



STUDY REPORT ON GENDER DIMENSIONS OF CLIMATE CHANGE RELATED PROJECTS IN SOMALIA

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Abbreviations and Acronyms

ADESO African Development Solutions
CBO Community Based Organization

CEDAW Convention on Elimination of All Forms of Discrimination Against Women

CJIP Climate Justice and Innovation Project
DINA Drought Impacts and Needs Assessment
FAO Food and Agriculture Organization
FGS Federal Government of Somalia

FGD Focus Group Discussions
GBV Gender-Based Violence
GEF Global Environment Facility

GGCA Global Gender and Climate Alliance

GGO Global Gender Office

HADMA Humanitarian and Disaster Management Authority

IDPs Internally Displaced Persons

INDC Intended Nationally Determined Contribution
IUCN International Union for Conservation of Nature

JPLG Joint Programme on Local Governance

KII Key Informant Interviews

MoECC Ministry of Environment and Climate Change

MoEWT Ministry of Environment, Wildlife and Tourism

MoPIC Ministry of Planning and International Cooperation

MoWDFA Ministry of Women Development and Family Affairs

NAPA National Adaptation Programme of Action

NAPs National Adaptation Plans

NGO Non-Governmental Organization
NRC Norwegian Refugee Council

OCHA Office for the Coordination of Humanitarian Affairs

RRF Recovery and Resilience Framework
SDG Sustainable Development Goals

SIDRA Somalia Institute for Development and Research Analysis

SRCS Somalia Red Crescent Society

UN United Nations

UNDP United Nations Development Programme

UNFCCC United Nations Framework Convention on Climate Change

WASH Water, sanitation and Hygiene

WFP World Food Programme



Executive Summary

Climate change poses serious development challenge in Puntland and Somalia in general that needs to be addressed urgently. Somalia and Puntland development plans and policy documents recognize this challenge and observe that if climate change is not urgently addressed, it will compromise the progress that Somalia has made in the recent years. Many studies including the recent comprehensive Somalia Drought Impacts and Needs Assessment (DINA) indicate that climate change affect men and women and the different groups of Somalia population differently and that in climate mitigation and adaptation efforts should seek to understand these differences and use the opportunities they provide to develop climate resilience in Somalia.

Through the support of Diakonia Somalia, this study was carried out in between December 2018 and January 2019 to assess the gender dimensions of climate change related projects in Puntland. The study was based on literature review and field data collection. The literature reviewed focused on Puntland and Somalia policy documents related to climate change supplemented by selected global literature that present the state of knowledge and best practice on gender and climate change. Field data was collected in six target districts (Bender Beyla, Dangorayo, Iskushuban, Harfo and Dhahar) through focus group discussions and key informant interviews. Interviews were also organized with representatives of seven government ministries and four development organizations.

The study benefited from the inputs of a total of 68 respondents (both focus group discussions and key informant interviews) selected to represent an equal mix of men, women and population groups. Data collection sessions were guided by study questions which were contextualized in each session by the field team. Open notes were taken for each session and summarized on preformatted data capture forms at the end of each session. Data was process and analysed by identifying key responses and aggregate and categorise responses by study question. Standard office software was used for this process.

The key findings of the study include:

- i. Communities have a clear understanding of climate change and its hazards. Four broad category of climate change impacts in Puntland include: Loss of human lives, malnutrition, diseases, hunger and food insecurity; Degradation of the rangeland, poor pasture and loss of biodiversity; Livestock deaths and low livestock production and profitability; and Poverty, loss of livelihoods and low income.
- ii. Climate change projects in Puntland underline the importance of gender for their success but majority do not define or identify how gender issues and dimensions will be considered or addressed. Even for those that define specific gender actions, progress and achievements made in the planned gender actions is rarely reported.
- iii. Women and youth, and especially those in rural areas, are most affected. Women remain longer in the areas affected to care for children and elderly, have less social and economic power, participate less in decision making, have limited access to resources, have less skills and work more in climate vulnerable sectors such as agriculture and livestock production.
- iv. Climate change projects in Puntland currently reach a very small number of the people affected.
- v. Women climate change related needs are many and included participation in decision making, strengthening women organizations, development of special climate change



- projects targeting women needs, and elimination of social and economic barriers created by gender in-equality in Puntland. On the other hand, men reported access to employment and income to support the family deal with climate change challenges as their main need.
- vi. Women are important contributors to climate change adaptation and mitigation actions in Puntland because of their understanding, experience and involvement with natural resources daily and their organizing and leadership roles within local communities.
- vii. Climate change projects can be adapted to better address men and women climate change related needs through engagement with all stakeholders; comprehensive assessment of community needs and priorities; use of local communities' action plans; use of bottoms up approach to give communities active role in project planning and implementation; and ensuring men and women are equally involved in planning and implementing climate change project.
- viii. Both men and women have opportunities to influence decision related to climate change mitigation, adaptation and community resilience by participating in forums where climate change issues are discussed. To make this possible, the community should be educating on the need for active and full participation of both men and women and equipped with skills to engage in discussion and decision making. Participatory approaches and tools should be used by development agencies and government to ensure quality involved of both men and women.
 - ix. Gender should be mainstreamed in all climate change policies, projects and research in Puntland and Somalia. Specific actions required to integrate gender should be identified by every climate change related project. A framework for tracking progress on planned gender actions should be put in place, progress made reported and outcomes and achievement for both genders quantified and shared.
 - x. Drawing on current global best practices, climate change projects in Puntland can be assessed along six areas to evaluate how gender responsive they are: Recognition of gender differences; Equal participation; Equal access to project financial resources by both gender; Gender integration in planning and implementation; Gender consideration in capacity development; and Documentation and reporting on gender actions and plans.

Based on the study finding and the conclusions draw, the study made several recommendations to the government, development organization and local communities. To the central and local government, the study recommends the following:

- i. Prioritize climate change and it effects as an important development challenge and lobby for support from development partners mitigation and adaptation by the community.
- ii. Reach a larger proportion of the affected community, population and households and address their needs adequately by increase investment in climate change and lobbying for additional support from development organizations and funding agencies.
- iii. Mainstream gender in all climate change policies, projects and research and develop and implement a framework for tracking and reporting progress made in mainstreaming gender in climate change related projects and other development initiatives.
- iv. Develop policies, legislation, strategies and development projects that address specific factors that meet specific climate change needs and interest of men and women in Puntland and that address the factors that make women more vulnerable to climate change hazards and their impacts.



v. Encourage development partners to adopt a bottom up approach in climate change project to give the local communities an active role in the planning and implementation climate change projects in Puntland.

To the development organizations (including Diakonia partners), the study recommends the following:

- i. Define clearly actions required to integrate gender in the climate change project they implement and setup a mechanism to track, assess and report progress on the identified gender actions and assessing achievements in mainstreaming gender and outcomes realized for both genders.
- ii. Create partnership among development organizations working on climate change in Puntland and develop a shared framework for assessing and evaluating how gender responsive development projects are. Based on recent international best practises, areas of assessment may include (a) Recognition of gender differences; (b) Equal participation; (c) Equal access to financial resources; (d) Gender integration in planning, implementation and monitoring; e) Gender consideration in capacity development; and (d) Documentation and reporting on gender actions.
- iii. Adapt their project to increase women contribution to climate change mitigation, adaptation and community resilience in Putland by taking advantage of women unique understanding and experience with natural resources use and management and their organizing and leadership roles within local communities.
- iv. Adopt use of participatory approaches and tools in their climate change related projects as a standard to ensure quality involvement of men and women. Educate the community on the importance of full and active participation of both men and women in climate change projects and build the capacity of both genders to engage in discussions and make decisions
- v. Build their climate change programmes based on comprehensive assessment of community their needs and priorities ensure that their address the specific climate change needs and interest of men and women and the factors that make women and specific groups of the community more vulnerability to climate change hazards and impacts.

To the local communities, the study recommends the following:

- i. Community leaders and members should undertake assessment of their climate change related needs and priorities and produce and periodically update a comprehensive community climate adaptation plan the clearly identifies the needs of men and women and prioritizes any special vulnerable groups in the community.
- ii. Community leaders should ensure that government and development organization consult and engage local community organizations and groups and that both men and women are fully and actively involved in the planning and implementation of climate change projects in their areas.
- iii. Community leaders should lobby all the government, development partners and other agencies implementing climate change projects to base their project and interventions on the community climate adaptation plans prepared by the community.
- iv. Men and women should participate in capacity development activities that will improve their understanding of climate change, its hazards and impacts and mitigation and



adaptation options. Men and women should also build their skills communication and decision making.

Chapter 1: Introduction

1.1 Study background

SIDRA received a consultancy request from Diakonia Somalia Country Office to conduct a study on the gender dimension of climate change related projects in Puntland. The study details were provided in the Terms of Reference which is attached in annex 4 of this report. The study was carried out over a 20-day period between December 2018 and January 2019.

The study was based on the Diakonia Climate Justice and Innovation Project (CJIP) which seeks to find and build synergies from experiences from Diakonia work related to climate change in different countries with three aims: (a) Strengthen Diakonia country programs through learning and exchange and development of innovative approaches to climate change; (b) Ensure Diakonia's global climate change advocacy is rooted in the realities of the rights holders at the local level; and (c) Supports internationalisation through linking of on-going work to international and global climate change policy processes. The study was part of similar studies that were carried out in other Diakonia country offices.

1.2 Study objectives

Overall objective of the assessment was to generate lessons on the gender dimension of Climate Change (CC) related projects with the aim of: (a) Strengthening the capacity of Diakonia and its development partners to build community resilience to climate change; and (b) Contributing to national and international innovation on climate justice and resilience building.

The specific objectives of the study included:

- Diakonia Somalia country office and its development partners have clear understanding of how integrating a gender perspective in CC related projects can contribute to gender equality and deliver effective results in terms of climate change adaptation and / or mitigation.
- Diakonia Somalia country office and its development partners can draw conclusions on the support need to implement the lessons and recommendations of the study.
- Diakonia Somalia country office and its development partners can benefit from Diakonia CJIP and contribute to its objectives.

1.3 **Study Questions**

The study addressed the following questions:

- How do women and men describe the impacts of climate change?
- ii. How do women and men experience of impacts of climate change?
- What strategies do women and men use to adapt to changing climatic conditions and the iii. hazards caused by climate change?



- iv. What are the different needs and interests of women and men in relation to climate change?
- v. How and to what extent do climate change projects carried out in Puntland address the needs and interest of women and men relating to climate change impacts and hazards?
- vi. How can climate change related projects be adapted to better meet the different needs and interests of women and men?
- vii. How can women and men influence decisions that relating to climate change adaptation, mitigation and community resilience at household level, local government, national government and global level?
- viii. What changes need to be made to better take into considerations the different needs of women and men in decision-making relating to climate change at different levels (household, local and national government, and global)?

1.4 Study result areas

The study focused on the following result areas:

- i. Assessment of men and women ability to influence decision-making on climate change,
- ii. Assessment of the gender dimensions of climate change related project carried out by government and development agencies in Puntland,
- iii. Recommendations on how to address the linkages between gender and climate change within climate change projects in Puntland.
- iv. Recommendations on how to strengthen gender perspectives of climate change projects to contribute to more gender equality and more effective climate adaptation, mitigation and community resilience.

1.5 Study activities

To reach the study results, the following activities were undertaken:

- i. Literature review: A review was made of the relevant literature and documents,
- Collect data: Data collection tools were developed, test and applied to collect data during Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs) with local communities and rights holders, local authorities, government agencies and local and international organizations,
- iii. **Analyse data**: The data collected during the FGDs and KIIs was analysed to bring out key findings, draw conclusion and make recommendations,
- iv. **Report**: A study report was prepared covering finding of the study, conclusions and recommendations and submitted to Diakonia Somalia office for review. A final report was then prepared based on the inputs of Diakonia to the draft report.

1.6 Scope of the study

The study was essentially a rapid assessment and relied on published literature and data collected in five districts through community focus group discussions and interviews with key informants draw from local authorities, government ministries and development agencies. The study examined the gender dimension of climate change projects implemented in Puntland. It also assessment climate



changes challenges in Puntland to provide the context for the analysis. Where necessary, a National Somalia context was explored. Due to the limited time available, detailed gender analysis was not carried out.

Chapter 2: Study Methods

2.1 Data collection

The assessment was based on two sources of information, published literature on one hand and field data collected through Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs). To contextualize the study and provide basis for applying the results at the local level, five districts target districts were selected in consultation with Diakonia. The target districts were Bender Beyla, Dangorayo, Iskushuban, Harfo and Dhahar. The study selected published literature mainly covering climate change in Puntland with two main areas of focus: (a) Climate change projects implemented in Puntland and especially those addressing climate change at local community level in all or some of the five target districts; and (b) Climate change policy, strategies and legislation with Puntland and Somalia.

FGDs were organized in each of the five target districts and brought together a total of 51 participants of which 31 were men and 21 were women. Key informants were draw from representatives of the local government in the five target districts, 6 government ministries; 1 disaster management agency; and representatives of five development agencies with substantial work and experience with climate change projects in Puntland. To collect enough data to address the study questions, a data collection matrix was prepared as summarized on table 1 below.

Table 1: Data collection matrix

| Data sources | Desk Review | Focus Group Discussions | Key Informant Interviews |
|--|-------------|----------------------------|-----------------------------|
| 1. Published literature | 18 | - | - |
| 2. Local communities and right holders (5 Districts) | - | 5 | - |
| 3. Local Authorities (5 Districts) | - | - | 5 |
| Government ministries and agencies (7 Authorities) | - | - | 7 |
| 5. Development Organizations (5 Organizations) | - | - | 5 |
| Total sample | 10 | 5 | 17 |

Based on the study TOR, the initial assessment questions were elaborated to specific questions to guide the FGDs and KIIs. The elaborated questions are presented in Annex 1A to 1D. During the actual FGDs and KIIs, the questions were adapted as necessary to fit the specific data collection session. Where appropriate, questions were contextualized to the different situations. During the FDGs and KIIs, data was captured on standard data capture form and transcribed to prepare a summary for each FGD and KII. For the FGD and KII, when elaborating the guiding questions to the study participants, the study assumed a time frame of the last 5 years (2013 to 2018).

2.3 Data analysis and presentation

The study benefited from the inputs of a total of 68 respondents (both focus group discussions and key informant interviews) selected to represent an equal mix of men, women and population groups. Data collection sessions were guided by study questions (Annex 1A to 1D) which were contextualized in each session by the field team. Open notes were taken for each session and summarized on preformatted data capture forms at the end of each session. Data was process and analysed by identifying key responses and aggregate and categorise responses by study question. Standard office software was used for this process. The results of the analysis were used to address the study questions, draw conclusions and make recommendations.

Chapter 3: Study Results

3.1 Results of review of selected literature

3.1.1 Somalia and Puntland climate change related policy

Somalia national adaptation programme of action

Somalia National Adaptation Programme of Action (NAPA) was prepared through the Ministry of National Resources of the Federal Government of Somalia (FGS) to provide first step toward articulating and implementing a nationwide strategy that addresses the impacts of climate change across Somalia and therefore make Somali people more resilient to climate change in an environment of high vulnerability due the country high dependence on natural resources (FGS, 2013a).

In the introduction of the NAPA, the president observed the importance of strengthening the vulnerable pastoral and agriculture sectors which contribute to the economy of the land, protects the ecosystem and upon which the Somali people depend on each day.

The NAPA was formulated through a participatory approach and identified droughts and floods as key climate change hazards among others. Although most of the population of Somalia is vulnerable to climate change, NAPA consultations identified women and youth, and particularly those in rural areas as being highly vulnerable to climate change. Through active participation of women and youth representatives in the process, the NAPA aimed to understand the vulnerability that particularly affect women and youth, the role of women and youth in the management of natural resources, determine the hazards that have the most serious impact on women and youth and understand strategies used by women and youth to cope with, mitigate or manage risks. For example, the consultations were informed that women are continuously involved in associations and saving schemes (e.g. 'haagba') with the mindset of securing saving that would help them deal with impacts of natural disasters.

Somalia first national communication to the UNFCCC

The Federal Government of Somalia prepared its first national communication to the United Nations Framework Convention on Climate Change (UNFCCC) with the support of UNDP and GEF (FGS, 2018a). The communication appreciated that the greatest challenge of the 21st century is to combat climate change while ensuring sustainable national development. In Somalia, climate change poses great risk to humanity, affecting livestock, agriculture, ecosystems, water resources, energy



resources, human settlements and other key sectors which contribute to the economy. Somalia government is therefore determined to work on modalities to reduce climate change by developing a comprehensive nationwide response to climate change through adaptation, mitigation and creating resilient communities. These changes will safeguard the environment, support economic growth and sustain the future generations. Mitigation will help achieve the national emission reduction target of 35%.

Although a National Adaptation Programme of Actions (NAPA) has been developed, Somalia lacks the resources needed to implement the NAPA. The country is challenged and vulnerable and does not have the capacity to adapt. Constrain to adaptation include low level of income, high level of poverty within the population and insecurity. While majority of the Somalia population is vulnerable to climate change, women and youth have been identified as the most vulnerable groups. The effect of sexual division of labour, unequal access to both material and non-material resources and women's diminished participation in decision-making in both political and private domains, increases their vulnerability to the impacts of climate change.

The communication highlights the critical need to address the adverse climate and poverty trends within specific livelihoods with special focus on the rural and nomadic populations. Development strategies should aim at dealing with the drivers of climate change vulnerability and local communities should be engaged actively in developing adaptation strategies. Gender should be mainstreamed by making both men and women integral part of the design, implementation, monitoring and evaluation of policies and programs in all political, economic and societal spheres, minimize existing inequality and build the capacity of both men and women.

Somalia intended nationally determined contribution

In 2015, through the state minister for Environment, Somalia prepared its' first Intended Nationally Determined Contribution (FGS, 2015) in line with the requirement of the UNFCCC. Somalia has an arid and semi-arid climate with two seasons which are highly variable in time and space. Several factors, including charcoal production and lack of alternative source of energy for domestic cooking have contributed to wide spread land degradation across the country. The sustainability of ecosystems to support pastoralist and agricultural livelihoods on which the bulk of the population depends on has been under serious threat.

The Intended Nationally Determined Contribution (INDCs) report identified nine ready and planned nationally determined contributions. These cover areas of sustainable land management for resilience livelihoods and food security; Integrated water resources management to improve water access and supply for vulnerable population and sectors; Reducing risk of natural disasters among vulnerable population; UN joint programme on charcoal production; Rehabilitation of the Fanoole hydro-electric dam and irrigation infrastructure; Project for introduction and domestication of indigenous and economically important plant species; Charcoal production from Prosopis; Scale-up use of solar energy; and Marine and coastal environment governance and management.

The INDCs report however did not describe the gender aspects of the climate change challenge in Somalia nor present the way how gender aspects and considerations would be addressed in the planned and proposed INDCs.



Puntland integrated district climate change adaptation plans

With the support of UNDP, the Puntland Ministry of Environment, Wildlife and Tourism (MoEWT) prepared integrated district climate change adaptation plans for three districts, Qardo and Bender Beyla in Karakaar region and Dangorayo in Nugaal region (MoEWT, 2017a). In developing the plans, the ministry appreciated that climate change was a threat to food security, sustainable development and poverty eradication in Puntland and that if adaption measures were not identified and implemented, it may erode the significant development gains recorded in Puntland in the recent past. On the other hand, with the increasing importance of climate change as key factor constraining development in Puntland, climate change adaptation should be integrated in all development efforts.

To prepare the adaptation plans, climate change context and challenges in the three districts were studied through reviewed of available literature on climate change adaptation and field data collection through focus group discussions and interviews in the three districts. The analysis lead to the development of integrated climate change adaptation plans for the three districts with adaptation objectives and activities for various sectors including water; animal husbandry, animal health and range management; agriculture and food security; health; biodiversity; natural disasters; coastal and marine resources; economic development and employment; and cross cutting issues.

The analysis preceding the preparation of the adaptation plans found out that women were more affected by climate change compared to men. For example, climate change hazards lead to an increased work load for women thereby placing a heavy burden on them. The analysis also identified that women are disadvantaged because of lower level of education and limited access to resources. However, no specific gender aspects were presented in the adaptation plans and gender was only addressed briefly as a cross cutting issues with a proposal to ensure gender equity in all interventions by conducting gender analysis..

Puntland climate change and drought management strategy

The Puntland climate change and drought management strategy (MoEWT, 2016a) identified the absence of adequate planning as a hindrance to effective management of climate hazards in Puntland. The strategy observed that climate change impacts such as droughts, storms, cyclones and floods threaten the livelihoods of most Puntland communities especially because the large proportion of the population depends on natural resources for survival. The rural communities in Puntland are pastoralists and are severely affected by recurrent droughts. The strategy aimed to balance climate change prevention, mitigation, preparedness, response and recovery.

The strategy articulated that climate change was one of the major contributors to land degradation and food insecurity in Puntland. Most of the people are nomadic and their main source of livelihood is livestock, agriculture and fishery. Climate change poses risk to all sectors of the economy including livestock, agriculture, forest, water, energy, transport, public health and safety. Although climate change could be managed through environmental conservation, in Puntland, severe environmental degradation and poorly managed drought put the country at a high risk and makes the people vulnerable to climate change related disasters. Although local populations have over the years developed indigenous ways of adapting to droughts, the current trends of recurrence severe drought make these traditional drought adaptation mechanisms ineffective.



The strategy identified policy and governance, early warning and education and awareness as key pillars to climate change and drought management. It further proposed drought mitigation and preparedness measures in different sectors including water; livestock; agriculture and food security; and health among others. The strategy defined information; education; training and awareness; and funding as key enablers for the strategy. Although the strategy recognized that climate change mitigation and adaptation strategies must be gender sensitive, it did not address gender in any

Puntland disaster management framework

specific way in its objectives and implementation arrangements.

Puntland Humanitarian Affairs and Disaster Management Agency (HADMA), with support from OCHA and Diakonia developed a Puntland Disaster Management Framework (HADMA, 2011). The framework observed that Puntland is prone to disasters (cyclones, droughts, storms, floods, tsunami, etc.) which led to losses in livelihoods and property with damages experienced in many sectors including livestock, environment and infrastructure. This caused loss of revenue, unemployment and subsequently increased the level of poverty.

Factors contributing to vulnerabilities in Puntland included increase in human and animal population, environmental degradation due to poor livestock practices, poorly managed water wells, tree cutting, fragile dry environment and poverty. The Puntland Disaster Preparedness and Management Framework was therefore formulated to provide a framework for operational disaster management and guide response by all stakeholders. The Framework envisioned "Achieving sustainable social, economic and environmental development in Puntland through reducing risks and vulnerabilities, particularly those of the poor and marginalized groups, and by effectively responding to and recovering from disaster impact".

The areas identified for action included systematic vulnerability assessment; establishment of early warning systems, public environmental awareness; efficient communications system during disasters; actively involving community in planning for disaster management and recovery; coordination and clear delegation of responsibility; and establishment of operational disaster management policy and associated plans.

Lack of adequate capacity in disaster management and funding were identified as two challenges that may hinder translation of the framework into concrete action.

Reforestation guiding plan for Bander Beyla, Qardho and Dangorayo districts

MoEWT prepared a reforestation guide and plan for three target districts, Bender Beyla, Qardho and Dangorayo districts (MoEWT, 2015a) with the objective of providing a conceptual framework for developing a detailed multi-stage plan for sustainable reforestation in the three districts.

This plan was reviewed as a sample to assess how practical natural resources management technical guides and plans address gender considerations. The guide addresses the technical aspects of reforestation including seedling management, site and planting considerations, moisture management, tools and equipment, worker environment and record keeping and monitoring among other aspects. The guide however does not present any address gender aspects in the reforestation guide and plan for the three districts.



3.1.2 Climate change projects implemented in Somalia and Puntland

Enhancing climate resilience of the vulnerable communities and ecosystems in Somalia – Project proposal

UNDP has implemented a five-year project "Enhancing Climate Resilience of the Vulnerable Communities and Ecosystems in Somalia" (UNDP, 2014) whose project proposal was reviewed in this study to explore how the climate change project planned to integrate gender.

The project proposal identified that 70% of Somalis depended on climate-sensitive agriculture and pastoralism. The country suffered from severe drought and floods and was vulnerable to conflicts arising from scarce resources. The community lacked the expertise and financial strength to build resilience to climate change and the proposed project aimed to finance and support government ministries, local government and Non-Governmental Organizations (NGOs) and Community Based Organization (CBOs) to improve natural resource management and disaster preparedness. The project further aimed to build youth knowledge on climate change so that they can serve understaffed ministries and support CBO efforts on the ground. The project also aimed to empower women to market and to scale-up distribution of adaptation technologies, providing them with an improved asset base.

To address women vulnerability to climate change, the project included an output aimed at strengthening women's livelihood diversification by enabling them to market adaptation technologies (e.g. rainwater harvesting equipment) and increase their asset base. At the district level, the project aimed to work with the Joint Programme on Local Governance (JPLG) and Decentralized Service Delivery to supports women to get involved in development, through public meetings, training, outreach and media campaigns. JPLG structure ensured that line ministries, districts, women-based groups and CBOs had reinforced capacities on climate change adaptation and disaster preparedness. The project further aimed to empowering women and youth with climate change knowledge so that they can seize employment and business opportunities. These initiatives were further supported by UNDP expanded work to promote gender equality and women's empowerment by providing strategic support to relevant Somali stakeholders therefore empowering Somali women to be able to determine and lead their own agendas, as well as inspire others. On this foundation, the project aimed to build resilience of women livelihoods in all zones where it was implemented through:

- Selecting women groups from each of the eight districts for training and leading the piloting of innovative businesses aimed at adopting climate adaptation technologies and increasing livelihoods (e.g., drip irrigation systems, and solar water pumps),
- ii. Sizing the historical and cultural involvement of women in operating small business,
- iii. Involvement of women in farms and agriculture and the opportunity to operate solar pumps for shallow wells that can be used to improve crop and vegetable production. Women can also be involved in the sale of water, as many already do through water catchment through private berkads,
- iv. Working with women organizations to identify members who want to jointly start an enterprise, and
- v. Providing women with value-chain analysis training, assisting them with setting up of the business and supporting them with initial capital and marketing.



The project aimed to realize a 10% change in revenue for women groups running sustainable businesses aimed at adopting climate adaptation technologies and increasing livelihoods. The project also aimed to realize a 25% increase in climate change awareness and climate change adaptation knowledge among the project beneficiary, of which 50% were women. Despite the elaborate gender mainstreaming strategy of the project, review of some of the project progress reports did not present achievement made in realizing the gender actions proposed by the project and the impact realized in building the capacity of men and women to adapt to climate change.

Enhancing climate resilience of the vulnerable communities and ecosystems in Somalia – Phase 1 report

MoEWT prepared a report of the first phase of the "Enhancing climate resilience of the vulnerable communities and ecosystems in Somalia" project funded by UNDP/GEF to enhance the resilience of vulnerable communities and ecosystems in Somalia through a host of interventions including water resource infrastructure development, rehabilitation of degraded rangelands, public awareness raising and provision of small grants for natural resources management related activities (MoEWT, 2016b). The project was motivated by the high risk that climate change poses to communities and the ecosystem in Somalia, especially considering that the bulk of Somali population pastoralists and small holder agriculture produces and therefore depends on natural resources for their livelihoods.

The project covered a wide range of interventions including rangeland rehabilitation; construction of water harvesting and storage facilities; establishment of pastoral associations; conducting of public environmental awareness campaign; training in climate change, Water, sanitation and hygiene (WASH) and natural resources management; and environmental round table discussions with secondary school students among other activities.

In Puntland, the project ensured close participation and involvement of the community through consultation with the local authorities, pastoralists, farmers, charcoal producers, fishermen, elders, women, and youth in the three districts (Beyla, Qardo and Dangorayo) where it was implemented.

The final report of first phase of the project clearly demonstrates gender considerations in community consultation and mobilization meetings, selection of project intervention sites, and in the trainings where in some cases the participation of women exceeded that of men. For example, the report recorded 53% participation of women in the WASH training carried out in the three districts in November 2015. However, despite the recorded gender considerations, the report did not demonstrate achievements by gender even on gender specific interventions.

Somalia Drought Impact and Needs Assessment

Although Somalia managed to avert famine in 2017, droughts coupled with erratic weather patterns makes famine an ongoing risk and therefore preventing achievement of vital long-term development goals needed to lift Somalia out of poverty and insecurity. FGS sort the support of the World Bank, the European Union, and the United Nations in conducting a comprehensive Drought Impact Needs Assessment (DINA) and Recovery and Resilience Framework (RRF) to assess the impact of drought on lives, livelihoods and sectors of the economy. Somalia Drought Impact and Needs Assessment (DINA) was prepared under the overall leadership of the Ministry of Planning, Investment and Economic Development (FGS, 2018b). Apart from determining the drought damages, losses and needs, the



DINA aims for a multi- sectoral phased recovery strategy focused on strengthening resilience to future disasters and effectively preventing the cyclical risk of famine.

The Somali customary system is based on a clear gender division of labour, and Somali women have unequal access to resources, opportunities, power and decision-making. Somalia has the fourth lowest position globally on the Gender Inequality Index and women suffer severe exclusion and inequality in all scope of the index—health, employment and labour market participation.

The DINA study found out that drought has had a disproportionate impact on the livelihoods, safety and wellbeing of women and girls in Somalia. The drought has aggravated the existing vulnerabilities and social marginalization of women and has induced massive displacement, with the majority being women and children. Prolonged exposure to drought has extended migration and family separation; increased school drop-outs of boys and girls and placed unbalanced responsibilities on women. For women, the increased travel distances in search of water and firewood, additional unpaid care work, increased drought-related diseases, a need to adopt an income earning role has resulted in increased work burden for women and increased drop-out rate for girls.

The drought has also put the women and children at higher risk of malnutrition and poor health as they traditionally eat after men. Female-headed households are exposed to protection risks such as forced evictions, discrimination, family separations due to lack of support structures and ungoverned settlements. As women and girls travel longer distances without protection to find water, food, livelihoods and other resources, they are more exposed to gender-based violence (GBV).

In agriculture, drought has plunged most of the population into food insecurity which has resulted to rise in malnutrition and lack of nutritious food. In crop production, Somali women share activities with men, while providing more than 60 percent of labour in subsistence farming. Due to their vulnerability, female-headed small-scale farming households have been the hardest hit by the drought. Women are heavily involved in subsistence farming (milk production, meat marketing and poultry production) leaving them particularly affected by the drought effects on livestock. Somali women have unequal access to agriculture, livestock and fisheries production inputs and technology.

In livestock, drought has caused massive population movement in search of grazing land and water for livestock, compounding issues related to displacement. The private sector is pivotal in the growth of the livestock trade in terms of provision of essential services and infrastructure development. In the water sector, scarcity of drinking water has contributed to a stark rise in malnutrition and water-borne disease. Women and girls traveling to water points and sanitation facilities that are limited and located far from homes are exposed to serious risk of violence. Women and girls, who have the primary responsibility for collecting water for domestic use, are now traveling increased distances in search of water. Scarcity of water and absence of men due to drought and conflict have resulted in an increase in women work burden in the household. The drought has caused water points to become the center of inter/intra social group conflict for control, access and use of water for human and livestock needs.

GEF climate change adaptation - Project proposal

The project proposal of GEF climate change adaptation project under development by UNDP presents detailed analysis of gender and climate change in Somalia. Project is under development and was accessed by the study team through communication with UNDP. The proposal gender



chapter provides detailed analysis that demonstrate critical links between gender and climate change in Somalia.

Gender policies exists at the Federal level (Somalia Gender Policy, 2013) and as a draft in Puntland. The policies required key strategic areas to be implemented to promote social justice and gender equality with active participation of women. Areas of focus identified include: (a) Strengthen gender equality and women's empowerment; (b) Implementation of relevant United Nations and other international gender legislation and frameworks in Somalia; and (c) Strong leadership in Somalia for gender equality and women's empowerment.

Although climate change affects most of the Somali population, its experience and impact are not equal to both genders and different groups of the population. Women and youth have been identified as the most vulnerable groups with several factors contributing to this situation:

- i. Majority of the poor in Somalia are women who face higher risks and greater burdens from the impacts of climate change.
- ii. Existing gender inequality in decision making processes and inequalities in access and control over resources prevent Somali women from fully contributing to climate change related planning, policy making and implementation in both the public and private domains. This increases their vulnerability to climate change.
- iii. Women must find their ways to feed their families which requires them to find wood fuel and drinking water which is more difficult and riskier during drought periods.
- iv. Women suffer from malnutrition due to food insecurity caused by drought or floods as they often feed the family and children first with the little that have.
- v. Pregnant and breast-feeding mothers generally need a better nutrition and are hard hit and suffer from lack of protein intake when livestock are lost due to drought or floods.
- vi. Climate change has increased women and youth exclusion from politics and decision making leading to exposure to acts of violence and radicalization.

The project proposal highlights that despite this situation, women in Somalia play critical role in responding to climate change. They apply their local and conventional knowledge, leadership and practical experiences in sustainable natural resources management at the household and community level. The proposal identified specific ways in which the proposed project will integrate gender. These include:

- i. Considering specific roles and needs of women and men and those most vulnerable in water management.
- ii. Ensuring sustainable use of water by promoting innovative gender-responsive solutions based on improved capacity, knowledge, new self-employment opportunities, and access to planning and decision-making.
- iii. Exploiting livestock value chain to improve women's and youth's economic situation and consequently their role and status in decision-making.
- iv. Increasing women's participation in development of environmentally, cost-effective practices and methods of sustainable water resource management and their wide spread use by both men and women.



These solutions will produce changes in status and role of women and men and to some extent transform gender relations to make them more equal. In this context the project will consider the roles played by women and men in finding alternatives when water resources are deficient.

Community level capacity needs assessment in Puntland

The Ministry of Environment and Climate Change (previously Ministry of Environment, Wildlife and Tourism) in collaboration with UNDP commissioned a rapid community capacity needs assessment to assess the capacity of the local community to implement climate change related projects in Puntland (MoEWT, 2017b). The assessment was carried out in five districts (Qardo, Bandar Bayla, Dangoryo, Dhahar, Jariiban and Burtinle) and examined the capacity of local government and community.

The assessment identified that climate change hazards such as droughts, storms, cyclones and floods threaten the livelihoods of most Puntland communities who depend on natural ecosystems and is a major development concern in the state. It is necessary to build the capacity of the local government and community to effectively address climate change challenges and integrate them in local development actions.

The assessment found out that the capacity development actions carried out in the districts in the past had not been properly documented hindering accurate evaluation of the capacity status. The assessment therefore tried to take stock of completed, ongoing ad proposed environment related capacity development activities, initiatives and projects. With climate change becoming a critical concern in realizing sustainable development in Puntland, the assessment stressed the need to strengthen local capacities in implementing interventions that address climate change and build community resilience. Following the assessment, priority areas for capacity development were identified. The need for effective resource mobilization and management was raised. This would make use of local resources to support local initiatives to combat climate change.

The assessment recommended that gender should be mainstreamed in climate change programmes and related capacity development activities but did not address specific gender dimensions of climate change capacity development.

Climate change vulnerability assessment of pastoral communities in Puntland

MoEWT conducted a climate change vulnerability assessment of three pastoral communities in three districts of Puntland. Dangorayo, Qardho and Bender Beyla (MoEWT, 2015b). The assessment aimed to understand the level of impact of climate change on the pastoral livelihoods and use the information gathered to formulate a climate change strategy for Puntland so that food security is achieved for all.

The assessment identified that the whole population (Men, women, boys and girls) was affected by the climate hazards but women were more vulnerable than men. During droughts, because of limited food, breastfeeding and pregnant suffer malnutrition. Traditionally, women will serve the food to the men and boys first before they can get their share which may be less in quantity and nutrition. Among other recommendations, the assessment raised the need for climate change resilience and response measures to be gender sensitive and focus on the supporting women withstand the effects of the climate risks. The other recommendations included enforcement of environmental legislation



and customary law, promoting surface water harvesting technologies and enhancing the livelihood assets of the community to avoid collapse and therefore negative coping strategies.

Climate change adaptation in Somalia

Senior advisor to the Minister of Agriculture of Somalia Federal Government made a presentation on Somalia climate change adaptation plans and activities during a participatory workshop organized in Addis Ababa, Ethiopia, to assess seasonal prediction of climate extremes in the greater horn of Africa (Abnoor, 2015).

The presentation articulated that Somalia has been troubled by internal conflicts over two decades therefore compromising it development efforts. The federal government is aware of the risks that climate change represents to progress, peace and security. The preparation of Somalia National Adaptation Programme of Action (NAPA) illustrates this and address the impacts of climate change.

Due to the importance of climate change in Somalia, many players are involved in climate change initiatives including government, United Nations, local and international NGOs and funding agencies.

Women and youth, especially those in rural areas have been identified as most affected by climate change. Women are most vulnerable due to culturally defined gender roles, unequal access to resources and limited participation in decision making. The bulk of Somalia population is young but Somali youth are trapped in an environment of violence, fear, unemployment and poverty with few opportunities for positive engagement leading them to crime and other risky activities. The presentation recommended the following areas of action:

- Data collection and analysis on climate related disaster (droughts, floods, dusts storms, strong winds),
- Establishment of national early warning system with a focus on climate related risks in areas of high vulnerability in the country, and
- Community level mapping of vulnerability and integration of vulnerability mapping results iii. in local disaster risk management plans and responses.

National development plans and policies 3.1.3

Somalia National Development Plan 2017 - 2019

The Somalia National Development Plan (Federal Government of Somalia, 2017) covers the fiscal period 2017 to 2019 and its theme is to accelerate socio-economic transformation to achieve poverty alleviation, economic revival and societal transformation in a socially just and gender equitable manner. The plan was developed through extensive consultations with wide variety of stakeholders including Federal government line ministries, national agencies, federal member states, civil society, NGOs, private sector, youth and women.

Overall, the plan aimed to realize results in the areas of Security, politics and reconciliation; Reduced poverty; Resilient communities that can withstand internal and external shocks; Vibrant economic sector; Increased availability and accessibility of quality of basic education, health, water and sanitation services; Increased employment opportunities and decent work particularly for the youth; and Federal political and economic framework that empowers the federal member states to deliver services and economic opportunities to the citizens of Somalia in a secure environment.



Unlike many development plans that include gender as a cross cutting issue, the development plan address gender as specific entities to ensure that gender issues are accounted for effectively in terms of responsible agencies and funding.

The plan identifies gender discrimination in Somalia is an old issue which is particularly pronounced in the areas controlled by Al-Shabaab. Somalia has a patriarchal social environment where girls are often subject to parental restrictions and where social and cultural factors and norms promote unequal power status of men and women with the tradition favouring male dominance. Women are left largely illiterate, bearing heavy domestic, farming and small livestock rearing responsibilities, in poor health and powerless. Women are also seriously under-represented in political office and in senior positions in the public and private sectors.

From a climate change perspective, the plan aims to invest in building a more resilient communities that can withstand internal and external shocks including cyclical droughts and other natural disasters through integrated approaches to development and risk management. The public sector and non-state institutions, as well as communities, need to be better equipped to forecast the likelihood of disasters occurring and to design better response mechanisms to ameliorate disasters once they occur. Systems to manage food security need to be enhanced to avoid hunger and starvation while systems need to be developed to strengthen the social and economic security of the population, particularly the poor.

From a gender perspective, the plan aims to promote gender equality and freedom from discrimination of all persons in Somalia and reduce gender inequalities and discrimination by creating an enabling legal, policy and institutional environment to achieve gender equality and equal opportunities. The plan aims to improve safety and security for women and make available quality gender statistics and information to address gender disparities and monitor performance of gender equality initiatives.

Puntland Development Plan 2017-2018

Puntland Development Plan (Puntland Government of Somalia, 2017) developed through the coordination of the Ministry of Planning and International Cooperation (MoPIC) recognizes Puntland Government of Somalia as the most developed state within the Federal Republic of Somalia. The plan was developed through an all-inclusive and participatory consultative process to provide an in-depth understanding of the Puntland State development problems, related priorities and the necessary strategies required to realize sustainable development. The plan covers six strategic sectors: Governance, Security, Justice, Livelihoods, Social and Infrastructure.

Although gender is addressed as cross cutting issue in all the six strategic sectors, the plan addresses specific gender concerns within the social sector development which seeks to promote education, health, social protection, gender equality, decent work conditions and empowerment for different groups such as women, children, youth, internally displaced persons, the older persons and persons with disabilities.

The situation analysis conducted under this sector identified that although women accounted for 60% of the population, they were underrepresented in the decision-making process and are few in the government service, military and police. There is widespread illiteracy among women and women in managerial positions in public and private sector remains very low. is widespread problem.



Government budget allocation to women development is less than 1% and women political

Overall, the development plan aims to achieve better health, education, gender equality, and employment results and provide a framework for increased aid effectiveness to reduce poverty and improve the livelihood for all people of Puntland.

The plan also addressed climate change and disaster management as a critical cross cutting factors that affect all six strategic sectors. Specifically, the plan provides for activities to address the adverse effects of climate change and land and environmental degradation through establishment of early warning systems and protection programmes.

Somalia National Gender Policy 2014 – 2024

participation is severely low.

The Somalia national gender policy (FGS, 2013b) observes that Somali women were disproportionately affected by the prolonged conflict in the country and borne the brunt of the conflict. However, despite the negative impacts of the conflict, Somali women became the primary income providers for their families and took new roles and responsibilities for the survival of their families. The policy affirms that addressing gender inequality is crucial for recovery and sustainable peace and development in Somalia. The policy aims to provide guidance for gender sensitive programming in the areas of economic empowerment, education, health and governance and political participation.

The policy goal is to promote gender equality and sustainable human development in Somalia by ensuring that equal value is placed on the contributions of women and men as equal partners in post conflict reconstruction processes and national development. The policy establishes a framework to guide the process of developing legislations; policy formulation and implementation; and programmes that will promote equal rights and opportunities for women and men in all spheres of life. The objectives of the policy include:

- i. Eliminating all forms of gender discrimination from Somali society,
- ii. Reducing gender inequalities between women and men; boys and girls to achieve sustainable livelihoods,
- iii. Promoting and advocating understanding of human rights of women and men.
- iv. Increasing women's participation in decision-making processes at all levels,
- v. Providing sets of guidelines for concrete strategies and actions to empower women and men, girls and boys,
- vi. Holding government accountable to its commitment to gender equality, and
- vii. Promoting positive societal beliefs, attitudes and behavioural change pertinent to achieving gender equality.
- 3.1.4 Linkage between gender and climate change

Framework for gender responsive national adaptation plans

The framework for gender responsive national adaptation plan (NAP Global Network, 2017) aims to enhance national adaptation planning and action in developing countries through coordination of



bilateral support and in-country actors and by facilitating international peer learning and exchange. The network has prepared a framework for gender responsive climate change national adaptation plans. With the increasing attention to create synergies in all efforts directed towards addressing climate change, one of the identified areas of intersection is gender equality integration in action geared towards realizing the Sustainable Development Goals (SDGs) and the Paris Climate agreement.

Gender equality is a universal human right and the Convention on elimination of All Forms of Discrimination against Women (CEDAW) among other related legislation is at the centre of the SDGs. Climate adaptation efforts will not be effective or sustainable if they do not take gender into account because women, girls, boys and men experience the impacts of climate change in different ways and have different needs, opportunities and capacities to respond. Women face additional barriers to adaptation compared to their male counterparts due to social norms and practices. By acknowledging gender differences in the NAP process, efforts can be made to empower women as agents of change. Women play key roles in contributing to household food and livelihood security, managing climate-sensitive resources and in community organization and leadership. The NAP process therefore presents an opportunity to address gender inequalities and mainstream gender in climate change response actions.

A gender responsive NAP process would include among other things: (a) The recognition of gender differences in assessing adaptation needs, opportunities, and capacities; (b) Equal participation and influence by men and women in adaptation decision-making processes; (c) Equal access to financial resources and other benefits resulting from investments in adaptation between men and women; (d) Emphasis on gender in the development and implementation of adaptation projects; (e) Gender consideration in capacity development efforts for both NAP teams and stakeholders; and (f) Document of the efforts to integrate gender considerations into country adaptation plans, strategies and reports and tracking of progress on this issue.

Gender and climate change report

The gender and climate change report (GGCA, 2016) observed that climate change is an important global phenomenon whose impacts are already being experienced by every person around the world. One important area of inequality is that of gender. Gender inequalities have social, economic, political, and cultural implications for individuals responding to climate change. Based on the inequalities associated with socially constructed gender role, men and women have different experiences on matters climate change. Gender plays a key role on how women, men, boys and girls are affected and response to climate change. Although gender discussion in climate change revolve around women and girls, men and boys also have unique vulnerabilities which should be addressed through gender mainstreaming. Women and men have different perspectives and understandings, and both knowledge are needed to address issues related to climate change.

A lot of effort has been put to improve the capacity of women cope with climate change by GGCA members and other organization including pushing for increased female representation in environmental governance institutions. This will ensure gender parity in climate leadership roles and ensuring that gendered language remains at the forefront of climate policy efforts. Despite the progress made, in some cases, efforts are lagging. It is therefore necessary that gender mainstreaming practices should be incorporated into all types of climate change policies, projects, and research.



Climate financing is an important mechanism for funding projects designed to mitigate and adapt to the impacts of climate change in developing countries. There has been concern that climate finance institutions fails to address the needs of both women and men in their funding decisions and are doing enough to ensure gender mainstreaming activities are incorporated in the projects they fund. For this reason, in recent past, major climate financing mechanisms have adopted specific gender policies and action plans that are designed to change institutional norms towards gender.

Gender mainstreaming has led to efforts to create gender parity in policymaking activities, increase use of gendered language in environmental treaties, ensure climate financing schemes include gender as a central focus, and reduce gendered differences in vulnerability and adaptation capacity building. It is believed that gender mainstreaming improves outcomes for women and men yet there is a strong need to document whether and how this is true. Impacts of gender mainstreaming are now being documented but the evidence base is still small.

The report presents a details assessment of impacts of climate change on livelihood and adaptation strategies in many sectors including agriculture, forestry and fisheries. It examines how gender mainstreaming can address climate change impacts and exploit opportunity for gender responsive climate change adaptation.

The Landscape and Way Forward on Gender and Climate Change

The publication "Roots for the future" was produced by the IUCN Global Gender Office (GGO) under the auspices of the Global Gender and Climate Alliance (GGCA) joint programme to present the best lessons, experiences and success stories in combating climate change and gender equality.

The report urges that climate change has direct and indirect impact on people's lives but affects mostly the poorest people in the poorest regions, the majority of these being women. The engagement and leadership of both men and women, equally, are needed to make our global response to climate change fully effective. Women's contribution is essential. In developing countries, women play a powerful role in sustainable agriculture and food security, as well as conservation of soil, forests and water resources.

In most societies there are significant differences between the rights realized and opportunities available for women and men. Women are marginalized by broader societal and cultural structures that limit their rights because of gender. They make up most of the poorest populations and are therefore likely to experience more severe impacts associated with climate change due to their economic status.

Through the UNFCCC, specific mandates have been put in place to ensure gender considerations are integrated into climate change policy making, programming and finance; ensure that diverse populations are represented in key decision-making processes and develop policy to protect rights of all communities and groups that may be impacted by climate change.

Gender mainstreaming is a globally strategy (approaches, methods, tools, technical and institutional processes and policies) used by the international community to identify gender inequalities and advance proactive actions towards gender equality. It serves the interests of both women and men in its long-term purpose of eradicating inequities and transforming discriminatory laws and practices. Although progress has been made on gender equality initiatives globally still there remains



challenges such as deaths of girls and women, disparities in girls' schooling and unequal access to economic opportunities

Gender and climate change - UNDP policy brief

The earth climate is changing and therefore the urgent need to limit warming. The launch of Sustainable Development Goals and the (SDGs) Paris Agreement in 2015 presented achievements for gender and climate change. This policy brief presents an overview of the linkage between climate change and gender (UNDP, 2016).

Climate change impact men and women differently due to their gender roles and powers at the household and community levels. Women are the worst hit due to the cultural and religious norms which limits women from making quick decisions in disaster situations. Women often are poorer, less educated and less involved in political, community and household decision-making processes that affect their lives. Women do not have easy and adequate access to funds to cover weather-related losses or adaptation technologies. Women have less economic, political and legal influence and therefore don't have the capacity to cope with the adverse effects of climate change. Yet, women are powerful agents to change and continue to make significant contributions to sustainable development

Gender equality is a fundamental human right. Studies show that gender equality and women's empowerment are central to economic development as well as environmental sustainability. Climate change is a threat to sustainable development and can jeopardize gains made by the global community in important domains such as food security and access to health and education. Meaningful participation by women will enhance the effectiveness and sustainability of climate change projects.

There is need to integrate gender perspectives into mitigation and adaptation actions and ensure that adaptive actions aim to build up the asset base of women. Mitigation and adaptation efforts should address sources of gender-based vulnerability, gender inequality and poverty. Analysis should be conduct on women's and men's roles in sectors impacted by climate change and their strategies for coping. As part of the development agenda, it is essential that gender equality and women empowerment continue to influence and drive collective climate and human effort.

Gender and Climate – IUCN issue brief

The IUCN issue brief on gender and climate change (IUCN, 2015) focuses on strengthening climate action by promoting gender equality. The brief observes that recognizing the important contributions of women as decision makers, stakeholders, educators, carers and experts across sectors and at all levels can lead to successful, long-term solutions to climate change. Women have proven to be leading the way towards more equitable and sustainable solutions to climate change. Across sectors, women's innovations and expertise have transformed lives and livelihoods, and increased climate resilience and overall well-being. Global negotiations have increasingly reflected the growing understanding of gender considerations in climate decision making.

Women and men are experiencing climate change differently, as gender inequalities persist around the world, affecting the ability of individuals and communities to adapt. Across societies the impacts of climate change affect women and men differently. Women are often responsible for gathering and



producing food, collecting water and sourcing fuel for heating and cooking. With climate change, these tasks are becoming more difficult. Extreme weather events such as droughts and floods have a greater impact on the poor and most vulnerable of who about 70% of the world's poor are women.

Despite women being disproportionately affected by climate change, they play a crucial role in climate change adaptation and mitigation. Women have the knowledge and understanding of what is needed to adapt to changing environmental conditions and to come up with practical solutions given an opportunity. It is important to ensure equal space and resources for women and men to participate in climate change decision making and action at all levels. Climate finance should be accessible to both men and women and designed to generate mutual benefits, not exacerbate patterns of inequity. Evidence shows that women's empowerment and advancing gender equality can deliver results across a variety of sectors, including food and economic security and health

Women and climate change: Vulnerabilities and adaptive capacity

Women and climate change – Vulnerabilities and adaptive capacities (Aguilar, 2009 - Lorena) is a contribution to the World Connection publication titled "Climate Connections" where 47 authors, mostly from developing countries have written shorter essays on climate.

The paper urges that climate change affects women more than men and provides several reasons. Climate change can slow progress toward gender equality and thus impedes efforts to achieve wider goals like poverty reduction and sustainable development, can have diverse impact on women wellbeing either direct or indirect, can affect women livelihood opportunities and can bring about diseases will affect women differently from men. Women have more limitations to assets whether physical, financial, social, or human that would increase their capacity to adapt to climate change. Poor women face different vulnerabilities than men and live in social exclusion.

Despite their vulnerability, women are strong agents of change and their role on climate change is critical. To tap women potential, the author recommends several actions: (a) Promote international policy action on climate and gender; (b) Integrate women into the wider arena of decision making; (c) United Nations Framework Convention on Climate Change (UNFCCC) should incorporate the principles of gender equity and equality at all stages and recognize the importance of gender and abide by human rights and gender frameworks; (d) Mainstream women empowerment and implementation of initiatives that meet women's needs and include women in all levels of design; and (e) Create opportunities to educate and train women on climate change.

3.2 Results of Focus Group Discussions and Key Informant Interviews

A total of 52 participants participated in five FGDs organized in the five study target districts (12 in Bender Beyla, 10 in Dongoroyo, 8 in Iskushuban, 12 in Harfo and 11 in Dhahar) while 16 key informants were interviewed. The key informants for the study were drawn from the local government in the five target districts, 5 development organizations (African Development Solutions, KAALO, Save the Children International, United Nations Development Programme, African Women Educationalists Somalia), 6 government ministries (Agriculture and Irrigation, Livestock and Animal Husbandry, Interior, Local governments and Rural Development, Environment and Climate Change, Humanitarian Affairs and Management Agency, Women Development and Family Affairs, Planning



and International Cooperation) and 1 Disaster management agency (Humanitarian Affairs and Disaster Management Agency). The FGDs and KIIs were carried out between 17th and 24th January 2019.

3.2.1 Climate change related hazards

The Focus Group Discussion (FGD) organized in the five target districts (Bender Beyla, Dangorayo, Iskushuban, Harfo and Dhahar) expressed a common understanding of climate change although the phenomenon was expressed in different ways in the five districts. Climate change was described as a global warming leading to change in weather patterns mostly experienced as prolonged droughts and extreme temperature. Iskushuban and Dhahar FGD further elaborated that climate change is exacerbated by human activities such as tree cutting, charcoal production and overgrazing.

From the FGDs, there was a clear understanding of climate change, its causes and associated effects as well as the role of humans' activities in driving climate change processes. The definitions of climate change expressed by the FGDs in the five districts are summarized on Table 2 below.

Table 2: Target districts definition of climate change

| Bender Beyla | Dangorayo | Iskushuban | Harfo | Dhahar |
|-------------------|---------------------|--------------------|----------------------|-------------------|
| Effect of | Global warming | Sudden changes of | A major hazard | Dramatically |
| greenhouse gases | experience in | temperature and | include recurrent | fluctuation of |
| released to the | major events such | seasons leading to | failure of rainy | seasons e.g. long |
| atmosphere by the | as prolonged | long dry season | seasons. Harfo | dry season and |
| developed | drought. For | and extreme high | district faces water | extreme high and |
| countries | instant, Dangorayo | and low | scarcity, high and | low temperatures. |
| | district has not | temperatures. In | low temperatures | In Dhahar, trees |
| | receive enough | Iskushuban, | and droughts | cutting and |
| | rains in the last 5 | climate change is | | overgrazing are |
| | years | exacerbated by | | major human |
| | | mass deforestation | | activities which |
| | | for charcoal | | contributed to |
| | | production | | climate change. |

The FGDs and KIIs in the five districts also enumerated the hazards associated with climate change as summarized on Table 3 below.

Table 3: Hazards associated with climate change in the target districts

| Bender Beyla | Dangorayo | Iskushuban | Harfo | Dhahar |
|---|--|--|--|--|
| ✓ Recurrent and prolonged droughts ✓ Cyclones with heavy rains and floods ✓ Tsunami ✓ Extreme high and low temperature | ✓ Heavy rains ✓ Freezing temperatures ✓ Flash floods destroying infrastructures and rangelands ✓ Tsunami and cyclones | ✓ Recurrent and prolonged droughts ✓ Floods ✓ Cyclones (2013, 2015, 2017 and 2018) and Tsunami ✓ Extreme high and low temperature ✓ Wild fires | ✓ Droughts ✓ Extreme low and high temperatures ✓ Strong winds with dusts | ✓ Recurrent and prolonged droughts ✓ Extreme cold and high temperature ✓ Strong winds with dusts |

The FGD and KII in the five districts were also asked to identify the most important climate change related hazards in each district. The hazards identified as most important in the five districts are listed on Table 4 below.

Table 4: Most important climate change related hazard in the target districts

| Bender Beyla | Dangorayo | Iskushuban | Harfo | Dhahar | |
|----------------|-------------------|----------------|----------------|-------------------|--|
| ✓ Prolonged | ✓ Prolonged | ✓ Prolonged | ✓ Drought | ✓ Prolonged | |
| droughts | droughts since | Droughts | ✓ Extreme hot | droughts | |
| ✓ Cyclones and | November | ✓ Floods | and cold | ✓ Strong winds | |
| Tsunami | 2013 | ✓ Extreme cold | temperature | ✓ Strong cold and | |
| ✓ Extreme high | ✓ Cyclones with | and hot | ✓ Strong winds | hot | |
| temperature | heavy cold | temperature | with dusts | temperature | |
| | rains | | | | |
| | ✓ Strong colds at | | | | |
| | coastal areas | | | | |

Prolonged drought and extreme cold and hot temperature were cited as most important climate change hazards in all five districts. Additionally, cyclone and Tsunami were cited in Bender Beyla and Dangorayo, while strong wind and dust were cited in Harfo and Dhahar. Flooding was cited in Bender Beyla and Iskushuban.

From the FGD and KII undertaken in the five districts and KIIs with governmental and development organizations representatives, an assessment was made to categorize climate change related hazards cited by the study. This resulted in six main groups of climate change hazards as listed on Table 5 below.

Table 5: Categories of climate change related hazards in Puntland

| Categories of climate change related hazard | Times cited (%) |
|--|-----------------|
| Drought, low seasonal rainfall and water scarcity | 33 |
| Cyclones, Tsunami and Heavy rainfall | 24 |
| Extreme Temperature – Freezing cold air and high temperature | 21 |
| Flash floods | 10 |
| Health problems and diseases | 5 |
| Land degradation and wild fires | 7 |

The most cited climate change related hazards fall under the first three categories of climate change related hazards. There is a clear appreciation among the communities in the five target districts about climate change and its causes. Overall, prolonged drought and extreme cold and hot temperature were cited as most important climate change hazards in all five districts. Additionally, cyclone and Tsunami were cited in Bender Beyla and Dangorayo, while strong wind and dust were cited in Harfo and Dhahar. Flooding was cited in Bender Beyla and Iskushuban.

3.2.2 Impacts of climate change

The data collected in the five districts (FGDs and KIIs) identified many impacts of climate change. These are summarized by district and associated climate change hazard on Table 6 below.

Table 6: Impact of climate change in the target districts

| District Hazard Impacts |
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| Human and livestock diseases leads to death (Reduction of livestock resistance against diseases) Rural urban migration due to low rainfall and water | Bender Beyla | Drought | 1. | Extinction of wildlife (like ostrich, Bicid, Garanuug, Goronyo, Goodir) |
|---|-------------------|-------------|-----|---|
| resistance against diseases) 3. Rural urban migration due to low rainfall and water 4. Conflicts over limited pasture and other resources such as fuel wood 5. Poverty causes after loss of livestock 6. Land degradation (In 2016, when Benderbayla received rains, it attracted many livestock from other regions resulted in overgrazing and outbreak of livestock diseases) Cyclone and Tsunami 1. Destruction of fishing equipment 2. Loss of vegetation and soil erosion caused by heavy rains 3. Poverty caused by loss of livestock 4. Human and animal diseases 5. Eye pain experienced of fisher folks since 2005 Tsunami 6. Low fish availability in the ocean 7. Destruction of coastal ecosystem (Extinction of coastal bird species like Xuunsho and Takar) 8. Loss of lives and unpredictable fishing condition (Strong storms prevent fishing) 9. Destruction of homes in the coastal areas (total of 113 homes destroyed by Tsunami in 2004 and cyclone in 2013) Extreme hot and cold temperature Dangorayo Drought 1. Soil erosion by water and wind, desertification and low productivity of rangelands 1. Livestock diseases (transmitted by livestock migrating from other areas) 5. Overgrazing of part of rangeland with grass 6. Conflicts over limited pasture and other resources (Dangorayo security is threatened by conflicts caused by diminishing pasturelands and water resources and ligal fencing of rangelands) 7. Loss of livestock leads poverty and migration to urban centres 8. Shortage of fuel woods 9. Water scarcity Cyclone 1. Destruction of fishing equipment, water wells and road networks (e.g. Midigar Bridge). 2. Erosion, loss of vegetation and siltation 3. Water buried under dirt or filled with sediment and pollutant affecting water quality, 4. Loss of livestock and vegetation cover (trees uprooted) 5. Poverty due to loss of livestock and assets 6. Human and livestock diseases Iskushuban Floods 1. Soil erosion causing advanced guillies, loss of plants, destruction of | | = . 5 | | · · · · · · · · · · · · · · · · · · · |
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| 2. High irrigation water demand and low productivity of agriculture 3. Risk of extinction of plant and animal (FGDs listed 16 aquatic and 20 terrestrial plants and 11 animals threatened with extinction) 4. Livestock diseases (transmitted by livestock migrating from other areas) 5. Overgrazing of part of rangeland with grass 6. Conflicts over limited pasture and other resources (Dangorayo security is threatened by conflicts caused by diminishing pasturelands and water resources and illegal fencing of rangelands) 7. Loss of livestock leads poverty and migration to urban centres 8. Shortage of fuel woods 9. Water scarcity Cyclone 1. Destruction of fishing equipment, water wells and road networks (e.g. Midigar Bridge). 2. Erosion, loss of vegetation and siltation 3. Water buried under dirt or filled with sediment and pollutant affecting water quality, 4. Loss of livestock and vegetation cover (trees uprooted) 5. Poverty due to loss of livestock and assets 6. Human and livestock diseases Iskushuban Floods 1. Soil erosion causing advanced gullies, loss of plants, destruction of | Dangorayo | Drought | 1. | Soil erosion by water and wind, desertification and low productivity |
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| 6. Conflicts over limited pasture and other resources (Dangorayo security is threatened by conflicts caused by diminishing pasturelands and water resources and illegal fencing of rangelands) 7. Loss of livestock leads poverty and migration to urban centres 8. Shortage of fuel woods 9. Water scarcity Cyclone 1. Destruction of fishing equipment, water wells and road networks (e.g. Midigar Bridge). 2. Erosion, loss of vegetation and siltation 3. Water buried under dirt or filled with sediment and pollutant affecting water quality, 4. Loss of livestock and vegetation cover (trees uprooted) 5. Poverty due to loss of livestock and assets 6. Human and livestock diseases Iskushuban Floods 1. Soil erosion causing advanced gullies, loss of plants, destruction of | | | _ | · |
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| 7. Loss of livestock leads poverty and migration to urban centres 8. Shortage of fuel woods 9. Water scarcity Cyclone 1. Destruction of fishing equipment, water wells and road networks (e.g. Midigar Bridge). 2. Erosion, loss of vegetation and siltation 3. Water buried under dirt or filled with sediment and pollutant affecting water quality, 4. Loss of livestock and vegetation cover (trees uprooted) 5. Poverty due to loss of livestock and assets 6. Human and livestock diseases Iskushuban Floods 1. Soil erosion causing advanced gullies, loss of plants, destruction of | | | | |
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| Cyclone 1. Destruction of fishing equipment, water wells and road networks (e.g. Midigar Bridge). 2. Erosion, loss of vegetation and siltation 3. Water buried under dirt or filled with sediment and pollutant affecting water quality, 4. Loss of livestock and vegetation cover (trees uprooted) 5. Poverty due to loss of livestock and assets 6. Human and livestock diseases Iskushuban Floods 1. Soil erosion causing advanced gullies, loss of plants, destruction of | | | 8. | |
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| 2. Erosion, loss of vegetation and siltation 3. Water buried under dirt or filled with sediment and pollutant affecting water quality, 4. Loss of livestock and vegetation cover (trees uprooted) 5. Poverty due to loss of livestock and assets 6. Human and livestock diseases Iskushuban Floods 1. Soil erosion causing advanced gullies, loss of plants, destruction of | | Cyclone | 1. | Destruction of fishing equipment, water wells and road networks |
| 3. Water buried under dirt or filled with sediment and pollutant affecting water quality, 4. Loss of livestock and vegetation cover (trees uprooted) 5. Poverty due to loss of livestock and assets 6. Human and livestock diseases Iskushuban Floods 1. Soil erosion causing advanced gullies, loss of plants, destruction of | | | | , , , |
| affecting water quality, 4. Loss of livestock and vegetation cover (trees uprooted) 5. Poverty due to loss of livestock and assets 6. Human and livestock diseases Iskushuban Floods 1. Soil erosion causing advanced gullies, loss of plants, destruction of | | | | |
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| 5. Poverty due to loss of livestock and assets 6. Human and livestock diseases Iskushuban Floods 1. Soil erosion causing advanced gullies, loss of plants, destruction of | | | _ | |
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| Iskushuban Floods 1. Soil erosion causing advanced gullies, loss of plants, destruction of | | | | |
| | Jolanda de la ene | Floods | | |
| ILLIPATION CANALS AND IAND DEVIANATION | iskusnuban | riouds | 1. | |
| 2. Loss of crop and farm land washed away by floods | | | 2 | = |
| 3. Destruction of homes along the coast | | | | |
| 4. Conflict over pasture and other resources | | | | |
| Drought 1. Large loss of livestock leads to reduced income sources and | | Drought | 1 | |
| increased poverty level and migration to urban areas | | | 1 | |
| | | | | increased poverty level and migration to urban areas |
| to diseases | | | 2. | Pasture and water shortages reduced livestock weighs and resistant |



| | | 3. | Reduced water table in Boreholes |
|--------|--------------|----|---|
| | | 4. | Loss of agriculture productivity due to lack of water, diseases, |
| | | '' | invasive plants (e.g. prosopis julifera) and extreme heat |
| | | 5. | Stagnant of local trades and small businesses creating burden for |
| | | . | those with loans |
| | Wild fires | 1. | Destroy agricultural farms (both fruit trees and cash crops) |
| Harfo | Drought | 1. | Conflict over limited resources caused by low rainfall and prolonged |
| | 1.5.8 | | dry seasons |
| | | 2. | Increased land degradation and desertification due to long periods of |
| | | | dry season |
| | | 3. | Low productivity of livestock caused by deceased weight, disturbance |
| | | | of breeding cycle and diseases |
| | | 4. | Diseases caused by strong winds and dusts |
| | | 5. | Increased health problems (Malaria, flu) particularly among women |
| | | | and children due malnutrition, increased respiratory infections due |
| | | | to extreme colds at nights |
| | | 6. | Increased divorce rate within the community |
| | | 7. | Food insecurity caused by desertification, soil erosions, decreased |
| | | | soil fertility and low land productivity |
| | | 8. | Increased poverty level within households due to lack loss of |
| | | | livestock and unemployment |
| | | 9. | Decreased business activities due to limited livestock products |
| Dhahar | Drought | 1. | Extinction of wildlife due to desertification |
| | | 2. | Human and livestock diseases leading to death. |
| | | 3. | Conflicts over limited water, pasture and other resources due to low |
| | | | rainfall and water |
| | | 4. | Poverty causes after loss of livestock leading to rural to urban |
| | | | migration |
| | | 5. | Shortage of fuel wood |
| | Extreme cold | 1. | Cholera outbreak due to shortage of water |
| | and hot | 2. | Difficult to work and walk during the day |
| | temperature | 3. | Death of livestock and other animal due freezing cold |
| | <u> </u> | 4. | Women and children vulnerable to weather fluctuations |
| | Strong winds | 1. | Immediate pasture dries up due to strong wind Dusts during day |
| | and dust | _ | /night |
| | | 2. | Pastoralist not able to rear livestock due to strong dusts |
| | | 3. | Difficult for people to stay at day and night due to wind and dust |

Further, based on aggregation of the data collected in the target districts (FGD and KII) and from representatives of governmental ministries and development organizations (KII), an assessment was made to categorize the impacts of climate change hazards in Puntland. The assessment also evaluated the number of times the impacts were cites by the participants. The result of the assessment is summarized on Table 7 below.

Table 7: Categories of climate change related impacts in Puntland

| Category of climate change impacts | Times cited (%) |
|---|-----------------|
| Loss of lives, malnutrition, diseases, hunger and food insecurity | 21 |
| Degradation of land and loss of biodiversity | 21 |
| Poverty, loss of livelihoods and low income | 12 |
| Livestock deaths, low livestock production and poor pasture | 10 |
| Water shortage | 8 |
| Displacement and migration to urban areas | 8 |
| Loss of property, infrastructure, fishing gear and other assets | 7 |



| Conflict over water, pasture and other natural resources | 5 |
|--|---|
| Decline in fish catch and fishing activities | 5 |
| Loss of agriculture land and low crop yield | 3 |

Climate change hazards experienced in the five districts causes a wide range of impacts in each district. Study participants identified loss of human lives, malnutrition, diseases, hunger and food insecurity; degradation of the land and loss of biodiversity; livestock deaths, low livestock production and poor pasture; poverty, loss of livelihoods and low income among the most important impacts of the prevailing climate change related hazards in Puntland.

3.2.3 Ongoing climate change related project

Participants of the FGDs and representatives of the local government in the five districts identified several climate change related projects, the agencies implementing these projects and the climate change related hazards and impacts addressed by the projects. The information captured is summarized on Table 8 below.

Table 8: Climate change related project implemented in the target districts

| District | Climate change related project | Implementing agency | Hazard and impacts addressed | Remarks |
|--------------|---|-------------------------------|---|---|
| Bender Beyla | Climate Resilience (Sand Dam) | UNDP | Water shortage among pastoralists | Drought affected community are |
| | Cash for work | WFP | Lack of livelihood for climate vulnerable community | supported with food and non-food items, Ministry of health |
| | Shelter rehabilitation | NRC | Poor shelter for IDPs | sends staff to address disease outbreaks in the district |
| Dangorayo | Climate Resilience (Rangeland rehabilitation) | SAVE the Children, UNDP | Degradation of rangeland caused by drought | Project not fully started so impact cannot be assessed |
| Iskushuban | Emergency food supply and food for work | WFP | Food insecurity caused by droughts | Projects reach a very small number of the affected people. FGDs |
| | Livestock restocking | FAO | Livestock deaths caused by drought | estimated the number served to be less than |
| | Unconditional cash transfer for children nutrition and school fees | SAVE the Children | Support for drought affected communities | 5% of those affected by climate change related hazards and impacts in Iskushuban |
| | Health support | SRCS, Save the Children | Diseases caused by drought related malnutrition | district |
| Harfo | Distribution of food items | WFP | Food insecurity caused by drought | Project reaches less than 10% of the affected people in the district |
| Dhahar | Cash transfer for vulnerable people | WFP | Support to affected community | No Remark made |

The study shows that many climate related projects are implemented in the five districts but most of these projects focus on drought and its impacts. Also, the study participants in the districts expressed



that the project reach a very small number of the people affected by climate change hazards and impacts. FGDs estimated the number of people reach to be between at 5% (Iskushuban district) and 10% (Harfo districts) of those affected.

Interviews with representatives of the development organization further identified that all four organizations were implementing climate change related project in different the regions of Puntland as summarized on table 9 below.

Table 9: Climate change related projects implemented by the interviewed development agencies

| A = 0.0 | Duningto | Duningto for | l a saki a sa a sa d | Have an algebra and described and |
|----------------------|---|---|---|--|
| Agency | Projects | Projects focus | Locations and Beneficiaries | How projects address CC hazards and impacts |
| ADESO | Sustainable coastal rehabilitation and development – Phase III | Adaptation and Mitigation | Drought affected farmers, fisher folks and community members in Laskoreh district, Sanaag Region | Develop community adaptation plans Provide climate resilient seedlings e.g. Date Palms Restoration of Mangrove forests Provision of solar irrigation system Provision of fishing gear and cooling system |
| KAALO | Food security and livelihood improvements through sustainable agriculture Building community resilience to with-stand environmental shocks Disaster Risk Management | Adaptation, Mitigation and Resilience Building | Community members in Bari, Karkar, Sool, Sanag and Nugal Regions | Livelihood improvement for the community |
| Save the Children | Building Resilience in Community in Somalia (RESTORE Project) | Mitigation, Resilience Building, Capacity Building, Cash transfer | Rural and urban communities in Bosaso (5 villages), Dangorayo (5 villages), and Badhan (5 villages) | Training (Disaster Risk Reduction, Early Warning System, WASH) Construction of Earth Dams Unconditional child cash transfer |
| UNDP | Enhancing Climate resilience of the vulnerable community and ecosystem | Adaptation and Resilience building | Pastoralists and Agro- pastoralist in Dangorayo, Gardo, Bayla and Burtinle | Construction of water harvesting facilities (sand dams, water catchments, boreholes) to improved water access Afforestation, reseeding and water harvesting to improvement rangelands Use of fuel-efficient cook stoves and alternative energy to reduce demand for charcoal and protect forests Public awareness on Climate Change hazards and |

| STUD | Y R | EPC | DRT |
|-------------|-----|-----|-----|
| | | | |

| | | | | environmental protection Building capacity of disaster management agency (HADMA) Support development of policies, plans and strategies for disaster management, climate change and vulnerability response Establish functioning Early Warning System |
|---------|-------------------------------------|------------------------|---|---|
| FAWESOM | Drought Response Initiative | Resilience Building | 100 women headed households in Galkayo District, Mudug Region | Provision of unconditional cash to restock and start small business to recover from drought |

Climate change related projects implemented by the development organization covered many areas including climate change adaptation, mitigation, resilience building, training and cash transfer. Training focused on climate change related topics such as Disaster Risk Reduction; Early Warning Systems; Water, Sanitation and Hygiene while cash transfer target children for nutrition and school fees. The projects were being implement across Puntland in the different regions. From the information collected, the "Enhancing climate resilience of vulnerable communities and ecosystems" by UNDP provided a unique model project that covered a spectrum of climate change intervention, including policy support, early warning, institutional development, public awareness creation and community level interventions that address local climate change impacts.

All the government ministries interviewed were aware of climate change related projects being implemented in Puntland. The projects cited by ministry representatives covered adaptation, mitigation and resilience building and included activities such as rain water harvesting and construction of water infrastructure to increase water availability for human and livestock, public awareness creation to reduce charcoal production and promote alternative energy sources and strengthening drought preparedness among others. Most of the projects were implemented in collaboration with the Ministry of Environment and Climate Change with supported from development organizations including UNDP, WFP, GIZ and World Bank among others. However, only three of the seven government institutions interviewed (Ministry of Environment and Climate Change, Ministry of Agriculture and Irrigation, and Humanitarian Affairs and Disaster Management Agency) reported that they were directly implementing or supporting implementation of climate change related project.

Assessment of the information collected revealed a range of ways in which government ministries and the local government are involved in climate change related project. For example, for the sustainable coastal restoration and development project implemented by ADESO in Durduri, Qow and Ceelaayo villages, the government is involved in monitoring the impact of the project. For the project implemented by Save the Children and KAALO in Bosaso, Dangoroya and Badhan districts (Building community resilience to withstand environmental shocks, Alternative livelihood and income generating incomes, and Disaster risk management) the local government is involved in the selection of beneficiaries following with set criteria while the central government is involved in monitoring. For the climate resilience for vulnerable community and ecosystems implemented by UNDP at Dangoroya, Gardo, Bayla and Burtinile districts, the local government and the Ministry of Environment and Climate Change are directly involved in the implementation of the project.



3.2.4 Measures used by climate change projects to address climate change hazards and impacts

The data recorded in the different FGDs and KIIs was aggregated to assess the measures used by climate change projects to address climate change hazards and impacts across Puntland. These measures, and the ways in which they address climate change hazards and impacts are categorized and summarised on Table 10 below.

Table 10: Measures used by climate change projects to address climate change hazards and impacts

| Category | Measure | How measure addresses climate change hazards and impacts |
|---|--|---|
| i. Policies, Plans, Strategies and Information | Community climate adaptation plans | Increase community capacities to resist climate shock |
| systems | Disaster management plans, Climate change and vulnerability response plans | Help communities and government to take proper actions against climate change impacts and increase community capacities to resist climate shock |
| | Drought Early Warning Systems | Prepare communities for sudden climate change and shocks like strong winds, cyclones and Tsunami |
| | Public awareness on environmental protection | Protect environment from destructive activities such as charcoal production |
| ii. Capacity Development | Training in Disaster risk Reduction, Early Warning Systems and WASH | Improve community understanding of climate change hazards and impacts and increase their capacity to cope with these hazards and impacts |
| | Institutional capacity development | Improve capacity of relevant emergency response institutions e.g. Puntland HADMA |
| iii. Rangeland rehabilitation | Restoration of native plant species, mangrove forest and provision of climate resilience seedling such as date palms | Rehabilitate landscape and ecosystem by use of plants adapted to dry climate, water scarcity or salty water |
| | Afforestation, re-seeding and water harvesting to rehabilitate rangelands | Restore rangeland productivity, increase ecosystem resilience and provide adequate forage for livestock and other wild animals |
| iv. Development of Water resources, fisheries and renewable | Construction of earth dams and other water harvesting structures | Increase water availability for human and livestock through construction of rainwater harvesting structures such as Sand Dam |
| energy | Provision of fishing gear and fish storage cooling equipment | Enable vulnerable communities in coastal areas to increase fish catch and preserve and transport fish to other cities in Puntland and improve their income. Also improve community nutrition. |
| | Provision of solar irrigation systems | Increases food productions to address food shortage caused by drought |
| | Promotion of alternative energy sources to reduce charcoal production | Increased use of alternative energy and efficient cook stoves to reduce charcoal production and tree cutting trees |

| v. Emergency relief | Food aid | Increased food availability for community members who affected by climate change hazards | | |
|------------------------|--------------------------------------|--|--|--|
| | Cash for work | increases house income for community members who lost their assets due to climate change hazards like droughts or cyclones | | |
| | Children unconditional cash transfer | Supports families lost their assets and could not able to pay children school fees | | |
| | Livestock restocking | Restore livestock for pastoral households who have lost their livestock due to droughts | | |
| | Health support | Address outbreak of diseases like anaemia, diarrhoea, malnutrition caused by weakening of human body due to lack of food and water | | |

Those measures that have been used by climate change projects implemented in the five target districts were identified in FGDs and KIIs conducted in the districts and are summarized on Table 11 below.

Table 11: Measures used by climate change projects to address climate change hazards and impacts in the target districts.

| Measure | | | Districts | | | | |
|---------|---|--------------|-------------|------------|----------|----------|--|
| | | Bender Beyla | Dangorayo | Iskushuban | Harfo | Dhahar | |
| 1. | Provision of solar irrigation systems | | | | | | |
| 2. | Provision of fishing gear and fish storage cooling equipment | | | | | | |
| 3. | Planting of native plant species, Restoration of mangrove forest and | | | | | | |
| | Provision of climate resilience seedling e.g. Date palms | | | | | | |
| 4. | Construct Earth Dams and other water harvesting structures | ✓ | > | | | | |
| 5. | Rehabilitation of rangeland through re-seeding and water harvesting | | | | | | |
| | and diversion | | | | | | |
| 6. | Provision of alternative energy sources to reduce charcoal production | | ✓ | | | ✓ | |
| | and use of efficient cook stoves | | | | | | |
| 7. | Development of community level climate adaptation plan | ✓ | ✓ | | | | |
| 8. | Implementation of policies, plans and strategies for climate change | ✓ | ✓ | ✓ | ✓ | ✓ | |
| | adaptation, mitigation, disaster management and response | | | | | | |
| 9. | Implementation of Drought Early Warning Systems | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 10. | Organization of public awareness campaign on environmental | ✓ | ✓ | ✓ | ✓ | ✓ | |
| | protection and charcoal production | | | | | | |
| 11. | Training on Disaster Risk Reduction, Early Warning Systems, Water, | | ✓ | | | | |
| | Sanitation and Hygiene | | | | | | |

Different measures are used by climate change projects in the five districts to address climate change hazards and impacts. These measures can be grouped into five categorized: (a) Policy, plans, strategies and early warning systems; (b) Capacity development; (c) Rangeland rehabilitation; (d) Development of water resources, fisheries and renewable energy; and (e) Emergency relief.



The measures used in all five districts include organization of public awareness campaigns on environmental protection and charcoal production; implementation of drought early warning systems and implementation of policies, strategies and plans for climate change mitigation, adaptation and disaster management and response.

In addition to these measures which were used in all districts, additional measures were used in different districts. Earth dams and other rain water harvesting infrastructure were constructed in Bender Beyla and Dangoraya, alternative energy sources to reduce charcoal production have been provided in Dangoraya and Dhahar while community level community climate change adaptation plans have been developed in Bender Beyla and Dangoraya. Training on Disaster Risk Reduction, Early Warning Systems and Water, Sanitation and Hygiene have been organized in Dangoraya.

3.2.5 Strategy used to adapt to the changing climate

The data collected in the FGDs and KIIs was used to evaluate the strategies used by the communities, local government and development organizations to adapt to a changing climate. Table 12 summarises the measures used by the communities, Table 13 summarises the measures used by the local government while Table 14 summarises measures used by development organizations.

Table 12: Strategies used by communities in the target districts to adapt to a changing climate

| District | Climate Hazard | Strategy | | |
|--------------|--------------------------|---|--|--|
| Bender Beyla | Drought | i. Find alternative jobs and sources of livelihood that are not affected by droughts. | | |
| | | ii. Get water from trucks supplied by development agencies and local government. | | |
| | | iii. Get livestock feed from other areas not affected by drought. | | |
| | Cyclones | i. Build strong stalls to shield livestock from cold and storms. | | |
| | | ii. Seek humanitarian support from development agencies. | | |
| | | iii. Settle at higher ground to avoid being affected by floods. | | |
| | Extreme high temperature | i. Reduce movement at midday. | | |
| Dangoroyo | Drought | i. Store water in berkads during the rainy season. | | |
| | | ii. Get water from trucks supplied by development agencies and local government. | | |
| | | iii. Get livestock feed from other areas not affected by drought. | | |
| | | iv. Migrate to areas with better pasture and water. | | |
| | | v. Migrate to urban centres. | | |
| | | vi. Take loans to cope with increasingly living cost. | | |
| | Cyclone | i. Seek humanitarian and social support. | | |
| | Extreme low terminative | ii. Dress with heavy clothes. iii. Settle in areas with good tree density where effected of cold is less. | | |
| | | iv. Seek humanitarian support. | | |
| Iskushuban | Drought | Get water from trucks supplied by development agencies and local government. | | |
| | | ii. Get livestock feed from other areas not affected by drought. | | |

| | | iii. Take loans to cope with increasing cost of living. |
|--------|-------------------------|--|
| | | iv. Migrate to areas with better pasture and water. |
| | Cyclone | i. Settle on higher ground where they cannot be affected by floods. |
| | | ii. Seek humanitarian support. |
| | Wild fire | i. No specific strategy to deal with wild fires. |
| Harfo | Drought | ii. Get water from trucks supplied by development agencies and local government. |
| | | iii. Community support to affected households. |
| | | iv. Migrate to areas with better water and pasture. |
| | | v. Store water in berkads during the rainy season. |
| | | vi. Feed drought affected livestock using agricultural crops e.g. maize. |
| | Extreme | i. Use heavy clothes to shield from cold. |
| | cold/hot temperature | ii. Shelter under shade from hot temperature. |
| | Strong wind and dust | i. Protect nose and eye from wind and dust. |
| Dhahan | Drought | Get water from trucks supplied by development agencies and local government and allocate fixed amount of water for each household. |
| | | ii. Migrate to area with better water and pasture. |
| | | iii. Migrate to urban centres. |
| | | iv. Take loans to cope with increasing cost of living. |
| | Extreme | i. Reduce movement at midday. |
| | how/high temperature | ii. Use heavy clothes to shield from cold. |

Strategies used by local government to adapt to the changing climate. Table 13:

| District | Strategy |
|--------------|---|
| Bender Beyla | i. Organize community awareness campaign on environmental protection |
| | ii. Rehabilitate gulley's depending on available budget. |
| | iii. Undertake urban greening. |
| | iv. Provide support to vulnerable communities. |
| | v. Setup drought committee at community level. |
| Dangorayo | Create community awareness on dangers of plastics, tree cutting, unplanned settlement and illegal road across the rangelands. |
| | ii. Provide early warning massage to the affected community. |
| | iii. Encourage community to support affected households. |
| | iv. Establish village drought committee. |
| | v. Seek support from central government and development organization. |
| Iskushuban | i. Collaborate with NGOs to support most vulnerable communities. |
| | ii. Provide early warning messages to affected communities. |
| | iii. Establish drought committee at village level. |
| | iv. Support rotational grazing in the rangelands. |
| Harfo | i. Harfo district did not have any budget for climate change activities and |

| | therefore there was no specific strategies reported in the district. |
|--------|--|
| Dhahar | i. Provide water trucking affected communities. |
| | ii. Establish village drought committee. |
| | iii. Provide early morning messages to affected community. |
| | iv. Organize public awareness campaign on environmental protection. |

Table 14: Strategies used by development projects to adapt to the changing climate

| Organization | Strategy use |
|---------------------|--|
| ADESO | i. Understand the challenges and opportunities faced by communities (pastoralists/fisher folks) and use this understanding to address the root cause of vulnerability. |
| | ii. Strengthen the resilience of coastal communities by building climate resilient livelihoods. |
| | iii. Invest in the restoration of rangelands through rangeland rehabilitation and mass afforestation. |
| | iv. Build the capacity of the affected communities to enable them to improve their livelihoods |
| | v. Invest in establishing Early Warning Systems and Disaster Risk Reduction |
| KAALO | Build community skills to promote diversification of livelihood and income generation. |
| | ii. Promote environmental conservation and sustainability. |
| | iii. Restore and develop livelihood supporting ecosystems in agriculture, livestock and fisheries. |
| | iv. Strengthen community development structures and community-based organizations |
| Save to Children | i. Invest in infrastructure that address climate hazards e.g. Rain water harvesting and water storage structures such as earth dams. |
| | ii. Create community awareness on climate change and disaster risk reduction. |
| | iii. Develop community livelihood options. |
| UNDP | i. Invest in infrastructure that address climate change hazards e.g. Rain water harvesting and storage structure. |
| | ii. Build the capacity of the relevant institutions at different levels. |
| | iii. Establish community natural resources cooperatives and associations. |
| | iv. Establish climate hazard Early warning systems. |
| | v. Raise community awareness on climate change and adaptation measures at district level. |
| | vi. Develop district climate change adaption plans. |
| FAWESOM | i. Advocate and support development of policies and plans that reduce the impact of drought on the community. |

From the data presented in Table 12, 13 and 14, it can be observed that the communities, local government and development organizations used many strategies to address the changing climate. Most of the cited strategies focus on drought. Although many strategies were used, several were used more frequently than others. Among the communities, popular strategies used included water



trucking, storage of water during the rainy season, sourcing for livestock feeds from outside the community and migrating to urban areas or other locations that are less hit by the climate hazard.

Among the local government, strategies that were more popular included community awareness raising on environmental protection, establishment of community drought committees, establishment of drought early warning systems, and supporting the most vulnerable households and encouraging community members to support each other.

For the development organizations, popular measures included capacity development of the community through training and awareness raising on environmental protection. Development organizations also reported unique strategies such as establishment of natural resources cooperatives and associations.

Impact of climate change on women and men 3.2.6

FGD and KII identified the different ways in which climate change hazards and impacts affected men and women. Comparing the responses provided in the FGDs and KII conducted in the five target districts with those provided by representatives of government ministries and development organizations, similar types of impacts were reported across the three groups of interviews. The results are summarized on Table 14.

Table 14: Impact of climate change on Men and Women

| Type of Impact | Impact |
|---------------------------|---|
| Men specific Impacts | i. Lack of income to support family leading to frustration, stress and irresponsible behaviour among some men. |
| | ii. Increase in level of crime and drug abuse among young men. |
| | iii. Migration to other countries through dangerous routes that threaten the life and safety of young men. |
| | iv. Increase in sexually transmitted diseases due to marriage breakdown. |
| Women specific Impacts | Increased workload due to long walk in search of water, food and fuel wood. Women also take up responsibilities left by men who have migrated with the livestock. Women also provide care to children, elderly and sick. |
| | ii. High exposure to climate change hazards since women remains behind to take care of children, elderly and sick. |
| | iii. Increased vulnerability due to gender inequality (limited access to information, low level of education and skills, lack of access to assets and capital). |
| | iv. Vulnerability to climate change related diseases such as cholera, diarrhoea and skin irritation. |
| | v. Increased vulnerability for pregnant and breast-feeding women. Poor milk production for breast feeding mothers. |
| | vi. Insecurity and risk of sexual based violence as women must walk far in search of water, food and fuel wood. |
| | vii. Stagnation of women small business due to loss of livelihood and increased level of poverty. |
| Common Impacts | i. Food insecurity, malnutrition and lack of food for children. |
| (Men and Women) | Migration to urban areas and pressure caused by displacement and unfamiliar lifestyle for rural people in urban areas. |

- iii. Lack of livelihood, unemployment and poverty.
- iv. Loss of livestock leading to low income and poverty.
- v. Poor market price for farm and livestock products due to low purchasing power of the community.
- vi. Frustration and stress due to difficult life caused by drought and other climate change related hazards.
- vii. Few marriages, family separation and increased rate of divorce.
- viii. Lack of school fees due poverty leading to school drop out for children.
- ix. Loss of farm land and agriculture production equipment caused by flooding.

The results show that climate change affect men and women in different ways although several common impacts exist. From the data collected, women are more affected by climate change compared to men with double number of impacts reported. This observation goes in line with that recorded in the literature review where it was clear that women are more affected by climate change compared to men. The information obtained from the interview with representatives of the four development agencies revealed some of the reasons why women were more affected by climate change than men. These include:

- i. Women are not able to move away when climate change hazard strike because they must care for the children and elder people and therefore remain in the affected areas.
- ii. Women have less social and economic power, are less involved in decision making and have less access to information and other resources that can help them cope and adapt.
- Women have less skills and limited opportunity for developing skills therefore making them iii. more vulnerable to climate change hazards.
- iv. More women work in sectors which are adversely affected by climate change such as agriculture.
- 3.2.7 Men and women climate change needs and interests

Aggregating all the data collected in the FGDs and KIIs, assessment was made on men and women climate change related needs and interest. The results of the assessment are summarized on Table 15 below.

Table 15: Men and women climate change related needs and interests

| Group | Needs and interest | Link to climate change |
|-------|--|--|
| Men | Access to employment and income for family support. | Enable men support their families to cope with climate change hazards and impact. |
| Women | i. Mainstream gender in climate change projects | Ensure climate change project are addressing specific needs of women. |
| | ii. Participate in politics and decision making. | Ensure women play a role in the development of climate change mitigation and adaptation solutions. |
| | iii. Strengthen and empower women organization. | Enable women play an active role in the planning and implementation of climate change projects. |
| | iv. Develop and implement special climate change project designed especially for | Address the disproportionate impact of climate change on women. |

| | women. | |
|--------------------|--|---|
| | v. Eliminate economic and political barrier that limit women participation and action in climate change policy and projects. | Increase women participation in climate change projects and therefore improve their coping capacity and reduce their vulnerability. |
| Common (Men and | i. Improve access to education, training, skills and employment. | Ensure sustainable livelihood and therefore community resilience to climate change. |
| Women) | ii. Diversify income generating activities and livelihood options. | Reduce community vulnerability to climate change. |
| | iii. Provide clean and safe drinking water. | Reduce disease outbreak caused by use of unsafe drinking water when water is scarce during droughts. |
| | iv. Improve access to climate change information and early warning | Enable effective community preparedness and response. |
| | v. Ensure equal participation in the planning and implementation of climate change strategies and projects. | Ensure men and women specific climate change needs and interest are equally considered in climate change related projects. |

KII with representative of the local government highlighted some of the activities addressing climate change related needs of men and women. Examples included agricultural women co-operative project supporting production and marketing of agricultural crops and agro-pastoral project where main beneficiaries where pastoral men. Ministry of Planning and Internal Cooperation (MoPIC) observed that most emergency project addressed to some extent climate change related needs of vulnerable and destitute women. The information provided by the development organization pointed at the same observation except for Save the Children who reported several activities directed towards the needs of women. These included training on food and nutrition, first aid and gender-based violence and distribution of dignity kits.

Despite the large number of men and women climate change related needs and interest recorded, participants in the target districts observed that climate change related projects did not meet the needs and interests of women and men. The participants observed that most were small emergency projects and limited in scope compared to the existing need. The same observation was made by the government ministries representative interviewed who felt that the projects coverage was low with estimates of between 5 and 50% (HADMA) and 20 and 25% (MoWDFA) of the existing needs.

3.2.8 Adapting climate change project to better address men and women needs and interests

Data collected in the FGDs and KIIs with community and local government in the five districts and the representatives of the development organizations identified ways in which climate change projects can be adapted to better address the needs and interests of men and women. The information provided is summarized on Table 16 and 17 below.

Table 15: How climate change related projects can be adapted to better address men and women needs and interests in the target districts

| District | Ways climate change projects can be adapted |
|--------------|--|
| Bender Beyla | i. Ensure community-based organizations and local government participated in the planning and implementation of climate change projects. |



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| | ii. Involve all stakeholders fully and effectively in the planning and implementation of climate change projects. |
|------------|---|
| | iii. Build climate change project based on comprehensive assessment of community needs and priorities. |
| | iv. Invest in sustainable climate change projects such are sustainable water resource development, early warning systems, and environmental conservation and sustainability projects. |
| Dangorayo | i. Consult with the grass root community and organizations during the design of climate change projects. |
| | Mainstream gender in climate change project and ensure equal participation of men and women in the planning and implementation of the projects. |
| | iii. Design climate change project so that they address specific climate change hazard experienced by the local communities and base projects on community designed action plan. |
| | iv. Engage community-based organization in the planning and implementation of projects. |
| Iskushuban | i. Ensure equal participation of men and women in planning and implementation of the climate change projects. |
| | ii. Consult grass root communities during the design of climate change projects. |
| | iii. Base climate change project on specific community action plans. |
| Harfo | iv. Ensure equal participation of men and women in the planning and implementation of climate change project. |
| | v. Ensure that climate change project undertake comprehensive assessment of community needs. |
| Dhahar | i. Base climate change project on specific community action plans. |
| | ii. Ensure climate change project address the specific climate change hazards and impacts experience by the local communities. |
| | iii. Climate change project should ensure equal participation of men and women in the planning and implementation of the projects. |

Table 16: How climate change related projects can be adapted by development organizations to better address men and women needs and interests

| Organization | Ways to adapt climate change projects |
|--------------|---|
| ADESO | i. Have the community lead climate change projects implementation strategy. |
| | ii. Map community risks and hazards through a participatory process. |
| | iii. Have the community identify available resources and prioritize their needs. |
| KAALO | Carry out comprehensive needs assessment to identify the needs and interest of men and women. |
| Save the | i. Ensure climate change projects prioritize community needs. |
| Children | ii. Ensure equal participation of men and women in climate change projects. |
| UNDP | i. Based climate change projects on grass root level consultation. |
| | ii. Ensure climate change projects follow a bottom up approach |
| FAWESOM | Involve women in all decisions made within climate change projects that affect them and their community. |

Representative of government ministries raised similar changes as identified by the community and development organizations. These included:

- i. Ensuring effective participation of all stakeholders and close collaboration with local communities.
- ii. Ensuring climate change needs are identified and prioritized by the local communities.
- iii. Ensuring that climate adaptation and resilience project are initiated by the local community.
- Designing long term projects with clear goals and outputs. iv.
- Integrating climate change issues in all development projects through coordination and ٧. promotion of climate change related issues among partners and stakeholders.

Aggregating the data, two changes are recorded across the interviews and discussions: (a) Designing climate change projects based on comprehensive community needs assessment, prioritization and action plans designed by the local community, and (b) Ensuring equal participation of men and women in the planning and implementation of climate change projects.

Local community needs assessment and prioritizations is raised most frequently. This change is defined in many ways including assessment of community needs and priorities, using action plans designed by local communities, local community assessing available resources and priorities, and use of bottoms up approach where community has central role in project planning and implementation. For participations, the changes identified include ensuring that men and women equally take part in planning and implementing climate change project, community consultations and fully and engaging all stakeholders in an effectively way.

3.2.9 Influencing climate change mitigation, adaptation and community resilience decisions

FGDs and KIIs data collected from the target districts, government ministries and development organizations identified the ways and means that men and women can influence decisions that relate to climate change mitigation, adaptation and community climate resilience. The responses did not identify different ways and means for men compared to women put rather identified a range of ways and opportunities for influencing climate change decisions directly or indirectly. The data collected from the three groups of respondents was aggregated and summarized as presented on Table 17 below.

Table 17: Ways men and women can influence decision relating to climate change mitigation, adaptation and community climate resilience

| Respondent group | Ways men and women can influence decisions |
|------------------|--|
| Target districts | By participating in drought forums such as district councils and village drought committees where discussions on climate change are made and decisions taken |
| | ii. By participating in community groups such as women and youth groups. These groups are always consulted regarding climate change issues. |
| | iii. By participating in family decision on when and where to migrate livestock and family to during droughts or other climate hazards where migration is necessary. |
| | iv. By participating in civil education and awareness campaigns organized to educate community and create awareness on climate change and |



| | environment conservation and protection. |
|---------------------------|---|
| | v. During collection and distribution of food and other items from community members to support households and community members affected by climate change. |
| | vi. Through family and livelihood choices including food taken by family, purchasing of household goods, investing in different livelihoods, etc. |
| Government ministries | By participating in community consultation and needs assessments and prioritizations organized during planning or inception of climate change projects. |
| | ii. By participating in implementation of specific activities of climate change projects where decision is sort from community on cause of action. |
| | iii. Through involvement in daily livelihood activities such as agriculture and livestock which largely depend on the state of the natural resources and where important decision need to be taken at community and household level. |
| | iv. During the monitoring of progress and performance of climate change related projects. |
| | v. By participating in the development of community climate adaptation action plans. |
| Development organizations | i. By educating the community on the need to take active role in the planning and implementation of climate change projects to create the change for both men and women to influence climate change decision. |
| | ii. Through increasing use of participatory approaches and tools to ensure that men and women participate and are actively involved in climate change related projects. |
| | iii. Through building of the capacity of men and women and their institutions so that they can engage in decision making. |
| | iv. By mainstreaming gender in the planning and implementation of climate change policies, strategies and projects. |

From this data, men and women have many opportunities to influence decision related to climate change mitigation, adaptation and community resilience. Most of these opportunities are related to participation in different forums where climate change related issues are discussed, and decision made. For men and women to effectively participate and influence decisions, several complementary actions are required. These includes educating community on the need for both men and women to participate actively and fully, building capacity with the community so that men and women have the necessary skills to engage in discussion and decision making, increasing use of participatory approaches and tools to ensure quality participation of men and women and mainstreaming gender to remove the barriers that hinder equal participation of both gender in planning and implementation of all climate change policies, strategies and project.



Chapter 4: Study conclusions and recommendation

4.1 Conclusions

From the literature review, the following conclusions were drawn regarding the gender dimensions of climate change related projects in Somalia and Puntland in particular.

- i. Climate change poses a serious threat to food security and sustainable development in Puntland and could compromise recent development progress made by the state if it is not addressed urgently. The major climate change hazards in Puntland includes droughts, dust storms, wild fires, cyclones and floods. Drought and floods are critical hazards in Puntland because of their cyclic nature and high rate of recurrence in recent years. The importance of climate change is highlighted both in the Puntland and Somalia development plans and almost all policy documents specifically highlight the importance of integrating climate change in development interventions.
- ii. Although most climate change related projects implemented in Puntland and Somalia highlight the importance of gender, but majority do not define or identify how gender issues and dimensions should be considered or addressed. Most projects recommend mainstreaming gender or ensuring gender equality but do not provide specific actions to take. This observation applies across the literature reviewed where the importance of gender equality and gender mainstreaming within climate change projects is always raised as a high priority but without identifying specific actions required to ensure gender considerations are integrated in the projects.
- iii. A few projects such as the "Enhancing climate resilience of the vulnerable communities and ecosystems in Somalia" elaborated gender specific actions planned in the projects. However, the performance and success of these actions were not specifically reported in the progress reports.
- iv. The Somalia National Adaptation Programme of Action (NAPA) specifically engaged with women in identifying their areas of vulnerability and defining strategies they use to cope with climate change and therefore opportunities for developing gender responsive climate change adaptation options. Gender responsive national climate change adaptation process provides a great opportunity for mainstream gender in climate change adaptation and related projects. From global best practise literature, six areas in which National Adaptation Plans (NAPs) can be made gender responsive including: (a) Recognizing gender differences in the assessment of adaptation needs, opportunities, and capacities; (b) Ensuring equal participation and influence by men and women in adaptation decision-making processes; (c) Ensuring equal access to financial resources and other benefits resulting from investments in adaptation between men and women; (d) Emphasizing on gender in the development and implementation of adaptation projects; (e) Gender consideration in capacity development efforts for both NAPs teams and involved stakeholders; and (f) Documenting efforts made to integrate gender dimensions and considerations into country adaptation plans, strategies and reports to enable monitor and reporting on progress. These areas provide a check list by which climate change related projects in Puntland and Somalia in general can be assessed to evaluate how gender responsive they are.



- The proposed Intended Nationally Determined Contributions (INDCs) proposed by Somalia ٧. under the United Nations Framework Convention on Climate Change (UNFCCC) for reductions in greenhouse gas emissions provides contribution to address climate change vulnerability for critical sectors and communities of Somalia. The identified contributions have potential for addressing climate change hazards across the country. However, the submission does not present or address any specific gender aspects or considerations.
- Although climate change affects all people in Somalia, the literature reviewed clearly vi. demonstrates that women and men and different groups of people are affected differently and experience the impacts of climate change hazards in different ways. Adaptation planning efforts should understand, address and take advantage of these differences. In Puntland, women and youth, and especially those in rural areas, have being identified as the most affected. A number of factors make women to be more vulnerable to climate change: (a) Climate change imposes a heavier workload on women because they have to walk longer to find food, water and wood fuel; (b) Women have limited access to both material and nonmaterial resources such as information and skills; (c) Women have lower level of education, fewer employment opportunities, lower income and poorer; (d) Women have to feed the children and the rest of the family first before they can eat and their food security is compromised; (e) Women who are pregnant or breast feeding have special nutrition requirement are hard hit in a food insecure environment; (f) Investment by government on women development is limited; and (g) Gender inequality in Somalia causes culturally defined gender roles, under representation in decision making and low participation in public service, politics and economy which makes women more vulnerable to climate change.
- vii. Literature demonstrates that women have important role in climate change adaptation and mitigation actions. Three ways in which women can play critical role in climate change related project in Puntland and Somalia include: (a) Using their practical experience and knowledge in the management of natural resources; (b) Maximizing on the care women place on natural resources such as water, wood and soil as an important resources and asset that they depend on daily; (c) Making use of women leadership role in the family and community especially during disasters.
- viii. The areas for intervention frequently proposed for climate change mitigation, adaptation and community resilience building in Puntland includes: (a) Undertake risk forecasting and assessment and development and use of early warning systems especially in the most vulnerable areas and population; (b) Undertake community vulnerability mapping and use the results of the mapping in developing local risk management and response plans; (c) Identify the most vulnerable and affected communities and households and focus interventions on them, and (d) Promote an integrated development approach.
- ix. Previous climate change related capacity development efforts made in Puntland have not been well documented. This makes it hard to adequately assess existing climate change capacity within local government and among the communities and hinders assessment of existing capacity gaps.
- Progress is being made in improving women capacity to cope with climate change in х. Puntland, but it is work in progress which needs continued effort. Gender should be mainstreamed in all climate change policies, projects and research in Puntland and Somalia.



STUDY REPORT Gender Dimensions of Climate Change Related Projects in Somalia

However, project should identify specific actions required to integrate gender and put in place a framework for tracking progress. As is the case in other developing countries, it is believed that gender main streaming in climate change actions in Puntland and the larger Somalia will have better outcomes for both genders. These outcomes need to be documented and demonstrated.

From the Focus Group Discussions and Key Informant Interviews data analysis, the following conclusions were drawn regarding the gender dimensions of climate change related projects in Puntland.

- i. The communities in the five target districts (Bender Beyla, Dangorayo, Iskushuban, Harfo and Dhahar) have a clear understanding of climate change, its causes and associated hazards. Prolonged drought and extreme cold and hot temperature were cited as most important climate change hazards in all five districts. Additionally, cyclone and Tsunami were cited in Bender Beyla and Dangorayo, while strong wind and dust were cited in Harfo and Dhahar. Flooding was cited in Bender Beyla and Iskushuban.
- ii. Climate change hazards experienced in the five districts causes a wide range of impacts in each district. Four broad category of important climate change impacts include: (a) Loss of human lives, malnutrition, diseases, hunger and food insecurity; (b) Degradation of the rangeland, poor pasture and loss of biodiversity; (c) Livestock deaths and low livestock production and profitability; (d) Poverty, loss of livelihoods and low income.
- iii. Many climate change related projects have been implemented across Puntland covering different climate change issues including mitigation, adaptation and community and ecosystem resilience. The projects have undertaken activities such as rain water harvesting, construction of water storage infrastructure, public awareness creation for environmental protection and conservation, promotion of renewable energy and strengthening drought preparedness. Many projects have focused on drought and its impacts. A UNDP project on "Enhancing climate resilience of the vulnerable communities and ecosystems in Somalia" provide a model project that cover a spectrum of climate change interventions including policy development, institutional building, early warning, public awareness creation and community level local interventions.
- iv. Climate change project are mostly supported by development organizations with the government being involved in different ways including supporting implementation, selection of beneficiaries and monitoring and evaluating results. Study participants in the target districts however felt that climate change projects reach a very small number of the people affected. Participants in Iskushuban and Harfo districts estimating the number reach to be between 5 to 10% of those affected.
- v. Measures used in climate change related project to address climate change hazards and impacts can be grouped into five categories: (a) Policy, plans, strategies and early warning systems; (b) Capacity development; (c) Rangeland rehabilitation; (d) Development of water resources, fisheries and renewable energy; and (e) Humanitarian aid and emergency relief. The specific measures used in all five districts include public awareness; early warning; and development of climate change adaptation, mitigation and disaster management and response plans. Additional measured are used in the different districts including construction



of earth dams to harvest rain water; provision of renewable energy to reduce charcoal production; development of community level climate change adaptation plans; and training on Disaster Risk Reduction, Early Warning Systems and Water, Sanitation and Hygiene.

- vi. Many strategies were used adapt to the changing climate. Among the communities, popular strategies include water trucking; storage of water during the rainy season; sourcing for livestock feeds from outside the area affected; and migrating to urban areas or other locations less affected by drought. Among the local government, strategies more frequently used include community awareness raising on environmental protection; establishment of community drought committees; establishment of drought early warning systems; support to most vulnerable households; and encouraging community members to support those affected. For the development organizations, popular strategies include training to build the capacity of the community; awareness raising on environmental protection; and establishment of natural resources cooperatives and associations.
- vii. Women are more affected by climate change impacts compared to men with double the number of impacts recorded. This goes in line with the observation made in the review of literature on climate change in Puntland. This is because women remain longer in the affected areas to care for children and elderly, have less social and economic power, participate less in decision making, have limited access to information and other resources, have less skills and less opportunity for skill development and more work in climate change vulnerable sectors such as agriculture and livestock production.
- viii. Men reported access to employment and income to support family deal with climate change challenges as their main climate change related need and interest. Women needs and interests were many and included participation in decision making, strengthening women organizations, development of special climate change projects for women, and elimination of social and economic barriers created by gender in-equality. Needs and interest common to men and women included access to education and training, diversification of livelihoods and income generating activities, safe drinking water, access to early warning information and equal participation in the planning and implementation of climate change strategies and projects.
- ix. Climate change projects can be adapted to better address men and women climate change related needs. Changes required include ensuring engagement of all stakeholders; community consultation and comprehensive assessment of their needs and priorities; using action plans designed by local communities; supporting local community to assess their resources and priorities; using bottoms up approach so that community have a central role in project planning and implementation; and ensuring men and women are equally involved in planning and implementing climate change project.
- x. Both men and women have many opportunities to influence decision related to climate change mitigation, adaptation and community resilience. Most of these opportunities are related to participation in different forums where climate change related issues are discussed, and decision made. For men and women to effectively participate and influence decisions, several support actions are required. These includes educating community on the need for both men and women to participate actively and fully in climate change projects, building capacity of the community so that men and women have the necessary skills to



engage in discussion and decision making, increasing use of participatory approaches and tools to ensure quality participation of men and women and mainstreaming gender to remove the barriers that hinder equal participation of both gender in planning and implementation of all climate change policies, strategies and project.

4.2 Recommendations

Based on the results of the study finding and the conclusions drawn, several recommendations are made to the local government, development organizations and communities as presented below.

4.2.1 Recommendation to the central and local government

The following recommendations are made to the central and local government:

- i. Prioritize climate change and it effects as an important development challenge and lobby for support from development partners mitigation and adaptation by the community.
- ii. Reach a larger proportion of the affected community, population and households and address their needs adequately by increase investment in climate change and lobbying for additional support from development organizations and funding agencies.
- iii. Mainstream gender in all climate change policies, projects and research and develop and implement a framework for tracking and reporting progress made in mainstreaming gender in climate change related projects and other development initiatives.
- Develop policies, legislation, strategies and development projects that address specific iv. factors that meet specific climate change needs and interest of men and women in Puntland and that address the factors that make women more vulnerable to climate change hazards and their impacts.
- ٧. Encourage development partners to adopt a bottom up approach in climate change project to give the local communities an active role in the planning and implementation climate change projects in Puntland.

4.2.2 Recommendation to development organizations

The following recommendations are made to development organizations:

- Define clearly actions required to integrate gender in the climate change project they implement and setup a mechanism to track, assess and report progress on the identified gender actions and assessing achievements in mainstreaming gender and outcomes realized for both genders.
- Create partnership among development organizations working on climate change in Puntland and develop a shared framework for assessing and evaluating how gender responsive development projects are. Based on recent international best practises, areas of assessment may include (a) Recognition of gender differences; (b) Equal participation; (c) Equal access to financial resources; (d) Gender integration in planning, implementation and



- monitoring; e) Gender consideration in capacity development; and (d) Documentation and reporting on gender actions.
- iii. Adapt their project to increase women contribution to climate change mitigation, adaptation and community resilience in Puntland by taking advantage of women unique understanding and experience with natural resources use and management and their organizing and leadership roles within local communities.
- iv. Adopt use of participatory approaches and tools in their climate change related projects as a standard to ensure quality involvement of men and women. Educate the community on the importance of full and active participation of both men and women in climate change projects and build the capacity of both genders to engage in discussions and make decisions
- v. Build their climate change programmes based on comprehensive assessment of community their needs and priorities ensure that their address the specific climate change needs and interest of men and women and the factors that make women and specific groups of the community more vulnerability to climate change hazards and impacts.

4.2.3 Recommendation to the community

The following recommendations are made to the local communities:

- i. Community leaders and members should undertake assessment of their climate change related needs and priorities and produce and periodically update a comprehensive community climate adaptation plan that clearly identifies the needs of men and women and prioritizes any special vulnerable groups in the community.
- ii. Community leaders should ensure that government and development organization consult and engage local community organizations and groups and that both men and women are fully and actively involved in the planning and implementation of climate change projects in their areas.
- iii. Community leaders should lobby all the government, development partners and other agencies implementing climate change projects to base their project and interventions on the community climate adaptation plans prepared by the community.
- iv. Men and women should participate in capacity development activities that will improve their understanding of climate change, its hazards and impacts and mitigation and adaptation options. Men and women should also build their skills for communication and decision making.



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- 21. UNDP (2016): UNDP policy brief Gender and climate change
- 22. UNDP (2014): Enhancing Climate Resilience of the Vulnerable Communities and Ecosystems in Somalia
- 23. UNDP (2019): Internal communication on GEF climate change adaptation project proposal



Annexes

Annex 1: Data collection tools

Annex 1A: Focus Group Discussion (FGD) data capture form

| General Information | The FGDs for the assessment on "Gender Dimensions of Climate Change Related Projects" will be carried out at five locations (Harfo, Dangorayo, Dhahar, Bender Beyla and Iskushuban) and will focus mainly on the local community and right owners [to purpose]. | | | | | | |
|------------------------|---|---|--|----------------------|--------------------|---------------|--|
| | FGD Lo | ocation | | | | | |
| | FGD D | ate | | | | | |
| | Partici | • | Total: | Female: | Male: | (Attach list) | |
| | Lead R | esearcher | | | | | |
| FGD Guiding | i. | What is your ι | ınderstandir | g of climate change | ? | | |
| Questions | ii. | What are the | climate chan | ge related hazards t | that affect the co | mmunity? | |
| | iii. | Of these hazar | rds, which ar | e the three most im | portant ones? | | |
| | iv. | What are the | impact of cli | mate change hazard | ls on the commu | nity? | |
| | v. | v. Do projects in your community address climate change related hazards and impacts (If possible please specify how and to what extent) | | | | | |
| | vi. | How do climate change impacts affect women and men? | | | | | |
| | vii. | What strategion | What strategies does the community use to adapt to the changing climate? | | | | |
| | viii. | What strategies does the community use to adapt to the three most important climate change hazards cited above? | | | | | |
| | ix. | What are won | nen specific | climate change relat | ted needs and int | erests? | |
| | х. | What are men | specific clin | nate change related | need and interes | sts? | |
| | xi. | | To what extent do projects in your community address women specific needs and interests identified above? | | | | |
| | xii. | | To what extent do projects in your community address men specific needs and interests identified above? | | | | |
| | xiii. | • | How do you think the climate change related projects can be adapted to better meet the needs and interests of women and men? | | | | |
| | xiv. | | ow can women and men influence decisions that relate to climate change laptation and mitigation? | | | | |
| | XV. | How can wom resilience? | How can women and men influence decisions that relate to community resilience? | | | | |



Annex 1B: Key Informant Interview (KII) data capture form - Local Government

| General Information | The KII for the assessment on "Gender Dimensions of Climate Change Related Projects" will be completed for three categories of informants (Local Authorities, Government Institutions, Development Agencies) [to purpose]. | | | |
|------------------------|--|--|--|--|
| | Name of Authority | | | |
| | Location | | | |
| | Interview Date | | | |
| | Respondent(s) Name | | | |
| | Respondent(s) Designation | | | |
| | Lead Researcher | | | |
| FGD Guiding | i. What are the climate change related hazards that affect the district? | | | |
| Questions | ii. Of these hazards, which are the three most important ones? | | | |
| | iii. What are the impact of climate change hazards in the district? | | | |
| | iv. Are you aware of climate change related projects in the district? | | | |
| | v. If yes, who is undertaking the projects? | | | |
| | vi. Do projects in the district address climate change related hazards and impacts? (If possible specify how and to what extent) | | | |
| | How do climate change impacts affect women and men? | | | |
| | viii. What strategies does your authority promote to adapt its programmes to the changing climate? | | | |
| | ix. What strategies does your authority promote to adapt its programmes to the three most important climate change hazards cited above? | | | |
| | x. How do you think the climate change related projects can be adapted to better meet the needs and interests of women and men? | | | |
| | xi. How can women and men influence decisions that relate to climate change adaptation and mitigation? | | | |
| | xii. How can women and men influence decisions that relate to community resilience? | | | |



Annex 1C: Key Informant Interview (KII) data capture form - Government Ministries

| General Information | The KII for the assessment on "Gender Dimensions of Climate Change Related Projects" will be completed for three categories of informants (Local Authorities, Government Institutions, Development Agencies) [to purpose]. | | | | |
|------------------------|--|--|---|--|--|
| | Name | of Institution | | | |
| | Locatio | on | | | |
| | Intervi | ew Date | | | |
| | Respor | ndent(s) Name | | | |
| | | ndent(s) Designation | | | |
| TCD. | | esearcher | | | |
| FGD Guiding | xiii. | What are the climat | e change related hazards that affect Puntland? | | |
| Questions | xiv. | Of these hazards, w | hich are the three most important ones? | | |
| | XV. | What are the impac | t of climate change hazards in Puntland? | | |
| | xvi. | Are you aware of cli | imate change related projects in Puntland? | | |
| | xvii. | If yes, who is under | taking the projects? | | |
| | xviii. | If yes, please specify | y area of focus (adaptation, mitigation, resilience building, etc) | | |
| | xix. Do projects address climate change related hazards and impacts? specify how and to what extent) | | | | |
| | XX. | xx. How do climate change impacts affect women and men? | | | |
| | xxi. | es your ministry / authority use to adapt its programmes to e? | | | |
| | xxii. | _ | What strategies does your ministry / authority promote to adapt to the three most important climate change hazards cited above? | | |
| | xxiii. | What are women sp | pecific climate change related needs and interests in Puntland? | | |
| | xxiv. | What are men spec | What are men specific climate change related need and interests in Puntland? | | |
| | xxv. | Do projects in Puntland address women specific needs and interests identified above? (How and to what extent) | | | |
| | xxvi. | Do projects in Puntland address men specific needs and interests identified above? (How and to what extent) | | | |
| | xxvii. | | ne climate change related projects can be adapted to better I interests of women and men? | | |
| | xxviii. | How can women and men influence decisions that relate to climate change adaptation and mitigation? | | | |
| | xxix. | How can women and men influence decisions that relate to community resilience? | | | |
| | xxx. | What changes do you think are necessary for women and men needs and interests to be taken in consideration during decision making? | | | |



Annex 1D: Key Informant Interview (KII) data capture form - Development Organizations

| General Information | The KII for the assessment on "Gender Dimensions of Climate Change Related Projects" will be completed for three categories of informants (Local Authorities, Government Institutions, Development Agencies) [to purpose]. | | |
|------------------------|--|--|--|
| | Name of Organization | | |
| | Location | | |
| | Interview Date | | |
| | Respondent(s) Name Respondent(s) Designation | | |
| | Lead Researcher | | |
| FGD Guiding | i. What are the climate change related hazards that your organizations address? | | |
| Questions | ii. Of these hazards, which are the three most important ones? | | |
| | iii. What are the impact of climate change hazards in Puntland? | | |
| | iv. Are you implementing specific climate change related projects in Puntland? | | |
| | v. If yes, what is the name of the project? | | |
| | vi. If yes, in which districts is the project implemented? | | |
| | vii. If yes, who are the beneficiaries of the project? | | |
| | viii. If yes, please specify area of focus (adaptation, mitigation, resilience building, etc) | | |
| | If yes, do the projects you implement address climate change related hazards and impacts? (If possible specify how and to what extent) | | |
| | x. How do climate change impacts affect women and men? | | |
| | xi. What strategies does your organization promote to adapt to the changing climate? | | |
| | xii. What strategies does your organization promote to adapt to the three most important climate change hazards cited above? | | |
| | xiii. In your areas of work, what are women specific climate change related needs and interests? | | |
| | xiv. In your areas of work, what are men specific climate change related needs and interests? | | |
| | xv. Does your work and that of your partners address women specific needs and interests identified above? (How and to what extent) | | |
| | xvi. Does your work and that of your partners address women specific needs and interests identified above? (How and to what extent) | | |
| | xvii. How do you think climate change related projects can be adapted to better meet the needs and interests of women and men? | | |
| | xviii. How can women and men influence decisions that relate to climate change adaptation and mitigation? | | |
| | xix. How can women and men influence decisions that relate to community resilience? | | |
| | xx. What changes do you think are necessary for women and men needs and interests to be taken in consideration during decision making? | | |

Annex 2: Field data transcripts

Focus Group Discussions - Bender Beyla District

| General Information | carried out at five locat | sessment on "Gender Dimensions of Climate Change Related Projects" will be cations (Harfo, Dangorayo, Dhahar, Bender Beyla and Iskushuban) and will local community and right owners. | | | | | |
|------------------------|---------------------------|---|----------------------|--|--|--|--|
| | FGD Location | Benderbayla dis | Benderbayla district | | | | |
| | FGD Date | 21/Jan/2019 | | | | | |
| | Participants | Total: 12 Female: 6 Male: 6 (Attach list) | | | | | |
| | Lead Researcher | Mohamed Isse | , , , | | | | |

1. What is your understanding of climate change?

We think that climate change is the effect of greenhouse gases released to the atmosphere by the developed countries and when the world talks about climate change, we ignored it and we did not give any considerations till we faced its hazards.

2. What are the climate change related hazards that affect the community?

- Recurrent and prolonged droughts
- Cyclones with heavy rains and floods
- Tsunami
- Extreme high and low temperatures

3. Of these hazards, which are the three most important ones?

- Recurrent and prolonged droughts
- Cyclones with heavy rains and floods
- Extreme high temperature

4. What are the impacts of climate change hazards on the community?

- 113 homes destroyed by cyclone in 2013 and Tsunami in 2004
- Extinction of coastal bird species like xuunsho and takar
- Wastes from the ocean
- Sand dunes which spreads to rangelands
- Formation of gullies
- Diseases for both livestock and people
- Extinction of wildlife e.g. Bicid, Garanuug, Goronyo, Goodir
- Unplanned roads in the rangelands since rural people use trucks for transportations means
- Shortages of forage and water for livestock
- In 2016, when Benderbayla received rains, it attracted many livestock from other regions; this resulted overgrazing and outbreak of livestock diseases
- Reduction of livestock products
- Deterioration of livestock body
- Reduction of livestock resistance against diseases
- Death of livestock
- Destruction of fishing equipments
- Reduction marine resources due to droughts
- Strong storms prevent fishing

5. Do projects in your community address climate change related hazards and impacts (If possible please specify how and to what extent)?

- During droughts, development organizations provide food and non-food items for the affected people
- During disease outbreaks (Malaria, Diarrhia, Bronchitis, and Cholera), Puntland Ministry of Health sends health workers to treat people

6. How do climate change impacts affect women and men?

Women

- Both extreme high temperature and colds cause skin irritations
- Anaemia particularly pregnant women
- Work load increases on women during drought seasons
- Food insecurity leads women and children malnutrition



- Women walk a long distances to fetch water and collect fuel wood
- Loss of livestock causes stagnant of women led small scale businesses
- Women are vulnerable to climate related diseases
- Rural women are affected by both extreme weather conditions (cold and hot temperatures)
- lack of clean water for domestic consumption
- Separation of families (divorce)
- Young rural migrate to urban, this increases pressure on urban women
- Special vulnerabilities during pregnancy or breastfeeding

Man

- Men loss family responsibility
- Unemployment
- Men frustrated and stressed due to lack of income for their families
- Young men commit crimes
- Migration of young men to abroad
- Rural-urban migration

7. What strategies does the community use to adapt to the changing climate?

Strategies to adapt droughts

- Seeking other jobs
- Water trucking
- Livestock feeding

Strategies to adapt cyclones

- Building strong stalls for livestock to prevent colds and storms
- Seeking social & humanitarian support
- Settle in high areas to prevent the effects of floods

Strategies to adapt high temperatures

• Reduce movements at mid days

8. What strategies does the community use to adapt to the three most important climate change hazards cited above?

Strategies to adapt droughts

- Seeking other jobs
- Water trucking
- Livestock feeding

Strategies to adapt cyclones

- Building strong stalls for livestock to prevent colds and storms
- Seeking social & humanitarian support
- Settle in high areas to prevent the effects of floods

Strategies to adapt high temperatures

• Reduce movements at mid days

9. What are women specific climate change related needs and interests?

Women specific climate related needs

- Empowering of women organizations
- Access to education/knowledge and skills
- Access to job creation
- Access to grants for their business
- Access to health facilities
- Access to aid support from government and donors

Women specific climate related interests

Effectively participate in the planning and implementation of climate adaptation and mitigation strategies

10. What are men specific climate change related need and interests?

Men specific climate related needs

- Access to income/livelihood diversification funds
- Access to education/knowledge and skills
- Access to vocational trainings



- Access to climate related information
- Access to climate financing
- Access to health facilities
- Access to aid support from government and donors

Men specific climate related interests

Lead the planning and implementation of climate change adaptation and mitigation strategies

11. To what extent do projects in your community address women specific needs and interests identified above?

• Emergency projects only support less than 10% of the population

12. To what extent do projects in your community address men specific needs and interests identified above?

Emergency projects only support less than 10% of the population

13. How do you think the climate change related projects can be adapted to better meet the needs and interests of women and men?

- Joint planning of all stakeholders including local communities
- Assessment of community needs and priorities
- Investment of sustainable projects like environmental sustainability, water development, fishing and early warning systems

14. How can women and men influence decisions that relate to climate change adaptation and mitigation?

• Civic education, teaching people about climate change hazards & impacts will help people to take proper decisions on climate change adaptation and mitigation

15. How can women and men influence decisions that relate to community resilience?

• Civic education, teaching people about climate change hazards & impacts will help people to take proper decisions on building community resilience

16. Other environmental issues in Benderbayla districts

- Illegal roads in the pasture valleys resulted diversion of runoff water from grazing valleys
- Formation of advanced gullies
- Extinction of forbs and grass species due to overgrazing

Focus Group Discussions – Dangorayo District

| General Information | The FGDs for the assessment on "Gender Dimensions of Climate Change Related Projects" will be carried out at five locations (Harfo, Dangorayo, Dhahar, Bender Beyla and Iskushuban) and will focus mainly on the local community and right owners. | | | | | |
|------------------------|--|--------------|--|--|--|--|
| | FGD Location | 18/Jan/2019 | | | | |
| | FGD Date | | | | | |
| | Participants | | | | | |
| | Lead Researcher | Mohamed Isse | | | | |

1. What is your understanding of climate change?

- Global warming is an international issue which Dangoroyo district experienced its major events such as prolonged drought, for instant Dangoroyo district did not receive enough rains for the last five years.
- On the other hand, we receive heavy rains with freezing temperature and flash floods which destroys infrastructures and rangelands.
- Changing climate is caused by the emission of greenhouse gases and exacerbated by human made environmental offenses like deforestation. Dangoroyo faced the following climate change hazards since
- Droughts: Sima, dulkuqaad, Gaatama, xaaraama cune, dabadhee, gaarigaari saar, kartoomaley, Ari warmaleh, Diimoon and jiho-jihys.
- Floods and Storms: Barafle-Tsunami 2004, Barafle 2013, Chapala & megh Cyclone 2015.

2. What are the climate change related hazards that affect the community?

- Recurrent and prolonged droughts
- Cyclones with heavy rains
- Tsunami
- Cold rains with floods

3. Of these hazards, which are the three most important ones?



- Recurrent and prolonged droughts
- Cyclones with heavy rains
- Cold rains with floods
- What are the impacts of climate change hazards on the community?
- Rangelands: High temperature increases plant transpiration, floods removed top fertile soils and formed gullies, spread of alien species and water shortage. All those impacts of Climate Change on rangelands lead desertification and low production of potential rangelands.
- Wildlife: Due to desertification, fragmentation and loss of habitats caused by climate change, some wild animals migrated, some went extinction and many more are endangered.
- Agriculture: Agricultural production reduced and its price increased owing to lack of enough water for irrigation, newly emerged weeds and insects, high temperature, destruction of crops and agricultural land etc.
- Water Resources: Shallow wells are buried under dirt, sediment and other debris, Declining water quality due to less water and more concentration of pollutants
- Marine Resources: Reduction of all types of marine resources due to climate change and degradation of coral reefs.
- Main villages: Sand dunes, reduction of economic and business activities and rural-urban migration are some of the climate impact on Dangorayo district.
- Security: Climate change is a threat to Dangorayo security on account for conflicts on rights to access diminishing pasturelands and water resources and illegal fencing.
- Socio-economic: Economic loss, Declining of Natural resources, Outbreak of diseases, Reduction of livestock and agricultural production prices, Poverty, Famine and finally loss of life.
- Infrastructure and Assets: Cyclones and Tsunami destroy fishing equipments of Dangoroyo coastal communities, homes and roads.
- Extinction species due to climate impact:
- FGD participants listed aquatic and terrestrial species those went to extinction or near to extinction in local language:
- Aquatic species: Animals Qoofaar, Kalbad, Saraacimo, Sheewo, Shoox, Shooxeyd, Qardabo, Suweyrax, Suubaan, Nebiriga. Plants: Canbar, Luul, marjaan, Isbuunyo, Qandiil, Dhir ubaxley, Waram.
- Terrestrial species: Plants: Murcanyo, Dhebi, Coodin, Bari jugle, Sadkax, Toonamaduur, Caw, Dureeme, Dhafaruur, Hohob, Mareer, Barrijugle, Maroore, Xamakow, Sifaar, Qurac, Damal, Higlo, Caday and maygaag. . Animals- Xuunsho, Gorgor, Baqelye, Dafado, Cantalyaa, Bayrac, Qosley, Daba taag, Shalamadle, Hudhud.

4. Do projects in your community address climate change related hazards and impacts (If possible please specify how and to what extent)?

• We have an EU-RESTORE PROJECT- strengthening resilience of the communities but it does not yet started well and we can not specify how and what extent it will address climate change related hazards.

5. How do climate change impacts affect women and men? Women

- Food insecurity leads women and children malnutrition
- Women walk a long distances to fetch water and collect fuel wood
- Loss of livestock causes stagnant of women led small scale businesses
- Women are vulnerable to climate related diseases
- Rural women are affected by both extreme weather conditions (cold and hot temperatures)
- lack of clean water for domestic consumption
- Separation of families (divorce)
- Young rural migrate to urban, this increases pressure on urban women
- Special vulnerabilities during pregnancy or breastfeeding

Man

- Unemployment
- Men frustrated and stressed due to lack of income for their families
- Young men commit crimes
- Migration of young men
- Rural-urban migration



6. What strategies does the community use to adapt to the changing climate?

Strategies to adapt droughts

- In the rainy season, they store water in the Berkads and instead use water in the natural shallow wells
- Water trucking
- Livestock feeding
- Out migration to search pasture and water
- Taking loans
- Migrate to urban centres

Strategies to adapt cyclones

• Seeking social & humanitarian support

Strategies to adapt floods

- Moving out of homes
- Seeking humanitarian

7. What strategies does the community use to adapt to the three most important climate change hazards cited above?

Strategies to adapt droughts

- In the rainy season, they store water in the Berkads and instead use water in the natural shallow wells
- Water trucking
- Livestock feeding
- Out migration to search pasture and water
- Taking loans
- Migrate to urban centres

Strategies to adapt cyclones

• Seeking social & humanitarian support

Rains with extreme low temperatures

- People use heavy clothes like jackets
- During low temperature periods, rural people settle in low lands with high density of trees
- Moving out of homes
- Seeking humanitarian

8. What are women specific climate change related needs and interests?

Women specific climate related needs

- Access to education/knowledge and skills
- Access to climate related information
- Access to climate financing
- Access to health facilities
- Access to aid support from government and donors

Women specific climate related interests

• Effectively participate in the planning and implementation of climate adaptation and mitigation strategies

9. What are men specific climate change related need and interests?

Men specific climate related needs

- Access to income/livelihood diversification funds
- Access to education/knowledge and skills
- Access to vocational trainings
- Access to climate related information
- Access to climate financing
- Access to health facilities
- Access to aid support from government and donors

Men specific climate related interests

Lead the planning and implementation of climate change adaptation and mitigation strategies

10. To what extent do projects in your community address women specific needs and interests identified above?

- WFP provides food items for vulnerable house holds
- SAVE-THE-CHILDREN provides unconditional cash distribution for approximately 500 families

11. To what extent do projects in your community address men specific needs and interests identified above?

• WFP provides food items for vulnerable house holds



SAVE-THE-CHILDREN provides unconditional cash distribution for approximately 500 families

12. How do you think the climate change related projects can be adapted to better meet the needs and interests of women and men?

The following ways can be adapted to better meet the needs and interests of women and men in climate change related projects:

- Proper community needs assessment
- Community consultations at grass root levels
- · Equally gender participation in the planning and implementation of climate change related projects
- Development of specific community action planning (CAP)
- Project should target climate change impacts on the ground such as environmental degradations, water shortages etc.

13. How can women and men influence decisions that relate to climate change adaptation and mitigation?

- For climate change adaptation, rural women and men equally participate migration of livestock to search water and pasture and equally feed their livestock
- For climate change adaptation, women and men partake the collection of community contribution and its distribution to the affected households
- For climate change mitigation, women and men carryout awareness campaigns on environmental protection, deforestation, trees planting

14. How can women and men influence decisions that relate to community resilience?

• Both women and men struggle to search income to provide food, water, education fees and health for the resilience of families and contribution to the community.

15. Other environmental issues in Dangoroyo districts

- Illegal roads in the pasture valleys resulted diversion of runoff water from grazing valleys
- Formation of advanced gullies
- Extinction of forbs and grass species due to decreased rural mobility and overgrazing

Focus Group Discussions – Iskushuban District

| General Information | The FGDs for the assessment on "Gender Dimensions of Climate Change Related Projects" wi carried out at five locations (Harfo, Dangorayo, Dhahar, Bender Beyla and Iskushuban) and w focus mainly on the local community and right owners. | | | |
|-----------------------------|--|----------------------------|--|--|
| | Name of Organization Iskushuban District | | | |
| | Location | Iskushuban | | |
| | Interview Date 20/01/2019 | | | |
| Participants Total 8 Female | | Total 8 Female: 3 Male : 5 | | |
| | Mohamed Isse | | | |

1. What is your understanding of climate change?

• Sudden changes of temperature and seasons e.g. long dry season and temperature e.g. extreme high and low temperatures and it is exacerbated by mass deforestation for charcoal production in the district.

2. What are the climate change related hazards that affect the community?

- Recurrent and prolonged droughts like Sima, naaf-maddone and naaf-cade droughts
- Cyclones in 2013, 2015, 2017 and 2018
- Extreme high and low with cold temperature
- Wild fires

3. Of these hazards, which are the three most important ones?

- Recurrent and prolonged droughts
- Wild fires
- Cyclones

4. What are the impacts of climate change hazards on the community?

Agriculture

- Agricultural farms are destroyed by wildfires (both fruit trees and cash crops)
- Floods created big gullies in farm lands



- Destruction farms' irrigation canals
- Diseases reduced agricultural productivities

CC Impacts on Livestock

- Pasture and water shortages
- · Reduced livestock weighs and resistant to diseases
- Reduced livestock products
- Death of livestock

CC Impact on People

- Increased health problems particularly women & children such as Malaria, flu & Malnutrition
- Increased food insecurity
- Increased divorce rate within the community
- Increased conflicts between and within communities over limited resources
- Increased poverty level in the household due to lack loss of livestock (unemployment)
- Increased climate related displacements
- Extreme daily high temperatures reduced human mobility
- Increased respiratory infections due to extreme colds during nights
- Death of people due to thirst

Impact on Environment

- Overgrazing
- Soil erosions (water and wind erosions)
- Formation of advanced gullies
- Reduced land cover (vegetations)
- Decertification
- Water shortage
- Invasive trees species e.g. prosopis juliflora,
- 5. Do projects in your community address climate change related hazards and impacts (If possible please specify how and to what extent)?
- Currently there is no projects that address climate related hazards and impacts in Xarfo district
- 6. How do climate change impacts affect women and?

Women

- Food insecurity leads women and children malnutrition
- Women walk a long distances to fetch water and collect fuel wood
- Loss of livestock causes stagnant of women led small scale businesses
- Women are vulnerable to climate related diseases
- Rural women are affected by both extreme weather conditions (cold and hot temperatures)
- lack of clean water for domestic consumption
- Separation of families (divorce)
- Young rural migrate to urban, this increases pressure on urban women
- Special vulnerabilities during pregnancy or breastfeeding

Man

- Unemployment
- Men frustrate and stress due to lack of income for their families
- Young men commit crimes
- Young men put their lives in danger to migrate to Europe
- 7. What strategies does the community use to adapt to the changing climate?
- Xarfo district has a drought committee which trucks water and distributes to both villagers and rural people during emergency cases
- Community contribution to support most vulnerable households
- Rural people move to search water and pasture
- In the rainy season, they store water in the Berkads and instead use water in the natural ballis
- They feed livestock for maize and other available food items
- Increased young men migration
- 8. What strategies does the community use to adapt to the three most important climate change hazards



cited above?

Droughts

- Xarfo district has a drought committee which trucks water and distributes to both villagers and rural people
- Community contribution to support most vulnerable households
- Rural people move to search water and pasture
- In the rainy season, they store water in the Berkads and instead use water in the natural ballis
- They feed livestock for maize and other available food items.

Extreme low and high temperatures

- For cold, people use heavy clothes like jackets
- For the day, they use trees shade to protect extreme sun lights
- During low temperature periods, rural people settle in low lands with high density of trees

Strong winds with dusts

• People use clothes to protect dusts from their eyes, noises etc

9. What are women specific climate change related needs and interests?

Women specific climate related needs

- Access to education/knowledge and skills
- Access to climate related information
- Access to climate financing
- Access to health facilities
- Access to aid support from government and donors

Women specific climate related interests

• Effectively participate in the planning and implementation of climate adaptation and mitigation strategies

10. What are men specific climate changes related need and interests?

Men specific climate related needs

- Access to income/livelihood diversification funds
- Access to education/knowledge and skills
- Access to climate related information
- Access to climate financing
- Access to health facilities
- Access to aid support from government and donors

Men specific climate related interests

• Lead the planning and implementation of climate adaptation and mitigation strategies

11. To what extent do projects in your community address women specific needs and interests identified above?

There are no projects that address women specific needs and interests in Xarfo district, sometimes WFP
provides food items for a small number of households in the community When and where to move family
livestock.

12. To what extent do projects in your community address men specific needs and interests identified above?

 There are no projects that address men specific needs and interests in Xarfo district, sometimes WFP provides food items for a small number of households in the community.

13. How do you think the climate change related projects can be adapted to better meet the needs and interests of women and men?

- Proper community needs assessment
- Community consultations at grass root levels
- Equally gender participation in the planning and implementation of climate change related projects

14. How can women and men influence decisions that relate to climate change adaptation and mitigation?

- For climate change adaptation, rural women and men equally participate migration of livestock to search water and pasture.
- For climate change adaptation, women and men partake the collection of community contribution and its distribution to the vulnerable households
- For climate change mitigation, women and men carryout awareness campaigns on environmental protection



15. How can women and men influence decisions that relate to community resilience?

• Both women and men struggle to search income to provide food, water, education fees and health for the resilience of families and contribution to the community.

16. Other environmental issues in Xarfo districts

- Illegal rangeland enclosures or privatization of communal pasture lands
- Trees cutting for the collection of fuel woods
- Extinction of forbs and grass species due to decreased rural mobility or overgrazing

Focus Group Discussions – Harfo District

| General Information | The FGDs for the assessment on "Gender Dimensions of Climate Change Related Projects" will carried out at five locations (Harfo, Dangorayo, Dhahar, Bender Beyla and Iskushuban) and will focus mainly on the local community and right owners. | | | | |
|------------------------|---|--------------|--|--|--|
| | Name of Organization Harfo District | | | | |
| | Location | Harfo | | | |
| | Interview Date | 17/01/2019 | | | |
| | Participants Total 12 Female: 4 Male: 8 | | | | |
| | | | | | |
| | Lead Researcher | Mohamed Isse | | | |

1. What is your understanding of climate change?

- Nowadays, changing climate is a clear phenomenon in Xafro district. Its major hazards include recurrent
 failure of rainy seasons April to June (Gu' rainy season) and October to December (Deyr rainy season) and it is the one of the major problems that facing Xarfo district, there is a water scarcity, both high and
 low temperatures and droughts. All these affected the lives and livelihood means of Xarfo district
 communities.
- 10 years ago temperature was a moderate but these days the situation is difficult owing to the extreme weather conditions.

2. What are the climate change related hazards that affect the community?

- Droughts
- Extreme Hot and cold temperature
- Strong winds with dusts

3. Of these hazards, which are the three most important ones?

- Droughts
- Extreme Hot and cold temperature
- Strong winds with dusts

4. What are the impacts of climate change hazards on the community?

A. <u>CC Impacts on Livestock</u>

- Decreased livestock disease resistance, weight, productivity and numbers due to longer dry seasons
- Increased livestock death due to droughts
- Decreased livestock prices during droughts
- Disturbance of animal breeding cycles
- Loss of hundreds of livestock due to droughts and extreme colds
- Shortage of pasture for livestock: due to recurrent droughts and overgrazing the productivity of rangeland ecosystems has reduced; this resulted deterioration of livestock products eg: milk and Meat.

B. CC Impact on People

- Increased health problems particularly women & children such as Malaria, flu & Malnutrition
- Increased food insecurity
- Increased divorce rate within the community
- Increased conflicts between and within communities over limited resources
- Increased poverty level in the household due to lack loss of livestock (unemployment)
- Increased climate related displacements
- Extreme daily high temperatures reduced human mobility



- Increased respiratory infections due to extreme colds during nights
- Death of people due to thirst

C. Impact on Environment

- Increased land degradation and decertification due to long periods of dry season and decreased soil fertility
- Decreased pasture and water resource availability
- Rainy seasons becoming too short for the growth of pasture.
- Decreased rangeland productivity
- Increased pressure on rangeland which leads to overgrazing
- Boreholes water tables lowered
- Increased water prices
- Increased evapotranspiration due to high temperatures

5. Do projects in your community address climate change related hazards and impacts (If possible please specify how and to what extent)?

· Currently there is no projects that address climate related hazards and impacts in Xarfo district

6. How do climate change impacts affect women and?

Women

- Food insecurity leads women and children malnutrition
- Women walk a long distances to fetch water and collect fuel wood
- Loss of livestock causes stagnant of women led small scale businesses
- Women are vulnerable to climate related diseases
- Rural women are affected by both extreme weather conditions (cold and hot temperatures)
- lack of clean water for domestic consumption
- Separation of families (divorce)
- Young rural migrate to urban, this increases pressure on urban women
- Special vulnerabilities during pregnancy or breastfeeding

Man

- Unemployment
- Men frustrate and stress due to lack of income for their families
- Young men commit crimes
- Young men put their lives in danger to migrate to Europe

7. What strategies does the community use to adapt to the changing climate?

- Xarfo district has a drought committee which trucks water and distributes to both villagers and rural people during emergency cases
- Community contribution to support most vulnerable households
- Rural people move to search water and pasture
- In the rainy season, they store water in the Berkads and instead use water in the natural ballis
- They feed livestock for maize and other available food items
- Increased young men migration

8. What strategies does the community use to adapt to the three most important climate change hazards cited above?

Droughts

- Xarfo district has a drought committee which trucks water and distributes to both villagers and rural people
- Community contribution to support most vulnerable households
- Rural people move to search water and pasture
- In the rainy season, they store water in the Berkads and instead use water in the natural ballis
- They feed livestock for maize and other available food items.

Extreme low and high temperatures

- For cold, people use heavy clothes like jackets
- For the day, they use trees shade to protect extreme sun lights
- During low temperature periods, rural people settle in low lands with high density of trees

Strong winds with dusts



• People use clothes to protect dusts from their eyes, noises etc

9. What are women specific climate change related needs and interests?

Women specific climate related needs

- Access to education/knowledge and skills
- Access to climate related information
- Access to climate financing
- Access to health facilities
- Access to aid support from government and donors

Women specific climate related interests

Effectively participate in the planning and implementation of climate adaptation and mitigation strategies

10. What are men specific climate changes related need and interests?

Men specific climate related needs

- · Access to income/livelihood diversification funds
- Access to education/knowledge and skills
- Access to climate related information
- Access to climate financing
- Access to health facilities
- Access to aid support from government and donors

Men specific climate related interests

• Lead the planning and implementation of climate adaptation and mitigation strategies

11.To what extent do projects in your community address women specific needs and interests identified above?

There are no projects that address women specific needs and interests in Xarfo district, sometimes WFP
provides food items for a small number of households in the community When and where to move family
livestock.

12. To what extent do projects in your community address men specific needs and interests identified above?

• There are no projects that address men specific needs and interests in Xarfo district, sometimes WFP provides food items for a small number of households in the community.

13. How do you think the climate change related projects can be adapted to better meet the needs and interests of women and men?

- Proper community needs assessment
- Community consultations at grass root levels
- Equally gender participation in the planning and implementation of climate change related projects

14. How can women and men influence decisions that relate to climate change adaptation and mitigation?

- For climate change adaptation, rural women and men equally participate migration of livestock to search water and pasture.
- For climate change adaptation, women and men partake the collection of community contribution and its distribution to the vulnerable households
- For climate change mitigation, women and men carryout awareness campaigns on environmental protection

15. How can women and men influence decisions that relate to community resilience?

• Both women and men struggle to search income to provide food, water, education fees and health for the resilience of families and contribution to the community.

16. Other environmental issues in Xarfo districts

- Illegal rangeland enclosures or privatization of communal pasture lands
- Trees cutting for the collection of fuel woods
- Extinction of forbs and grass species due to decreased rural mobility or overgrazing

Focus Group Discussions - Dhahar District

| General Information | carried out at five locat | sment on "Gender Dimensions of Climate Change Related Projects" will be ions (Harfo, Dangorayo, Dhahar, Bender Beyla and Iskushuban) and will al community and right owners. |
|------------------------|---------------------------|--|
| | FGD Location | Dhahar district |



| STU | DY RE | PORT |
|-----|-------|------|
|-----|-------|------|

| FGD Date | 19/Jan/2019 | | | |
|-----------------|--------------|-----------|---------|---------------|
| Participants | Total: 11 | Female: 8 | Male: 3 | (Attach list) |
| Lead Researcher | Mohamed Isse | | | |

1. What is your understanding of climate change?

- As Dhahar community, we see climate change as a dramatically fluctuation of seasons e.g. long dry season and temperature e.g. extreme high and low temperatures.
- Trees cutting and overgrazing are major human activities which contributed to climate change.

2. What are the climate change related hazards that affect the community?

- Recurrent and prolonged droughts
- Extreme cold
- Extreme high temperature
- Strong winds with dusts

3. Of these hazards, which are the three most important ones?

- Recurrent and prolonged droughts
- Extreme cold
- Extreme high temperature

4. What are the impacts of climate change hazards on the community?

Environment

- Reduced land cover (vegetations)
- Soil erosions (water and wind erosions)
- Decertification
- Reduced soil moisture and ground water table
- Water shortage
- Invasive trees species e.g. prosopis juliflora, waxmatare and geed shimbireed

Livestock

- Pasture and water shortages
- Reduced livestock weighs and resistant to diseases
- Reduced livestock products
- Death of livestock

People

- Reduced income sources
- Increased poverty level
- Increased security threats
- Diseases e.g. diarrhia, fever and bronchitis

5. Do projects in your community address climate change related hazards and impacts (If possible please specify how and to what extent)?

• No projects that address climate change related hazards in our area

6. How do climate change impacts affect women and men?

Women

- Extreme cold prevents women to wake up early morning and go to works such preparation of tea, coffee or open small shops
- Reduced customers of women led small scale businesses
- Children school dropout due to lack of school fees
- Food insecurity leads women and children malnutrition
- Women walk a long distances to fetch water and collect fuel wood
- Loss of livestock causes stagnant of women led small scale businesses
- Women are vulnerable to climate related diseases
- Rural women are affected by both extreme weather conditions (cold and hot temperatures)
- lack of clean water for domestic consumption
- Separation of families (divorce)
- Young rural girls migrate to urban centres, this increases pressure on urban women
- Special vulnerabilities during pregnancy or breastfeeding



Stress and frustration

Man

- Unemployment
- Men frustrated and stressed due to lack of income for their families
- Young men commit crimes such as stealing
- Migration of young men
- Rural-urban migration
- 7. What strategies does the community use to adapt to the changing climate?

Rural people

- Migrate livestock to areas received rains
- Water trucking
- Purchase maize, grass and other food items for livestock
- Take loans from urban centres
- Seek family support

Villagers/ urban people

- Collect community contributions to support affected households
- · Water committee allocated fixed amounts of water for each family during prolonged droughts
- Seek international support and remittance from Somali diaspora
- 8. What strategies does the community use to adapt to the three most important climate change hazards cited above?

Strategies to adapt droughts

- Allocate fixed amounts of water for each family
- Water trucking
- Livestock feeding
- · Out migration to search pasture and water
- Taking loans
- Migrate to urban centres

Extreme Colds

- People use heavy clothes like jackets and
- During low temperature periods, rural people settle in low lands with high density of trees

Extreme high temperatures

- Reduce movements during mid days
- 9. What are women specific climate change related needs and interests?

Women specific climate related needs

- Strengthening women led local organizations
- Access to education/knowledge and skills
- Access to climate related information
- Access to climate financing/grants
- Access to health facilities
- Access to aid support from government and donors

Women specific climate related interests

· Effectively participate in the planning and implementation of climate adaptation and mitigation strategies

10. What are men specific climate change related need and interests?

Men specific climate related needs

- Access to income/livelihood diversification funds
- Access to education/knowledge and skills
- Access to vocational trainings
- Access to climate related information
- Access to climate financing
- Access to health facilities
- Access to aid support from government and donors



Men specific climate related interests

- Lead the planning and implementation of climate change adaptation and mitigation strategies
- Control and management local non violent conflicts
- Contribute to the project free causal labours

11. To what extent do projects in your community address women specific needs and interests identified above?

- WFP provides food items for vulnerable house holds
- 0% since there are no projects

12. To what extent do projects in your community address men specific needs and interests identified above?

• 0% since there are no projects

13. How do you think the climate change related projects can be adapted to better meet the needs and interests of women and men?

- The following ways can be adapted to better meet the needs and interests of women and men in climate change related projects:
- Proper community needs assessment
- Community consultations at grass root levels
- Equally gender participation in the planning and implementation of climate change related projects
- Development of specific community action planning (CAP)
- Project should target climate change impacts on the ground such as environmental degradations, water shortages etc.

14. How can women and men influence decisions that relate to climate change adaptation and mitigation?

- For climate change adaptation, rural women and men equally participate migration of livestock to search water and pasture and equally feed their livestock
- For climate change adaptation, women and men partake the collection of community contribution and its distribution to the affected households
- For climate change mitigation, women and men carryout awareness campaigns on environmental protection.

15. How can women and men influence decisions that relate to community resilience?

• Both women and men struggle to search income to provide food, water, education fees and health for the resilience of families and contribution to the community.

16. Other environmental issues in Dhahar districts

- Illegal roads in the pasture valleys resulted diversion of runoff water from grazing valleys
- Formation of advanced gullies
- Extinction of forbs and grass species due to decreased rural mobility and overgrazing

Key Informant Interview – Bender Beyla District

| General Information | The KII for the assessment on "Gender Dimensions of Climate Change Related Projects" will be completed for three categories of informants (Local Authorities, Government Institutions, Development Agencies) [to purpose]. | |
|------------------------|--|-------------------------------------|
| | Name of Organization | Banderbeyla District |
| | Location | Banderbeyla |
| | Interview Date | 21/01/2019 |
| | Respondent(s) Name | Bile Nur Farah, tell no: 0907798433 |
| | Respondent(s) | Vice mayor |
| | Designation | |
| | Lead Researcher | Mohamed Isse |

1. What are the climate change related hazards that affect the District?

- Prolonged droughts
- Cyclones in 2011
- Tsunami in 2005
- Foreign vessels (over fishing)
- Strong colds at coastal areas

2. Of these hazards, which are the three most important ones?



- Prolonged droughts
- Cyclones
- Tsunami

3. What is the impact of climate change hazards in the District?

Drought Impacts

- Extinction of wildlife (like ostrich)
- Diseases both human and livestock leads to death.
- Rural urban migration
- Conflicts over limited pasture and other resources
- poverty causes after loss of livestock
- Shortage of fuel woods
- Low rainfall and water

Cyclones

- Destruction of fishing equipment
- Gullies formation (soil erosion)
- Loss of livestock
- Loss vegetation cover (trees uprooted)
- Poverty due to loss of livestock
- Diseases both human and animal

Foreign vessels

- Low fish availability in the oceans
- Low market of fishers due fish quality
- Unemployment of fishers (youth)
- Poor income leads poor economic in the city
- Fish immigrated into big oceans were small fishers cannot reach
- Over fishing

<u>Tsunami</u>

- Eye pain experienced of fishers during fishing experiencedsince Tsunami 2005
- Low fish availability in the ocean
- Unpredictable situations in the oceans since tsunami fishers always have fears.
- loss of lives
- Submerging communities
- Destruction of homes
- Destruction fishing equipment and stores
- Sea level increases

Heat and cold

- Cholera outbreak
- Shortage of water
- People difficult to walk during day time

Land slides

- Difficult to climb mount
- Falling large stones and soil from the mountains
- Community use mountain caver as protection from sun and rainfall but these day community don't use the mountains and fear it.

4. Are you aware of climate change related projects in the district?

Yes!

- EU RESTORE PROJECT
- Climate resilience project 2015 (sand dam)
- WFP (cash for work)
- FOA
- NRC

5. If yes, who is undertaking the project?

Ministry of Environment and Climate Change (MoECC)



- FOA
- WFP
- NRC

6. Do projects in the district address climate change related hazards and impacts?(If possible specify how and to what extent)

- Yes these projects address climate change problems in the district and reduced some level of the climate change impacts.
- Climate resilience project addressed some level water shortage in the district.
- WFP supported cash for vulnerable community
- NRC support rehabilitee shelter for IDPs and distribute utensils for IDPs

7. How do climate change impacts affect women and men?

Women

- Women suffer from vulnerable diseases
- Women suffer from vulnerable heat and cold
- Frustration and stress
- women suffer malnutrition
- Mostly women responsibility increases during hard times (droughts, cyclones etc)

<u>Men</u>

- Poverty and low income
- Loan (dayn)
- Unemployment
- Loss of families' men responsibility due tolack of monthly expenses and finally leads to family separations (Divorce)
- Crimes e.g. stealing
- Migrate to both urban centres and abroad

8. What strategies does your authority use to adapt its programmes to the changing climate?

- MoPIC coordinates the initiatives of taking an action to reduce the impact of climate change
- Community awareness on environmental protection.
- Rehabilitation of gullies depend our cost.
- Awareness on youth of jobseekers
- Urban planting and greening.
- Advocating vulnerable community
- Creation of drought committee team in the village and district.

9. What strategies does your authority promote to adapt to the three most important climate change hazards cited above?

Drought

- Establish drought committees
- Collecting community contribution from abroad and urban
- Community contribution and awareness
- Call support from governments, NGOs, UN and others

Cyclones

Dissemination of early warning massages

Land slides

• Community awareness to keep away from landslide prone site

10. How do you think the climate change related projects in the district can be adapted to better meet the needs and interests of women and men?

Both Men and Women Have

- Unemployment
- Poverty
- Diseases
- Low education
- Lack of financial support

Following recommendation provided

• Job creation



- Awareness
- Grants support for vulnerable communities
- Capacity building and education
- Strengthening of community based organization and local authorities and allow them to participate project planning phase, as well as its implementations

11. How can women and men influence decisions that relate to climate change adaptation and mitigation?

- Women have membership in the district council
- Two are district zone chairladies(gudomiyexafaded)
- Women participate district organisational as well other youth organisation.
- Women carried out awareness on environmental such as deforestation
- Women are members of drought committee
- Women collect contributions from community especially other women to support affected households

12. How can women and men influence decisions that relate to community resilience?

All men and women have a same voice in building community resilience in the district.

Key Informant Interview – Dangorayo District

| - No y miles man - Dan Bord y o District | | | |
|--|--|--|--|
| General Information | The KII for the assessment on "Gender Dimensions of Climate Change Related Projects" will be completed for three categories of informants (Local Authorities, Government Institutions, Development Agencies) [to purpose]. | | |
| | Name of Organization | Dangoroyo District | |
| | Location | Dangoroyo | |
| | Interview Date | 18/01/2019 | |
| | Respondent(s) Name | Mukhtar Adirahman Ahmed, tell no: 0907799545 | |
| | Respondent(s) | Mayor | |
| | Designation | | |
| | Lead Researcher | Mohamed Isse | |

1. What are the climate change related hazards that affect the District?

- Prolonged droughts since November 2013
- Cyclones in 2013
- Tsunami in 2004
- Strong colds at coastal areas

2. Of these hazards, which are the three most important ones?

- Prolonged droughts since November 2013
- Cyclones with heavy cold rains
- Strong colds at coastal areas

3. What is the impact of climate change hazards in the District?

Drought Impacts

- Desertification
- wind erosions
- Extinction of wildlife
- Diseases effected livestock (diseases transmitted by other livestock immigrated other areas)
- Overgrazing (gathering a small part of rangeland which rained)
- Conflicts over limited pasture and other resources
- Loss of livestock leads poverty and migration to urban centres
- Shortage of fuel woods
- Water scarcity

Cyclones

- Destruction of fishing equipments, natural wells and road networks (such as Midigar Bridge).
- Siltation
- Loss of livestock and vegetation cover (trees uprooted)
- extreme colds
- sudden temperature fluctuations



Poverty due to loss of livestock

Diseases

4. Are you aware of climate change related projects in the district?

Yes!

- EU RESTORE PROJECT
- Fencing, afforestation and reseeding of 100ha
- 5. If yes, who is undertaking the project?
 - Save the Children
 - Ministry of Environment and Climate change (MoECC)

6. Do projects in the district address climate change related hazards and impacts?(If possible specify how and to what extent)

• Yes these projects address climate change problems in the district and reduced some level of the climate change impacts.

7. How do climate change impacts affect women and men?

Women

- Women are mostly vulnerable group (diseases)
- Women with children don't have enough food for themselves and their children
- Pregnant women suffer malnutrition
- Mostly women responsibility increases during hard times (droughts, cyclones etc)

Men

- Poverty caused loss of their wealth such as livestock
- Unemployment
- Loss of families' men responsibility due to lack of monthly expenses and finally leads to family separations (Divorce)
- Crimes e.g. stealing
- Migrate to both urban centres and abroad

8. What strategies does your authority use to adapt its programmes to the changing climate?

- MoPIC coordinates the initiatives of taking an action to reduce the impact of climate change
- Community awareness on tress protection, plastic wastes, wildlife protection, illegal roads and un-planned settlements.
- Early warning massages support from government agencies.
- Communities support each for difficult times
- Creation of drought committee team in the village and district.
- Call for support from government and international NGOs.

9. What strategies does your authority promote to adapt its programmes to the three most important climate change hazards cited above?

Drought

- Food and water supply in harsh times
- Community contribution and awareness
- Call support from governments, NGOs, UN and others

Cvclones

• Dissemination of early warning massages

Cold and hot temperature

- Distribution of blankets for few families
- Organising Community to support each other during difficult times

10. How do you think the climate change related projects in the district can be adapted to better meet the needs and interests of women and men?

• Strengthening of community based organization and local authorities and allow them to participate project planning phase, as well as its implementations

11. How can women and men influence decisions that relate to climate change adaptation and mitigation?

- Women have membership in the district council
- Women carried out awareness on environmental such as deforestation
- Women are members of drought committee
- Women collect contributions from community especially other women to support affected households



12. How can women and men influence decisions that relate to community resilience?

• All men and women have a same voice in building community resilience in the district.

Key Informant Interview – Iskushuban District

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|------------------------|--|----------------------------------|--|
| General Information | The KII for the assessment on "Gender Dimensions of Climate Change Related Projects" will be completed for three categories of informants (Local Authorities, Government Institutions, Development Agencies) [to purpose]. | | |
| | Name of Organization | ISKUSHUBAN district municipality | |
| | Location | Iskushuban district | |
| | Interview Date | 12/01/2019 | |
| | Respondent(s) Name | MahadJama Mohamed 0907791504 | |
| | Respondent(s) Designation | Municipality secretary | |
| | Lead Researcher | Mohamed Isse | |

1. What are the climate change related hazards that affect the District?

- Droughts
- Floods
- Few cyclones and Tsunami
- Diseases effected agriculture (last 10 years)
- Tsunami disaster 2004
- Strong colds

2. Of these hazards, which are the three most important ones?

- Droughts
- Floods
- Extreme cold and hot temperature

3. What is the impact of climate change hazards in the District?

<u>Floods</u>

- Soil erosion and land degradation
- Advanced gullies
- Loss of plants and
- Wash away farmer by floods
- Invasive species (prosopusjulifera)
- · Conflict of pasture and other resources
- Submerging communities

Droughts

- Loss of livestock leads poverty and urban migration
- Diseases effected livestock
- Loss of livestock (hundred)
- loss vegetation cover (trees uprooted)
- water shortage causes reduced water table in Boreholes
- Low yield farmers and lack of market
- Loss farmer due shortage lack of water, diseases, invasive plants and extreme heat
- Poverty due loss of livestock

4. Are you aware of climate change related projects in the district?

Yes!

- Health services
- Food for work

5. If yes, who is undertaking the project?

- WFP
- Save the Children

6. Do projects in the district address climate change related hazards and impacts?(If possible specify how and to what extent)

• Addresses 3% of people needs



2015 WFP provided 200 people for food

7. How do climate change impacts affect women and men?

Women

- Women are mostly vulnerable to diseases, cold, heat etc.
- Women suffer disease and malnutrition.
- Mostly women take family responsibility.
- Family separation and divorce rate increases last few years.
- Women farmer affected lack of market for their products.

Men

- Poverty leads unemployment
- Stress and frustration
- Low markets for their products.
- Minor Crimes causes poverty and employment
- Risk their life for danger trips such as Yemen and Libya
- Loans causes poverty

8. What strategies does your authority use to adapt its programmes to the changing climate?

- Districts lead the implementation human NGOs plans for the most vulnerable communities.
- Community awareness and early warning for massages with support from other agencies such as (HADMA).
- Early warning massages support from government agencies.
- Creation drought response committees from communities.
- Rangeland rotational grazing (2017, 3 months).

9. What strategies does your authority promote to adapt to the three most important climate change hazards cited above?

Drought

- Community awareness and early warning
- District organise people and establish committees for all villages
- Collection contribution within the people for addressing climate change impacts.

Floods

- Dissemination of early warning massages especially farmers
- Awareness on pastoral not settle flood prone areas
- Burning dead animal in selected caves in order to avoid diseases.

10. How do you think the climate change related projects in the district can be adapted to better meet the needs and interests of women and men?

Women needs

- Low level of education (skills)
- Disease and malnutrition
- Poverty and unemployment

Men needs

- Poverty and employment
- Loss of livestock
- Stress and frustration
- Family separation
- Lack of education and skills

Interests

- Job creation for youth
- Grant support for cooperatives
- Capacity building especially business entrepreneurship
- Climate change adaption skills

11. How can women and men influence decisions that relate to climate change adaptation and mitigation?

- Women participation district administration
- Women play big role collection community contributions.
- Youth participate awareness (outreach programs)



During disasters Men carry out quiche emergency support

Key Informant Interview - Harfo District

| General Information | The KII for the assessment on "Gender Dimensions of Climate Change Related Projects" will be completed for three categories of informants (Local Authorities, Government Institutions, Development Agencies) [to purpose]. | | |
|------------------------|--|--|--|
| | Name of Organization | Harfo district | |
| | Location | Harfo district | |
| | Interview Date | 17/01/2019 | |
| | Respondent(s) Name | Bashir Macalin Dahir tell no: 7797631 or 6505288 | |
| | Respondent(s) Designation | Mayor | |
| | Lead Researcher | Mohamed Isse | |

1. What are the climate change related hazards that affect the District?

- Droughts
- Extreme Hot and cold temperature
- Strong winds with dusts

2. Of these hazards, which are the three most important ones?

- Droughts
- Extreme Hot and cold temperature
- Strong winds with dusts

3. What is the impact of climate change hazards in the District?

- Low rainfall and prolonged dry seasons
- Diseases
- Food insecurity
- Strong winds and dusts
- Conflict over limited resources
- Decreased business activities due to less livestock products
- Decertification and soil erosions

4. Are you aware of climate change related projects in the district?

- There is no climate change related projects in the Xarfo district
- 5. If yes, who is undertaking the project?

6. Do projects in the district address climate change related hazards and impacts?(If possible specify how and to what extent)

- Distribution of food items by WFP is the only project which addresses climate change related hazards and impacts.
- It targets less than 10% of the total population in the district

7. How do climate change impacts affect women and men?

<u>Women</u>

• Women groups either they are in rural or district/villages are most drought affected groups in the community, climate change impact increases works and pressures on women since they collect fuel wood, fetch water and care for children and livestock.

<u>Men</u>

- Increased rate of unemployment
- Increased security threats
- Increased young men migration

8. What strategies does your authority use to adapt its programmes to the changing climate?

- There is no a budget allocated for programmes to climate change in the district due to limited financial resources; that is why we do not have specific strategies for climate change programs.
- 9. What strategies does your authority promote to adapt to the three most important climate change hazards cited above?
 - We collect community contributions (money from Diaspora, clothes, food and water from local community members) to help drought affected people



- We inform central government, NGOs and donors about the drought and its impact on peopole and livestock.
- 10. How do you think the climate change related projects in the district can be adapted to better meet the needs and interests of women and men?
 - We do not have climate change related projects in the district that can be adjusted to better meet the needs and interests of women and men.
- 11. How can women and men influence decisions that relate to climate change adaptation and mitigation?
 - When and where to move family livestock,
 - Collection of community contributions
 - Environmental protection awareness
- 12. How can women and men influence decisions in the district that relate to community resilience?
 - Both women and men struggle to search income to provide food, water, education fees and health for the resilience of families and contribution to the community.

Key Informant Interview - Dhahar District

| General Information | The KII for the assessment on "Gender Dimensions of Climate Change Related Projects" will be completed for three categories of informants (Local Authorities, Government Institutions, Development Agencies) [to purpose]. | |
|------------------------|--|-----------------------------------|
| | Name of Organization | Haylaan region |
| | Location | Garowe |
| | Interview Date | 23/01/2019 |
| | Respondent(s) Name | Mohamed Awil, tell no: 0907791101 |
| | Respondent(s) Designation | Vice mayor |
| | Lead Researcher | Mohamed Isse Mohamed |

- 1. What are the climate change related hazards that affect the District?
 - Prolonged droughts
 - Strong colds and hot temperature
 - Strong Winds
- 2. Of these hazards, which are the three most important ones?
 - Prolonged droughts
 - Strong winds
 - Strong cold and hot temperature
- 3. What is the impact of climate change hazards in the District?

Drought Impacts

- Extinction of wildlife
- Diseases both human and livestock leads to death.
- Rural urban migration
- Conflicts over limited pasture and other resources
- poverty causes after loss of livestock
- Shortage of fuel woods
- Low rainfall and water
- Desertification

Heat and cold

- Cholera outbreak
- Shortage of water
- People difficult to walk during day time
- Animal died due strong cold
- Women and children vulnerable weather fluctuations

Strong winds

- Dusts during day night
- Difficult people during day night
- Immediate pasture dry up



- Pastoralist do not able rearing livestock due dusts
- 4. Are you aware of climate change related projects in the district?

- Water catchments
- 5. If yes, who is undertaking the project?
- 6. Do projects in the district address climate change related hazards and impacts?(If possible specify how and to what extent)
 - WFP supported cash for vulnerable community
- 7. How do climate change impacts affect women and men?

Women

- Women are vulnerable diseases, heat and cold effects
- Women gets frustration and stress due difficulties in the life.
- Women and children suffer malnutrition
- Mostly women responsibility increases during hard times (droughts, cyclones etc)

Men

- Poverty caused by loss of livestock
- Unemployment in the urban area due shortage skills
- Divorce rate among families increases causes family separation, poverty etc
- Crimes e.g. stealing
- migrate to both urban centres and abroad
- 8. What strategies does your authority use to adapt its programmes to the changing climate?
 - Community awareness on environmental protection.
 - Early warning for disaster
 - Awareness youth for not risking their life in the danger trips
 - Community arrangement to support each other
 - Water tracking support from community, donors and governments.
 - Establishment of drought committee team in the village and district.
- 9. What strategies does your authority promote to adapt to the three most important climate change hazards cited above?

Drought

- Establish drought committees
- Collecting community contribution from abroad and urban
- Community contribution and awareness
- Call support from governments, NGOs, UN and others
- 10. How do you think the climate change related projects in the district can be adapted to better meet the needs and interests of women and men?

Both Men and Women Have these challenges

- Unemployment
- Poverty
- Diseases
- Low education
- Lack of financial support

Following recommendation provided

- Job creation
- Awareness
- Grants support for vulnerable communities
- Capacity building and education
- 11. How can women and men influence decisions that relate to climate change adaptation and mitigation?
 - Women have membership in the district council
 - Women have membership in the regional administration



- Women participate district organisational as well other youth organisation.
- Women carried out awareness on environmental such as deforestation
- Women are members of drought committee
- Women collect contributions from community especially other women to support affected households

12. How can women and men influence decisions that relate to community resilience?

 All community members contribute their skills, manpower, and money during difficult times such as drought in 2016

Key Informant Interview – Ministry of Agriculture and Irrigation

| General Information | The KII for the assessment on "Gender Dimensions of Climate Change Related Projects" will be completed for three categories of informants (Local Authorities, Government Institutions, and Development Agencies) [to purpose]. | |
|------------------------|--|---|
| | Name of Organization | Ministry of Agriculture and Irrigation (MoAI) |
| | Location | Garowe |
| | Interview Date | 24/01/2019 |
| | Respondent(s) Name | Mohamed Warsame Salah email:moha.warsame111@gmail.com |
| | Respondent(s) Designation | Director of planning Department |
| | Lead Researcher | Mohamed Isse |

1. What are the climate change related hazards that affect Puntland?

- Springs and stream water decreased due to droughts and climate change
- Water yield of shallow wells is extremely decreased due to decline of ground water table.
- Loss of soil fertility is also one the major constrains and hazards of climate change
- All livelihood sources decreased due drought, water scarcity and any issues related to hazards.
- Land became degraded after loss of plants, natural wild and other physical factors.

2. Of these hazards, which are the three most important ones?

- Soil
- water
- Poor adaptation crops due to climate change.

3. What is the impact of climate change hazards in Puntland?

- Household income is extremely declined
- · Livelihood standard of household is worsened
- The market price index of vegetable and fruits highly increased
- Food meals and vegetable consumption of vulnerable households are decreased
- Malnutrition of old aged people, mother and child is increased.

4. Are you aware of climate change related projects in Puntland?

Yes!

• Drought resilience projects under climate changes projects

5. If yes, who is undertaking the project?

- Ministry of Environment and Climate Change (MoECC)
- Ministry of Agriculture

6. If yes, please specify area of focus (adaptation, mitigation, resilience building, etc)

Adaptation and resilience building

7. Do projects address climate change related hazards and impacts?(If possible specify how and to what extent)

- Drought adaptation smart agriculture
- Drought resilience projects

8. How do climate change impacts affect women and men?

• They are affected by many ways e.g. unable to resist the impacts of drought

9. What strategies does your Ministry/ authority use to adapt its programmes to the changing climate?

• By use of the Ministry strategic plan which focus on future for agricultural development with approaches of climate adaption in order to improve food security of the country.

10. What strategies does your Ministry/ authority promote to adapt to the three most important climate change



hazards cited above?

- We create and establish new ideas that we promote to adapt the climate change e.g. encourage farmers to use drip irrigation method in order to minimize water loss
- Use of enhance climate smart agriculture.

11. What are women specific climate change related needs and interests in Puntland?

 Most of farmers are women so this topic is related to women farmers and they have vital role to contribute to their knowledge and skills so the areas that we think has a need is capacity development for women

12. What are men specific climate changes related need and interests in Puntland?

• Pastoral community and farmers

13. Do projects in Puntland address women specific needs and interests identified above? (How and to what extent)?

Yes!

Agricultural women cooperatives project (producing, managing and marketing for crop the yield.

14. Do projects in Puntland address men specific needs and interests identified above? (How and to what extent)?

Yes!

Agro-pastoral project can be very fundamental for Puntland community particularly pastoral men.

15. How do you think climate change related projects can be adapted to better meet the needs and interests of women and men?

All Through learning and encouraging.

16. How can women and men influence decisions that relate to climate change adaptation and mitigation?

By livelihood relocation decision.

17. How can women and men influence decisions that relate to community resilience?

• By livelihood relocation decision.

18. What changes do you think are necessary for women and men needs and interests to be taken in consideration during decision making?

• Behaviour changes because when you take a decision like the way your life is better to know where you want to go and what you want to achieve for the future depend on you.

Key Informant Interview – Ministry of Environment and Climate Change

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|------------------------|---|---|--|
| General Information | The KII for the assessment on "Gender Dimensions of Climate Change Related Projects" will be completed for three categories of informants (Local Authorities, Government Institutions, and Development Agencies) [to purpose] | | |
| | Name of Organization | Ministry of Environment and Climate Change (MoECC) | |
| | Location | Garowe | |
| | Interview Date | 23/01/2019 | |
| | Respondent(s) Name | Maryan Mohamed Aden Email, maria.moha2013@gmail.com | |
| | Respondent(s) Designation | Director of NRM Department | |
| | Lead Researcher | | |

1. What are the climate change related hazards that affect Puntland?

- Drought (Dry and getting hotter)
- Floods
- Land Deterioration
- Raised Temperature
- Hunger and Famine
- Worsened health conditions (Malnutrition, No safe water, cholera outbreak)
- 2. Of these hazards, which are the three most important ones?
 - Drought
 - Land Degradation



- Worsened health conditions (Malnutrition, No safe water, cholera outbreak)
- 3. What is the impact of climate change hazards in Puntland?
 - Reduction of Water Levels
 - Loss of Soil Fertility
 - Unsustainable Plant and vegetation survival
 - Loss of livestock and wildlife
 - Increased budgetary on farming (Economic)
 - Reduced Crop Yield
 - Social Impact of drought include outbreak of waterborne disease, Hunger and Malnutrition and death, Migration of People
- 4. Are you aware of climate change related projects in Puntland?

- 5. If yes, who is undertaking the project?
 - UNDP and MOECC
 - UNDP and MOECC
 - GIZ and MOECC
 - WB and MOECC
- 6. If yes, please specify area of focus (adaptation, mitigation, resilience building, etc)
 - Climate Resilience Project
 - Awareness on Charcoal Reduction
 - Strengthen Drought Preparedness
 - Water for Agro-Pastoral Livelihood Project6

7. Do projects address climate change related hazards and impacts?(If possible specify how and to what extent)

Yes the above projects address climate change related hazards whereby this contributes towards
resilience, mitigation and adaptation to climate change phenomena, the water project, climate resilience
and drought preparedness project are mainly involved in establishing rain water harvesting technologies
to increase water availability for human, livestock and production as well, the charcoal reduction project
is to increase awareness on deforestation and promote more friendly alternatives for charcoal to reduce
the impact of charcoal.

8. How do climate change impacts affect women and men? Women

- Water Scarcity
- Pasture Reduction
- Crop Failure
- Waterborne diseases
- Hunger and Malnutrition and death
- Migration of People
- 9. What strategies does your Ministry/ authority use to adapt its programmes to the changing climate?
 - Develop environmental legislations for the mitigation, adaptation and resilience to climate change.
 - Organize forums and debates on Climate Change mitigation and adaptation.
 - Enhance community knowledge in adaptive and mitigative strategies in climate change,
 - Establish extension service stations, mobile field schools, vocational training for communities on sustainable utilization of NRs, exchange programmes.
 - Initiate income generating projects e.g. bee keeping, and fodder banks.
 - Develop surface water harvesting strategies
 - Control flood water to reduce climate risks
 - Mainstream climate change actions into NDPs and policies
 - Increase climate change expertise and support deployment to regions and districts
 - Document the impact and responses to climate change on Puntland's biodiversity.
 - Strengthen seasonal grazing systems for regeneration in pastoral areas
- 10. What strategies does your Ministry/ authority promote to adapt to the three most important climate change hazards cited above?



- Develop surface water harvesting strategies
- Control flood water to reduce climate risks
- Enhance community knowledge in adaptive and mitigative strategies in climate change,
- Establish extension service stations, mobile field schools, vocational training for communities on sustainable utilization of NRs, exchange programmes.
- Document the impact and responses to climate change on Puntland's biodiversity.
- Strengthen seasonal grazing systems for regeneration in pastoral areas.

11. What are women specific climate change related needs and interests in Puntland?

- Provision of safe and clean water
- Diversified income generation activities

12. What are men specific climate changes related need and interests in Puntland?

- Provision of safe and clean water
- Diversified income generation activities

13. Do projects in Puntland address women specific needs and interests identified above? (How and to what extent)?

Yes!

• I cannot measure the degree these projects addressed specific needs of women.

14. Do projects in Puntland address men specific needs and interests identified above? (How and to what extent)?

Yesl

• I cannot measure the degree these projects addressed specific needs of men.

15. How do you think climate change related projects can be adapted to better meet the needs and interests of women and men?

- There is need to have a pre assessment on their status.
- Consultation in the initial stage of preparation is also important.
- Participate in decision making on specific needs and what communities consider as a priority.

16. How can women and men influence decisions that relate to climate change adaptation and mitigation?

- By Participating of consultation meetings of the respective matter
- By Participating of forums of climate change

17. How can women and men influence decisions that relate to community resilience?

• By increasing consultative meetings.

Key Informant Interview – Humanitarian Affairs & Management Agency

| General Information | The KII for the assessment on "Gender Dimensions of Climate Change Related Projects" will be completed for three categories of informants (Local Authorities, Government Institutions, Development Agencies) [to purpose]. | | |
|------------------------|--|--|--|
| | Name of Organization | Humanitarian Affairs & Management Agency (HADMA) | |
| | Location | Garowe | |
| | Interview Date | 24/01/2019 | |
| | Respondent(s) Name | Mohamed Aidid Hassan email. hadmapunt@gmail.com | |
| | Respondent(s) Designation | Director of Preparedness and Resiliency | |
| | Lead Researcher | Mohamed Isse | |

1. What are the climate change related hazards that affect Puntland?

- Recurrent droughts
- cyclones
- Strong winds
- Flash floods

2. Of these hazards, which are the three most important ones?

Recurrent droughts



- cyclones
- Flash floods

3. What is the impact of climate change hazards in Puntland?

- People displacements
- Destruction of properties e.g. homes, roads etc
- Environmental degradations (densification and soil erosions)
- Loss of peoples' assets or properties such as livestock, retailer shops etc
- Diseases e.g. Anaemia, Malnutrition, famine etc
- Rural-urban migration
- Water scarcity
- Mental illness
- Reduced household income
- High temperatures
- Shortage of pasture and water for livestock
- Livestock diseases
- Livestock death
- Food insecurity
- Death of children and old people

4. Are you aware of climate change related projects in Puntland?

Yes!

- Awareness on charcoal reduction and promotion of alternative energy sources
- Climate related disaster early warnings

5. If yes, who is undertaking the project?

- Ministry of Environment and Climate Change with support of international partners
- HADMA for second project

6. If yes, please specify area of focus (adaptation, mitigation, resilience building, etc)

Adaptation and Resilience building

7. Do projects address climate change related hazards and impacts?(If possible specify how and to what extent)

• Yes but less than 40%

8. How do climate change impacts affect women and men?

<u>Women</u>

- Displacement
- Malnutrition and other diseases like anaemia
- Shortage of water
- Food insecurity

<u>Men</u>

- Unemployment, poverty and malnutrition
- Metal health issues: stress and frustration
- Migrate to abroad

9. What strategies does your Ministry/ authority use to adapt its programmes to the changing climate?

- Preparedness strategy
- Vulnerability mapping
- Response plans
- Early warning mechanisms
- Risk mapping
- Coordination of humanitarian aids

10. What strategies does your Ministry/ authority promote to adapt to the three most important climate change hazards cited above?

Drought

- Contingence plans which are not implemented due to inadequate financial resources
- Early warning mechanisms
- Drought impact assessment



Seek humanitarian assistance

Floods

- Early warning mechanisms
- Seek humanitarian assistance

11. What are women specific climate change related needs and interests in Puntland?

<u>Needs</u>

- Women need access to shelter, food, health facilities, vocational trainings, etc
- Protection
- Financing women cooperatives
- Restocking for rural women

Displaced women interested their previous lifestyles

12. What are men specific climate changes related need and interests in Puntland?

Interest

• Job creation

13. Do projects in Puntland address women specific needs and interests identified above? (How and to what extent)?

Yes!

Not enough may be 10%.

14. Do projects in Puntland address men specific needs and interests identified above? (How and to what extent)?

Yes!

Not enough may be 5%.

15. How do you think climate change related projects can be adapted to better meet the needs and interests of women and men?

- Climate adaptation and resilience projects must be locally initiated
- Participation of local communities and stakeholders in planning of climate change related projects
- Climate related projects must be long term projects with clear outputs

16. How can women and men influence decisions that relate to climate change adaptation and mitigation?

- They should participate in needs assessment, project planning, implementations and monitoring of climate adaptation and mitigation projects
- They must be members of decision takers

17. How can women and men influence decisions that relate to community resilience?

- They should participate in needs assessment, project planning, implementations and monitoring of climate resilience projects
- They must be members of decision takers.

18. What changes do you think are necessary for women and men needs and interests to be taken in consideration during decision making?

Behavior changes

Key Informant Interview - Ministry of interior, Local Governments and Rural Development

| The KII for the assessment on "Gender Dimensions of Climate Change Related Projects" will be completed for three categories of informants (Local Authorities, Government Institutions, Development Agencies) [to purpose]. | |
|--|---|
| Name of Organization | Ministry of interior, Local governments and Rural Development |
| Location | Garowe-Puntland |
| Interview Date | 23/01/2019 |
| Respondent(s) Name | Liban Ali Mohamed email. coordinationunitmoi@gmail.com |
| Respondent(s) Designation | Head of Aid& Coordination meetings |
| Lead Researcher | Mohamed Isse |
| | completed for three categorie Development Agencies) [to put Name of Organization Location Interview Date Respondent(s) Name Respondent(s) Designation |

- 1. What are the climate change related hazards that affect Puntland?
 - Floods
 - Conflicts
 - Drought



- DRM
- 2. Of these hazards, which are the three most important ones?
 - Drought
 - Cyclone winds
- 3. What is the impact of climate change hazards in Puntland?
 - Deterioration of life standards
 - Loss of livestock
 - Rural urban migration reduced income
 - Stagnation of shop retailer
 - Water shortage
 - Mitigation of rural to seek water
 - Floods destroyed agriculture farm
- 4. Are you aware of climate change related projects in Puntland?

- Rural Development of Water structures (Hafir Dams)
- Range reservoirs
- Emergency food and cash aid-WFP
- 5. If yes, who is undertaking the project?
 - Ministry of Environment and Climate Change (MoECC)
 - WFP
- 6. If yes, please specify area of focus (adaptation, mitigation, resilience building, etc)
 - Resilience building
- 7. Do projects address climate change related hazards and impacts?(If possible specify how and to what extent)
 - Projects address less than 20% climate change impacts.
 - Most of the projects are emergency not even recovery projects
- 8. How do climate change impacts affect women and men?

Women

- Deterioration income sources (livestock, agriculture)
- Displacement
- Food insecurity
- Malnutrition especially pregnant women
- Exploitation of displaced women (burden of works, sexual abuse).
- Diseases
- Insecurity

Men

- Unemployment
- Frustration
- Loss of family due to poverty (Divorce).
- Migration
- Drug and crimes
- 9. What strategies does your Ministry/ authority use to adapt its programmes to the changing climate?
 - Water trucking
 - Advocate vulnerable communities
 - Aid coordination for vulnerable communities
 - Early warning for hazards
 - Resource distribution of communities based magnitude of the impacts
- 10. What strategies does your Ministry/ authority promote to adapt to the three most important climate change hazards cited above?

Drought

- Early warning system
- Coordination resilience agencies
- Advocate for effected communities



- Collaborate with key line ministries and partners to adapt climate change mitigations <u>Cyclone</u>
- Early warning system
- 11. What are women specific climate change related needs and interests in Puntland?
 - Provision of basic services e.g. education, health, water etc.
 - Protection and nutrition.
- 12. What are men specific climate changes related need and interests in Puntland?
 - Provision of basic services e.g. education, health, water etc.
 - Job creation and income diversification
- 13. Do projects in Puntland address women specific needs and interests identified above? (How and to what extent)?

- To a less extent, but the climate change impact is major threat in Puntland.
- 14. Do projects in Puntland address men specific needs and interests identified above? (How and to what extent)?

Yes!

- To a less extent, but the climate change impact is major threat in Puntland.
- 15. How do you think climate change related projects can be adapted to better meet the needs and interests of women and men?
 - All stakeholders must meet to plan together
 - Needs must be driven from local people and government
 - Need assessment must be conducted prior to project planning .
- 16. How can women and men influence decisions that relate to climate change adaptation and mitigation?
 - They must be involved of conducted women roles in climate change adaptation
 - Some women shifted new skills to survive Women tend to have a higher environmental awareness than men.
- 17. How can women and men influence decisions that relate to community resilience?
 - Women play big role for community development as well as decision making, during difficult time women sacrifice all their resource for the survival of their families, women collect contribution during droughts.
 - Also men always lead all the household and community activity and play big role for community resilience.
- 18. What changes do you think are necessary for women and men needs and interests to be taken in consideration during decision making?
 - Establishment of Micro-credit programmes for both women and men
 - Active participation and involvement in decision making
 - Livelihood income and diversification
 - Resilience programmes/projects

Key Informant Interview – Ministry of Livestock and Animal Husbandry

| General Information | | "Gender Dimensions of Climate Change Related Projects" will be s of informants (Local Authorities, Government Institutions, rpose]. |
|--|--|---|
| | Name of Organization | Ministry of Livestock and Animal Husbandry (MoLAH) |
| | Location | Garowe-Puntland |
| | Interview Date | 24/01/2019 |
| | Respondent(s) Name Mustafe Dahir email: mustafekml13@gmail.com | |
| | Respondent(s) Designation | Director of Planning and M & E Dep't, 0906793355 |
| | Lead Researcher | Mohamed Ismail |
| 1. What are the climate change related hazards that affect Puntland? | | |



- Drought
- Floods,
- Cyclone winds
- Soil erosion
- 2. Of these hazards, which are the three most important ones?
 - Drought
 - Cyclone winds
 - Soil erosion
- 3. What is the impact of climate change hazards in Puntland?
 - Distraction of livelihood assets and income
 - Depletion of soil nutrient and declined yields
- 4. Are you aware of climate change related projects in Puntland?

- 5. If yes, who is undertaking the project?
 - Ministry of Environment and Climate Change (MoECC)
- 6. If yes, please specify area of focus (adaptation, mitigation, resilience building, etc)
 - Ministry of environment constructed several dams and water catchment and rehabilitated Berkads across Puntland and pastoral communities benefited
- 7. Do projects address climate change related hazards and impacts?(If possible specify how and to what extent)
 - The pastoral community depends on water from the water catchments, and sand dam such as Biyoguduud sand in Banderbeyla district
- 8. How do climate change impacts affect women and men?
 - Climate change affect both women and men differently and most importantly women are extremely
 vulnerable to climate change since they are involved in the household level through subsistence farming
 and are care takers of their families
- 9. What strategies does your Ministry/ authority use to adapt its programmes to the changing climate?
 - The ministry has being adapting its programmes to the changing climate by incorporating our projects climate change component/ factor.
 - The ministry has employed strong working relation with Ministry of environment and climate change
- 10. What strategies does your Ministry/ authority promote to adapt to the three most important climate change hazards cited above?
 - Awareness creation and stakeholder engagement
 - Support of livelihood diversification programmes
 - Collaborate with key line ministries and partners to adapt climate change mitigations
- 11. What are women specific climate change related needs and interests in Puntland?
 - Livelihood income and diversification
 - Gender mainstreaming in government projects and programmes to address women needs and interests particularly climate change adaptation programmes
 - Provision of basic services e.g. education, health, water etc.
 - Eliminate social, political and economic barrier that limit their coping capacity
 - Women access to resources and property
- 12. What are men specific climate changes related need and interests in Puntland?
 - Livelihood income and diversification
 - Provision of basic services e.g. education, health, water etc.
 - Access to resource and property
- 13. Do projects in Puntland address women specific needs and interests identified above? (How and to what extent)?

No!

- Projects in Puntland do not adequately address women specific needs and interests.
- 14. Do projects in Puntland address men specific needs and interests identified above? (How and to what extent)?

Yes!



- Projects address small percentage of men's needs, but Puntland youth still have following problems unemployment, poverty, migration
- 15. How do you think climate change related projects can be adapted to better meet the needs and interests of women and men?
 - Community collaboration and stakeholder participation
 - Effective studying
 - Participation related agencies
- 16. How can women and men influence decisions that relate to climate change adaptation and mitigation?
 - Active participation and decision-making involvement.
- 17. How can women and men influence decisions that relate to community resilience?
 - Active participation and decision-making involvement as well as mobilisation of stakeholder communities.
- 18. What changes do you think are necessary for women and men needs and interests to be taken in consideration during decision making?
 - Equal access to resources and property
 - Establishment of Micro-credit programmes for both women and men
 - Active participation and involvement in decision making
 - Livelihood income and diversification
 - Resilience programmes/projects

Key Informant Interview – Ministry of Planning and International Cooperation

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|--|--|--|--|
| General Information | The KII for the assessment on "Gender Dimensions of Climate Change Related Projects" will be completed for three categories of informants (Local Authorities, Government Institutions, Development Agencies) [to purpose]. | | |
| | Name of Organization | Ministry of planning and international cooperation (MoPIC) | |
| | Location | Garowe | |
| | Interview Date | 24/01/2019 | |
| | Respondent(s) Name | Abdinasir Ali | |
| | Respondent(s) Designation | Technical Advisor | |
| | Lead Researcher | Mohamed Ismail | |

- 1. What are the climate change related hazards that affect Puntland?
 - Due to poor rain seasons, drought conditions continue to affect a very large area of Puntland this makes people vulnerable to famine risk exposure, displacement, lose of livestock and properties. rising surface temperatures, and rising sea levels increasingly threaten population livelihoods.
 - A good proportion of the population are suffering from water scarcity, food insecurity and malnutrition.
- 2. Of these hazards, which are the three most important ones?
 - Drought
 - Displacement
 - Famine
- 3. What is the impact of climate change hazards in Puntland?
 - The impact of climate change hazards in Puntland includes an overall larger risk of flooding and erosion, unemployment due to the loss of livestock and agriculture land, insecurity and malnutrition.
- 4. Are you aware of climate change related projects in Puntland? Yes!
- 5. If yes, who is undertaking the project?
 - Ministry of Environment and Climate Change (MoECC)
- 6. If yes, please specify area of focus (adaptation, mitigation, resilience building, etc)
 - Mitigations and Resilience building e.g. Dams construction and bore holes
- 7. Do projects address climate change related hazards and impacts?(If possible specify how and to what extent)
 - Yes, provision of dumps and water harvesting infrastructures has an impact of the livelihood of the population, however the hazards has direct impact of whole population.
 - The government cannot provide projects that can effectively address the magnitude of the crises related to the climate change.



8. How do climate change impacts affect women and men?

- The climate change impact affects both women and men with greater impact of women due to their social responsibility, women are often responsible for gathering and producing food, collecting water and sourcing fuel for heating and cooking. Due to climate changes these tasks become more difficult.
- 9. What strategies does your Ministry/ authority use to adapt its programmes to the changing climate?
 - MoPIC coordinates the initiatives of taking an action to reduce the impact of climate change
- 10. What strategies does your Ministry/ authority promote to adapt to the three most important climate change hazards cited above?
 - Puntland Ministry of Environment And Climate Change is mandated to carry out any project related to the subject matter. However, MoPIC as a planning institution, it assists technically in developing strategies and policies pertaining to their area of mandate.

11. What are women specific climate change related needs and interests in Puntland?

Empowering women through provision of financial resources, training and technology, access to political
decision-making spheres to enable them play a full role in tackling climate change and other
environmental challenges

12. What are men specific climate changes related need and interests in Puntland?

 Raising awareness of climate change with regard of deforestation of forests, Financial support, training and technology.

13. Do projects in Puntland address women specific needs and interests identified above? (How and to what extent)?

Yes!

 Yes, although there is no specific project that address women specific needs but all livelihood and resilience projects address to some extent in delivering some services to the vulnerable and destitute women.

14. Do projects in Puntland address men specific needs and interests identified above? (How and to what extent)?

Yes!

Ministry of environment organises environment and climate change awareness campaigns

15. How do you think climate change related projects can be adapted to better meet the needs and interests of women and men?

• Government and other agencies needs to give priorities to the projects related to climate change risk mitigation, they need also to better coordinate, promote and connect the climate issues to the all projects by allocating climate change component in every project.

16. How can women and men influence decisions that relate to climate change adaptation and mitigation?

• Empowering the severely affected communities and Decision making participation by all.

17. How can women and men influence decisions that relate to community resilience?

• Ensure full participation by men and women equally in managing natural resources and implementing early warning and recovery plans and policies to get more resilient men and women.

18. What changes do you think are necessary for women and men needs and interests to be taken in consideration during decision making?

- Equal participation in designing ,planning and implementation of projects
- Empowering them through financial support and grants
- Hands on training and participation of decision making process

Key Informant Interview – Ministry of Women Development and Family Affairs

| General Information | The KII for the assessment on "Gender Dimensions of Climate Change Related Projects" will be completed for three categories of informants (Local Authorities, Government Institutions, Development Agencies) [to purpose]. | |
|------------------------|--|---|
| | Name of Organization | Ministry of Women Development and Family Affairs (MoWDFA) |
| | Location | Garowe |
| | Interview Date | 23/01/2019 |
| | Respondent(s) Name | Mohamed Ali Ismail |



| D | D: . (D) . IT : . |
|---------------------------|-----------------------------------|
| Respondent(s) Designation | Director of Planning and Training |
| Lead Researcher | Mohamed Isse |

1. What are the climate change related hazards that affect Puntland?

- Droughts (low rainfall)
- Extreme heat and colds
- cyclones with winds and floods
- Sea level rise (Bander beyla, iskushaban, Hafun etc 2004).

2. Of these hazards, which are the three most important ones?

- Droughts (low rainfall)
- Extreme heat and colds
- Cyclones with winds and floods

3. What is the impact of climate change hazards in Puntland?

- Environmental degradations (densification and soil erosions)
- Loss of peoples' assets or properties such as livestock, retailer shops etc
- Batch overgrazing during rainy seasons
- Diseases e.g. Anaemia, Malnutrition, famine etc
- Rural urban migration
- Water scarcity
- Reduced household income
- High temperatures
- Shortage of pasture and water for livestock
- Livestock diseases
- Livestock death

4. Are you aware of climate change related projects in Puntland?

The Ministry of environment and Climate Change has carried out several activities related to climate change in Puntland in the following areas;

- Awareness on charcoal reduction and promotion of alternative energy sources
- Rangeland rehabilitation e.g. gullies control, water diversions
- Mobile small scale business camps which fallow pastoralist and settle in rangeland valleys have been reduced to some extent
- Construction of small scale water development infrastructures e.g. sand dams, improved earth dams
- Reduction of runoff water speed and diversion to pasture lands
- General awareness campaigns on environmental protection

5. If yes, who is undertaking the project?

• Ministry of Environment and Climate Change with support of international partners

6. If yes, please specify area of focus (adaptation, mitigation, resilience building, etc)

Adaptation and resilience building

7. Do projects address climate change related hazards and impacts?(If possible specify how and to what extent)

Yes but I can't measure properly

8. How do climate change impacts affect women and men?

Women

- Deterioration of women income sources e.g. livestock, agriculture, business, milk, meat etc.
- Women family responsibilities increased
- Women cannot afford payments of school fees
- Malnutrition and diseases
- Shortage of water
- Food insecurity

Men

- Unemployment, poverty and malnutrition
- Metal health issues: stress and frustration
- · Loss of family responsibility
- Family separations
- Less marriage rates in the population



- 9. What strategies does your Ministry/ authority use to adapt its programmes to the changing climate?
 - Early warning for vulnerable communities on droughts and cyclones

Increased sexual transmitted diseases due lack of marriage

- Advocacy of vulnerable women and children
- Ministry has three college centres in Puntland; those provide shelter, food, education and health for under age 18 girls and boys.

10. What strategies does your Ministry/ authority promote to adapt to the three most important climate change hazards cited above?

- Early warning for vulnerable communities on droughts and cyclones
- Advocacy of vulnerable women and children
- Ministry has three college centres in Puntland; those provide shelter, food, education and health for under age 18 girls and boys.

11. What are women specific climate change related needs and interests in Puntland?

Needs

- Women need access to shelter, food, health facilities, etc
- Financing women cooperatives
- Restocking for rural women

Interests

- Women interest to participate politics and decision making
- Women interested to have equal share of work and education with men

12. What are men specific climate changes related need and interests in Puntland?

Needs

- Job creation to regain family responsibility
- Education more specifically on vocational training skills
- Financing for livelihood sources

13. Do projects in Puntland address women specific needs and interests identified above? (How and to what extent)?

Yes!

• Up to 20% to 25%.

14. Do projects in Puntland address men specific needs and interests identified above? (How and to what extent)?

Yes!

Up to 20% to 25%.

15. How do you think climate change related projects can be adapted to better meet the needs and interests of women and men?

- To conduct community needs assessment in consultation with communities
- To have contingence plan for sudden climate related hazards

16. How can women and men influence decisions that relate to climate change adaptation and mitigation?

• Teaching communities on climate related impacts to take proper decisions for climate adaptations and mitigations.

17. How can women and men influence decisions that relate to community resilience?

• Teaching communities on climate related impacts to take proper decisions for community resilience

18. What changes do you think are necessary for women and men needs and interests to be taken in consideration during decision making?

• I don't know!

Key Informant Interview – African Development Solutions

| General Information | The KII for the assessment on "Gender Dimensions of Climate Change Related Projects" will be completed for three categories of informants (Local Authorities, Government Institutions, Development Agencies) [to purpose]. |
|------------------------|--|
|------------------------|--|



| ST | UDY | REP | ORT |
|----|------------|------------|------------|
| | | | |

| Name of Organization | African Development Solutions (ADESO) |
|--------------------------|---------------------------------------|
| Location | Somalia and Kenya |
| Interview Date | 25/01/2019 |
| Respondent(s) Name | Mohamed Ahmed Ali |
| Respondent(s) Designatio | n Badhan,Sanaag |

1. What are the climate change related hazards that your organizations address?

Drought, floods, cyclones, sea rise, movement of fish species in the ocean, rising temperatures, scarcity of water.

2. Of these hazards, which are the three most important ones?

Drought, floods, and movement of fish species in the ocean

3. What is the impact of climate change hazards in Puntland?

- · Low fish yield, low raining, IDPs, Rising temperatures, more extreme rainfall events
- Increased runoff and gully formation, lost of lives and Livelihoods, health deteriorations
- movement of fish species in the ocean, scarcity of water, degraded ecosystems, failure
- poor harvesting of small scale farmers and more other impacts

4. Are you implementing specific climate change related projects in Puntland?

Yes!

5. If yes, what is the name of the project?

• Sustainable Coastal Restoration and Development for Somalia, Phase III

6. If yes, in which districts is the project implemented?

• Three coastal villages in Laskoreh district, Sanaag region

7. If yes, who are the beneficiaries of the project?

• All members of community including Women, men and youth.

8. If yes, please specify area of focus (adaptation, mitigation, resilience building, etc)?

• Climate Adaptation and mitigation.

9. What If yes, do the projects you implement address climate change related hazards and impacts?(If possible specify how and to what extent).

Yes the project supported climate affected communities in the coastal areas of Sanaag region, overall the project addressed drought affected farmers, fishers and resident communities through providing solar irrigation systems, fishing gears and cooling systems, development of community climate Adaption plan, mangrove and other native seedlings restoration and providing climate resilient seedlings e.g. Date palm

10. How do climate change impacts affect women and men?

- in general the climate change affects the whole community, and especially most vulnerable groups women and children are the most affected people
- Women are mostly affected due lack of climate change information and in most place women and children are left behind while the men leave the village to seek alternative livelihoods

11. What strategies does your organization promote to adapt to the changing climate?

- Strengthening resilience of coastal communities to effects of climate change and frequent weather variations through mass reforestation and restoration of degraded ecosystems
- Understanding the challenges and opportunities faced by pastoralist/fisher folks in the managing climate risks as well as their adaptive capacity for the future
- Building capacity of coastal communities to enable them improve their sustainable livelihood and appropriate climate change adaption strategies

12. What strategies does your organization promote to adapt to the three most important climate change hazards cited above?

- Addressing underlying causes of vulnerability
- Environmental management
- Building climate-resilient livelihoods.
- Disaster risk reduction
- Integrate community early warning systems
- Climate services.

13. In your areas of work, what are women specific climate change related needs and interests?

• There are no specific needs of women in this project but mangrove plantation may become one of their



14. In your areas of work, what are men specific climate changes related needs and interests?

- Address the priority of the climate affected communities mostly on fishers
- Build the capacity of fisher men to adapt the climate change
- Support developing climate adaption plan

15. Does your work and that of your partners address women specific needs and interests identified above? (How and to what extent)?

- Women need to have access to climate change information
- To involve women while developing climate change adaption projects and design suitable project for them
- Building adaptive capacity
- Establish alternative livelihoods.

16. How do you think climate change related projects can be adapted to better meet the needs and interests of women and men?

• The project implementation strategy is community-led; where the community map the risks and the hazards in their respective locations, identify their available resources and the gaps which will be prioritized for this project within the available budget.

17. How can women and men influence decisions that relate to climate change adaptation and mitigation?

- Involving the communities throughout the process. Using participatory approaches and tools.
- Community Adaption Action plan can be one good example of involving decision making.

18. How can women and men influence decisions that relate to community resilience?

- All community members participated designing and implementation stages of project
- Conduct community awareness raising on the importance of participating the decision making process.

19. What changes do you think are necessary for women and men needs and interests to be taken in consideration during decision making?

- In the previous phase of the project, the communities developed essential community climate change adaptation plans (CAAP) and the community vulnerability capacity assessment plan (CVCAP).
- Changes could be the specific needs of the women and men will be considered if involved well.

Key Informant Interview – KAALO

| General Information | The KII for the assessment on "Gender Dimensions of Climate Change Related Projects" will be completed for three categories of informants (Local Authorities, Government Institutions, Development Agencies) [to purpose]. | | |
|------------------------|--|---------------------------------------|--|
| | Name of Organization | KAALO | |
| | Location Garowe | | |
| | Interview Date 23/01/2019 | | |
| | Respondent(s) Name | Najib Ahmed email. najiib98@gmail.com | |
| | Respondent(s) Designation | Environmental Management adviser | |
| | Lead Researcher Mohamed Isse | | |

1. What are the climate change related hazards that your organizations address?

• Floods, Cconflicts, drought, DRM

2. Of these hazards, which are the three most important ones?

Floods, Conflict and Drought

3. What is the impact of climate change hazards in Puntland?

- Loss of properties and livelihoods
- Food insecurity
- Acute shortages of water; lowering water tables
- Biodiversity loss
- Displacement and migration
- 4. Are you implementing specific climate change related projects in Puntland?
 - Yes!

5. If yes, what is the name of the project?

- Food security and livelihood improvements through sustainable agriculture.
- Building community resilience to with-stand environmental shocks.



- Alternative livelihoods and income generating activities
- 6. If yes, in which districts is the project implemented?
 - Major regions in Puntland- Bari, karkar, sool, sanag, Nugal
- 7. If yes, who are the beneficiaries of the project?
 - The local communities in those respective districts and villages.
- 8. If yes, please specify area of focus (adaptation, mitigation, resilience building, etc)?
 - Adaptation, mitigation and resilience building.
- 9. If yes, do the projects you implement address climate change related hazards and impacts?(If possible specify how and to what extent).
 - Yes, through livelihood improvements but I cannot specify what extent

10. How do climate change impacts affect women and men?

- Women meet 90 per cent of household water and fuel needs in Africa. In arid areas they spend up to 8 hrs a day in search of water.
- They are active in production activities such as forests, fisheries, and in agriculture women produce up to 80 per cent in Africa, 60 per cent in Asia, 30 - 40 per cent in Latin America. Sector that is highly exposed to the risks that come with drought and floods.
- Women are more susceptible to the impacts of climate change, as they must adapt to declining water supplies, climate variability, natural disasters, pest outbreaks, changing precipitation patterns and other impacts of climate change on crop production.
- Loss of livelihoods and lives; sexual violence and trauma.
- Loss of livelihoods; lack of adequate shelter; conflicts.
- Economic drawbacks; lack of land tenure; resource-dependent livelihoods; school dropouts, early marriage.

11. What strategies does your organization promote to adapt to the changing climate?

- Enhance and promote diversification of livelihoods and incomes
- Promote environmental conservation and sustainability
- Promote skills development and income generation activities
- Strengthen community structures and community based organizations
- Restore and develop live-saving ecosystems (livestock, fisheries and farming)
- Support public sector entities to improve service delivery

12. What strategies does your organization promote to adapt to the three most important climate change hazards cited above?

Droughts and floods

- Enhance and promote diversification of livelihoods and incomes.
- Promote environmental conservation and sustainability.
- Restore and develop live-saving ecosystems (livestock, fisheries and farming) promote skills development and income generation activities.

Conflicts

- Strengthen community structures and community based organizations.
- Support public sector entities to improve service delivery.

13. In your areas of work, what are women specific climate change related needs and interests?

- More support in terms of knowledge and skills development.
- Building women's networks and as well creating micro-finance and loan mechanisms.
- Alternative livelihoods and income.
- Protection and property rights.

14. How In your areas of work, what are men specific climate changes related needs and interests?

- Alternative livelihoods and income
- Job creation
- 15. Does your work and that of your partners address women specific needs and interests identified above? (How and to what extent)?

No!



- There are no specific dedicated interventions targeting women; as far as the climate resilience projects are concerned.
- 16. Does your work and that of your partners address men specific needs and interests identified above? (How and to what extent)

No!

- There are no specific dedicated interventions targeting men; as far as the climate resilience projects are concerned
- 17. How do you think climate change related projects can be adapted to better meet the needs and interests of women and men?
 - There is need to carry out a comprehensive assessments targeting to capture the needs and aspirations of both women and men. From there, the programming can be based on the outcomes of the different needs
- 18. How can women and men influence decisions that relate to climate change adaptation and mitigation?
 - Women tend to have a higher environmental awareness than men.
 - Women show more willingness to act for preserving the environment
 - Women are more sceptical towards technological risks
 - Women act more environmentally friendly
 - They buy more environmentally sound products
 - They eat less meat
 - Their mobility behaviour is less environmentally harmful
 - However, Household decisions are majorly influenced by that of the MEN!
- 19. How can women and men influence decisions that relate to community resilience?
 - Usually women can have a suggestion or advice, but the final decisions are reached by the MEN!
 - Whether to stay or migrate, or adopt any mechanism; it's always directed by the decisions made by the household head -The man-!
- 20. What changes do you think are necessary for women and men needs and interests to be taken in consideration during decision making?
 - Cultural Structural reforms are required to modify the unnecessary community created roles and responsibilities
 - Allowing more women to participate in the forums
 - Spending more resources in capturing and documenting the different needs and interests of men and women

Key Informant Interview - Save the Children International

| General Information | The KII for the assessment on "Gender Dimensions of Climate Change Related Projects" will be completed for three categories of informants (Local Authorities, Government Institutions, Development Agencies) [to purpose]. | |
|---|--|--|
| | Name of Organization | Save the Children International |
| | Location | Gardo |
| | Interview Date 17/01/2018 | |
| | Respondent(s) Name Abdirashid Mohamed Abdi, email: | |
| | | abdirashid.mohamed@savethechildren.org |
| Respondent(s) Designation EU RESTORE PROJECT LEAD | | EU RESTORE PROJECT LEAD |
| | Lead Researcher | Mohamed Isse |

- 1. What are the climate change related hazards that your organizations address?
 - Drought, Floods, diseases, desertification
- 2. Of these hazards, which are the three most important ones?
 - Drought, Floods and diseases
- 3. What is the impact of climate change hazards in Puntland?
 - Shortage of water
 - Food insecurity
 - Prolong droughts which migration of the rural development



- Crop failure
- Human and animal diseases
- Malnutrition to the vulnerable people (Children and Women)
- Unemployment
- Increase of temperature
- 4. Are you implementing specific climate change related projects in Puntland?
 - Yes
- 5. If yes, what is the name of the project?
 - Building Resilience in Community in Somalia (Restore Project)
- 6. If yes, in which districts is the project implemented?
 - Bosaso(5 vilages)
 - Dangoroyo(5 villages)
 - Badhan(5 villages)
- 7. If yes, who are the beneficiaries of the project?
 - Both rural and urban communities.
- 8. If yes, please specify area of focus (adaptation, mitigation, resilience building, etc)?
 - Resilience building
 - Child grants
 - Capacity building
 - Mitigation of disaster
- 9. If yes, do the projects you implement address climate change related hazards and impacts?(If possible specify how and to what extent).

Yes, by constructing strategic Earth Dams

- Providing DRR training
- Training on Early Warning System
- WASH related training
- Nutrition
- Unconditional child grant transfer
- Graduation

10. How do climate change impacts affect women and men?

- Women will have less socio-economic power than men have a limited access to financial independence and employment
- Limited training on job related benefits
- Increased gender based violence and psycho-social problems
- Limited access to basic services
- Women feed and care the family without men support totally
- 11. What strategies does your organization promote to adapt to the changing climate?
 - Construction of Strategic Earth Dams
 - Graduation of livelihood activities
 - Awareness of the community on Disaster Risk Reduction
- 12. What strategies does your organization promote to adapt to the three most important climate change hazards cited above?
 - Construction of Strategic Earth Dams
 - Graduation of livelihood activities
 - Awareness of the community on Disaster Risk Reduction
- 13. In your areas of work, what are women specific climate change related needs and interests?
 - Financial support for saving the lives of their families
 - Provisional life skills and live skills equipment for income generation activities
 - Protection (Shelter, WASH and physco-Social wellbeing).
- 14. In your areas of work, what are men specific climate changes related needs and interests?
 - Creation of income generation activities
 - Financial support for saving the lives of their families
 - Provisional life skills and live skills equipment for income generation activities



15. Does your work and that of your partners address women specific needs and interests identified above? (How and to what extent)?

Yes, address women specific needs and interests.

- IYCF training and food demonstration
- Protection and GBV training
- Provide training on psychosocial first aids
- provide unconditional cash transfer
- distribution of dignity kits

16. Does your work and that of your partners address women specific needs and interests identified above? (How and to what extent)?

Yes, address women specific needs and interests.

- IYCF training and food demonstration
- Protection and GBV training
- Provide training on psychosocial first aids
- provide unconditional cash transfer distribution of dignity kits

17. How do you think climate change related projects can be adapted to better meet the needs and interests of women and men?

- Community will sustain their original settlements
- By coping mechanism
- Participation and gender mainstreaming of the projects
- Prioritises of the community needs

18. How can women and men influence decisions that relate to climate change adaptation and mitigation?

- Empower men and women to participate the decision making process, policy and planning equally
- Strong gender mainstream of the project/programs to support both men and women equally at all stages
- Strength the capacity of both men and women to engage in a participatory process from project inception.
- Ensure that both men and women participate and influence family decision and benefit from development efforts equally and as a team.

19. How can women and men influence decisions that relate to community resilience?

- Through participatory decision making approach
- Coordination meetings and information sharing

20. What changes do you think are necessary for women and men needs and interests to be taken in consideration during decision making?

- Building the capacity of the both men and women for better improvement
- Avoid gender inequality
- Gender mainstream of projects/programs

Key Informant Interview – United Nation Development Programme

| General Information | The KII for the assessment on "Gender Dimensions of Climate Change Related Projects" will be completed for three categories of informants (Local Authorities, Government Institutions, Development Agencies) [to purpose]. | | |
|------------------------|--|-------------------------------------|--|
| | Name of Organization | United Nation Development Programme | |
| | Location Garowe | | |
| | Interview Date 24/01/2019 | | |
| | Respondent(s) Name Awil Abdinor, Email: awil.abdinor@undp.org | | |
| | Respondent(s) Designation National Program Officer | | |
| | Lead Researcher Mohamed Isse | | |
| 4 144 1 11 | | | |

- 1. What are the climate change related hazards that your organizations address?
 - Drought /Water Scarcity



- Flash floods
- Environmental degradations
- Desertification

2. Of these hazards, which are the three most important ones?

- Drought/water scarcity
- Environmental degradations
- Floods

3. What is the impact of climate change hazards in Puntland?

- Loss of life
- Loss of livelihoods
- Water scarcity
- Loss of income/property
- Disease
- Temperature rises
- Floods
- Cyclones winds
- Increased poverty
- Desertification

4. Are you implementing specific climate change related projects in Puntland?

• Yes!

5. If yes, what is the name of the project?

• Enhancing Climate resilience of the vulnerable community and ecosystem

6. If yes, in which districts is the project implemented?

• Dangorayo, Gardo, Bayla and Burtinle

7. If yes, who are the beneficiaries of the project?

• Pastoralist and agro-pastoralist of the above-mentioned target districts.

8. If yes, please specify area of focus (adaptation, mitigation, resilience building, etc)?

• Adaptation and resilience building.

9. If yes, do the projects you implement address climate change related hazards and impacts? (If possible specify how and to what extent).

- Improved access and the quantity of water through construction of water harvesting facilities such as sand dams, water catchments boreholes.
- Rehabilitation of rangelands through water diversions
- Afforestation and reseeding programs
- Protection forests through charcoal reduction by developing alternative Energy, the use of fuel-efficient cooking stoves, supporting alternative livelihoods.
- Wide spread of awareness raising of Climate Change hazards and environmental protection programs in all Puntland districts,
- Building the capacity of disaster management agency (HADMA) to respond emergency responses
- Supporting the development policies, plans and strategies relating to the disaster management, climate change, vulnerability response plans and lands use.
- Establishing early warning system which is functioning

10. How do climate change impacts affect women and men?

- Although the majority of the population of Somalia is vulnerable to climate change, pastoralist are highly vulnerable compared to urban populations, because they are so dependent upon rain-fed rangeland grazing for their livestock tend to have very few fixed assets.
- Women are also identified the most vulnerable groups in Somalia because of sexual division of labor, unequal access to both material and non-material resources and women's diminished participation in decision-making in both political and private domains. Women plays important role such as livestock rearing and fetching drinking water for the pastoralist families.

11. What strategies does your organization promote to adapt to the changing climate?

- Community awareness raising on Climate change and adaptations at district level
- District adaptations plans



NRM community cooperatives/associations

- Institutional capacity building
- Water harvesting structures
- 12. What strategies does your organization promote to adapt to the three most important climate change hazards cited above?
 - Establishing early warning system
 - Construction of water infrastructures
 - Building the capacity of the relevant institutions
- 13. In your areas of work, what are women specific climate change related needs and interests?
 - Protection, nutrition and financing
- 14. How In your areas of work, what are men specific climate changes related needs and interests?
 - Employment
- 15. Does your work and that of your partners address women specific needs and interests identified above? (How and to what extent)?

Yes!

- I could not measure it
- 16. Does your work and that of your partners address women specific needs and interests identified above? (How and to what extent)?

Yes!

I could not measure it.

- 17. How do you think climate change related projects can be adapted to better meet the needs and interests of women and men?
 - Grass root level consultations or bottom-up
- 18. How can women and men influence decisions that relate to climate change adaptation and mitigation?
 - They need empowering or capacity building on climate adaptation and mitigation to take appropriate decisions.
- 19. How can women and men influence decisions that relate to community resilience?
 - They need empowering or capacity building on climate resilience to take appropriate decisions.
- 20. What changes do you think are necessary for women and men needs and interests to be taken in consideration during decision making?
 - Adopting gender equalities through cultural changes

Key Informant Interview – African Women Educationalists Somalia (FAWESOM)

| General Information | The KII for the assessment on "Gender Dimensions of Climate Change Related Projects" will be completed for three categories of informants (Local Authorities, Government Institutions, Development Agencies). | |
|------------------------|---|--|
| | Name of Organization FAWESOM | |
| | Location Garowe | |
| | Interview Date 28/03/2019 | |
| | Respondent(s) Name Zahra Said Nur | |
| | Respondent(s) Designation National Coordinator | |
| | Lead Researcher Mohamed Isse | |

- $1. \ \ \ \ What are the climate change related hazards that your organizations address?$
 - In 2016 and 2017 there was a severe drought that affected pastoralist communities in Somalia. FAWESOM
 with the support of UNDP Somalia, was one of the organization that were involved in assisting pastoralist
 communities that became internally displaced persons because of the drought
- 2. Of these hazards, which are the three most important ones?
 - Droughts,
 - Heavy rainfalls and flooding
 - Tropical cyclones (these are rare storms that bring torrential rains and stormy seas to the coastal areas)
- 3. What are the impact of climate change hazards in Puntland?
 - Climate change severely affects the population in Puntland in many ways. The recurrent droughts and the tropical cyclones (although not as often as the drought) forces many people to leave nomadic and coastal



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areas heading for urban towns or to IDP camps seeking for help. Due to the severe drought, cases of deaths and illness of displaced children and the elderly become common. These illnesses are mostly due to acute malnutrition. Cases of deaths related to diarrhea and cholera are also very common within displaced communities.

4. Are you implementing specific climate change related projects in Puntland?

• FAWESOM is not currently implementing a climate change related project in Puntland. But FAWESOM with the financial support from UNDP Somalia implemented a project that was geared to assisted nomadic families who after losing their livestock to the drought of 2016 - 2017 became internally displaced persons (IDPs) in Mudug Region.

5. If yes, what is the name of the project?

• The drought response initiative was one component of the Gender Equality and Women Empowerment (GEWE) Project that FAWESOM was implementing with the support of UNDP Somalia

6. If yes, in which districts is the project implemented?

The project was implemented in Galkayo District of Mudug Region, Puntland State of Somalia

7. If yes, who are the beneficiaries of the project?

• The beneficiaries of the project were female headed households that were displaced because of the severe drought in 2016 and 2017.

8. If yes, please specify area of focus (adaptation, mitigation, resilience building, etc)

• The focus of the project was both mitigation and resilience building:

Mitigation

At the beginning of 2017, as concern that if the drought prolongs, the situation might turn to a famine
grew among all concerned parties, FAWESOM was one of the national organizations that advocated for a
swift and substantial action and mobilization of funding in order to avoid famine which could have caused
higher loss of lives and properties. FAWESOM joined local and international partners that established joint
initiatives to mitigate against a deterioration of the drought condition into a famine. This included tackling
rising malnutrition, limiting displacement, and containing disease outbreaks and enhancement of
protection particularly for women and children.

Resilience Building of the IDPs Communities

- It was in this spirit that FAWESOM and UNDP Somalia signed a contract for a drought response project that focused supporting 100 female headed households affected by the drought. The focus of the project was also community resilience building. It provided the following to the beneficiaries:
 - Each household was given a cash grant of \$300. The aim was to give these families the opportunity of re-stocking some of the livestock that they lost if they decide to return to their original settlements or give them opportunity to use the grant for the establishment of a small business in the camps that they were staying
 - A very basic financial training was provided to them

Gender based Violence

 The project also had a GBV monitoring component with the aim to monitor GBV in those areas and also to raise awareness on violence against women and girls (FGM was included) and advocate for victims of GBV.

9. If yes, do the projects you implement address climate change related hazards and impacts? (If possible specify how and to what extent)

 The project that FAWESOM implemented in partnership with UNDP addressed climate change induced drought by assisting displaced nomadic communities. As mentioned above, the project provided start up grant to IDPS that were female headed household. The aim of this grant was to help the beneficiaries establish small business activities for their livelihood and address GBV

10. How do climate change impacts affect women and men?

• Climate change impact affects women and men differently. Historically women are socially, economically and politically discriminated against. This caused that women have less access than men to productive resources and opportunities – land, education, finance, labour and decision making/leadership roles. The fact that women are the one who bear children, take care of the family members including children and the elderly with little resources makes them more vulnerable to climate change related disasters. Additionally, women are more prone to gender-based violence (GBV) then men

11. What strategies does your organization promote to adapt to the changing climate?

• In order to address the effects of climate change, there must be a concerted effort and global strategies to mitigate its effects. Policies and plans at the national and community levels must be developed. There



STUDY REPORT Gender Dimensions of Climate Change Related Projects in Somalia

must be political will from countries globally to seriously address climate change by adhering to international conventions and protocols such as Sendai Framework and Paris Agreement.

12. What strategies does your organization promote to adapt to the three most important climate change hazards cited above?

• See point above response

13. In your areas of work, what are women specific climate change related needs and interests?

- Programs and plans must take into consideration the immediate needs of women in terms of food, shelter, water & sanitation, health, education and income.
- The level of distress caused by the droughts on women who are displaced by climate change related disasters must be evaluated from gender perspective in order to plan properly.
- Women must be involved in all decisions that are related to their situation particularly their vulnerability to violence during displacement

14. In your areas of work, what are men specific climate change related needs and interests?

NA

15. Does your work and that of your partners address women specific needs and interests identified above? (How and to what extent)

• Yes. FAWESOM carries out gender analysis in all its work in order to take into consideration women's needs and interests in our programs.

16. Does your work and that of your partners address women specific needs and interests identified above? (How and to what extent)

• Yes. Gender is mainstreamed in all programs

17. How do you think climate change related projects can be adapted to better meet the needs and interests of women and men?

Women must be involved in all forums and decisions that affect them and their communities.

18. How can women and men influence decisions that relate to climate change adaptation and mitigation?

• Decisions that are related to climate change adaptation and mitigation must be made jointly with the beneficiaries both men and women. It is important to take into consideration indigenous and traditional knowledge of addressing environmental related crisis such as drought etc.

19. How can women and men influence decisions that relate to community resilience?

• Communities must be organized and establish forums to discuss the problems related to climate change and how they can prepare for, adopt and mitigate these problems.

20. What changes do you think are necessary for women and men needs and interests to be taken in consideration during decision making?

Both men and women have responsibilities in addressing issues that affect women. Men and women must
work together when making decisions that affect the lives of community members. Service providers must
adopt right-based approach when dealing with climate change issues. The government both at state and
federal level must be committed to international conventions and protocols on climate change and the
environment



Annex 3 - List of study participants

Annex 3a: List of Focus Group Discussion Participants

| District: | Harfo | |
|--------------------------------------|------------|-----|
| Date of FGD | 17-01-2019 | |
| Name of Particip | pant | Sex |
| 2. Bashir Adan Not | ır | M |
| 3. Jamac Diriye | | M |
| 4. Maamed Jibril | | M |
| 5. Mowlid Maham | ed farah | M |
| 6. Abdiqadir Osma | n Hirsi | M |
| 7. Qodhob Maham | ned Omar | M |
| 8. Keyf Abshir Hirs | İ | F |
| 9. Maryan Abdicas | is Osman | F |
| 10. Fartun Muse Ah | med | F |
| 11. Bosteeyo Abdifa | itax Farah | F |
| 12. Mahad Mahamud Abdi | | M |

Annex 3b: List of Focus Group Discussion Participants

| District: | Dangoroyo | |
|-------------------------|------------|-----|
| Date of FGD | 18-01-2019 | |
| Name of Participant | | Sex |
| 1. Farah Mahamud | d Mahamed | M |
| 2. Mahamed Saed | Yaasin | M |
| 3. Osman Mahamu | ud lise | M |
| 4. Mahamed Bashi | ir Mahamud | M |
| 5. Cabdalahi Ismai | l Mahamed | M |
| 6. Khafiijo Fidaaf Jama | | F |
| 7. Halan Husen | | F |
| 8. Hindi Osman Muse | | F |
| 9. Ibaada Aali | | F |
| 10. Fatima Adan | | F |

Annex 3c: List of Focus Group Discussion Participants

| District: | Dhahar | |
|---------------------|------------|-----|
| Date of FGD | 19-01-2019 | |
| Name of Participant | | Sex |
| 1. Sagaar Ahmed V | Varsame | M |
| 2. Mahamed Cali N | Mahamud | M |
| 3. Ahmed Mahame | ed Abokor | M |
| 4. Ahmed Adan Jai | ma | M |
| 5. Muhubo Mahan | ned Osman | F |
| 6. Abdisalan Jama | Salah | M |
| 7. MaHamed Cawi | l Ali | M |
| 8. Ibraahim Saed B | Bayr | M |



| 9. Jama Hasan Yusuf | M |
|-------------------------|---|
| 10. Shukri Muse | F |
| 11. Fatima Abdalahi Ali | F |

Annex 3d: List of Focus Group Discussion Participants

| District: | Iskushuban | |
|----------------------------------|------------|-----|
| Date of FGD | 20-01-2019 | |
| Name of Participant | | Sex |
| Haliimo Omar | | F |
| 2. Maryan Ahmed | | F |
| Haliimo Abdi | | F |
| 4. Ahmed Yusuf | | M |
| 5. Muse Ali | | M |
| 6. Barre Diraac | | M |
| 7. Axmed Siciid M | axamed | M |
| 8. Mahamed Yusu | f | M |

Annex 3e: List of Focus Group Discussion Participants

| District: | Banderbeyla | |
|------------------------------------|-------------|-----|
| Date of FGD | 21-01-2019 | |
| Name of Participant | | Sex |
| Farah Ali Iise | | M |
| 2. Suufi Husen | | M |
| 3. Yaxye Hasan | | M |
| 4. Casha Osman | | F |
| 5. Iftin Saed | | F |
| 6. Safiyo Saed Osman | | F |
| 7. Sahra Saed Iiman | | F |
| 8. Maryan Muse Ali | | F |
| 9. Fatima Saed Farah | | F |
| 10. Maxamed Osman Saed | | M |
| 11. Ainashe Ahmed Hirsi | | M |
| 12. Fanah Mohamed | | M |



STUDY REPORT

Annex 3f: List of study key informants

| Nan | ne | Organization | Position | Date |
|-----|----------------------------|---|---|------------|
| 1. | Abdirashid Mohamed Abdi | Save the Children International | EU RESTORE Project Lead | 17-01-2018 |
| 2. | Najib Ahmed Balaala | KAALO | Environmental Management Adviser | 23-01-2019 |
| 3. | Awil Abdinor | United Nations Development Programme | National Program Officer | 24-01-2019 |
| 4. | Mohamed Ahmed Ali | African Development Solutions (ADESO) | Lead Researcher | 25-01-2019 |
| 5. | Zahra Said Nur | Forum for African Women Educationalists Somalia (FAWESOM) | National Coordinator | 28-03-2019 |
| 6. | Liban Ali Mohamed | Ministry of interior, Local governments and Rural Development | Head of Aid Coordination Meetings | 23-01-2019 |
| 7. | Maryan Mohamed Aden | Ministry of Environment and Climate Change (MoECC) | Director of NRM Department | 23-01-2019 |
| 8. | Mohamed Ali Ismail | Ministry of Women Development and Family Affairs (MoWDFA) | Director of Planning and Training | 23-01-2019 |
| 9. | Mustafe Dahir | Ministry of Livestock and Animal Husbandry (MoLAH) | Director of Planning and Monitoring and Evaluation Department | 24-01-2019 |
| 10. | Mohamed Warsame Salah | Ministry of Agriculture and Irrigation (MoAI) | Director of Planning Department | 24-01-2019 |
| 11. | Abdinasir Ali | Ministry of planning and international cooperation (MoPIC) | Technical Advisor | 24-01-2019 |
| 12. | Mohamed Aidid Hassan | Humanitarian Affairs Management Agency (HADMA) | Director of Preparedness and Resiliency | 24-01-2019 |
| 13. | Bashir Macalin Dahir | Xarfo District | Mayor | 17-01-2019 |
| 14. | Mukhtar Adirahman Ahmed | Dangoroyo District | Mayor | 18-01-2019 |
| 15. | Mahad Jama Mohamed | Iskushuban District | Municipality secretary | 20-01-2019 |
| 16. | Bile Nur Farah | Banderbeyla District | Vice Mayor | 21-01-2019 |
| 17. | Mohamed Awil | Dhahar District | Vice Mayor | 23-01-2019 |

Annex 4: Study Terms of Reference

INTRODUCTION

Diakonia works for a just, equal and sustainable world free from poverty, oppression, inequality and violence. Diakonia believes that there is no stronger driver for change than when people know their rights and organize together in order to claim those rights. Power analysis from an intersectional perspective and focusing on gender equality are crucial for obtaining sustainable results. Women and girls have a specific priority in all Diakonia's work. See Diakonia's Global Strategy for our Vision, Mission and Overall goal.

Climate change threatens to undermine development gains made to date as well as future development efforts. People living in poverty, and marginalised groups, are particularly vulnerable to the impacts of climate change and are often excluded from participating in decision making on climate action. The solutions that are promoted to address climate challenges therefore often mirrors the priorities, interests and perspectives of those with power, influence and money, which tends to further marginalise women compared to men, minorities compared to majority groups, etc.

According to Diakonia's analysis, the issues of climate change and gender are linked, as they both expose unfair power structures. People and countries with more power and resources tend to contribute more to emissions that cause global warming. Those who live in poor and marginalized conditions are most vulnerable to the impacts of climate change. Gender relations build on traditional norms and ideas about what men and women should do and how they should behave. These patriarchal structures uphold an unsustainable economic system, which builds on extraction of natural resources, accumulation of wealth and private property and aims at continuous economic growth and contributes to greenhouse gas emissions.

In terms of climate change, women and men experience different vulnerability and have different experiences, knowledge and attitudes to climate change due to traditional gender roles. Women generally have less access to decision-making, which means that their needs, interests and knowledge are overlooked in planning and implementation of climate change measures.

BACKGROUND

Diakonia embarked on a mission to find and build on synergies from experiences from our work related to climate change in different countries under a project called the Climate Justice Innovation Project (CJIP) in 2016. The aim is twofold: to strengthen country programs through learning and exchange and development of innovative approaches; and to ensure that Diakonia's global advocacy is rooted in the realities of the rights holders.

The CJIP should contribute to innovation within Diakonia, to collaboration between our different country programs and to internationalisation, in terms of linking on-going work to international or global policy processes. Seven country programs are currently involved with the project. Two workshops, one including representatives from partners organisations besides Diakonia staff, have been held to exchange experiences, identify synergies and lay out the way forward.

As of 2018, the subtitle and overall goal of the CJIP is "Engendering the NDCs". The CJIP work plan for 2018-2019 is found in Annex 1. The CJIP work plan for 2016-2017, which includes the aim and overarching objectives, is found in Annex 2.

This study will be undertaken simultaneously in up to six (6) of the countries that participate in CJIP, in close cooperation with the partner organisations involved in the project and the rights holders that



they work with. Results will be compared and the lessons and recommendations will be used for mutual learning and identification of innovative approaches to climate change mitigation and adaptation, as input to developing national advocacy on "Engendering the NDCs" and to Diakonia's global advocacy on climate justice.

THE ASSIGNMENT

The assignment is a fifteen days consultancy (including the validation of the draft report and sharing sessions). The assignment should be initiated in 2018 and terminated before 31 January 2019.

The contracting part is the Diakonia Country Office (CO). Together with the partner organisation participating in the CJIP (hereinafter referred to as the Partner) the Diakonia CO will select the project that the study will focus on (hereinafter referred to as the Project). Methods for carrying out the task, including time disposition, and questionnaires for interviews, will be proposed by the consultant and agreed upon with Diakonia, based on the information below. Diakonia Bangladesh Country Office and its partner BARCIK have selected the project "Peoples Led Development Processes in Bangladesh" implemented by BARCIK and supported by Diakonia that the study will focus on. The field study will be carried out in Puntland.

OBJECTIVES, OUTPUTS and DELIVERABLES

Objectives

The objective of the study is to generate lessons on the gender dimensions of the Project on climate change and resilience, which will strengthen the capacity of the Partner as well as the Diakonia CO to understand how to build community resilience in relation to the project, and contribute to innovative work on climate justice and resilience building at national and international level.

The specific objectives are that:

- The Partner organisation has a clear understanding of how the Project can contribute to more gender equality as well as deliver more effective results in terms of climate change adaptation and/or mitigation, by integrating a gender perspective.
- The Diakonia CO is able to draw conclusions on the support that the Partner will need in order to implement the lessons and recommendations from the study; and on how partners can benefit from participating in the CJIP and contribute to its objectives.

Outputs

- 1. A clear description and analysis of the gender dimensions of vulnerability to climate change and resilience and men's and women's respective ability to influence decision-making on climate change in the context in question
- 2. A clear description and analysis of the gender dimensions of the Project and the context where it is implemented.
- Recommendations on how to address the linkages between gender relations and climate change (in terms of vulnerability, strategies, capacities and decision-making) within the Project or similar interventions in the same the country context.
- Recommendations on how to strengthen the Project from a gender perspective, in order to contribute to more gender equality and more effective climate adaptation/mitigation and more effective community resilience.



Deliverables

• A written report in English including a summary, findings & analysis, conclusions and recommendations and lessons learned.

ACTIVITIES

- a. Desk review of relevant project documents for the Project and for CJIP (to be provided by Diakonia)
- b. Introduction to the methodology with a co-worker from the partner organisation (the Coworker), who will work alongside the consultant in the assignment
- c. Participatory gender analysis of the context where the Project is carried out (with the local community/rights holders and together with the Co-worker) which exposes the specific gender based inequities that contribute to differentiated vulnerabilities of women and men to the effects of climate change and their different roles in decision making and implementation of climate change responses.
- d. Field study including interviews with rights holders (both women and men) that participate in the Project (together with the Co-worker). The study should include, but not be limited to, the following:
 - i. How women and men, respectively, describe the impacts of climate change and their own experience of these impacts
 - ii. How women and men, respectively, describe their current strategies to adapt to changing climatic conditions and/or hazards what their needs and interests are in light of this change
 - iii. How and to what extent women and men, respectively, feel that the Project is addressing their needs and interest in light of the described impact of climate change in light of described impact of climate change and disaster risks
 - iv. How women and men, respectively, think that the Project can be adapted to better meet their needs and interests
 - v. How and to what extent women and men, respectively, feel that they are able to influence decisions that relate to climate change adaptation or mitigation and/or community resilience (including household level, municipal level, national level and global level)
 - vi. What changes that women and men, respectively, think are necessary for their needs and interests (with regard to climate change) to be better taken into consideration in decision-making (at the household, local and national level)
- e. Analysis of the interviews and the results from the gender analysis, in order to meet the objectives of the study and produce the specified outputs
- f. Drawing of conclusions and making recommendations, in line with the objectives of the study
- g. Validation of a draft report with Diakonia team
- h. Production of a final written report (see below)



- i. Participating in a sharing session with the Diakonia team (see below under 'Procedures') and the Partner
- j. Participating in a sharing session with the CJIP project team and the consultants that have done the other country studies, for joint reflection and learning

REQUIREMENTS/PROFILE OF CONSULTANT

- Advanced university degree in a relevant subject
- Broad experience and good knowledge of the context in which the study is to be undertaken.
- Documented background and experience of doing gender work and conducting gender analysis and producing recommendations
- Documented background and experience in using participative methodology
- Documented background and experience of addressing gender dimensions in climate change related projects/activities, including projects/activities that focus on climate change impacts on livelihoods and producing recommendations on how to strengthen results of the intervention based on the integrated analysis

PROCEDURES

Diakonia's' Country Office will assign a point of contact (PoC) to whom the Consultant will report. A team consisting of the PoC, the Country Director and the Climate Change Policy Advisor at Diakonia Head Office will collectively review and comment on the draft report.

- Overall responsible is the CJIP Project Leader (Policy Advisor on Climate Change at HO)
- The operational responsibility (contract signing, remuneration) lies with the Country Director
- The assigned Program Officer will be the PoC for the consultant regarding the study and all practical and logistical matters.
- The report will be written in English



ABOUT

SOMALI INSTITUTE FOR DEVELOPMENT RESEARCH AND ANALYSIS (SIDRA)

Somali Institute for Development Research and Analysis (SIDRA) is a private, notfor- profit research and policy analysis think tank that provides quality research and development services to both public and private entities in order to contribute to the attainment of Somalia's development priorities. The headquarters are in Garowe, the capital city of Puntland State of Somalia.

SIDRA offers technical innovative solutions grounded in a process of inclusive change, facilitation, information, communication and reengineering new ways of systems and knowledge-based policy researches.

The institute serves a broad mix of public, private and civil society organizations. We have developed flexible structures that can quickly deliver the right team with the right experience and expertise to everyone, anywhere in the country.

VISION

To become the leading development research institute and center of excellence in Somalia

MISSION

To be relevant, original and excellent in order to co-construct knowledge, alliance, dynamic policy environment and institutional capacity fit for purpose

STRATEGIC OBJECTIVES

- (i) To conduct high quality research and policy analyses to inform evidence based effective policy making in Somalia
- (ii) To build a forum for debate on public policy in Somalia
- (iii) To respond to the need of building external capacity for public policy research and policy analyses in Somalia



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