Gender Assessment

SAP073: Building Climate Change Resilience of Vulnerable Households in Selected Localities of Ethiopia

Ethiopia | Ministry of Finance, CRGE Facility | GCF/B.46/02/Add.01

28 September 2026

GREEN CLIMATE FUND

Gender Assessment and Action Plan

Building Climate Change Resilience of Vulnerable Households in Selected Localities of Ethiopia

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Part I: Gender Assessment

I. Background

Ethiopia is located in the horn of Africa and is home to 107.3 million people; From this, females are 53.5 million and men are 53.8 million (ESS, 2023). In 2015, the median age was 18.6 with an average family size of 5.3 and 5.0 for urban and rural areas, respectively (FAO, 2019). From the total households in the country female headed households (FHHs) are 25 percent and male headed households (MHHs) are 75 percent (FAO, 2019). Over 83% of the population are smallholder farmers, of whom 26% are female-headed households (MoF, 2019).

The World Bank classifies Ethiopia as a 'low-income food deficit' country with a Gross Domestic Product (GDP) of US$ 181.6 billion and GDP per capita at Purchasing Power Parity (PPP) of US$ 1,719 (UNDP, 2018). The Human Development Index (HDI), which measures average achievements in long and healthy lives, knowledge and a decent standard of living, places Ethiopia in the low human development category: at rank 175 (out of 191 countries), with a value of 0.498 (UNDP, 2022). The 2023 global multidimensional poverty index shows that 68.7% of the population in multidimensional poverty, with 23.5% living below the national poverty line (UNDP and OPHI, 2020).

Agriculture is the backbone of the economy and the main sector of employment, as it accounts for about 37 percent of the GDP and 73 percent of total employment (UNDP, 2018). The number of farmers cultivating in less than 0.9 ha and in very fragmented landscapes account for about 60% of farmers (Zerssa,G., et al, 2021). Smallholder agriculture contributes over 85% of total employment, over 90% of foreign exchange earnings, and approximately 50% of gross domestic product (GDP) (Welteji, D, 2018). Smallholder farmers account for 95% of the total area under agriculture and these farmers provide more than 90% of total agricultural output (Welteji, D, 2018).

However, these farming systems are facing critical challenges including land degradation, low soil quality and limited resources which is negatively affecting sustainable crop production and food security (Zerssa,G., et al, 2021). Natural resources are key in the country's economic growth and development, as well as the livelihoods of the rural population. As a result, growth in the agriculture sector can play a critical role in reducing the poverty rate – a 1% increase in agricultural output leads to a decrease in poverty of nearly 1% (World Bank, 2016a).

Eighty percent of the Ethiopian population currently live in rural areas. Recent rapid economic growth, however, signals the advent of a demographic transition, as urban services and industry are expanding rapidly (World Bank, 2019a). In the past decade, Ethiopia's average annual economic growth rate was slightly over 10%, exceeding the regional average of 5%. In this period, services grew by 12%, industry by 21% and agriculture by 7% (World Bank, 2019a).

Public investment, which increased from 5% of GDP in the early 1990s (Rodrik D, 2016) to 15.3% in 2022 (Terry M et al., 2022), plays a significant part in Ethiopia's growth. More recently, foreign direct investment (FDI) has influenced Ethiopia's growth, and the country has attracted about US$ 8.5 billion in FDI (CIA, 2021). The sustained economic growth Ethiopia maintained over the past decade reduced the poverty rate from 30% to 24% between 2011 and 2016 (World Bank, 2019a).

However, in 2022 inflation rose to 34% and the real GDP growth fell to 5.3% while it still remained above East Africa's average, which was 4.4% (ADB, 2023). The growth as well as inflation were negatively affected by drought, internal conflict as well as increased commodity prices as a result of the global economic uncertainties. Remittances also declined by 10% in 2020, and Foreign Direct Investment inflows were 20% lower (FDRE, 2021).

Ethiopia is highly vulnerable to impacts of climate change despite its very low global greenhouse gas emissions contribution (0.04% of global emissions) (Crippa, M. et al., 2019). Evidence of climate change impacts has become clear in Ethiopia in the last 50 years. An average of around 1°C in temperature increase has been recorded since the 1960s. Occurrences of extreme weather events such as drought and floods have increased in the last ten years while annually, 25-50% mean rainfall variations are observed. These circumstances are expected to further increase the risk of conflict over scarce resources and food insecurity, affect human health, put infrastructure at risk and exacerbate environmental degradation. Therefore, to manage vulnerability to climate risks and hazards, sustainable adaptation and resilience measures are crucial (FDRE, 2021).

Women constitute half of the Ethiopian population (49.87%) (ESS, 2023) and 22.1% of the total heads of households (World Bank, 2019b). The livelihoods of the majority of rural women are directly dependent on agriculture and environmental resources; hence they are engaged in productive activities (including crop farming and livestock herding) as well as the management of natural resources and household assets (AU, 2012). A study shows the uptake of climate smart agriculture by women smallholders is limited due to access to credit, extension services, restricted cooperative and water user associations membership, lack of access to skill, training, information as well as restricted mobility (Tsige, M. et al, 2020).

Despite the efforts Ethiopia made to ensure gender equality by reviewing policy and legal frameworks, it is one of the lowest performing countries against gender equality indicators among Sub-Saharan African countries (FAO, 2019). Some of the examples of such low performance include agricultural productivity where FHHs have significantly less value production (mean = 9,898 Birr/ha) than MHHs (mean = 11,273 Birr/ha). Further a lower proportion of FHHs (19.5 percent) has land titles as compared to 80.5 percent of MHHs. The percentage of female who received extension advisory services was about 51 percent as compared to 62 percent for male. Further, 11.3 percent and 9.4 percent of FHHs participated in vegetable and fruits irrigation production, respectively as compared to 88.7 percent and 90.6 percent of MHHs who participated in the same (FAO, 2019).

Ethiopia has a value of 0.921 in the Gender Development Index, which is the ratio of female to male HDI values; it is in Group Four, which includes countries with medium to low equality in HDI achievements between women and men. The Gender Inequality Index, which reflects inequality in achievement between women and men in reproductive health, empowerment, and the labor market, ranks Ethiopia at 129 out of 191 countries, with a value of 0.520 (UNDP, 2022).

This gender assessment is carried out to inform the proposed Green Climate Fund project on the gender roles and power relations observed in the Ethiopian context. It is expected to support the design of the project by taking into consideration the different priorities, needs and knowledge of women and men.

II. Methodology

This gender assessment was conducted using a combination of desk review and stakeholder consultations, ensuring that both secondary data and primary stakeholder inputs informed the analysis and the design of gender-responsive interventions.

The desk review included analysis of relevant national policies, strategies, and frameworks, including Ethiopia's gender equality and climate change policies, the Climate Resilient Green Economy (CRGE) Strategy, and sectoral policies related to agriculture, water, and rural development. It also drew on key documents on gender equality, social inclusion, and climate change in Ethiopia, as well as lessons learned from the Adaptation Fund–financed *Climate Smart Integrated Rural Development Project*, to identify gender-related challenges, opportunities, and good practices applicable to similar project contexts.

To complement the desk review, stakeholder consultations were conducted at multiple levels, including federal, regional, woreda, and community levels. A national stakeholder consultation workshop was organized by the CRGE Facility, bringing together representatives from relevant line ministries, regional

bureaus, finance and sector institutions, community representatives, and regional institutions responsible for women and youth affairs. This initial workshop brought together expert groups and community representative to discuss on the lessons of the previous Adaptation Fund supported project and what needs to be incorporated into this GCF project (Annex I). Additional consultations at sub-national levels involved woreda-level technical experts, local authorities, and community representatives (see consultation section under Annex 12: ESAP, of the project proposal).

The participation of community representatives from the target regions enabled the assessment to capture local perspectives on barriers faced by women and other vulnerable groups in accessing water services, agricultural support, and livelihood opportunities. The consultations generated critical insights into gender roles and division of labour, access to and control over resources, participation in decision-making processes, and the constraints women face in accessing water, agricultural inputs, extension services, and livelihood opportunities. This multi-level and inclusive engagement strengthened the quality of the gender assessment and helped ensure that the resulting Gender Action Plan reflects both institutional priorities and community-level realities.

The consultation process also incorporated the perspectives of other vulnerable groups, including youth, to better understand differentiated vulnerabilities and barriers to participation. Findings from these consultations were systematically analyzed and used to inform both the gender assessment and the development of the Gender Action Plan.

Relevant government institutions with mandates for gender equality and women's empowerment were engaged throughout the consultation process, particularly at the regional level. In particular, representatives from Women and Social Affairs participated in the project preparation workshop alongside sector institutions, finance bureaus, and community representatives. Their engagement ensured that institutional perspectives on gender mainstreaming, women's empowerment, and social inclusion were fully integrated into the assessment.

Building on this foundation, the project will continue structured stakeholder engagement throughout implementation to promote inclusive participation, responsiveness to community needs, and adaptive management of gender-related interventions.

III. National Context

Ethiopia Gender Profile

Population

Ethiopia has a population of 107.3 million and a population growth rate of 2.85%. It is the second-largest country in Africa (ESS, 2023 and World Bank, 2019a). 50% of the total population are women, while 44% are under the age of 15 and 4% are above the age of 65 (EPHI, 2021). Average household size is 5.2 persons in rural areas and 3.6 in urban areas (CSA, 2020).

Education

Literacy is key in preparing a skilled workforce. Participation in a broader range of work opportunities, including more profitable and high-value-added sectors, are determined by the technical and vocational skills of an individual (Hallward-Driemeier, M., 2013). Education is also strongly linked with socioeconomic variables such as lifestyle, income, and fertility.

The Government of Ethiopia has, in the past two decades, increased access to free primary education and been promoting school attendance. As a result, net enrollment rate in primary and middle schools has increased from 54 percent in 2002/3 to 94 percent in 2014/15 while enrollment rate for secondary education has increased from 16 percent to 26 percent in the same years. However, even if advances have been

made in the availability and access, the quality remains a hurdle (USAID, 2019). The 2023 sustainable development report also shows that the quality of education in Ethiopia remains a major challenge and the progress has stagnated.

According to USAID, 2019 report girls have lower access to education than boys across all educational levels and regions, except in Addis Ababa. Further, 1.6 million primary and secondary school-aged girls are not in school, and out of the secondary school-aged girls, 75 percent do not attend secondary schools (UNICEF, 2019). Married girls are more likely to drop out of school than unmarried girls while among girls aged 15-17 who are currently married, 90% are out of school and 10% are behind the expected grade level (USAID, 2019).

The gender development index of the 2021/22 Human Development Report indicates that the mean year of schooling in Ethiopia is 2.2 years for females and 4.2 for males, while the gender inequality index shows that only 9.1% of females and 20.1% of males above the age of 25 have at least some secondary educations (UNDP, 2022).

Based on a survey conducted in 2016 men are better educated than women in Ethiopia. Of the population aged 15-49, about half of women (48%) and 28% of men aged 15-49 had no formal education. Urban women complete a median of 7.7 years of education, while the median among rural women is 0. The corresponding figures among men are 9.3 and 2.9 years, respectively. Additionally, 48% of women are literate, as compared to 69% of men (CSA, 2017a; EPHI, 2021).

In 2019, 35% of females attended some primary schooling, 6% completed primary education, 11% had some secondary schooling and 7% completed secondary school or had more than a secondary education. Improvement is seen in the percentage of women being educated as the percentage of women with no education fell from 75% in 2000 to 48% in 2016 and 40% in 2019 (EPHI, 2021).

The median age for a mother's first birth in Ethiopia is 18.7 years (EPHI, 2021). Women who give birth in their teenage years are more likely to drop out of school, it is also shown that they will continue to struggle with decisions related to fertility, motherhood, and the labor market throughout their adult life (CSA, 2017a).

The gender gap in adult education is also wide with 70% of illiterate men enrolled in adult education programs, while only around 40% of illiterate women are enrolled in such programs. This is due to the fact that women are likely to experience more time and social constraints with age relative to men. In order to facilitate women's involvement in continuing education programs, it may be effective to offer financial incentives to offset time costs associated with attendance and travel (UN Women, 2014).

Health

According to the second health sector transformation plan (2021), in Ethiopia, communicable and non-communicable diseases, mental health and injuries are affecting all age groups with a disproportionately higher burden on children and women in their reproductive age. Even though life expectancy at birth has increased from 58 years in 2007 to 65.5 years in 2017, premature death and suboptimal quality of life are still critical health and development challenges. In 2019, 58% of disability adjusted life years were due to maternal and neonatal conditions, communicable diseases and malnutrition while non-communicable diseases had a share of 35%.

Provision of equitable health services is critical in improving maternal and child health. Even though Ethiopia has a good record in achieving the Millennium Development Goals related to child mortality and maternal mortality reduction, a wide disparity in different population groups was seen in the use of high-impact interventions for maternal health including births assisted by skilled health professional (Anteneh HA., 2023). The proportion of birth attended by skilled health personnel increased from 5% in 2000 to 49.8% in 2019. However, the 2019 EDHS shows that urban women were 1.76 times more likely to give birth with the assistance of skilled professionals, the rate difference between women with higher education and those with no education was 57.9%, and the rich were 6.2 times more likely to use professional services compared to the poor. A study by Geta TG et al (2022) also showed that maternal anemia risk reduces when women

are educated, live in urban areas, have smaller family size, have long birth interval and have access to antenatal care.

According to UNICEF (2019), contraceptive use has consistently increased since 2005 from 14 percent to 41 percent among married women. However, the rate of use is much lower for Somali and Aar regions when compared to the rest of the country. Rate of use is higher in urban areas, for educated women as well as in rich households.

The median age at first birth among women aged 25-49 is 18.7 years (EPHI, 2021). The 2022 gender inequality index shows that, there are 69.2 births per 1,000 women aged 15-19. The age at which childbearing commences is an important determinant of the health and well-being of a mother and child.
Family planning is essential for women to minimize unplanned or unwanted pregnancies as well as unsafe abortions. Additionally, it enables women to space the births of their children, which benefits the health of the mother and child. The 2019 mini demographic and health survey showed that 96% of married women aged 15-49 know at least one method of contraception. The contraceptive prevalence rate in 2019 was 41% and has steadily increased from 14% in 2005 (EPHI, 2021).
Health care services during pregnancy and after delivery are yet another important factor for the survival and well-being of both the infant and the mother. Skilled care during pregnancy, childbirth and the postpartum period is essential in reducing maternal and neonatal morbidity and mortality. A 2019 survey shows that the percentage of women aged 15-49 who received antenatal care from a skilled provider were 74, which has increased from 62% in 2016. Further, 48% of births occurred in a health facility, which has increased from 26% in 2016 and just 5% in 2005. The gender inequality index of 2021/22 shows that the mortality ratio for Ethiopia is 401 maternal deaths/100,000 live births, which needs considerable improvement to meet the SDG target of 70/100,000 by 2030. Although institutional delivery has been promoted in Ethiopia, home delivery is still common, primarily due to distance, scarce transport, and lack of appropriate facilities (EPHI, 2021).
With regard to female genital mutilation (FGM), 65% of women aged 15-49 (a decrease from 74% in 2005 and 80% in 2000) are circumcised. Among women who have heard of female circumcision, 24% believe that the practice is required by their religion and 18% believe that the practice should be continued (CSA, 2017a). Though a lot of progress has been observed since a national strategy and action plan were developed in 2013 to address harmful traditional practices, it is evident that more work is needed in raising awareness and taking actions to eliminate the practice of FGM (MoWCYA, 2013; CSA, 2017a).

Participation in the formal and informal economy

To improve economic outcomes of a society it is essential to narrow the gender gap in labor market skills. It has been shown that when female participation in labor force and education level increases, faster economic growth, lower child mortality and better maternal and child health are observed. The Ethiopia Socioeconomic Survey (ESS) of 2015-16 shows that women are 17% less likely than men to participate in the labor force. This difference widens to 29% when considering other factors such as education, age, and household wealth. A gender gap of 4.4 hours exists among individuals active in the workforce; on average, while men work 31 hours per week, women work only 27 (World Bank, 2019a).

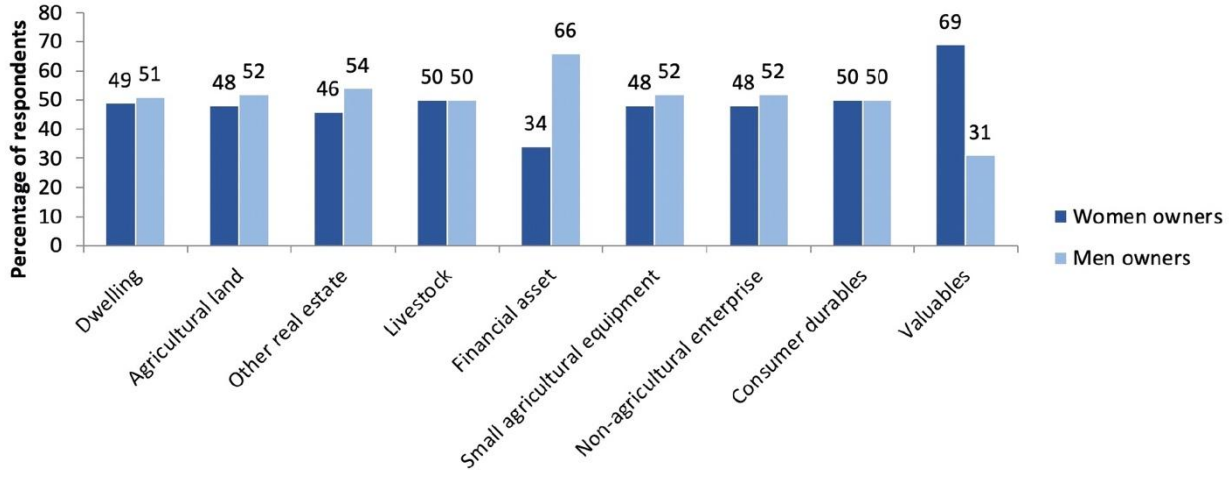
Access to Resources

Asset Ownership

The 2022 Ethiopian gender asset gap survey shows that 84 percent of women and 86 percent of men own dwellings; 69 percent of women and 73 percent of men own agricultural land and 75 percent of women and 76 percent of men own livestock. Even though the gender gap in asset ownership is narrow, women still have lower incidence and share of asset ownership. Further, relative to men and male-headed households, women and female-headed households fare worse in land and asset ownership. Compared to female-headed households, male-headed households have larger plot sizes, a larger proportion of cultivable land and a larger fraction of registered land. Women in male-headed households are very rarely primary land managers, though the reverse is not the case for men in female-headed households (World Bank, 2019a).

Further there is a rural-urban gap where ownership of dwellings, agricultural land and livestock is greater in rural areas than in urban areas. On the other hand, while these assets are owned by majority of the populations in the regional states, financial asset ownership is highest in Addis Ababa (ESS, 2022).

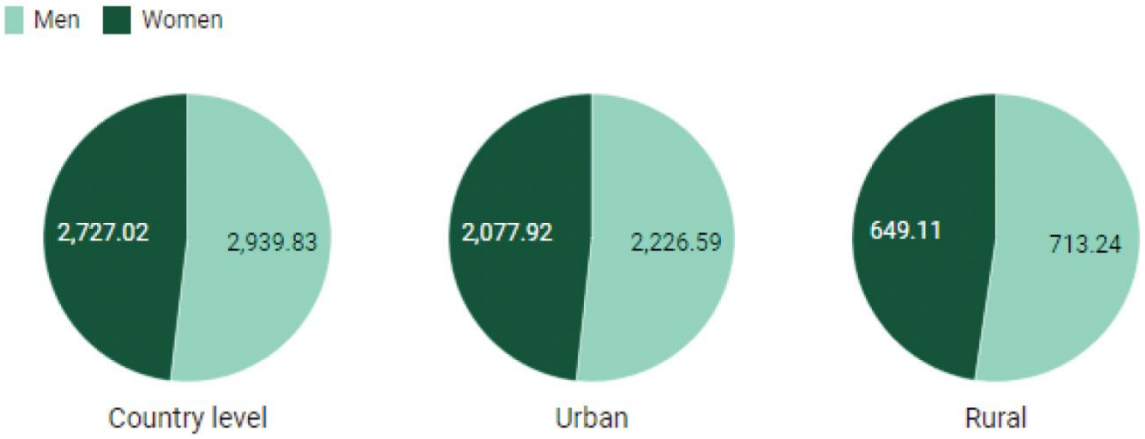
Fig. 1: Distribution of asset ownership at country level



Source: Ethiopian gender asset gap survey, 2022

Wealth is the value of all the assets owned by a person and measures the value of accumulated economic resources – both physical and intangible assets. Compared to gender asset gap indicators, the gender dynamics of wealth provides a comprehensive insight into the long-term wellbeing. The figure below shows that total net wealth of women and men by sex and region (ESS, 2022).

Fig 2: Distribution of wealth by sex and place of residence (in billion Birr)



Source: Ethiopian gender asset gap survey, 2022

Land as productive resource

Based on FAO's 2019 national gender profile of agriculture and rural livelihoods report, only 19.2 percent of women as compared to 80.8 percent of men has agricultural resources, including land. Further, the ESS survey of 2015-16 shows that seventy four percent of female farmers are widowed, divorced, or separated and that, on average, they have smaller household size, are five years older and are more likely to be illiterate – 88% for females vs. 59% for males (World Bank, 2019a).

Rural households, on average, own 1 hectare of land; while, on average, male-headed households own 1.12 ha, female-headed households own 0.6 ha (CSA, 2020). Further, even though women make up more than 40% of the agricultural labor force and head approximately 25% of all farming households, they have less access not only to land but also to other factors of production than men (World Bank, 2019a). In terms of gross value of output, female farmers produce 23% less per hectare than male farmers. In addition, women see lower returns to their time spent on agricultural activities, extension services received, and use of fertilizer and oxen compared to their male counterparts (O'Sullivan M. et al., 2014). The fact that female farmers grow a narrower range of crops further widens the gender gap in productivity (World Bank, 2019a).

These lower returns point to broader social norms, market failures and institutional constraints that prevent women's resources from translating into the same levels of agricultural productivity as they would for men (World Bank, 2019a). Addressing these challenges is a necessary step to fulfill ambitious targets, such as those set in the national Ten-Year Development Plan – including securing the rights of the 60% of women who are not given land rights (Planning and Development Commission, 2021).

Services and Inputs

Extension services

Women farmers are affected by both the supply and demand side constraints. Top-down extension models often prioritize working with male while at the demand side the lack of access to education and information limits women's ability to demand for technologies and services. Agriculture extension services are how smallholder farmers access information about new technologies and other farm-related information. Female farmers are less likely than male farmers to attend extension programs. Twenty three percent of female farmers attended extension programs compared to 38% of male farmers, in 2015-16. This means women are less aware of, and exposed to, new techniques, farming knowledge and management practices. Though policies have recognized the need to close the gender gap, identifying and addressing constraints still remains a challenge (World Bank, 2019a).

Formal credit

Financial services and credit can provide small-scale farmers with the opportunity to improve farm productivity and transition from subsistence farming to large-scale and commercial farming (Mukasa A. N., 2017). Credit can, in the short term, help farmers increase their purchasing power to acquire necessary production inputs and finance their operating expenses, while in the long run it can help farmers to make profitable investments (World Bank, 2019a). Female farmers are 9 percentage points less likely to live in a household with access to credit than male farmers (Mukasa A. N., 2017). Reasons include the fact that women are less likely to own and control physical assets that serve as collateral and they have lower levels of human and social capital which, in turn, can reduce their eligibility for formal credit. When credit is constrained, farmers are likely to use sub-optimal levels of productive inputs, thereby limiting their productive capacity (Mukasa A. N., 2017).

Production inputs

To mitigate crop losses, modern agricultural inputs, such as fertilizers, pesticides, herbicides, and fungicides are used. Female farmers use 2 percentage point lower levels of these agricultural inputs than their male counterparts, which limits productivity and may imply greater vulnerabilities to shock-induced variations in production. Reasons vary from these products being typically sold in large quantities, requiring a sizable upfront cost that cash-constrained women may struggle to afford, to mobility where limited transport options are available that affect access to both inputs and markets (World Bank, 2009a). A report by FAO also shows that female heads are less likely to use improved technologies and use less input when

compared to their male counterparts. While lands owned by males are more likely to use chemical fertilizers, improved seeds and herbicides, women owned lands use manure and limited improved seeds (FAO, 2019)

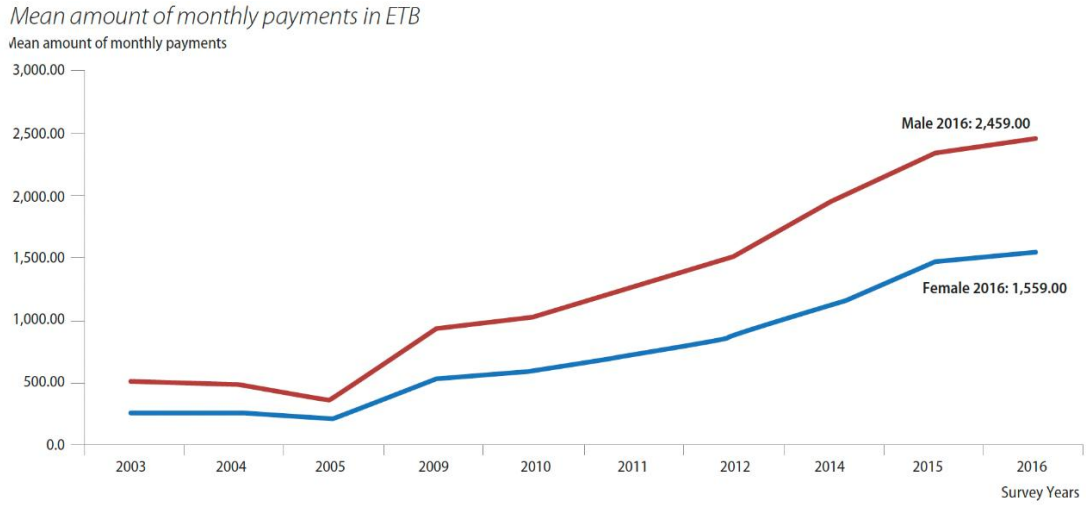
Access to Irrigation

Greater production, income, job opportunities and climate resilience can be gained through gender equality in irrigation programs. In Ethiopia efforts are observed to mainstream gender into the planning and implementation of irrigation programs (Nigussie, L. et al, 2023). A 2023 study by Nigussie, L. et al showed that two types of gender mainstreaming strategies are used – rule-based and role-based. The rule-based strategies are taken up by small, scheme-based irrigation projects and focus on policies and rules for equal rights and participation in decision making and capacity development. On the other hand, the role-based strategies are implemented by small-scale and micro irrigation technologies and emphasize on challenging social norms through capacity building of stakeholders to counter the imbalance of power and workloads. The study identified that negative stereotypes about women from various groups including families, communities as well as the private sector; institutional biases and limited capacities make gender mainstreaming challenging. Further, Likimyelesh, N. et al. (2017) stated that although studies show most projects target both women and men farmers, women still benefit much less from irrigation programs due to lower access to information, including training. Men mostly control the use of irrigation technologies and have more control over income from these technologies.

Level of income and wages

Formal and informal sector analysis showed that female employees earn 44% less per hour than their male counterparts. This disparity drops to 36% when individual-, household-, and job-level characteristics are taken into consideration (World Bank, 2019a). A 2017 analysis of monthly earnings in urban areas for men and women showed income inequality where women's mean monthly earning was 63 percent of that of the men (NPC, 2017).

Fig. 3: Paid employees aged 10 and above by sex and survey year: 2003-2016



Source: Gender Statistics Report, 2017 (National Planning Commission, Central Statistical Agency of Ethiopia, 2017)

The gender wage gap is partly explained by gender differences in education, experience, and training (Arbache J. S. et al., 2010). Secondary and post-secondary education help individuals to develop more advanced skills to garner higher wages. Data show that employees who hold a bachelor's or postgraduate degree, have, on average, a 50% higher hourly wage relative to individuals who only completed secondary education, and a 20% higher wage than those who only completed their primary education (World Bank, 2019a).

Furthermore, women's limited labor market skills pigeonhole them into jobs concentrated in low-profitability sectors, with more women working in informal wage employment than men (Arbache J. S. et al., 2010).

37% of women report seasonal employment and 13% report occasional employment (CSA, 2017a). These trends of irregular employment contribute to women's limited on-the-job training, fewer professional development opportunities, and a perpetuation of disparities in skill sets, job opportunities and wages (World Bank, 2019a).

Norms and Practices

Gender norms arise from, and give basis to, the belief that men and women are, and should be, different in behavior, aspirations, status, and economic activity (Cech E.A., 2013). Norms influence everything from educational investments early on in life, to factors later in life such as the timing and dynamics of marriage, childbearing, household dynamics, asset ownership, internalized beliefs, and work and self-employment (Paluck E.L. and Ball L., 2010; World bank 2019a).

Marriage and Childbearing

Marriage and childbearing in Ethiopia often occur early in life, and childbearing constrains young women's employment (World Bank, 2019a). The median age at first marriage for women is the lowest in Eastern Africa at 17.4 years (Clark S. et al., 2017). Both social norms and economic pressures may result in early marriages. When norms emphasize women's role as mothers rather than providers, girls may be motivated to move into adulthood through marriage and motherhood rather than through education and employment. In cases where norms emphasize virginity, marriage in adolescence is encouraged. Economic pressures also motivate marriages, leading parents to arrange their daughters' marriages in order to escape poverty at home. Women who marry early are more likely to drop out of school earlier and less likely to spend time acquiring valuable skills for economic success. Therefore, delaying marriage may result in better educational and economic outcomes for women in Ethiopia (World Bank, 2019a).

Career and Family

As indicated above when women get married and have household responsibilities, they may be forced to avoid job opportunities that will minimize the time they can give to caring for family members and the household. Such choices will impact lifetime earnings and contribute to the gender gaps in wages and profits (World Bank, 2019a).

Further, women experience an increasing trade-off between career and family as they enter roles with higher pay and responsibility, in part discouraging women from aspiring to particular occupations or positions. In Ethiopia, a study of large companies, including Ethiopian Airlines, Ethio-Telecom and NIB International Bank, found that female business leaders experience intense "work overload" attributed to their "inability to say no, the nature of their company and their work, and the imbalance of their responsibility and their required working hours" (World Bank, 2019a).

Intra-household Dynamics

The 2022 Ethiopian gender asset gap survey shows that dwellings to the most part is jointly owned by couples. When it comes to agricultural land, 67 percent to couples nationally own their land jointly while for 6 percent and 2 percent of the couples only the husband and wife exclusively own the land, respectively. In the case of financial assets, intra-household disparity is observed. In 48 and 11 percent of rural and urban couples, respectively only the husband owns financial assets while the equivalent proportion for women is 2%. When it comes to decision making, women are 11 percent less likely to decide on how to spend their own money, 37% less likely to make solitary decisions or participate in major household purchase decisions, 27 percent less likely to decide on their own health care and 20 percent less likely to make visits to relatives or friends on their own (ESS, 2022).

Further, the majority of domestic work is delegated to women, including child rearing, cleaning, food preparation, wood and water collection, and food production. Ethiopian women aged 18-19 spend 4.1 hours per day on domestic tasks, compared to 1.5 hours for boys of the same age (A. Pankhurst et al., 2016). Women are much more likely than men to spend time collecting water and fuel wood; about 49% of female household members engage in these activities daily, compared with only 25% of male members (CSA, 2020). In addition, many studies document the large amounts of time women devote to agricultural and livestock production. In Oromia, Amhara and SNNP Regions, for instance, women divide their time between agricultural and domestic tasks and spend about 14 hours a day on both productive and domestic activities,

compared to an average of 10 hours spent by men (Agajie, G. and Derese, T., 2011). According to UN Women, women contribute as much as 70% of on-farm labor in post-harvest activities for cereals and take on 60% of marketing activities .

Internalized Beliefs

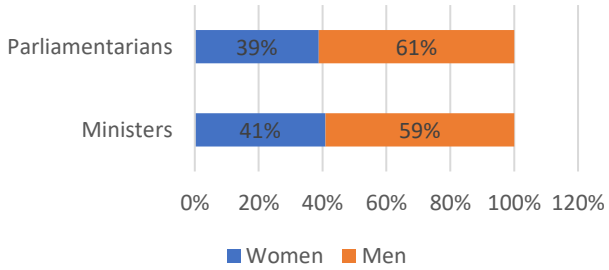
Gender gaps in economic outcomes may arise due to women's internalized beliefs about appropriate work for women or women's abilities, as well as discrimination. Ethiopian gender gaps in self-assessed ability are clearly seen for tasks typically performed by only one gender or tasks for which either men or women have a perceived natural advantage. On the other hand, when gender is said to be irrelevant to the task, men and women show no difference in self-perceived competence (World Bank, 2019a).

Violence against women affects a woman's physical and mental health, as well as her ability to engage in daily activities. Fear of violence can also reduce women's willingness to pursue economic activities, especially activities uncommon for women. In Ethiopia, one in ten women report having experienced sexual violence while one-third of ever-married women have experienced spousal violence (CSA, 2017a). 63% of women and 28% of men agree that a husband is justified in beating his wife for activities such as burning food, going out without permission, neglecting children, or refusing to have sex (CSA, 2017a).

Women in Politics

According to 2023 women in politics data, Ethiopia ranks 29 (out of 190) for women in ministerial positions with a score of 40.9% (9 out of 22), while the country ranks 25th for women in parliament. Of the 616 seats in the federal Parliamentary Assembly (House of Peoples' Representatives and House of Federation), 38.8% are held by women. This is higher than the sub-Saharan African average and the world average of 26.5% for women in parliament. Ethiopia is also among the 17 countries (11.3%) globally that have a woman head of state (UN Women, 2023).

Fig. 4: Percentage of women and men parliamentarians and Ministers



Source: UN Women, 2023

IV. Gender and Climate Change

Even though Africa is among the lowest contributors to greenhouse gas emissions, key development sectors have already experienced effects of climate change including water shortages, loss of lives, biodiversity loss, reduced economic growth and reduced food production. In Africa, employment is mainly in climate-exposed sectors with 55-62% of sub-Saharans employed in agriculture and 95% of cropland being rainfed. Poor and female-headed households face the highest livelihood risks from climate shocks in rural Africa while in urban areas increasing trends of informal settlements which lack basic services increase the vulnerability of large populations, mainly women, children and the elderly (IPCC, 2022)
According to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCCC), East Africa's climate has warmed more than the global average in the past few decades by 0.7^{o}C – 1^{0}C from 1973 to 2013. In 2022, drought intensified in the Greater Horn of Africa, primarily in southern Ethiopia, Kenya and Somalia (WMO, 2023). Ethiopia is one of the sub-Saharan African countries that is highly vulnerable to the impacts of climate change and variability (Birara, H. et al., 2018), despite its very low global greenhouse gas emission (0.04%) contribution (Crippa, M. et al., 2019).

Evidence of climate change impacts has become apparent in Ethiopia in the past 50 years. Changes in the amount and spatial distribution of seasonal and annual rainfall and recurrent droughts are among the major climate-related developments evident in Ethiopia (Zeleke et al., 2017; Weldearegay, S.K. and Tedla, D.G., 2018). Ethiopia is also among the East Africa countries which has experienced strong rainfall variability and intense wet spells resulting in widespread flooding events (CDKN and ACDI, 2022).

Ethiopia's agriculture systems are predominantly rainfall dependent. As a result, any variation in rainfall amount, distribution and trends will have a direct impact on agricultural production. This in turn significantly affect the lives of smallholder farmers who depend largely on agriculture as their main source of income (Desalew, M.M. and Bhat, H.G, 2021).
A study on agricultural productivity change caused by climate change up to the year 2050, finds that, at national level, crop production will be adversely affected during the coming four decades, with increased severity over the time period. Therefore, food prices are expected to increase which in return will lower the Ethiopian GDP growth, reduce real household incomes, and adversely impact consumption. Overall, the study indicates that climate change will cause a loss of 31% of agricultural GDP by 2050. It further shows that poor, rural households will be more affected than urban and rural non-farming households. Since agriculture has linkages with other sectors, an impact on the agriculture sector will also adversely impact the agro-processing, industrial and service sectors. The value of exports and imports are expected to fall by 36% and 32% in 2050, respectively. Therefore, the need to mainstream adaptation measures to sustain the overall performance of the economy is critical. The key recommendations of the study are increasing the use of irrigation and infrastructure development, building human capital, especially the skills of farmers, and integrated policy options, including changes in modern technology and enhanced awareness to adapt to adverse climate change impacts (Solomon, R. et al., 2021).
Another study done in the northwestern highlands of Ethiopia, in the Rib Watershed, shows that both seasonal and annual rainfall patterns across the watershed vary extremely and exhibit high temporal and spatial variability (Desalew, M.M. and Bhat, H.G, 2021). Most parts of the watershed have experienced high variability or less reliability of rainfall over the last few decades, notably with higher variability of Belg – short rainy period (March-May) rainfall in the watershed than Kiremt – the main rainy season (June- September). The study projected that the Kiremt rainfall will probably increase by 20-25% by 2050 relative to the baseline period (1986–2017) while the Belg rainfall is projected to decline by 4.8-8%.
In the Rib Watershed, a greater warming trend for both current and future scenarios was observed. In the study area, the mean annual temperature increased by 1.07°C over the last four and a half decades, with an average rate of 0.24°C per decade (Desalew, M.M. and Bhat, H.G, 2021). Comparable results were found in Lake Tana sub-basin (Abera, K. et al., 2018) and Tekeze basin (Fikru, F. et al., 2018).
Increases in temperatures may adversely affect crop production, farm income and food security in many ways, especially when combined with high inter-annual and intra-seasonal variability of rainfall. The projected warming will reduce the grain yield of cereal crops, which are already experiencing significant reduction due to human-induced soil erosion (Desalew, M.M. and Bhat, H.G, 2021). An increase in temperature significantly affects mean yield, as well as yield variability, of maize, millet, and sorghum

(Maharjan and Joshi, 2013). Heat stress increases evaporation and reduces water availability (Hatfield and Prueger, 2015) leading to low yield, particularly in low rainfall-receiving downstream areas. Ethiopia is among the countries that are working on improving irrigation efficiency to mitigate growing water stress (IPCC, 2022).

Livestock production is another important income source of rural communities. It contributes about 39% of the agricultural gross domestic product (GDP) and 17% of Ethiopia's GDP (Shapiro, B. et al., 2017). However, livestock management is often inefficient, with low and unreliable returns that leave many livestock-producing households in poverty (Rettberg, S. et al., 2017).

About 60% of Ethiopia's lowlands are arid or semi-arid and Shapiro, B. et al. (2017) estimate that 60 million ha of rangelands are grazed in Ethiopia and that livestock consume 120% of the annual forage production in average weather years. The forage deficits are higher in drought years and have been aggravated by increasing livestock populations. As a result, livestock productivity per animal has declined.

Improved production practices, such as rotation grazing, restoration of degraded rangeland, and fodder cultivation, may reduce or mitigate the negative impacts of grazing livestock on rangelands (Ng'ang'a, S. et al., 2020) and can reduce the GHG emissions per unit of animal products by increasing yields per animal (Kashangaki, J. and Ericksen, P., 2018). Improved practices may also accelerate the production cycle and reduce livestock morbidity and mortality rates (Vétérinaires sans Frontières, 2018). Still, if ruminant populations increase, total GHG emissions may increase even if the emissions per animal fall.

Men and women are affected differently by the impacts of climate change mentioned above. There is a general understanding that since climate change has gender-differentiated impact, policies, programs, and interventions need to address these impacts in both mitigation and adaptation responses in order to make interventions sufficient, just, sustainable and avoid further increases in the existing gender gap (MoF, 2019).

A study shows that although all rural Ethiopian households are vulnerable to climate change, the magnitude of the effect differs, and female-headed households are more vulnerable. In the study, on average, household income in male-headed households declined by 5.7% while income in female-headed households declined by 12.4% due to climate variability. Since the study exposed both types of households to the same level of climate shock, the effect was attributed to differences in endowments and adaptive capacity. It is expected, therefore, that as a result of climate variability, female-headed households will become absolutely and relatively poorer (Tesfamicahel, W., 2016).

Women and female-headed households are the least prepared, most vulnerable, and likely to be worst affected by climate change. Their limited control over and access to, resources and information, and their limited input in decision-making processes, increases the vulnerability of many women to climate change (Aklilu, A. et al., 2013; Alebachew, A., 2011; Tesfamichael, W., 2016).

Securing water, energy and for the household, along with maintaining overall household well-being, is the role of women in rural Ethiopia. Therefore, extreme climate events such as floods, droughts, and rising temperatures place greater pressures on women. In addition, during emergencies men are mostly forced to migrate while women are left behind with children, assuming additional responsibilities without necessarily having the right skills and knowledge (MoANR, 2017). A study by Alebachew, A. (2011) shows that some men who leave their villages and families behind sometimes do not continue to help their family as they establish new lives at their destinations. Migration can, therefore, increase the level of malnutrition due to increased scarcity of food, leading to deteriorating health status of the communities left behind.

Adaptation preferences are usually different in male and female headed households. In male-headed household preferences are given to on-farm adaptation measures, such as cropping time adjustment, crop diversification, planting cash crops and soil conservation, while female-headed households tend to focus on off-farm and non-farm diversification adaptation measures (Azeb, A. and Van Laerhoven, F., 2016). Male-headed household heads have fewer domestic responsibilities and can, therefore, rely on income from temporary labor migration during bad harvest times – which is usually not an option for female-headed household heads, as they are responsible for caring for the children, the elderly and the sick, as well as the cattle (Azeb, A. and Van Laerhoven, F., 2016, Aklilu, A. et al., 2013).

A study shows that reducing the gender gap in climate change adaptation between male- and female-headed households enhances climate change adaptation by female-headed households by almost 19%. However, the study reports that to bring about transformational changes, intrinsic behavioral issues such as social and cultural challenges and traditional gender norms and division of labor need to be targeted by policies (Aryal, J., 2022).

Increasing frequency and intensity of floods, increased water stress and deteriorating water quality are additional critical impacts of climate change. Women and men often have different needs and priorities in terms of water use. Women usually use water for domestic purposes while men usually use it for agriculture-related functions. (Alebachew, A., 2011).
In drought-prone areas the time required for water collection increases and women and children (mostly girls) have to travel greater distances to find water (Azeb, A. and Van Laerhoven, F., 2016). They are, therefore, forced to spend more hours fetching water, which significantly increases their workload and potentially exposes them to harassment, especially in areas and times of conflict. A study by Alebachew, A. (2011) indicates, on average, women work 14-17 hours each day and, during chronic drought and famine years, the daily work schedule may extend to 16-18 hours and beyond.
According to a survey by CSA (2014), rural households in Ethiopia obtain water mostly from wells or from public/private taps outside their homes. Thirty percent of households obtain water from unprotected wells outside of the household; 22% from a protected well outside of the household; and 25% from natural sources (rivers, springs, etc.). About 22% obtain water from a shared / community tap, and less than 1% of households report having access to piped water on their own premises. Women and girls spend a significant amount of time collecting water. About 56% of rural households have to travel less than 1 hour to get water, while 37% have to travel between 1 and 2.5 hours, and the remaining have to travel even further to fetch water. Poor access to safe drinking water, coupled with illiteracy (73%) and water-borne disease prevalence, greatly influence the participation of girls and female in education, agricultural production, and other development activities (Getachew, D., 2016).

Therefore, easy access to water mostly benefits women and girls, as it reduces the burden of water collection that disproportionately falls on them and makes time available for education and economically productive activities. It also reduces the physical challenges they face (i.e., exposure to physical hardship, sexual and physical violence), when they travel long distances to fetch water (UN Women, 2014). Yet, achieving equity within and among rural communities remains challenging and can compromise the sustainability of groundwater use (Likimyelesh, N. et al., 2018).

Based on an assessment done by a project implemented in Oromia and SNNPR that provided women and men farmers with water lifting technologies, installing technologies near households enabled multiple uses in addition to irrigation (Likimyelesh, N. et al., 2017). The assessment showed that even though men and women use the technologies for different purposes, both found the technologies ease their work. While men use water from these technologies mainly for irrigation, women and children use the water for multiple purposes, including livestock watering and domestic use. For these reasons, a water-based project should give specific attention to gender-based needs and concerns to prevent reinforcing inequities in opportunities for water access and governance or social norms against women (World Bank, 2016b).

Access to information, affects the likelihood of technologies improving the livelihoods of farmers. Likimyelesh, N., et al. (2017) found that, in their study area, women are excluded from decision-making in groundwater development and management due to male dominance, cultural influence and women simply not being invited to meetings, as well as inability to participate due to their high domestic workload. Men, therefore, have greater access to information. Due to the same reasons, women are reluctant to participate in groundwater monitoring.

It has been made clear that while on one hand climate change pose barrier to gender equality, gender inequality can also aggravate the effects of climate change. Not only women and men are affected differently by climate change but their contribution to climate change action is also different. Because of gender differences in rights, responsibilities, and opportunities, the levels of exposure, vulnerability and resilience to climate change impacts experienced by men and women are different (Global center on adaptation, 2021).
This indicates the need to invest more effort in reaching and informing women, including understanding the times and locations convenient for women. Projects need to extend invitations to women directly for information-sharing events and meetings and not rely on spouses or men in the community to inform women (Likimyelesh, N. et al., 2017). Even though it is now standard practice for development programs to be built upon ‘gender mainstreaming’ approaches, the result is often nothing more than a satisfied quota (e.g., a certain number of women in groups or on water management committees), rather than actual participation

or influence in decision-making (Lefore, N. et al., 2017). Therefore, it is imperative that steps are taken to address the root causes of women's lack of participation, such as high demands on their time due to domestic responsibilities, and social norms that discriminate against them (Likimyelesh, N. et al., 2018).

The development of the Climate Resilient Green Economy (CRGE) Strategy in 2011 has provided a strong basis for climate-resilient development planning across sectors and levels of government in Ethiopia (FDRE, 2011; MoF, 2021a). In 2012, the Ethiopian government established the CRGE Facility as a financial mechanism to support the implementation of priorities identified by the CRGE Strategy (MoF, 2021a). Although studies indicate that the CRGE Strategy, as well as the Climate Resilient Strategies for Agriculture and Forest, and Transport, fail to explicitly address the gender dimension of climate change (Azeb, A and Van Laerhoven, F., 2019; MoF, 2019), recent efforts by the CRGE Facility have tried to ensure gender is taken into account in the implementation of programs and projects managed through the Facility (MoF, 2021b). Further, the recently launched LT-LEDS, recognizes the need for gender equality and social inclusion in climate action (FDRE, 2023).

V. Gender and climate: institutional, legal and policy frameworks

Legal and policy frameworks

Strong policy commitments to bring about gender equality has been demonstrated by the Ethiopian Government. It has signed and domesticated several international and regional policies, development frameworks and conventions, including the Convention on the Elimination of all forms of Discrimination against Women (CEDAW), the Beijing Platform for Action, Agenda 2063, the 2030 Sustainable Development Goals (SDGs), the Maputo Protocol, the Maputo Plan of Action, and the Malabo Declaration.

The Ethiopian Constitution guarantees equality before the law: equal rights to land, property, employment, maternity leave and pay, and equal rights between the male and female counterparts in marriage. There are affirmative action provisions to address the historical legacy of discrimination.

A number of instruments are used to mainstream gender issues in the country's social, economic and political affairs. These include the 1993 National Ethiopian Women's Policy, the 2006 National Action Plan for Gender Equality, and the National Women's Development and Change Strategy and Package.

Ethiopia's overarching development strategy, the Ten-Year Development Plan (2021-2030), includes women's rights, representation, and access to resources as one of the key areas of focus under social sector development (NPC, 2021). The 2023 long-term low emissions development strategy (LT-LEDS) has provisions for promoting the rights and benefits of women (FDRE, 2023). Gender-responsive budgeting (GRB) is expected to be implemented across all sectoral ministries, guided by the National Gender-Responsive Budgeting Guideline developed by the Ministry of Finance. The national climate change gender action plan (MoPD, MoWSA, 2024) seeks to ensure climate change responses are equitable, effective and responsive to the distinct needs, vulnerabilities and capacities of women and men.

Further, the Women's Affairs Office was upgraded to a Ministry in 2005 and was restructured as the Ministry of Women and Social Affairs in 2021. Proclamation no 691/2010 expanded the Ministry's mandate to render comprehensive protection and promotion of women's rights and to coordinate the efforts of the Women's Affairs Directorates (WADs) established in the sectoral ministries (MoF, 2019).

Several legislative and policy frameworks have been established to provide directions on how climate change effects can be eradicated or at least reduced. The frameworks range from stand-alone climate change mitigation and adaptation processes to the mainstreaming of climate change into decision-making processes at a national level. Relevant policy instruments are presented below.

National Policy on Ethiopian Women, 1993

The policy outlines the major economic, social, and political concerns of Ethiopian women and indicates broad strategies and interventions (Transitional Government of Ethiopia, 1993). Since then, major programs have been designed to be gender-sensitive or to have gender components, and women's affairs have been given attention with the establishment of an office that eventually grew to the status of a ministry (Amdissa,

T., 2018). A new national policy on gender equality and women empowerment is drafted and currently under review at the Ministry of Planning and Development.

The Revised Family Code, 2000a

Even though the earlier Family Code granted permission to married women to control assets or pursue a profession, it failed to offer protection to unmarried or widowed women. The 2000 Revised Family Code better protects women by granting equal rights to spouses during the duration, conclusion, and dissolution of marriage, requiring equal asset division between the husband and wife upon divorce (FDRE, 2000).

In an attempt to improve women's ability to earn, work and thrive outside of the home, the 2000 Revised Family Code changed the legal age of marriage to 18. A study in 2013 showed that, by 2005, five regions and two charter cities had implemented this change. The increased marriage age helped improve participation in the labor market, particularly for young women. In the five regions, labor force participation rose by 15-24% more than regions that had not yet implemented the change (Hallward-Driemeier, M. and Gajigo, O., 2013).

Water Resources Management Proclamation, 2000b

The Ethiopian Water Resources Management Proclamation (WRMP) is the main policy governing the water resources sector. The theme of the proclamation focuses on the sustainability and equitability of water uses and cross-cutting issues. The proclamation indicates that in order to provide for the full participation of users and facilitate effective decision making, the management of water supply and sanitation services is to be at the lowest and most efficient level of institutional set-up (FDRE, 2000). The main challenge surrounding water resources is their uneven spatial and temporal occurrence and distribution among the major river basins. Four river basins namely, Abbay (Blue Nile), Tekeze, Baro-Akobo and Omo-Gibe in the north-western and south-western parts of Ethiopia, provide 80-90% of the water resources in the country (Israel K, and Merkineh M, 2020).

The Ethiopian Water Resources Management Policy and Water Sector Strategy, 2001

The Water Resources Management Policy (MoWR 2001a) has a section on gender related issues which aims to "promote the full involvement of women in planning, implementation, decision making and training, as well as empower them to play a leading role in self-reliance initiatives." On the other hand, the Strategy (MoWR 2001b) emphasizes gender mainstreaming with the aim to:

- Pay special attention to the role of women while establishing community-based structures for the management of localized water supply and sanitation (WSS) and small-scale irrigation systems. It includes allocation of a specific number of seats for women in these community-based structures, depending upon the nature and size of the scheme.
- Enhance the active involvement of women for the sustainable services of water schemes and success of water projects and programs. It incorporates the launching of campaigns to encourage women to contribute to improved management of water schemes.
- Take steps to empowering women in decision-making processes of water projects and relieve them from the huge burden of fetching and carrying water for the family.

Land Registration Act, (FDRE, 2003)

The Act grants equal inheritance and property rights to women. It enabled land registration of households, accompanied by issuing certificates. Land certificates were issued after public registration to ensure transparency. Furthermore, the land certification scheme required that land administration committees at the *kebele* level, the smallest administrative unit in Ethiopia, consists of at least one female member (Holden et al., 2011). Female-headed households are encouraged to participate in the certification process due to the presence of female members in the land administration committees. Overall, the land registration process increased tenure security for women (World Bank, 2019a). A study across 15 villages in Ethiopia indicated that, combined with the Family Code revisions, the 2003 Land Registration Act changed perceptions and social norms related to the division of assets upon divorce (World Bank, 2019a).

Climate Resilient Green Economy (CRGE) Strategy, 2011

The CRGE Strategy integrates into the country's development planning climate change adaptation and mitigation, and resilience-building measures. It has recognized the most vulnerable sectors to climate

change to be the agriculture, health, water and energy, buildings, and transportation sectors (FDRE, 2011). The strategy identified more than 150 potential green growth opportunities, of which 60 were prioritized.

When it comes to gender equality issues including challenges to women in relation to the priority sectors, studies show that the Strategy is weak. The only program that mentions the potential positive impact on women is the Rural Energy and Efficient Stoves Initiative, where the potential to contribute to gender equality is indicated without any detail (MoF, 2019).

Despite the Strategy recognizing the effects of climate change on people's livelihoods and social well-being in its vision statement, it does not show the differential impact of climate change on men and women. It provides no explanation for how the gendered nature of climate change problems and their solutions can be addressed (Azeb, A and Van Laerhoven, F., 2019).

Following the creation of the CRGE Facility in 2012 and the development of sector climate-resilient strategies in 2015, the Facility has recognized the need to have gender integration across different priority sectors and has taken some steps towards this in recent years by developing a gender mainstreaming strategy (MoF, 2021a).

Climate-Resilient Strategy for Agriculture and Forestry, (FDRE, 2015a)
The Climate-Resilient Strategy for Agriculture and Forestry aims to ensure climate-resilient economic growth in Ethiopia. Its focus is on three sub-sectors recognized as the most vulnerable to the impacts of climate change: crops, livestock, and forestry.

As shown in previous sections, women have significant role in the agriculture sector and there is, therefore, a need to identify ways for equitable participation and benefit from investments on climate change mitigation and adaptation. However, a review undertaken in 2017 shows that the Strategy hardly mentions the terms gender, women, or females, and where it does it hardly provided any explanation on what the gender- and climate-related challenges, impacts and subsequent actions should be. In the instances where the terms are used, it states women as being impacted by climate change but without articulating mechanisms to address their vulnerability (Azeb, A. and Van Laerhoven, F., 2019).

Further, the Strategy identifies 41 adaptation options, which are further categorized under nine themes. Only one of these themes, social protection for high-priority groups, includes women and children. The remaining themes (capacity building and institutional coordination, information and awareness, crop and water management on farms, livestock, value chains and market development, sustainable agriculture and land management, natural resources conservation and management, disaster risk reduction) include no references to gender or women's issue.

Climate-Resilient Strategy for Water and Energy, (FDRE, 2015b)
The Climate Resilient Strategy for Water and Energy analyses the economic and social impacts of current climate variability to ensure economic growth and poverty reduction. In order to build climate resilience, it takes preventive measures for the impacts of future climate change in the water and energy sectors.

The Strategy, however, only includes few references to the impact of climate change and gender. Even though there is an overall statement that identifies the positive contribution of improved access to water on women's lives, it provides no detailed information on what will be done and how the changes will come about. Further, the vulnerability assessment does not consider gendered power relations, institutions, or other socio-economic drivers. Of its 11 strategic priorities, only one (the development of the gender action plan) reflects 0n women's issues (MoF, 2019).

On a positive note, the Strategy does recognize a few gender issues, including the impacts of lack of access to modern energy services on women's workloads, their participation in productive activities such as education and employment, their health and lack of access to clean water and sanitation. Moreover,

although it has yet to materialize, the Strategy has committed to developing a gender action plan (MoF, 2019).

Climate-Resilient Strategy for Transport, (FDRE, 2015c)
The Climate-Resilient Strategy for Transport sets the framework to deliver an integrated, modern transport system with a focus on multi-modal transportation and good customer service. The Strategy is completely gender-blind with regard to its contents, according to a review by MoF (2019).

Gender Equality Strategy for the Agriculture Sector (MoANR, 2017)
The limitations of female farmers are identified by the Strategy, and it proposes to address these through capacity building of staff on gender-sensitive planning, programming, and service delivery. The need to support the revision and implementation of land-related policies and to strengthen institutional structures and systems in Ethiopia is emphasized in order to increase the profitability and productivity of women in the agriculture sector. Meaningful participation of women in decision-making and partnership with other relevant ministries to promote gender equality are also among its strategic objectives.

Women's Development and Change Package and Strategy (MoWCA, 2017a,b)
The Women's Development and Change Package recognize the limited access to extension services that female farmers have and highlights services that should benefit women, including input use, labor-saving technologies, participation in horticulture, nutrition-dense crop production, irrigation soil management and agro-processing.

The Women's Development and Change Strategy, on the other hand, lists a set of interventions related to ownership, access, and use of land. Among these are: encouraging sharecropping where women lack the required labor to cultivate their land, ensuring women obtain fair sharecropping agreements, assigning plots to landless women, and making women aware of their land ownership rights.

Ethiopia's National Adaptation Plan (NAP-ETH), 2019
Ethiopia's NAP was developed in 2017-2018. Its goal is to reduce vulnerability to climate change by building adaptive capacity and resilience (FDRE, 2019). A detailed gender analysis was done in 2019. The analysis identified three main issues that need to be considered in the implementation of the NAP-ETH: (i) gender differences in adaptation needs, opportunities, and capacities; (ii) equitable participation and influence in adaptation decision-making processes; and (iii) equitable access to financial resources and other benefits resulting from adaptation investments. The document also elaborates on actions to be taken to address these issues, with the aim of providing a roadmap to integrate gender considerations into the implementation of the NAP-ETH (FDRE, 2019). The NAP implementation roadmap was developed in 2020 and 5 implementation strategies which focus on agriculture and water; natural resources management; health, livelihoods, and social protection; climate services and adaptation technologies; and infrastructure are identified. Each implementation strategy identifies adaptation options with key activities and gender considerations (FDRE, 2020).

Gender Mainstreaming Strategy 2020-2023, CRGE Facility
A Gender Mainstreaming Strategy is developed by the CRGE Facility to address gender gaps and opportunities relating to its climate finance mandate. The Strategy's goal is to enable vulnerable women and men, young girls, and boys to improve their livelihoods, to raise their incomes and strengthen their resilience to climate change. The Strategy aims to achieve this through the creation of equitable and fair opportunities for men and women to support a paradigm shift to low-emission and climate-resilient development. It has four strategic outcomes, with associated outputs and activities, as well as a gender implementation plan. The strategic outcomes identified are:

1. Strengthened policies, institutions, and processes within the CRGE Facility and Executing Entities on the promotion of gender equality.
2. Enhanced gender mainstreaming capacities and strategy delivery within the CRGE Facility and Executing Entities.
3. Increased design of gender-responsive projects and programs in the CRGE Facility.
4. Increased participation of women in climate action decision-making.

The Ten-Year Development Plan (2020/21 – 2030/31)
Ethiopia's 10-year Development Plan sets the government development agenda from 2020/21-2030/2031. In its social development plan section, the document states that due attention will be given to women's rights, representation and equitable access and ownership to resources. To this end, some of the targets include addressing the 44% gender gap in wages, giving land ownership right for 59.7% of women among those who do not have ownership rights, and increasing the proportion of women who have access to loans from 33% to 55%. The Plan also has a section on ensuring a climate-resilient green economy through development and conservation of the environment, forest, wildlife, and biodiversity (Planning and Development Commission, 2021).

The long-term low emissions development strategy (LT-LEDS)
Ethiopia launched its LT-LEDS in 2023. This is a strategy that countries are encouraged to produce as part of the Paris Agreement. It provides a long-term roadmap on decarbonization and climate resilience. These trajectories are expected to be used as benchmark for revised and updated NDCs. The document provides various scenarios to achieve net-zero and climate resilient development by 2050 (FDRE, 2023).

Even though it lacks details, the LT-LEDS recognizes the need for gender equality and social inclusion in climate action. Economic opportunities through green job programs and a more inclusive labor market are included in the strategy.

Ethiopia's Climate Change Gender Action Plan (2024)
The national Climate Change Gender Action Plan (CCGAP) provides a comprehensive framework for advancing inclusive climate action by systematically integrating gender considerations across national climate policies, strategies, and investments. Recognizing that climate change impacts are not gender-neutral, the CCGAP addresses the structural inequalities that limit women's and girls' access to resources, decision-making, and adaptive capacity.

The CCGAP further supports inclusive climate action by translating policy commitments into sector-specific, actionable measures across nine priority sectors, including agriculture, water and energy, disaster risk reduction, health, education, and urban development. The Plan emphasizes building women's adaptive capacity through improved access to climate information, extension services, early warning systems, and gender-responsive technologies, while also promoting women's leadership and representation in climate institutions at all levels. By addressing the disproportionate climate impacts faced by women and girls, particularly in food security, water access, energy, and health, and by mobilizing gender-responsive climate finance to support transformative initiatives, the CCGAP strengthens social inclusion and accountability in Ethiopia's climate response. Through robust institutional coordination, stakeholder engagement, and monitoring, the Plan positions women and marginalized groups not merely as beneficiaries, but as key agents of change in building a climate-resilient and equitable future for Ethiopia.

Ethiopia's Nationally Determined Contribution 3.0 (2025-2035)

Ethiopia's NDC 3.0 (2025–2035) clearly and explicitly integrates gender equality and social inclusion as core elements of its climate response. The NDC prioritizes reducing women's disproportionate climate burdens (e.g. water collection and energy access), promoting women's participation in climate-smart agriculture, cooperatives, and extension services, and addressing the specific vulnerabilities of children and youth, particularly in health, nutrition, education, and protection from climate-induced risks.

Beyond sectoral adaptation, gender and social inclusion are institutionally embedded throughout the NDC framework. They informed the preparation process through dedicated assessments and are reflected as a defining feature of NDC 3.0. The document further emphasizes inclusive stakeholder engagement, equity-aligned ambition, and transparent tracking of benefits. Overall, NDC 3.0 treats gender equality and social inclusion not as safeguards, but as enablers of effective, resilient, and equitable climate action in Ethiopia.

While NDC 3.0 clearly states that gender and social inclusion are mainstreamed, the document could have been strengthened by introducing explicit, measurable gender-responsive targets across mitigation and adaptation actions. Further, although the NDC articulates financing needs clearly, gender considerations are not yet operationalized within the climate finance framework. Finally, while NDC 3.0 makes strong progress on inclusion, it largely frames gender equality in terms of access and burden reduction. The NDC could have gone further by explicitly articulating transformative gender outcomes.

Institutional Arrangements

The Ministry of Women's Affairs was established in 2005, with structures at regional, woreda and sector department levels. The Ministry is mandated to oversee and coordinate the work of sectoral ministries in their efforts to address gender issues (JICA, 2006). To date, it has facilitated the development of various policies, including the Women's Development and Change Package, that identify gender issues relevant to climate change response interventions. The Ministry had different names over the years, and, in 2021, it was restructured as the Ministry of Women and Social Affairs.

Reports on the integration of gender and climate change show that there has been challenges in collaboration of the different sectors. In 2012, it was found that mainly due to limited human and financial capacity the Women's Affairs Departments within sectors were not actively contributing towards integration of gender in the context of the CRGE Framework (AU, 2012). More recently, in 2017, a study showed that the departments' involvement in policy and program development was week stating that it does not go beyond formality (Azeb, A. and Van Laerhoven, F., 2019). Even within Ministries such as the Ministry of Agriculture, where a gender mainstreaming manual was developed, at the zone and woreda levels the assigned gender focal persons were found to have no or very limited knowledge of gender issues (Azeb, A. and Van Laerhoven, F., 2019).

A 2020 scoping study conducted on the Climate and Gender Directorates of the Ministry of Finance and the Environment, Forest and Climate Change Commission showed that there is consensus amongst experts that gender-responsive climate change policy and program are critical for addressing climate change issues. However, the understanding of which gender issues need to be incorporated into the day-to-day operations of these departments, and how, varies across and within the consulted offices and officials, indicating the need to create a common understanding. Moreover, despite the interest in integrating gender within the climate change sector, a lack of institutionalization has severely deterred gender-responsive planning and implementation of program, accountability and monitoring, intra- and inter-sectoral coordination, and gender-equal decision-making on climate change issues (Mulugeta, M. and Lealem, M., 2020).

In December 2020, the CRGE Facility and the then Ministry of Women, Children and Youth (MoWCY) launched the National Community of Practice (CoP) for Gender Equality and Social Inclusion in Climate Change. Following a number of restructurings in the sector ministries, the CoP is currently co-chaired by the Ministry of Planning and Development and the Ministry of Women and Social Affairs. Members include sector ministries, non-governmental organizations, and development partners. In 2023, the second meeting of the COP was held, in which members worked on and approved the revised terms of reference and the 2023/2024 workplan. The specific objectives of the COP are to inform strategic decision-making; plan harmonized and aligned investment programming, capacity development and implementation; advocacy and resource mobilization; and monitoring, evaluation, reporting and knowledge management (MoF, 2021b). Continuous GESI in climate change integration trainings are being delivered to CoP members to support integration of GESI in climate actions and policies (CDKN, 2026).

VI. Key Gender and Climate Change Issues at Project Sites

Gender assessment at the project sites has been undertaken to inform the design and implementation of a proposed Green Climate Fund (GCF) project building on the Adaptation Fund financed *Climate Smart*

Integrated Rural Development Project (2017–2022). The project adopts an integrated approach to water management, climate-smart agriculture, natural resource management, and climate-resilient livelihood diversification.

The assessment analyses gender-differentiated vulnerabilities, roles, constraints, and opportunities related to climate change in the project areas and identifies key gender gaps relevant to water access, agriculture, livelihoods, and decision-making. The findings directly inform the project's Gender Action Plan (GAP), ensuring that interventions are gender-responsive, inclusive, and aligned with GCF Gender Policy requirements.

The project will be implemented in selected kebeles across seven woredas of five regional states and one city administration:

- Amhara region: Tenta woreda
- Diredawa city administration: Wahil Cluster
- Harari region: Erer woreda
- Oromia region: Adama and Alelitu woredas
- Southern Nations, Nationalities and Peoples' region: Lok Abaya woreda
- Tigray region: Raya Azebo woreda

Amhara region, Tenta woreda

The Amhara region is situated in the northwestern and north central part of Ethiopia. It is one of the four largest regions, with a population of 21.1 million. 84% of the population live in rural areas and are engaged in agriculture (UNICEF, 2018). Crops that are grown in the region include teff, barely, wheat, oil seeds, sorghum, maize, oats, beans, and peas (UNICEF, 2019a). Large number of livestock, 8,314,200 (27.9% of the national total), are found in the region (USAID, 2000). The region has various water resources, including Lake Tana, and several rivers that provide great potential for irrigation development (UNICEF, 2019a).

Although there has been consistent decline in monetary poverty, largely due to agricultural growth and benefits from program such as the Productive Safety Net, there is still a lot to be done to meet the SDG targets for the region. Over one-quarter (26%) of the population live below the national poverty line (the SDG target being 13%) and almost one-third (31%) live below the food poverty line (SDG target 16%).

The median age of 16.2 years for first marriage among women aged 20-49 years is the lowest in the country. The rationale of child marriage in the region relates to the belief that marriage reduces the risk that daughters engage in pre-marital sex, exposing them to sexually transmitted diseases and pregnancy while unmarried, which would lead to family disgrace and social stigmatization (UNICEF, 2019a).

As in most other regions of Ethiopia, Amhara women and girls are traditionally labelled as nurturers and caregivers; thus, childcare responsibilities often fall exclusively on them. 83% of first marriages are decided by parents and 64% of women stop attending school after marriage, with the main reason being that they are too busy with family life (UNICEF, 2019a).

As in other regions, Amhara women are often denied their share of inheritance when their parents or husbands die. It is also common for women to be excluded from decisions on common property in marriage and to be denied their due share during a divorce (UNICEF, 2019a).

Gender-based violence is high in Amhara region, with women aged 15-49 reporting psychological (26%), physical (22%) and sexual (10%) violence. Further, 65% of women and 46% of men believe that a husband is justified in hitting or beating his wife in various circumstances (UNICEF, 2019a).

The climate in Amhara region is affected significantly by weather variations: farmers face droughts, frost, hailstorms, flooding, and landslides. Localized flooding of fields by rainfall run-off is a frequent problem. It

was estimated that more than 100,000 people were at risk of flooding and more than 25,000 people were likely displaced in 2018 (UNICEF, 2019a).

According to the 2016 Ethiopia Demographic and Health Survey (EDHS), 64% of households use improved drinking water sources in the region, with only about 17% of water sources being piped. The Ethiopia Socioeconomic Survey (ESS) 2017 shows that 37% of households spend 30 minutes or more reaching the nearest water source, fetching water, and returning to their dwelling. As in other parts of the country, women and girls are mainly responsible for fetching water. The availability and sufficiency of drinking water is 82% and 75%, respectively.
A study on gender mainstreaming in selected sectors in the Amhara region shows that, despite the existence of legal and policy frameworks, in practice gender mainstreaming is not being implemented. It is also not taken into consideration in the region's plans, implementation, monitoring and evaluation and budgeting. Therefore, more work is needed to see changes on the ground (Bishaw, A., 2015).

The target woreda in Amhara region, Tenta woreda, has a population of 166,000 with 15 percent of the households being female headed. It has both livestock and crop production zones. Drought is the major climatic challenge the woreda faces while it is also affected by flooding, landslides and soil erosion to a lesser degree. Human, livestock and crop diseases are also among the key challenges the woreda deals with. Limited access to drinking water and infrastructure, shortage of pasture and water for livestock and deforestation exacerbate the challenges being faced. Chronic food insecurity due to erratic rains, degraded land and small land holdings affect many households in the woreda and hence communities participate in food/cash for work programs and receive food aid (MoFEC, 2017)

Diredawa City Administration, Wahil Woreda

The Diredawa city administration is located in the Eastern part of Ethiopia and consists of the city of Diredawa and the surrounding rural areas. Based on 2019 population projection, it has a total population of 493,000 with 63 percent living in the city and 37 percent living in rural areas. It has a fertility rate of 3.1 for women between the age of 15-49 which has declined from 3.6 in 2005 (UNICEF, 2019b).
The city administration has shown a 20 percent point decline in monetary poverty since 2004/05 with a total monetary poverty rate at 15 percent in 2019. This is the second lowest poverty rate in the country, after Harari. Rural poverty at 23 percent is higher than that of urban poverty which is at 11 percent. The administration also has a lower percentage of people living below the food poverty line (12 percent) compared to the national average which is 25 percent (UNICEF, 2019b).
Progress has also been recorded in maternal health care where antenatal care during pregnancy from a skilled health worker increased from 57 percent in 2011 to 84 percent in 2019. Educational attainment and wealth have been identified as factors for this progress. Further, rate of skilled attendance during delivery increased from 40 percent in 2011 to 71 percent in 2019 and delivery in health facility increased from 40 percent in 2011 to 69 percent in 2019. However, postnatal care within 48 hours in only 28 percent and Diredawa has the fourth highest under-five mortality rate in Ethiopia with 93 deaths per 1000 births (UNICEF, 2019b).
Even though Diredawa has relatively low food poverty rate, malnutrition in children is high. Stunting prevalence of under 5 years was 25 percent in 2019. The 2016 EDHS has shown socio-economic status and mother's education have been shown to have a strong link with a child's wellbeing.
When it comes to education, the Gender Parity Index (GPI) for Dire Dawa primary and secondary education is 0.88 and 0.89, compared to a national average of 0.9 and 0.87, respectively, meaning there are fewer girls enrolled in primary and secondary education than boys.

Based on the 2016 EDHS findings, 90 percent of households in Diredawa use improved drinking water with 41 percent having water sources piped into their dwelling. However, only 69 percent of households in rural areas use improved water sources and of these, only 5 percent have the water source piped into their compound. The poorest in the rural areas have the least access to improved water sources (UNICEF, 2019b).

Diredawa has a median age of 18.7 years for first marriage which is the highest in the country. Almost one out of every three girls in Diredawa are married before the age of 18 years. Further, the practice of female genital mutilation/cutting is deeply rooted at a prevalence of 75 percent among women aged 15 to 49 years compared to the national average of 65 percent (UNICEF, 2019b).

Most women in Diredawa decide themselves regarding whom to marry while 36 percent still stated their parents made the decision for them. Of those aged 15-49 about 69 percent stopped attending school after marriage with the main reason being the demand of family life followed by husbands' refusal to let them continue their education (UNICEF, 2019b).

It is shown that about 32 percent of husbands are said to participate in household chores with only 14 percent participating every day. Women are mostly excluded from decision making on common property, however compared to other regions in the country women have the upper hand in making decision in major household purchases and own health care. Women also have less access to information including the internet and mass media (UNICEF, 2019b)

Wahil woreda is located in the Eastern part of Diredawa with 16 percent of the household being female-headed. It is categorized under semi-arid and moist highlands. The livelihood in the woreda is dominated by agro-pastoralism. The main climatic challenge of the woreda is water and moisture stress with periodic droughts and failures of rains. Flooding and soil erosion also affect the woreda along with human, crop and livestock diseases. Even though the main source of income of the woreda is agriculture there is food deficit as a result of low income and small land holdings. The effect of climate change is exacerbated as a result of deforestation, limited access to water, health services, information and infrastructure, low education levels and poor agriculture management. Many households participate in food/cash for work programs and receive food aid (MoFEC, 2017).

Harari Region, Erer Woreda

The Harari region is the smallest regional state in Ethiopia both in terms of land mass and population. It lies in the eastern part of the country and surrounded by the Oromia region. The ancient city of Harar is the region's capital city. Based on a 2019 projection the total population of the region is 257,000. The total fertility rate among women aged 15-49 was 4.1 in 2016 which has increased from 3.8 in 2005. 56 percent of the population live in urban areas. The rural population in the region depends mostly on rain-fed and small-scale agriculture (UNICEF, 2019c)

The region has successfully reduced both monetary poverty and the rate of people living below the food poverty line by 20 percentage points since 2004/05. The monetary poverty rate is 7 percent which is the lowest in Ethiopia. People living below the food poverty line were 6 percent in 2015/16 (UNICEF, 2019c).

Maternal health care has improved in the region over the last decade. The rate of women who have received professional antenatal care during pregnancy has increased from 56 percent in 2011 to 81 percent in 2019. Access to antenatal care is associated with educational attainment and household wealth. Other indicators have also shown improvement including rate of skilled attendance during delivery which has increased from 33 percent in 2011 to 65 percent in 2019 and the rate of women who delivered in a health facility which has increased from 32 percent in 2011 to 64 percent in 2019. On the other hand, those receiving postnatal care within 48 hours are still low and only at 37 percent. (UNICEF, 2019c).

Even though most of the population reside in urban areas and the region has low food poverty rate, malnutrition among children in the region is very high. The 2016 EDHS report shows that socio-economic backgrounds and education attainment of mothers affect the rate of stunting in children. The key contributors to malnutrition include access to diversified food, lack of awareness of the need to have a diversified diet, and lack of access to fortified food (UNICEF, 2019c).

The Harari region is close to universal improved drinking water usage in urban areas, at 99.6 percent. However, only 60 percent of rural households have access to improved water. Same is true with having sources of water piped into own compound or housing with 44 percent for the region, 71 percent for urban

households and only 5 percent for rural households (EDHS, 2016). When it comes to accessibility of water sources, 28 percent of households in the region need more than 30 minutes to reach water sources, collect water and return to their dwelling (UNICEF, 2019c).

In Harari about 24 percent women indicated their first marriage was arranged while 76 percent married based on their own decision. Of women aged 15-49, 69 percent drop out of school after marriage, mainly due to their busy family lives and to a lesser degree (5 percent) due to refusal of their spouse to continue their education (UNICEF, 2019c)

Erer woreda is the only woreda in Harari region with a population 183,000, of which 13% households are female-headed. It is predominantly arid and within the livestock zone, although it has livelihoods based on both livestock and crops production. Water stress and drought are the main climatic challenges along with health challenges such as water borne diseases, as well as livestock and crop diseases and pests. Limited access to drinking water, shortage of pasture and water for livestock, deforestation, lack of access to infrastructure, a shortage of health facilities, and low educational attainment levels, increase the vulnerability of the community. There are food deficit and many households in the woreda participate in food/cash for work programs and receive food aid (MoFEC, 2017).

Oromia Region, Adama and Aleltu Woredas

Oromia is the largest region in Ethiopia, occupying approximately 34% of the land area and accounting for 37% of the population. The total population is over 37 million. Under-18s account for 54% of the population (CSA, 2017b). The fertility rate in Oromia is higher than the national average, with a total fertility rate of 5.4 compared to the national rate of 4.6 (CSA, 2016). The average household is also large, at 5.2 people per household compared to the national average of 4.8 people per household (CSA, 2017c).
Oromia has a diverse range of agro-ecological zones. Sedentary rain-fed agriculture and livestock production dominates in the highland areas while the lowlands are characterized by pastoralist communities who depend on livestock production (UNICEF, 2019d). The region is divided into 20 administrative zones, with 84% of the population living in rural areas (CSA, 2019). Oromia has experienced high and sustainable economic growth, due primarily to growth in the agricultural sector; however, there are limited off-farm job opportunities in the region, especially for youth (UNICEF, 2019d).
Strong agricultural growth, positive results from the Productive Safety Net Program (PSNP), and implementation of pro-poor economic and social development policies and strategies have all contributed to an increased per capita income in the region (World Bank, 2015). The region succeeded in achieving a 16% decline in monetary poverty between 2004/05 and 2015/16 (FDRE, 2017). A poverty analysis study in 2015/16 found that the poverty headcount ratio in Oromia was 23.9%, just above the national average of 23.5 percent (FDRE, 2017).
Oromia region has the most repeated beneficiaries of relief food in Ethiopia, especially between 2016 and 2018 due to extreme droughts (UNOCHA, 2019). In 2022, the region had 792,686 internally displaced persons due to conflicts and climatic shocks (IOM, 2022).
The proportion of pregnant women who gave birth in the five years and who received antenatal care from a skilled health provider during their pregnancy is 71%, the fourth lowest rate in Ethiopia. Only 44% of births are assisted by a skilled attendant (doctor or midwife) and 56% of women give birth without any assistance during delivery.

There is high prevalence of malnutrition, with serious implications for social and economic development. In Oromia, 28% of child deaths are associated with under-nutrition (CSA, 2016), with 36% of children under 5 stunted, 5% wasted and 16% underweight (EPHI, 2019). Stunting is associated with low socio-economic status and mothers' educational attainment: the children of mothers with no education are more than two times more likely to be stunted than those whose mothers have completed secondary or higher education (EPHI, 2019).

The gross enrolment ratio (GER) and the net enrolment ratio (NER) for pre-primary education in Oromia are low (29.4% and 16.4%, respectively) and far below the national average of 40.7% and 23.9%, respectively. Only 46% of students complete the first cycle of primary education (grade 4) and the dropout rate in primary schools is 20%, higher than the national average of 17.5%. Some of the reasons for high

dropout rates and grade repetition include demand for child labor by rural households, child marriage, abduction of girls, long distances to schools, internal migration due to climate change, drought, and conflicts (MoE, 2018).

About 17% of water sources in Oromia are piped and 63% of households use improved drinking water sources, marginally fewer than the national average of 65% (CSA, 2016). 28% of households spend more than 30 minutes bringing water to their houses compared with the national average of 32% - reflecting progress in water infrastructure and the availability of water sources. As elsewhere in the country, women and girls are mostly responsible for fetching water (UNICEF, 2017a).

Lack of water supply and proper facilities, as well as hygiene products in schools, are major challenges for girls, leading to girls missing (and some even dropping out of) school due to menstruation. 90% of schools never have water available and 100% of schools never have soap available. There is a clear need for a gender-inclusive approach to improving water supply, sanitation and hygiene infrastructure in schools, in order to address school absenteeism, performance and completion (UNICEF, 2017b).

Dependency on land and weather for agricultural and livestock production is a key vulnerability for many households in Oromia (World bank, 2015). Climatic shocks contribute to increased internal conflicts because of trans-boundary competition over resources, such as grazing land, arable land, and water (UNICEF, 2014).

There was an increase in the average median age of marriage in Oromia between 2000 and 2011; however, progress has since stagnated and currently stands at 17.4 years. There has also been a decline in child marriage rates, from 58% in 1991 to 48% in 2016 – but still well above the national average of 40% (CSA, 2016).

In coming decades, rising temperatures, extraordinary rainfall events and more intense and prolonged droughts and floods are projected (World Bank, 2010). The high prevalence of poverty, high rates of malnutrition, high population growth and low climate adaptive capacities increase vulnerability to climate change (World Bank, 2010). Women and girls experience greater risks, burdens, and impacts of climate change, as emergencies exacerbate existing gender inequalities (CEDAW, 2018). During climate change-induced emergencies, formal and informal protection mechanisms break down, and human rights abuses increase, resulting in increased gender-based violence that affects women and girls disproportionately (UNICEF, 2019d).

As in most other regions of Ethiopia, Oromia Regional State has a patriarchal society in which men hold primary power in private and public life. Women and girls have traditionally performed their roles in the domestic sphere, and these activities are often considered inferior. Women and girls are labelled nurturers and carers, with the result that childcare responsibilities often fall exclusively on them (UNICEF, 2019d).

In line with the national average, in Oromia 35% of women (aged 15-49) decide for themselves to marry, while parents make the decision for 61% (CSA, 2016).

One of the selected woredas, Adama, is located in the Great Rift Valley, with at altitude ranges of 1500 - 2300 meters above sea level. It has a total population of 155,349, of whom 79,013 are male and 76,336 are female. The average rainfall in the woreda is inadequate for crop production and recurrent droughts are common. The woreda has 30 percent of arable or cultivable land, 6.5 percent of pasture, 5.2 percent of forest, and 58.3 percent of other forms of land including swampy, degraded or otherwise unusable. Fruits, vegetables and sugar cane are important cash crops (MoFEC, 2017).

The second selected woreda of Oromia region, Aleltu, has a total population of 53,414 of whom 27,109 are male and 26,305 are female. The Woreda is located in the highland mixed livelihood system. Rainfed crop production and livestock husbandry are practiced in the woreda. Teff, wheat and pulses are among the crops that are cultivated. However long years of extractive production, high population and livestock densities have resulted in sever degradation of the natural resources (MoFEC, 2017).

Sidaama Region, Loka Abaya Woreda

The Sidaama regional state was formed in June 2020 after a referendum. It was previously part of the Southern Nations, Nationalities and Peoples' (SNNP) Region. The total area of the region is estimated to be 6,806.2 square kilometers. The new region comprises the Hawassa city administration, which is the capital city and four zones - East, West, South, and central Sidaama Zones (Sidaama region website, 2024). As the region is quite new information in this section is for the wider SNNP regional state.

SNNPR is located in the southwest part of Ethiopia and is the third largest region in the country. It has an estimated population of 20 million people with 14% under 5 years of age and 47% between 0 and 17 years of age. The average household size is 5.2. The fertility rate is decreasing and is 4.4 for women aged 15-49 (UNICEF, 2019e). About 83% of the population live in rural areas and are mostly farmers, even though there are agro-pastoralists and pastoralists communities in the region (UNICEF, 2019e).

The region has consistently reduced monetary poverty in the past several years despite frequent shocks. People living under the national poverty line are 10.4%, while those living below the food poverty line are 12.3%. As in most of the other regions, rural monetary poverty (22%) is higher than urban poverty (14%) (UNICEF, 2019e).

There has also been progress in maternal health indicators with the rate of mothers receiving antenatal care from a health provider had reached 69% in 2019 from 27% in 2011. Child delivery in health facility has also reached 48% in 2019 which is equal to the national average. However, the quality and coverage of maternal, new-born and child health services remain low (UNICEF, 2019e).

The EDHS (2016) indicate 59% of households use improved drinking water sources with 84% availability and 81% sufficiency. However, pastoralists in the region still depend on unprotected water sources like river water. The average time to collect water is more than 30 minutes for 36% of households in the region. This affects mostly women and girls as they are mainly responsible to collect water for their households (UNICEF, 2019e).

According to the EDHS 2016 the median age of first marriage in the region is 18.2 years for women aged 20-49 years. Even though this is considerable high and above the national average, a significant progress is seen for those aged 20-24 with a decline from 62% in 1991 to 31% in 2016. Even though female genital mutilation is decreasing among the younger generation, it is still of high concern in the region with a prevalence rate of 62% among women aged 15-47 (UNICEF, 2019e).

With about 65% of the region being mountainous and above 1,500m elevation and the rest lowland with grass and bush, the region has diverse climate, topography and ecology. The lowest-lying areas are found the southern part of the region where pastoralists reside due to little rainfall. The higher elevations on the other hand receive adequate rainfall and crop production is possible. Climatic shocks such as high temperature and rainfall, prolonged droughts and intense floods are projected for the coming decades. The high population growth and density coupled with other factors such as competition for land, migration of the youth, poverty, poor infrastructure, degraded environment, lack of farming technology and low level of education makes it harder for communities to cope with climatic shocks. Women and girls face greater risks, burdens and impacts of climatic shocks as they exacerbate already existing gender inequalities (UNICEF, 2019e).

Like most part of the country men in the region hold power in private and public life. The social system has rooted gender stereotypes where women and girls are expected to focus on the domestic sphere which is considered inferior (UNICEF, 2019e).

Based on the EDHS 2016, 36% of women aged 15-49 stated their first marriage was arranged by their parents while the remaining made their own choices. 82% of women stopped their education after marriage mainly due to the high demand of domestic chores while some discontinued due to their husband's unwillingness. In the region 11% of girls aged 15-19 have begun childbearing. These indicate the challenges young girls face to continue their education (UNICEF, 2019e).

It is stated that 37% of husbands participate in some form of household chore while only 19% do so every day. Women are mostly excluded from making decisions on shared properties and denied of ownership (UNICEF, 2019e).

The selected woreda, Loka Abaya, has an estimated population of 99,233 of whom 50,603 are men and 48,630 women. 1,059 or 1.07 percent of its population are urban dwellers. The altitude of the woreda ranges from 1500 - 1768 meters above sea level, with mean annual temperature of 17 - 20 degree Celsius. Mixed farming is the main livelihood system with main crops including perennial (e.g., coffee and enset), cereals and root crops. The major challenges in the woreda include degradation of natural resources and frequent droughts. The landuse in the woreda include 20.2 percent cultivated land, and 42.6 percent forest (MoFEC, 2017).

Tigray region, Raya Azebo woreda

Tigray region is located in the dry lands of northern part of Ethiopia with an estimated population of 5.4 million people. In 2018, Tigray had a higher percentage (34%) of female headed household compared to the national rate (25%). Though three out of four live in rural area and depend on agriculture, urbanization has increasingly become a priority with an annual rate of 4.6% (UNICEF, 2019f).

Even though the region has demonstrated impressive agricultural growth and pro-poor spending on basic services and social protection, the region still had the highest monetary poverty in the country in 2016. 13.5% of people live under the national poverty line and 16.5% live below the food poverty line. Women are more likely to live in poverty than men with 43% and 24% of women living in monetary and food poverty as compared to 22% and 11% of men, respectively (UNICEF, 2019f).

The region has progressed in several child and maternal health and nutrition indicators. In antenatal care the region has performed much better than the national average. This is stated to be due to a high regional priority given to maternal mortality (UNICEF, 2019f).

72.1% of households in the region use improved drinking water sources, which is the largest share of all regions and above the national average of 66%. However, still one third of households are located more than 30 minutes away from water sources. Like in other parts of the country the responsibility of fetching water fell on women and girls (UNICEF, 2019f).

There is still high level of sexual harassment and violence in the region. 65% of women believe a husband is justified in beating his wife while 31% men share the same opinion. Improvement is seen in early marriage in the region which was 43% in 2016. Female genital mutilation has also been decreasing in the region which is 24.2% and the lowest in the country (UNICEF, 2019f).

The region is vulnerable to climate stress and is highly affected by environmental degradation. Drought, hailstorms, floods and landslides put people at high environmental risk. In the lowlands and degraded highland areas of the region, minimum agricultural production and scarcity of drinkable water are high challenges. Extreme temperatures and intense rainfall and droughts are projected to be major environmental challenges in the region in the coming years (UNICEF, 2019f).

In the region women and girls have limited mobility, fewer economic opportunities and less decision-making power due to socio-cultural factors. There is inequality between men and women when it comes to ownership and decision making. While women participation in politics is increasing grassroots participation remains low (UNICEF, 2019f).
A study done in parts of Tigray showed that the top climate-change related impacts that affect their livelihoods are drought (97%), flooding (76%), pests and disease (62%), and other hazards (39%). The impacts of climate-change were found to be more sever on female-headed households mainly due to their lack of resource access and control, lack of income and technology use and high dependence on natural resources. Some of the coping strategies identified in the area included water harvesting practices, soil and

water conservation, irrigation, diversifying income sources and agricultural inputs and adjustment of planting dates and crop varieties (Assefa, E. and Gebrehiwot G., 2023).

The selected woreda, Raya Azebo, lies in the arid agro-ecology with plains, and undulating mountains dominating the terrain. It has a total population of 136,000. It is one of the more productive of the areas of the region, and produces enough food from crops and livestock, due to fertile soils and relatively high rainfall. Nonetheless, periodic drought is a recurring problem, and there have been reports of increased rainfall variability which has affected the livelihoods of much of the population. Flooding and soil erosion are also common mainly due to the terrain. Human, crop and livestock pests and disease are also the challenges faced by the community. Deforestation and low transport access further exacerbate the challenges faced in the woreda. 55% percent of the population do not have adequate assets to cope with major shocks: and many are forced to participate in food/cash for work programmes in times of droughts (MoFEC, 2017).

Key Outcomes and implications for Implementation and sustainability Across All Project Sites

Key outcomes

Gender Roles and Division of Labour

Across all project regions, gender norms strongly shape roles and responsibilities. Women and girls bear a disproportionate burden of unpaid care and domestic work, including water collection, fuelwood gathering, food preparation, childcare, and support to agricultural activities. Men generally dominate decision-making in household and community spheres, particularly regarding land use, asset control, and participation in formal institutions.

This unequal division of labour constrains women's time, mobility, and ability to participate in training, leadership roles, and income-generating activities, thereby limiting their adaptive capacity to climate change.

Education, Early Marriage, and Harmful Practices

Educational attainment for girls and women remains lower than for men in most project areas, driven by early marriage, domestic workload, poverty, and limited school infrastructure. Several regions report high rates of child marriage, school dropout following marriage, and harmful practices such as female genital mutilation/cutting (FGM/C), particularly in Dire Dawa, Amhara, Sidaama, and Oromia.

These factors undermine women's long-term economic opportunities, access to information, and capacity to engage in climate-resilient livelihoods.

Access to Resources and Services

Women consistently face structural barriers in accessing and controlling productive resources, including:

- **Land and inheritance:** Women are often excluded from land ownership and inheritance or hold weaker use rights.
- **Water:** Although women are primarily responsible for water collection, they are underrepresented in water user associations and decision-making bodies.
- **Agricultural inputs and extension:** Women have more limited access to extension services, climate information, technology, and finance.
- **Livelihood opportunities:** Female-headed households, which constitute between 13% and 34% of households in the target areas, face labour, asset, and capital constraints that heighten vulnerability to climate shocks.

Climate Risks in the Project Areas

The project regions experience increasing climate variability, including recurrent droughts, erratic rainfall, floods, soil erosion, and rising temperatures. These hazards affect water availability, agricultural productivity, livestock health, and household food security.

Differential Impacts on Women and Men

Climate change exacerbates existing gender inequalities:

- **Women's workloads increase** during droughts and water scarcity as they travel longer distances to fetch water and sustain household food needs.
- **Female-headed households** are disproportionately affected due to limited assets, labour, and access to coping mechanisms.
- **Food and nutrition impacts** are particularly severe for women and children, with high rates of child stunting linked to maternal education and food insecurity.
- **Gender-based violence (GBV)** risks increase during climate-induced stress and emergencies, as social protection mechanisms weaken and economic pressures intensify.

Women's limited participation in decision-making and restricted access to early warning information further reduce their ability to prepare for, respond to, and recover from climate shocks.

Intersectional Vulnerabilities

In addition to women and female-headed households, the assessment identifies other groups facing heightened vulnerability, including:

- **Youth**, particularly rural young women and men with limited access to land, employment, finance, and skills development;
- **Elderly persons**, who may have reduced mobility and limited income sources;
- **Persons with disabilities**, who face physical, social, and institutional barriers to accessing infrastructure, services, and participation;
- **Widowed or divorced women**, chronically poor households, and labour-constrained families.

These vulnerabilities are driven by intersecting socio-economic, cultural, and institutional factors, including poverty, remoteness, low literacy, and weak local institutional capacity.

Institutional and Policy Context

Despite the existence of national and regional gender equality policies and legal frameworks, gender mainstreaming remains limited in planning, budgeting, and implementation at regional, woreda, and kebele levels. Capacity gaps among implementing institutions and sector offices often result in gender being treated as an add-on rather than integrated across technical interventions.

Strengthening institutional capacity for gender-responsive planning, implementation, and monitoring is therefore essential for achieving sustainable project outcomes.

Implications for Project Design

The gender assessment identifies several priority gender gaps and opportunities relevant to the project:

1. **Limited access to productive resources** (water, land, inputs, finance) for women
2. **Low participation of women in decision-making structures**, particularly water and natural resource governance institutions
3. **High time burdens** related to unpaid care work and water collection
4. **Limited access to information, skills, and training**, especially for women and youth
5. **Risks of exclusion and SEAH** in project-related activities if safeguards are not in place

Response Measures and Linkage to the Gender Action Plan

In response to these findings, the project's Gender Action Plan includes targeted and integrated measures to:

- Improve women's access to potable and productive water infrastructure, reducing time burdens;
- Promote women's participation and leadership in water user associations, irrigation committees, and local planning processes by establishing minimum quotas and embedding sex disaggregated indicators and qulitative measures;
- Deliver project activities such as consultations, trainings, and watershed and irrigation management meetings using gender-responsive modalities, including convenient timing and locations agreed with women, women-only consultation spaces, and participatory facilitation approaches that enable meaningful engagement despite existing care and productive responsibilities.
- Link women and vulnerable groups to integrated livelihood support packages, combining skills training, start-up inputs, market linkages, and access to financial services, rather than standalone interventions.
- Deliver gender-responsive training and capacity building tailored to women, youth, and vulnerable groups;
- Address socio-cultural barriers through awareness-raising and gender-sensitive facilitation;
- Integrate SEAH risk prevention and survivor-centred grievance redress mechanisms;
- Build institutional capacity for gender mainstreaming at regional, woreda, and community levels.

Sustainability of Gender-Related Investments

Gender-related investments under the project are designed to be institutionally embedded, locally owned, and financially integrated, ensuring sustainability beyond the project period. Rather than creating parallel systems, the GAP is implemented through existing government structures, including sectoral ministries, regional and woreda-level implementing entities, and Women and Social Affairs Offices, with coordination and oversight by the Ministry of Finance through the CRGE Facility. This alignment strengthens national and sub-national capacity to mainstream gender equality in climate-resilient development programming.

Sustainability is further enhanced by integrating gender actions and budgets within core project components, rather than treating them as stand-alone or externally funded activities. Costs associated with gender-responsive infrastructure, capacity development, livelihood support, and safeguarding mechanisms are embedded within sectoral budget lines, enabling continued replication and scale-up through public investment frameworks and future climate and development programs.

At community level, sustainability is reinforced through institutionalized participation of women in water user associations, watershed groups, and livelihood cooperatives, supported by gender-responsive bylaws, leadership quotas, and skills transfer. Investments that reduce women's time burden, strengthen climate-resilient livelihoods, and improve access to finance and services contribute to durable socio-economic gains, while the strengthened capacity of institutions to plan, budget, and monitor gender outcomes ensures that gender equality and social inclusion considerations remain integral to national climate resilience efforts.

VII. Sexual Exploitation, Abuse and Harassment (SEAH)

The project recognizes that sexual exploitation, abuse and harassment (SEAH) can significantly undermine women's dignity, safety, participation, and ability to benefit from climate-resilient development interventions. Although the project falls within the low-risk threshold under the Simplified Approval Process, low-level SEAH risks may nevertheless arise. These risks may occur during community consultations, training and awareness-raising activities, beneficiary selection processes, interactions between contractors or project workers and community members, as well as workplace relations among project staff, consultants, and contractors. Such risks are particularly pronounced in contexts characterized by unequal power relations, limited access to services, and barriers to safe and confidential reporting for women and girls.

To address these risks, the Gender Action Plan incorporates targeted measures to ensure that women, girls, and other vulnerable groups are able to participate in project activities within a safe, respectful, and supportive environment. These measures include SEAH awareness-raising for communities and project personnel; training for relevant staff, focal points, contractors, and workers; integration of Codes of Conduct into contractual and workforce arrangements; strengthening of confidential, accessible, and survivor-centred grievance redress mechanisms; and establishment of clear referral pathways to appropriate support services. The implementation and effectiveness of these measures will be monitored as part of the project's regular gender and environmental and social safeguards follow-up.

The project's gender-responsive approach therefore extends beyond increasing women's access to project benefits and participation in decision-making. It also places explicit emphasis on ensuring that such participation is safe, inclusive, and accountable. Through integrated awareness, grievance, referral, and accountability mechanisms, the project seeks to reduce the risk of harassment, intimidation, abuse, or exclusion of women, girls, and other vulnerable persons in connection with project-related activities.

Implementation of the gender-related SEAH actions will be led by the Ministry of Finance / CRGE Facility, in collaboration with the designated Executing Entities and the relevant regional and woreda implementation structures. Gender focal points, safeguards focal points, grievance focal points, and supervising personnel will support implementation of these measures, including awareness raising, training, communication of safe conduct expectations, functioning of grievance channels, and maintenance of referral pathways. Please see cross-cutting SEAH risk mitigation and response actions table under the part II, gender action plan matrix.

VIII. Conclusion

The assessment confirms that climate change and gender inequality are deeply interconnected in the project areas. Climate hazards intensify existing gender disparities, while structural gender inequalities limit adaptive capacity and resilience. Women play a central role in water management, agriculture, and household resilience, yet remain marginalized in access to resources, services, and decision-making.

By integrating gender and social inclusion considerations across all components and coupling risk mitigation with targeted empowerment measures, the project aims to deliver transformational gender and social inclusion outcomes. These include increased agency, improved livelihoods, reduced time poverty, enhanced participation in decision-making, and more equitable access to climate-resilient resources and services, ensuring that women and other vulnerable groups are not only beneficiaries, but key agents of change in climate adaptation.

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