular reporting and progress tracking of all stakeholders on DRR and resilience building(women-headed households).

## 6.2 Development and deployment of Early warning for all :

Inadequate, unclear road map of the Sendai framework of Early warning for all functional processes. As a result, the development, broadcasting, transmission, and dissemination of impact forecasts are being done haphazardly, which leads to some level of untimely dissemination. It is highly recommended that NMHS and sector departments collaborate to develop integrated forecasting for the development and deployment of precision-level, detailed advisories, as well as improvement issues, which are being entrusted to them. The proposed roadmap of EWS for all working is shown in the following diagram.

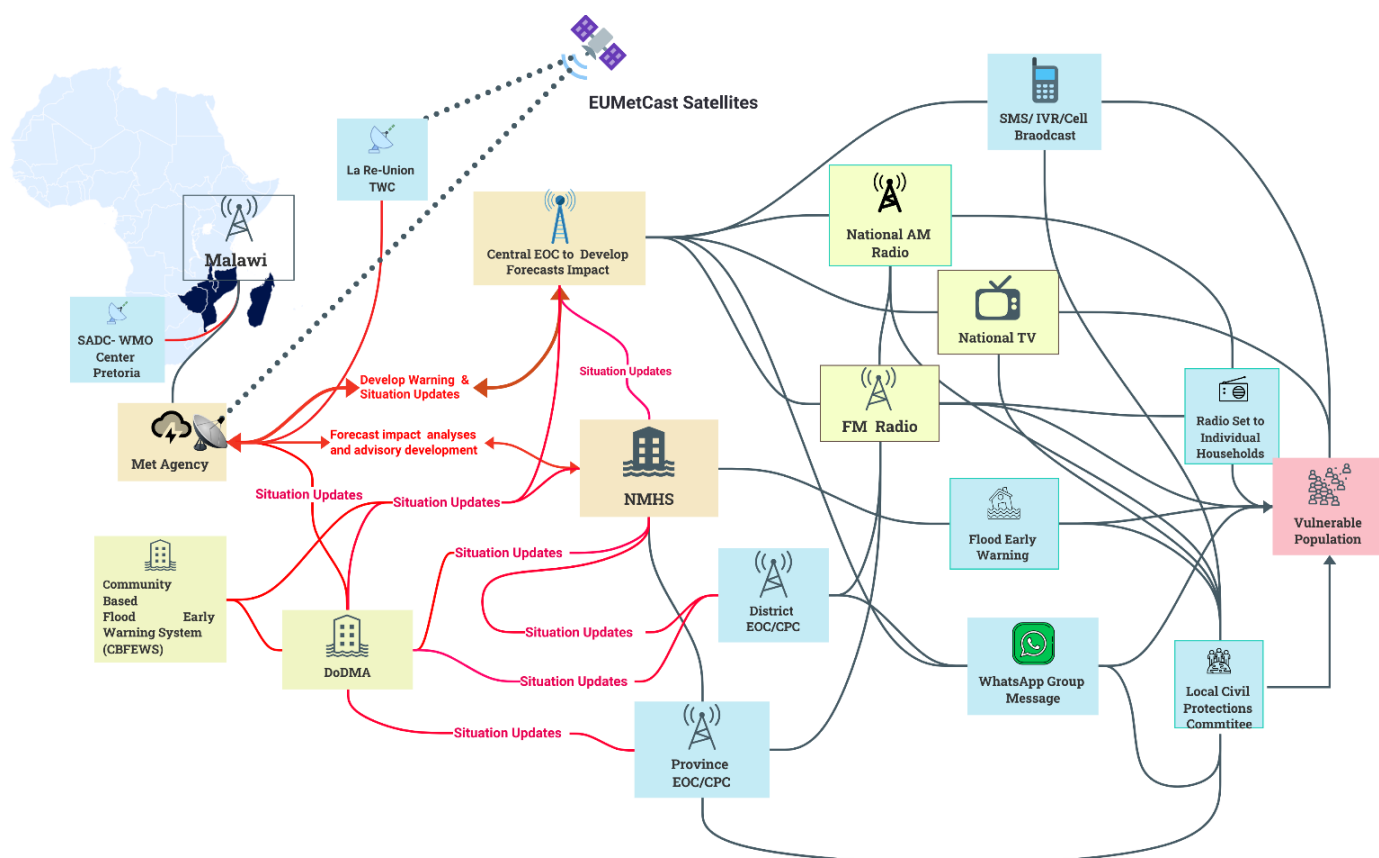


Figure: Diagram of EWS development and dissemination process to target vulnerable gender group

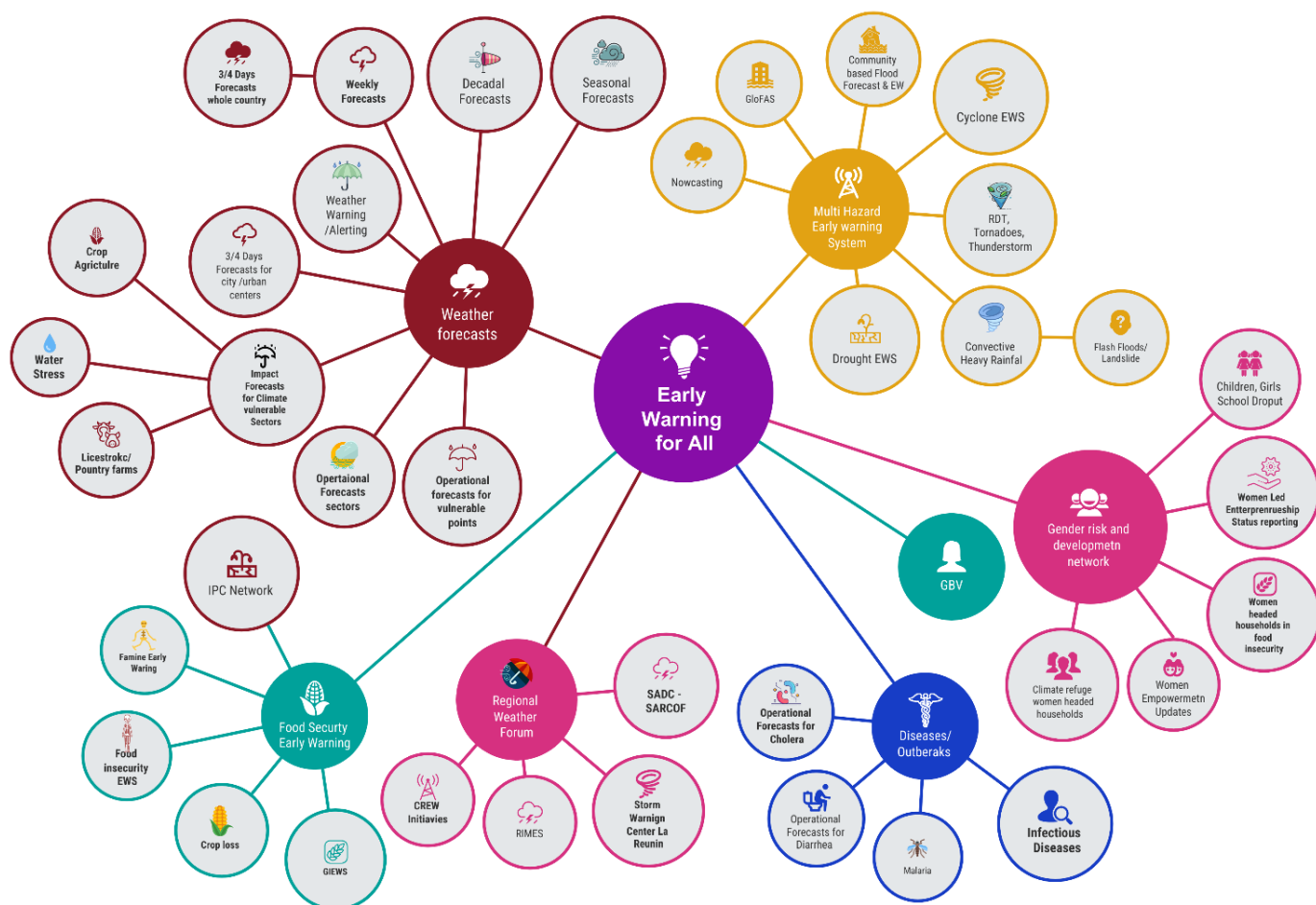


Figure: Proposed EWS for all value chains need to be handled jointly by EoC/Met Agency /NMHS / National Disaster Management Organization (NDMO) and other sectoral ICT Units

**a) Improving ICT-driven DRM governance at all levels (national, provincial, district, Administrative Post, ward, village) :**

The current DRM governance mechanism is managing a disaster emergency response paradigm, which is inadequate to function in the integrated multi-hazards, disaster, changing climate impacts, DRR, CCA, NAP portfolios, and multi-stakeholder coordination.

- ❖ Develop a gender-responsive and multi-stakeholder coordination DRM framework at all levels (national, district, province, ward, village)—strong multi-stakeholder coordination and gender response DRM structures for gendered DRR and resilience building.
- ❖ Need a Paradigm shift and transitioning from the existing DRM coordination process to undertake post-disaster emergency response-based ad-hoc interventions by the Civil Protection Committee to risk-informed multistakeholder coordination of DRM and DRR for local-level gender empowerment and development.
- ❖ Enhance the capacity of NDMO based on the current mandate (civil protection/ emergency preparedness and response)
- ❖ Improve DRM governance at the Provincial and district levels with DRM staffing and capacity building in DRM.
- ❖ Develop DRM planning at the Provincial and district level by clearly defining the multi-stakeholders map (state, nonstate, UN agencies, INGOs, national NGOs, CSOs, Charities, Private Sectors, Local Institutions, academia, youth girls organization, WLO, local charities etc.)

- ❖ Installation of Emergency Operations Center and SOP for supporting all early warnings, operational forecasts, EWS for women, girls/ youth groups, children, disabilities
- ❖ Sector and sectoral elements specific, farmers, Women-led category of entrepreneurs specific special impact weather forecast, operational forecasts.
- ❖ Structural DRM support for the women smallholder farmers (water access, drainage system, access to agricultural land, access to surface water /irrigation, access to solar PV powered irrigation, access to AVC inputs, horticulture supports, access to market etc.) . Develop Local agroecology-based DRM and DRR projects and pilot demonstration in every village and community level horticulture for supplying all agricultural inputs for promoting community-based DRR scheme.

**b) Setup EOCs at the province and district levels and improve of multi-hazard early warning system:**

- Most of the respondents mentioned the development of much-needed precision-level weather forecasts: Met agencies need to develop more specialization in developing high-resolution seasonal, decadal, weekly, 3-day, and 5-day weather forecasts, and need to develop a dynamic and statistical downscale model rapidly developing thunderstorm (RDT of Meteo France) for predicting heavy rainfall and thunderstorms.
- **Improving surface observation system:** Upgrading METEOROLOGICAL AGENCY weather observations system, acquisition of 5km grid data sets on surface observation, install more AWS with synoptic conditions tracking sensors, drone radar, laser ceilometer, radiosonde, rain gauging instrument, uses of EUMETCast lightning sensor data for tracking thunderstorm, Flood level gauging from the river system, flood forecasting and modeling.
- **Development of impact based weather forecasts and operational forecasts:** Develop methodology and guidelines on how to organize forecast briefing with guidelines on who will be the participants, how to interpret the risks by organizing discussion and analyzing weather model/outlook subject matter specialists ( *Agrometeorologist, hydrologist, geomorphologist, water resource engineer, Plant scientist, Agri engineer, drought experts, landslide expert, agroecologist, ecologists, meteorologist, synoptic engineers, geomorphologist, etc.*) along with forecasters( long, medium, short range), Numerical Weather Prediction(NWP) engineers/specialists, Synoptic Engineer and organize the forecast beliefs/discussion about the anticipatory impacts, risk and vulnerability and eventually developing impact forecasts. The multi-hazard risk analysis over the elements (which is not a designated responsibility of EOC operators) is group work, and the outlined specialists need to develop customized tools, methodology, guidelines on impact-based forecasts, and operational forecasts for the sector, sectoral elements, lives, and livelihood elements on the ground.
- **Analysis of weather phenomena and interpretation of risks and vulnerabilities:** Meteorological agencies need to develop high-resolution gridded forecasts and analyze the damaging and beneficial impacts of impending weather parameters on the lives and livelihoods of individuals. Met agencies need to develop a pool of technical experts/specialists (*Agrometeorologist, hydrologist, geomorphologist, water resource engineer, Plant scientist, Agri engineer, drought expert, landslide expert, agroecologist, ecologists, meteorologist, synoptic engineer, geomorphologist, etc.*) for interpreting the extreme weather phenomena being forecasted. Developing methodology, tools, and guidelines on transplantation and interpretation of risk and vulnerabilities of predicted impending weather phenomena/parameters. Detailed analysis of Impacts and effects of ongoing onset weather events and developing bulletins. Developing special weather bulletins for women, the elderly, girls, and youth groups on the onset of tornadoes, thunderstorms, heavy rainfall, cyclones, flash flooding, landslides, etc.

**c) Emergency Operations Center (EOC) to develop Early Action Protocol (EAP) :**

- Develop a forecast-based early action protocol, anticipatory loss and damage (L&D), and impact level, and instantly broadcast the messages so that every women-headed household is adequately warned /alerted. National media outlets need to play a pivotal role ( in the local language) by broadcasting distance learning education programs ( radio/TV) for awareness
- EOC to develop early warning-based anticipatory early actions advisories/bulletins for the women-headed households about what needs to be done in the given early warnings and impending hazard conditions so that they get well alerted and well prepared.

- d) **The Gender in Humanitarian Action (GiHA) :** Development of a forecast-based GiHA protocol for women/single mothers and girls-headed households
- e) **Develop national risk financing framework (gender-focused) :** The Ministry of Finance and Economic Affairs needs to develop a National risk financing framework and DRR budgetary allocation in every fiscal budget ( with gender-based allocations)
- f) **Mandating Local authorities' planning and budgets: Local authorities' budgets** are separate from the central Government budget; these are composed of local revenue. When a disaster occurs at the urban authority level, the urban council is responsible for disaster response. Suppose the magnitude exceeds the urban council's capacities. In that case, the urban council submits a request for assistance to NDMO, which can make use of the National Contingency Fund (or request additional funds from the Ministry of Finance) for emergency humanitarian support. However, the local government needs to develop DRR Planning and budgets for the TA level.
- g) **Inadequate Urban councils' planning and budget allocations for implementing community-level DRM/DRR schemes:** Urban councils do not have a budget for financing DRM/DRR schemes for poor households
- h) **Strengthen the National DRM Framework**
  - Apply an integrated approach from response, recovery, and reconstruction, to risk reduction and preparedness based on sound disaster risk assessment, and mainstream DRM in all sectors, through formulation/revision and enactment of the DRM Bill, development of the DRM Policy and DRM Strategy in line with the Sendai Framework for Disaster Risk Reduction.
  - **Institutional Strengthening and Capacity Development:** Enhancing the capacity of NDMO based on DRM, recovery, and resilience mandate (emergency preparedness, response, risk reduction, recovery, and resilience). This entails increasing capacities at the central level in terms of staff, technical capacity, and resources, as well as reinforcement.
  - **Improving Cyclone and Flood Forecasting and Early Warning:** Enhance forecasting and early warning for cyclone and flood events through the strengthened real-time observation network, early warning system, and capacity development for NDMO and METEOROLOGICAL AGENCY.
  - **Anchoring SARCOF** Southern Africa Region Climate Outlook Forum with METEOROLOGICAL AGENCY and EOC at Lilongwe and District level.

### 6.3 Improved Methodology, ICT tools, and stakeholder coordination for Development SADD :

SADD on demographic, socioeconomic, and sectoral multi-hazard and climate risk information data collection, collocation, and development of tailor-made informed tools is an essential component for risk-informed DRM, DRR, and CCA planning projects. Assessment countries (Malawi, Mozambique, Zimbabwe) lack a clear roadmap, methodology, guidelines, or tools for systematically collecting data from households. A clear roadmap, stakeholder map, and responsibilities, headed by the Vulnerability Assessment Committee, National Statistical Office, NDMO, and other local government organs and CSOs, need to mobilize the SADD data collections for support of gender-responsive and risk-informed development. The following proposed diagram shows the stakeholder coordinating structure governing the SADD process.

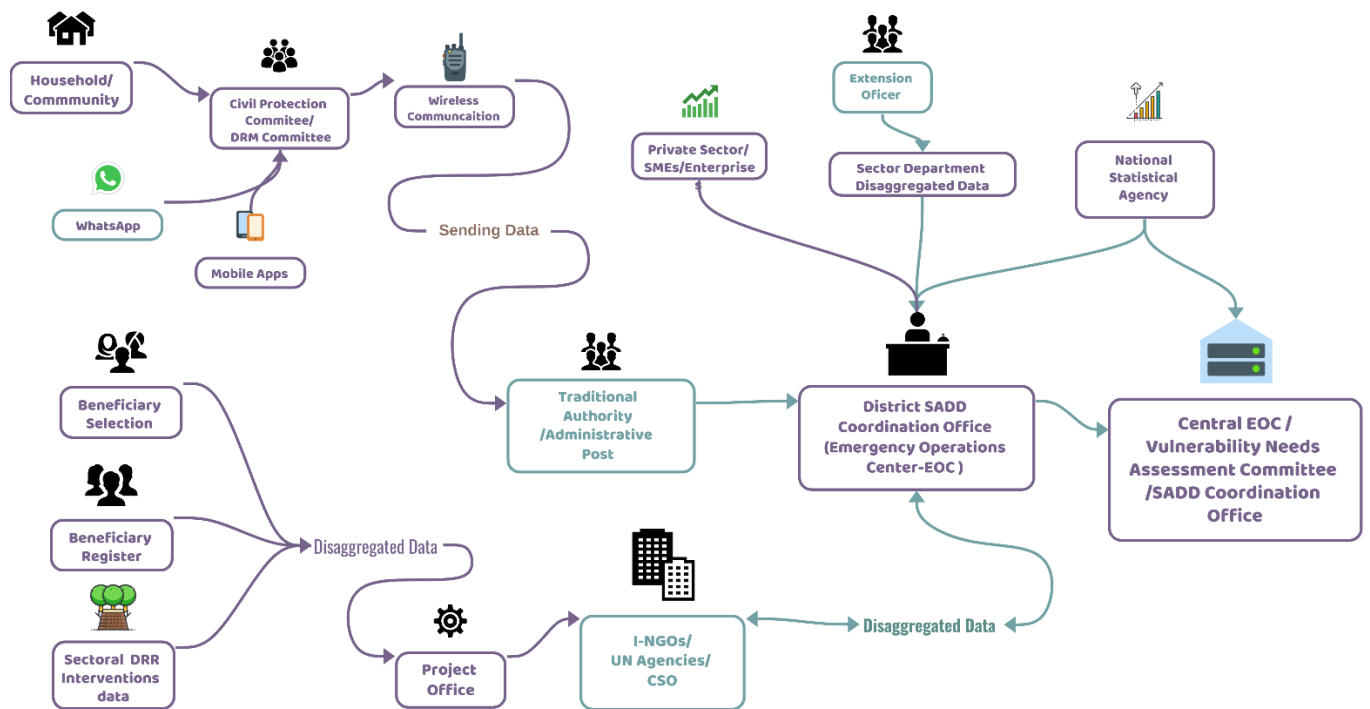


Figure: SADD Data Collection Mechanism



- Capacity development of the National Statistical Office, Ministry for Development Planning, relevant line ministries, and government officials at national and subnational levels to understand the importance of collection, analysis and use of disaggregated data for DRR policy and planning; and (UN Women in collaboration with the UNDRR ) develop the capacity of governments to collect, analyze and report on sex, age and disability disaggregated data) ( Without gender analysis and SADD, the disaster vulnerabilities and impacts of disasters on women and girls are often rendered invisible, and this deprioritizes their needs and capacities in disaster risk management and humanitarian response.
- Tailormade SADD for gender analysis in the necessary information to integrate gender perspectives into disaster risk reduction, climate change, risk-informed development, and resilience laws, policies, strategies, plans, programmes, and projects.
- Utilization of SADD data in planning efficient disaster risk reduction, resilience, and risk-informed development strategies, programmes, and projects that address both men's and women's needs and reduce inequalities.

#### 6.4 Improving UN , Government, and multi-stakeholder coordination mechanisms in DRM and DRR functionalities

The assessment identified key gaps in UN, Government, and multi-stakeholder coordination mechanisms in DRM, DRR, and CCA-related actionable planning, programming, intervention design, and implementations. The UN HCT coordination is mainly limited to mobilizing emergency post-disaster humanitarian assistance. The government is still developing a climate risk management framework, an actionable coronation structure, and localization of gender-responsive DRM, DRR, and CCA interventions at the local last mile.

Proposed diagram showing the coordination structure and risk-informed tools to be incorporated for gender-responsive planning and intervention implementation.



Figure: Diagram Proposed UN-Government Coordination Structure for DRM Process

#### 6.5 Community-level risk-informed gender development approach

To develop a roadmap to the WRD process from the assessment that has thoroughly investigated the existing systemic government structure, long-term perspective planning, medium-term planning, and strategies( 5 years), and actionable short-term planning( Annual Development Program -ADP), strategies, and identified that the in-place government system and top-down approaches are inadequately gender-responsive.

However, to bridge the last-mile bottom-up participatory gendered risk-governance gap, the assessment proposes the following risk-informed community-level gendered climate governance and action-oriented intervention implementation process.



Figure : Community-level risk-informed gender development approach

- Climate-resilient green entrepreneurship development
- Women's Access to Green Finances (internal government allocation, external donor funds, Multi-national companies running CSRs, SMEs, green development funds, green bonds, women empowerment Bank, private sector enterprises, etc.)
- Women's Access to forecast-based finances
- Women/single mothers/adolescent girls' leadership role in local civil protection and DRM community
- State, nonstate, and CSOs' roles/responsibilities, accountability to the affected population (AAP) at the local level
- Women's leadership in local-level DRR/CCA intervention planning and scheme implementation
- State, nonstate, and CSOs running the GBV reporting network
- Women-led agricultural value chain development
- Women improve access to local government sectoral services deliveries
- Climate information network and information services for women entrepreneurs, awareness raising of girls, and youth groups.
- Access to impact-based weather forecasts, forecast-based early action services
- Distance learning mass media-based climate education, adaptive/conservative and subsistence agricultural practices at the local level.
- Climate-resilient green entrepreneurship development

## 6.6 SGBV tracking network and dissemination system (Proposed )

- Robust information management network & violence reporting (web-based/geospatial), Social monitoring, networking, and women-led policing for reducing PESA and SGBV incidence
- National media outlet(Radio/TV) based on constant broadcasting on humanitarian situations and GBV incidence

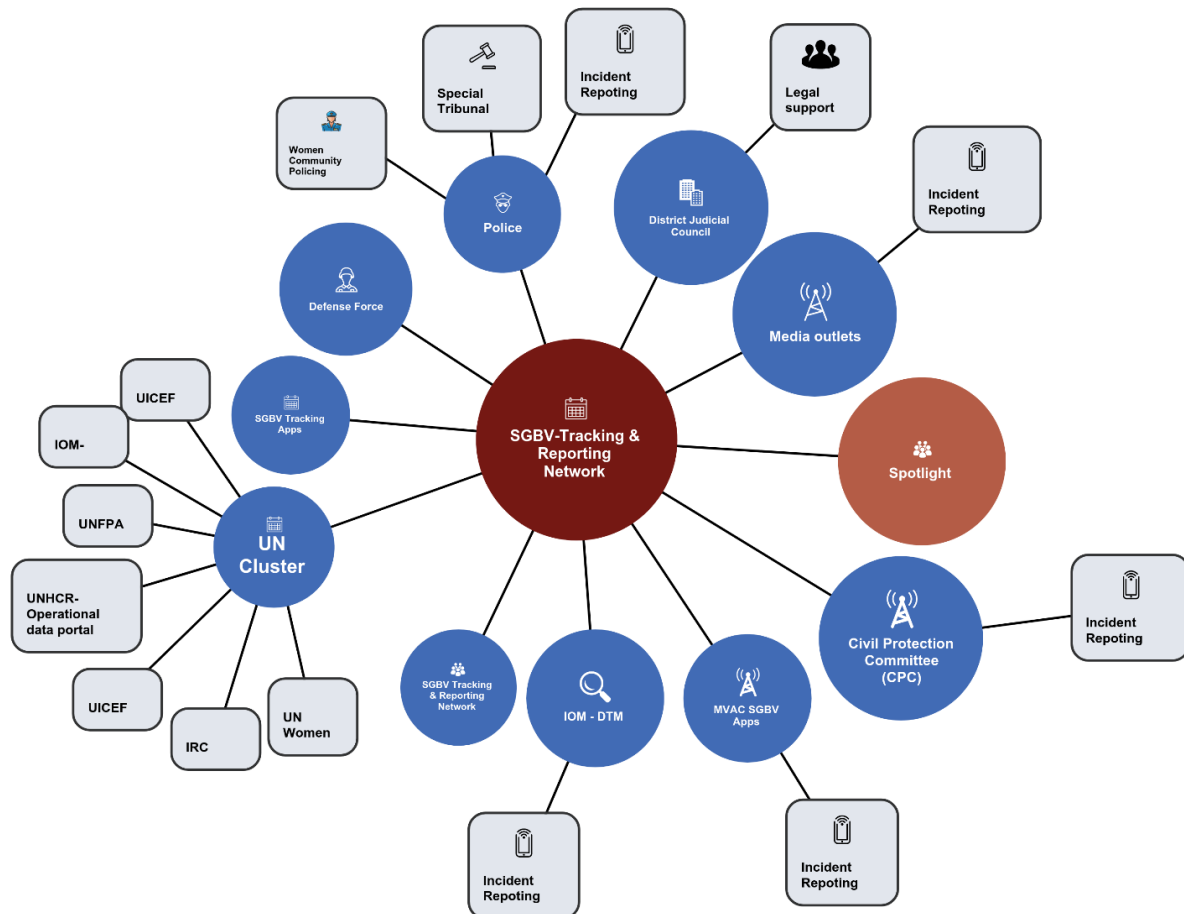


Figure : Proposed SGBV tracking and reporting network

## 7.0 Chapter: Actionable recommendations for stakeholders ( government, UN agencies, CSOs, UN Women CO )

### Annexure 1:

#### Proposed Institutional Capacity Building:

- Capacity development of the sector department in the gender action plan in every cluster
- Capacity development in the MIS system for tracking data on the cluster's gender progress.
- Revising DRM policy and inclusivity of gender components/agenda of DRM/DRR issues so that all interventions are to be should be gender-responsive
- Capacity development of the sector department in SADD tools, methodology, guidelines development, and coordination structure
- Capacity development to support the finance ministry in developing the finance framework.
- Capacity building of the gender ministry in gender-responsive DRM action plan development
- Capacity building of NDMO in developing DRR in humanitarian action in the National gender policy ( component on gender risk management ) and stakeholder maps ( UN Agency, Plan International, SCI, other actors ).
- Capacity building of EOC /Met Agency in the development of EAP and EWEA, impact-based forecast development, community-based early warning development, operational forecast development, and Improvement of early warning dissemination
- Capacity building of WLO, CSO, Local NGOs, and Youth Groups in DRM ( preparedness, response )
- Coordination Capacity of District level state and non-state actors in the implementation of Anticipatory action (AA) DRM programs, Food security and logistics, preparedness and response,

## 8.0 Concluding Remarks :

Females are the disproportionately larger demographic portion of the global population. In Malawi, they are largely contributing to domestic GDP( *In 2022, agriculture contributed around 26.73 percent to the GDP of Mozambique, Malawi 22.1%, and Malawi 7.19%*) as most of the agricultural workforce is women and adolescent girls, and significantly boosting the local economy. Unfortunately, frontline women in society are suffering from the effects of climate shocks. The last mile state and non-state actors need to empower women and girls to lift themselves out of the protracted poverty tangles and food and livelihood insecurity induced by climate change impacts.

Considering the multiple intricacies of gender dimensions, the assessment highlighted a comprehensive, bottom-up risk governance approach to making women /gender resilient to disasters. The women and other gender groups at the frontline are suffering from multi-dimensional problems with poor gender machinery structures & processes, and a gender-built government system that needs to be strengthened. The process of institutional decentralization primarily addresses the government's administrative layers and certain sector departments at the district level; however, persistent centralized control structures continue to hinder effective governance. The implementation of budget and fiscal autonomy for district-level government development still requires stronger political will, commitment, and accountability to the affected population. The district local governments require budgetary and fiscal support from the central government to drive gender empowerment, engage individuals, promote women-led micro-entrepreneurship development, access to smallholder farming, green entrepreneurship, private sector involvement in local agroecology-based rural economy development, and enhance gender resilience in the face of disasters.

Typically, districts are recognized as local development domains; however, in the assessment countries, local governments are still not fully decentralized and lack a local government body to govern participatory local government's gender machinery and simultaneously legislate on local development, local-level planning, budgeting, resource allocation, and sector-level functionaries. Centralized bureaucracies continue to control the local government system, which controls sectoral decentralization to the local level and lacks a roadmap for stakeholder coordination to implement district-centric, multi-stakeholder coordinated DRM and DRR actionable and coordinated planning and interventions. On the other hand, the paradigm of level planning decisions is biased by central bureaucracies and the masculinity of the power-structured political elites.

In these given circumstances, gendered DRR planning processes are hampered by the absence of structured gender machinery, gender dimensions, gender DRM/DRR framework, gendered climate risk-informed tools, gendered socioeconomic vulnerability tailored and evidence-based informed tools to inevitably influence the government planning and budgeting entities to identify the entry point of inclusivity of gendered responsive DRM/DRR planning and inclusive budgetary process. However, to date, the central government's strides in gender inclusivity to local planning and DRR development process come generically and reactively with some narratives not as indispensable agenda of considerations of the larger size of the population and potential the GDP contribution from the rural growth sector (*agriculture, livestock, agroforestry, aquaculture, fisheries, SMEs, food processing etc.*) to contribute hugely to the local and national economy.

The institutional level designating the gender professionals being influenced by the persistent bureaucratic dimension of power and decision-making process at the District and down level, rather the gender machinery, government mandates, climate risk-informed tools, gender socioeconomic vulnerability, climate risk information network, and gender DRR/DRM network can advocate gender fitness over the all administrative process, local development planning, DRM, DRR, CCA planning process.

Creating the much-needed sense of ownership at the central (National/Provincial/District) and local level (District/TA/Administrative Post /Village) levels over the paradoxical bureaucratic governance pattern which hinders the voices being heard, ensuring the inclusive participation of women and ensuring the use of evidence-based and gendered climate risk-informed tools for fostering the planning and budgeting processes.

Women, children, adolescent girls, elderly are living on the climate frontline terrain landscape with highest level of hydrometeorological hazardous hotspot, compounded by the highest level of risk and vulnerabilities to dangerous cyclones accompanied by heavy rainfall, storm surges, rapidly developing thunderstorm(RDT)-induced flash flooding, landslides, riverine flooding, but unfortunately, the state level hazard early waning, timely warning

dissemination, real-time public alerts still at the corner. Due to a lack of central government accountability in this regard, most of the fatality tolls are attributed to vulnerable groups. The capacity building, systemic improvement, and upgradation of multi-hazard early warning systems are now deemed a high priority for governments, aimed at saving lives and property, and minimizing loss and damage.