



Country Pastoralism and Small-Scale Farming Profile – Ethiopia

ACKNOWLEDGEMENT

The Country Pastoralism and Small-Scale Farming Profile development exercise primary objective was to identify the current status of the governance landscape for pastoralist and small-scale farming in Ethiopia.

The SLGA program supports the implementation of the AU Agenda on Land, in addition the program is part of the BMZ unique initiative 'One World, No Hunger. This programme will have immense contribution to the initiative under the Action Area "promoting responsible land use and improving access to land". The SLGA aims to strengthen the human and institutional capacities required to realise sustainable land policies that recognise the rights of marginalised groups such as small scale farmers, pastoralists, youths and women across Africa. One of the main areas of action for SLGA is the establishment and coordination of the Network of Excellence on Land Governance in Africa (NELGA) under the leadership of the ALPC (African Land Policy Centre).

This study generated evidence to inform SLGA's capacity to provide advisory support on such issues to decision makers and other stakeholders. This information will contribute to the body of literature available on the Land Governance Agenda of the AU to improve land governance in Africa.

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Registered office

GIZ Office

PO Box 2406

1 Orange Groove

Highlands

Harare

Zimbabwe

Programme: SLGA

Authors

Jimat Development Consultants

46 Somerset

Eastlea, Harare

Zimbabwe

Lead Author: Dr Lemlem Aregu Behailu

Research Support Staff: Deveria Banda and

Tichaona Chivero

Editorial Team

Jimat Development Consultants

46 Somerset

Eastlea, Harare

Zimbabwe

Design and Layout

Christel Kenou/Jimat Development Consultant

Photo credits /sources

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ACRONYMS

ADLI : Agricultural-Led Industrialisation

AGP I : Agricultural Growth Project I.

AGP II : Agricultural Growth Project II.

AU : African Union

AU-DREA : African Union, Department of Rural Economy and Agriculture

AU-ADB-ECA : African Union-African Development Bank and United Nations Economic

Commission for Africa

CEDAW : Convention on the Elimination of all Forms of Discrimination Against Women

ETB : Ethiopian Birr

GDP : Gross Domestic Products

GTP I and II : Growth and Transformation Plans I and II

ILO : International Labour Organisation

KM : Kilo Meter

MDG : Millennium Development Goal

SDGs : Sustainable Development (SDGs)

SDPRP : Sustainable Development and Poverty Reduction Program,

SHF : Smallholder Farmers

SNNPR : Southern Nations, Nationalities, and Peoples' Region

SSF : Small-Scale Farming

UNESCO : The United Nations Educational, Scientific and Cultural Organization

USAID : United States Agency for International Development

USD : United States Dollar

PPP : Purchasing Power Parity

Pos : Produce Organisations

1. COUNTRY AND MACROECONOMY

Overview of Ethiopia

Ethiopia is in the Horn of Africa, and it is a landlocked country. The country is bordered by Djibouti, Eritrea, Somaliland., Kenya, South Sudan, and Sudan. The country is geographically so diverse, consists of rugged mountains, flattopped plateaus, deep gorges, and river valleys. The Danakil depression¹, the lowest place in Africa is found in Ethiopia². Similarly, Ethiopia has diverse ecology ranging from tropical savanna in the west to a warm desert climate in the east. Most of the country (70 %) is highland where many smallholder farmers are situated.

Ethiopia has 1.112 million square KM and the home to 120,513,748 populations. It is the largest and the most populated country in the Horn of Africa and the second most populous nation in Africa, next to Nigeria. The total population is estimated to be 120,513,748 as of Saturday, October 22, 2022, based on World meter elaboration of the latest United Nations data³.

About 83% of the population live in rural areas, whereas 17 % live in urban area.

Socio-economic indicators

Ethiopia is one of the world's poorest countries, with about 44% of its population living in poverty. However, Ethiopia also has one of the fastest-growing economies in the world. Causes of poverty in Ethiopia include various actions stemming from natural disasters and man-made actions⁴.

GDP in Ethiopia is expected to reach 112.00 USD Billion by the end of 2022, according to Trading Economics global macro models and analysts' expectations.⁵. GDP per Capita in Ethiopia is expected to reach 650.00 USD by the end of 2022, according to Trading Economics global macro models and analysts' expectations⁶.

Table 1: Ethiopian GDP and GDP per capital in 2022

GDP indicators	In 2022	Previous	Unit
GDP	111.27	107.66	USD Billion
GDP per Capita	852.01	826.97	USD
GDP per Capita PPP	2366.42	2296.89	USD
GDP from Services	836.20	786.80	ETB Billion
GDP from Manufacturing	618.80	576.90	ETB Billion

In Ethiopia, the unemployment rate stands at 24%. As stated by the World Bank in 2007, Ethiopia's rural youth are becoming landless and lacking job opportunities, which often leads to an increased migration to urban areas. The labour market institutions that govern employment

relations in Ethiopia are generally found to be weak. This weakness is characterized by the limitation of a legal framework and a lack of social dialogue among institutions.⁷

¹ The depression is situated about 125 meters below sea level at 200 km long by 50 km wide. The depression is home of 25% of African volcanos and it is the hottest place on earth

² https://www.bunniktours.com.au/blog/10-interesting-facts-about-ethiopia

³ https://www.worldometers.info/world-population/ethiopia-population/

⁴ poverty rate of ethiopia - Google Search

⁵ https://tradingeconomics.com/ethiopia/gdp

⁶ GDP per capital OF ETHIOPIA - Google Search

⁷ unemployment rate of Ethiopia - Google Search

Despite a fast-growing economy, Ethiopia remains one of the poorest countries in the world. It is prone to weather-related shocks and experiences high levels of food insecurity, particularly among rural populations and smallholder farmers.

Agriculture and Livestock

Agriculture is the backbone of the Ethiopian economy. It contributes 50% of the GDP and 85

% of the employment. 70% of raw materials required for large and medium industries come from agriculture. Crop production contributes 60% of the sector's outputs, while livestock accounts for 27% and the rest (13%) comes from other agriculture value additions. It is also the country's main foreign currency source through exporting agricultural commodities, which include: coffee; hides and skins; and seeds and nuts used for edible oil production.

Table 2: Structure shift in Ethiopian Economy

Year	Service	Industrie	Agriculture
2008/09	45.1	12	42.9
2009/10	46.7	13.2	40.1
2010/11	49.3	13.3	37.6
2011/12	47.0	12.8	40.2

2. SMALL SCALE FARMING

General characteristics of smallholder farmers

A smallholder farmer is a person who works on a small piece of land growing crops and raising livestock. Usually, families run these farms for subsistence as their main source of income. About 74% of Ethiopia's farmers live on small farms, with about 67% living below the national poverty line⁸. Small-scale farming is the dominant farming system in Ethiopian agriculture, characterized by rain-fed mixed farming by employing traditional technologies and adopting a low input and low output production system. The national average farm landholding of smallholder farmers is less than 1 ha (Rahmeto, 2000).

Small-scale farmers' land tilled accounts for 95% of the total area of agriculture used land, while only 5% accounts for private and state commercial farming. Hence small-scale farmers account for more than 90% of the total agricultural output. They produce 94 % of food crops and 98% of coffee which is the leading export Goods and contribute 40% the country's GDP 9.

Role and place of women

Women play a significant role in Ethiopian agriculture and smallholder farming. They contribute a lot to the development of the family and society in general through contributing to the unpaid household care and family maintenance

⁸ https://borgenproject.org/smallholder-farmers-inethiopia/

⁹ contribution of ethiopian small holder farmers for GDP -Google Search

crop production, animal husbandry, marketing of agricultural products and engaging in income generation activities and several communities works. Despite their huge contributions, due to prevailing culture and low attitudes towards women that undermined women's contribution and due to high workload (domestic work, production and marketing work and community work), their contributions are underestimated and placed them low economic positions. As a result, men are considered as a bread winner of the family "Men bring food and women prepare it" is a saying that has commonly been used to describe the role of women and men within the societies (Boserup 1970)

Women contributions for about 40% the agriculture labour force (Almaz, 2000). Women farmers perform up to 75 per cent of farm activities, representing 70 per cent of household food production in Ethiopia. But they typically produce up to 35 per cent less than male farmers because they have lower access to resources (such as land) extension services and inputs (seeds, fertilizer, etc.).

The government has taken appropriate measures to enhance women's land rights. Though the land policy enables women to own land equally with their husbands and inherits land through a joint land certificate, the customary practices limit women's land rights.

Considering gender equality in decision-making and leadership, women have limited decision capacity nor hold leadership positions. Accordingly, an assessment of forty-two produce organisations (Pos) revealed that 59.5% of the assessed POs have below 20% women as members; this is even worse regarding leadership positions. As it is shown, 66.7% of the POs do not have women in the Executive Committee. 30.9% of the POs have one woman in the Executive Committee of seven members. However, none of the women is in prominent decision-making positions such chairpersonship, deputy chairpersonship or secretarial posts. A question comes here what implication does this have in terms of gender equality?

Though Ethiopia is a signatory for many international and regional convention and guidelines on women, like the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW), gender inequalities remain an issue in every sector. If real economic development is envisioned and to be achieved, women's contributions to the economy need to be acknowledged, appreciated, and supported.

Therefore, an intensive investigation about women's involvement in development is vital to understand their actual contribution and main obstacles encountered on which a sound and sustainable solution can be designed and implemented.

Role and place of youth

While agriculture sector has enormous potential and booming businesses to provide considerable opportunities to youth entrepreneurs, young people do not like farm work and migrate to the city for employment (ILO, 2021).

Lack of working place and resources (land) seasonality of agricultural income from small-scale farming, fear of risk and uncertainty of small-scale agriculture, and lack of initial capital, are the leading barriers affecting youth participation in an agricultural enterprise. Differently, among the agricultural enterprises, livestock enterprises were preferred by the majority of the youths, indicating that the livestock sector has a huge capacity for job creation to youth in Ethiopia.

Despite of young people especially rural youth employment represents high underemployment, and growing youth landlessness in Ethiopia, (Moreda, 2017), particularly, young graduates from higher education are not willing to take agriculture as their main livelihood as reported by many studies (Mastewal, 2020). Hence, to increase youth participation in an agricultural enterprise, special policy adjustments based on the nature of the enterprise are needed for initial saving, and introduction of agricultural insurance for fear of agricultural risk are recommended through modernizing agriculture and make the sector attractive to youth.

Available research on small-scale farming

The World Bank, in collaboration with the Ethiopian government, aided smallholder farmers in stimulating the economy and decreasing poverty by financing the first and second Agricultural Growth Project (AGPI and AGPII) to help smallholder farmers in Ethiopia. AGPII helps agricultural services in many ways, such as by increasing resources and technologies and aiding in marketing. With the help of projects like AGPI and AGPII, agricultural productivity and commercialisation can increase by managing and overcoming the adversities of farming.

At national level, it is also the most researched area of agriculture as compared to pastoralism and it is the most dominate farming system in Ethiopia

Public policy in support of small-scale farming

Rural development in Ethiopia has a relatively longer history than many sub-Saharan African countries. Under the Imperial Era before 1974, development policies favoured industrial development, neglecting the agricultural sector and smallholder farmers, working mainly with the better-off and commercial farmers. During the Socialist Derg regime 1974–1991 periods, the political environment favoured collective and state farms at the expense of smallholder farmers.

Relatively the post-1991 period is marked by the most prominent and enduring economy-wide strategies intended to attain food self-sufficiency at national level by increasing productivity of smallholders through research-generated information and technologies, increasing the supply of industrial and export crops and ensuring the rehabilitation and conservation of natural resource base with special consideration of package approach (Bure, 1998: Lemma and Beyene, 2000; Kassa 2003). These includes Agricultural-Led Industrialisation (ADLI), the Sustainable Development and Poverty Reduction Program (SDPRP), Participatory and Accelerated Sustainable Development to Eradicate poverty

(PASDEP) and successive growth and transformation plans (GTP I and II).

Most of these policies and strategies, including policymakers and donor agencies, have so far emphasised using modem farm technologies as Ethiopia's sole source of agricultural growth. Although there were significant attention across regimes, the access, utilisation and coverage of the country's technological packages of rural development was not realised. Despite the supportive policies and strategies of smallholder farmers for the last three decades, population growth, environmental degradation, the climaterelated decline of yield, low level of farm input innovation, capital constraints are among the pressing constraints. Hence, the cost of modern technologies is so prohibitive that few farmers in limited areas of the country are so far reached.

Therefore, it is high time to explore ways to identify approaches that could complement existing growth strategies. Understanding the complex issues involved and continuous debate on the pros and cons of alternative options are required. Continued public engagement in input markets and extension services and participation of private investment in providing goods and services for smallholders in a potentially efficient manner should be encouraged (Welteji, 2018)

Access to land and land governance

Land is public property in Ethiopia. The government has administered it since the 1975 radical land reform. The reform ended the exploitative type of relationship that existed between tenants and landlords. Tenants became own operators with use rights but no rights to sell, mortgage or exchange land. The change of government in 1991 has brought not much change in land policy. Even though the Ethiopian Revolutionary Democratic People's EPRDF adopted a free market economic policy, it has decided to maintain all rural and urban land under public ownership. The December 1994 government constitution also proclaimed that 'Land is a common property of the nations, nationalities and people of Ethiopia and shall not be subject to sale or to other means of transfer'. Hence, smallholder farmers have only the right to cultivate land but cannot sell, exchange, or mortgage it.

Investors can lease land from smallholders, and regional, state, and large-scale investors can lease but not purchase land from the government or smallholder farmers. The government has made occasional land redistributions accommodate the growing population. Land redistribution was more frequent during the Derg time and has been discouraged since 1991, though not eliminated. (Mulat, 1999). Population growth could have been supported by rural non-farm employment creation, but this hasn't happened, so young adults and their groups remain in rural areas either unemployed, as landless labourers or as sharecroppers on someone else's land. This consequence of land redistribution and the current land policy does not seem to have been foreseen by the government of Ethiopia.

Ethiopia's landholding system and tenure security have been controversial issues for the last 5 decades with the increasing population.

The question of 'who owns the land' or 'who uses the land' is in part philosophical call (that land is a gift of nature), in part a question of property rights. (the right of every citizen to own property is legally protected), and in part, a question of development (land being one of the factors of production that constitutes the very foundation of social and economic development). Regardless of the perception of its ownership and use or how long it is owned (indefinite for private or definite for public ownership), all land tenure regimes are governed by the same property rights and land administration principle

Climate change and small-scale farming

In Ethiopia, climate change and associated risks are expected to affect agriculture and food security severely. Climate change, such as drought, highly variable rainfall, flood, low precipitation, high temperature, frost etc., can have a devastating effect on the livelihood and welfare of the people, particularly the smallholder farmers whose main livelihood depends on rainfed agriculture. The level of impact depends on

the awareness and the level of adaptation in response to the changing climate. Smallholder farmers' adaptation capacity to climate changes, ensuring appropriate policy measures, and the design of successful development projects depend on different factors. The level of education, age and wealth of the head of the household; access to credit and agricultural services; climate information, and temperature all influence farmers' adaptation choices. On the other hand, lack of information on adaptation measures and lack of finance is seen as the main factors inhibiting adaptation (Gebrehiwot and Van der Veen, 2013)

Despite factors influencing smallholder farmers' negative impact of climate changes on small-scale farming, stallholder farmers' perceptions have not yet been adequately studied. Some findings revealed that smallholder farmers perceive warming temperatures and decreasing rainfall that correspond with meteorological record as climate change (Habtemariam et al. 2016). Smallholder farmers perceived an increase in temperature, a decrease in rainfall, and an increase in inter-annual and intrapersonal rainfall variability over the last 20-30 years. The observed climate data (1977-2009) also showed an increasing trend in temperature and high inter-annual and intra-seasonal rainfall variability.

In contrast to farmers' perceptions of decreased rainfall totals, observed rainfall data showed no statistically significant decline. The interaction among various bio-physical and socio-economic factors, changes in rainfall intensity and reduced water available to crops due to increased hot spells may have influenced the perception of farmers concerning rainfall trends.

Accordingly, in recent decades, smallholder farmers have changed farming practices to adapt to climate change. For example, farmers have looked into crop and variety choices, cropping calendar adjustments, and moisture conservation practices such as minimum tillage, irrigation and mulching.

Anticipated climate change is expected to expose new risks outside the range of current experiences. Critical technological, institutional, and market-access constraints must be removed to enable farmers to adapt to these impacts. Therefore, there must be better communication and capacity building enabling strategies at agricultural inputs, credit supply, market access, and strengthening of local knowledge and information services that need to become an integral part of government policies to assist farmers in adapting to the impacts of current and future climate change.

The identified factors help policymakers to provide targeted extension and advisory services to enrich climate change understanding and support appropriate farm-level climate change adaptations.

International and regional cooperation in support of small-scale farming

International actors support Ethiopia advocating for an inclusive development agenda and apply context-specific approaches development and land reforms sensitive to international development standards and human rights supported small-scale farmers. Public and private investors are engaged to pay particular attention to international instruments that uphold the dignity of all people, including smallholder farmers. the Convention on the Protection of World Cultural and Natural Heritage (UNESCO, 1972); the Right to Food, the Covenant on Economic, Social and Cultural Rights) and the United Nations Declaration on the Rights of Indigenous Peoples and the African Charter on Human and Peoples' Rights, among others, in land-related economic activities.

For example, following the Millennium Development Goal (MDG) and Sustainable Development (SDGs)., the Ethiopian government designed and implemented successive Growth and Transformation plans (GTP I and II).

Continentally, since 2006, the African Union, African Development Bank and United Nations Economic Commission for Africa (AU-AfDB-ECA) Consortium, in conjunction with regional economic Communities, launched an initiative on

land policies in Africa to assist African states to equip themselves with land policies that can contribute to economic development and poverty reduction as well as peacebuilding. These were not to impose, design or mainstream a uniform land policy on African states but to help AU Member States develop and implement national land policies that are efficient and effective. The land policy initiatives are complemented by drafting benchmarks and land indicators as recommended in the AU-endorsed Framework and Guidelines on Land Policy in Africa, enabling states to assess the progress in implementing their land policies and regulations.

For example, following the 2030 Agenda for sustainable development, the Ethiopian government attempted to redistribute the land in the highlands where smallholder farmers are predominant to address the population growth and make the youngster and adults own land.

3. PASTORALISM

General characteristics

Pastoralism is a way of life, culture, livelihood, and symbol of love for 12 million citizens (pastoralists) in Ethiopia and the extensive use of rangelands that supports about 10-12% of the population in the country (Mohamed, 2019). Pastoralism is a critical production system practiced in the country's arid and semi-arid dryland areas. It covered 2/3rd of the land mass of the country. Recent estimates indicate that about 120 million pastoralists and agropastoralists live worldwide, of which 41.7% reside only in Sub-Saharan Africa (SSA).

Pastoralists live in areas often described as marginal, remote, conflict-prone, food insecurity, and associated with high levels of vulnerability and insecurity. Pastoral communities earn their livelihood from keeping domestic livestock. In Ethiopia, 97% of Ethiopian pastoralists are found in lowland areas of the country. They also represent many different ethnic groups. Regarding population size and area coverage, Somali, Afar, and Borena (in Oromia) are the majority of the pastoralist, accounting for about

53%, 29%, and 10% of the pastoral population, respectively. The rest smaller pastoralist groups of 8% include Hamer and Galeb, Arero and Dasenech found in Southern Nations, Nationalities, and peoples' Region (SNNPR.) Despite the significant role of pastoral areas in the national economy, very little consideration is given to pastoral development; policymakers often neglect these groups by focusing on the interests of agriculture and urban people.

Role and place of women

The great majority of pastoral societies in Ethiopia are patrilineal and male-dominated. The reasons for this are much debated, but the root cause appears to be related to the importance of not dispersing viable herds.

In most pastoral societies, gender roles are strongly marked, and patterns seem to be extremely similar across the world. Women are typically responsible for milking and dairy processing; they may or may not sell the milk and usually have control over the proceeds to feed the family. Men are responsible for herding and selling meat animals. In systems where herds are split, women usually stay at fixed homesteads with some livestock, like lactating cow, sheep and goat, while men go away with the animals. Women are entirely responsible for taking care of the livestock staying behind at home.

The income of wives and daughters is lower than that of husbands and sons, resulting from the general traditional subordination of women and girls and the customary and religious restrictions on women's ability to accumulate wealth (Brockington 2001). In other words, for a pastoral household to be viable, to women generally have lower household- and community- level decision power; they own less wealth, with less household expenditure devoted to them than men.

Such issues should draw the attention of policymakers to gender-sensitive pastoralism development and help to develop feasible development policies and strategies for pastoralism that ensure pastoralists' adaptive capacity of women and men pastoral and sustainability in pastoral areas.

Available research on pastoralism

Following AU Policy Framework for Pastoralism, which supports pastoralism as a way of life and pastoralists' right to self-determination (principle 3); supports pastoral mobility (principles 4 and 7); and warns against the links between unruled commercialisation of food production, dispossession and growing social inequality (AU, 2015), provided relatively a considerable attention in the recent national research programs. These include initiation of research related to and guided by the 2015 Ethiopia Livestock Master Plan, which recommends to 'promote herd mobility as a strategy to utilise temporal and spatial variability in the availability of forage'

Accordingly, the national research has challenged and addressed the previously misconceived assumptions and demonstrated the consistency of pastoral resource management (Yimer, 2015). Main challenges are related to issues of governance, resource access (land rights, livelihood and diversification options); climate change (trends of desertification, risks and opportunities). Moreover, enabling environment such as investing in basic infrastructure, services and facilities including utilising ICT microfinance options) and fair market remuneration (pastoral-friendly food and trade policies, rural-urban links) are among others

Hence, these suggested to strength the current research initiatives that could potentially provide evidence based solutions and policies to pastoralism.

Public policy in support of pastoralism

It is evident that the development policies in Ethiopia favour a smallholder farming system over pastoralism. Despite the pastoralists' economic and social significance in Ethiopia, very little consideration is given to pastoralism. All the past and recent pastoral development interventions in Ethiopia were initiated by multilateral organisations (World Bank) and bilateral organisations (USAID).

The 1995 constitution is the first to incorporate pastoralists' issues for the first time in the country.

It also formed a department in the ministry of federal affairs, which coordinates and facilitates development in pastoral areas and set up Pastoralist Affairs Standing Committee in the parliament, which oversees pastoral development activities in the country.

Moreover, the current regime, the constitution of Ethiopia, gives pastoral communities the right to free land grazing, fair use of natural resources, market access and receiving fair price, and not being displaced from their own lands. However, pastoralists have recently faced new problems, including competition for water and pasture, being unrepresented in socio-economic and political activities, ethnic-based conflicts, poverty, and uneven drought and climate changes. The government of Ethiopia began large scale efforts to develop the pastoral areas and initiated different projects. The government of Ethiopia also acknowledges the usefulness of traditional pastoral knowledge in managing pastoral However, its long-term policy resources. advocates for settlement of pastoralists based on development of irrigation. There is a need for more and open dialogue among the policy makers, development facilitators, researchers, pastoral advocacy groups and the pastoral community to bring to the surface implications and appropriateness of the government's long term policy of pastoral settlement.

As the pastoral development policies and strategies seem to state centrally driven, the current nature of pastoralism and pastoral communities' lifestyle is changing in Ethiopia. Therefore, the government needs to develop policies and strategies based on local customs and practical knowledge.

Pastoralism and rangeland management

Pastoralists optimise the dry land's resources by practicing a mobile and extensive livestock-keeping system. They use mobility as a strategy to respond quickly to fluctuations in resource availability. They usually move according to where and when pasture becomes available, dictated by the dry lands' scarce and unpredictable rainfall and use different herd management

strategies such as herd splitting, herd diversification and herd maximisation to ensure that they spread the risk of livestock loss from droughts, diseases and theft. To safeguard their herds against drought, floods, pasture and soil degradation, disease and social unrest, they use the available vegetation without degrading the environment.

Pastoralists in Ethiopia have traditional institutions and organisations which guide the pastoral production and way of life to be sustained. These economic, social and political institutions facilitated the ownership, and management of resources, including rangeland, resolution of conflict, sharing and redistribution of wealth, and governance.

The pastoral sector in Ethiopia raises the majority of livestock in condition where most of the livestock feed on natural rather than cultivated land which includes 40% of the cattle, 75% of the goats, 25% of the sheep, 20% of the equines, and 100% of the camel found in pastoral areas.

Both pastoralism and smallholder farming are interlinked and depend on each other. For example, 20% of the animal for smallholder farmers, particularly oxen, come from the pastoral area.

Political and economic marginalisation has led to an erosion of the pastoral asset base, mainly their livestock. These structural forces disrupt their mobility routes and access to dry season grazing areas, severely curtailing pastoralists' abilities to move animals to a different pasture, a key mechanism for coping with drought. This is particularly true for poorer pastoralists with smaller herd sizes. Rather than address this marginalisation and reinforce adaptive capacities, there has instead been a focus on providing emergency assistance, which has often been either too late or inappropriate and has further undermined sustainable development in these

Climate change and pastoralism

Pastoralism is practiced mainly on the grasslands

that cover about a quarter of the world's surface (Follet &Reed, 2010). To mitigate climate risk, pastoralism integrates risk management strategies and rational use of drylands mostly found in Africa's vast arid and semi-arid areas. It is manifested by rainfall variability and associated uncertainties in the spatial and temporal distribution of water resources and grazing for animals.

They are heavily impacted by climate changes such as repeated drought. In addition, environmental challenges, infrastructural challenges, recurrent conflict, and threats to livelihood are among other factors that threaten pastoralists' livelihood their adaptive capacity to climate change. To end such vulnerability of the pastoral population, the government put settlement policies in place as an alternative. However, the question remains if settlement to pastoralism is the most feasible system to enhance adaptive capacity of the pastoralists to climate change.

Pastoralists use mobility as a basic strategy for their livelihood development and risk management systems. It is closely associated with mobile herds and with the drylands (Robinson et al.,2011). Although African pastoral ecosystems are ancestral homelands to a substantial portion of the population for whom pastoralism is a traditional way of life, pastoralism is far from static. Pastoralists in many areas are adapting to new economic opportunities and better access to modern means of communication (AU/DREA, 2010).

However, the long years of marginalisation of pastoralist have resulted in a lack of access to productive assets and basic services, dependence on aid, food crises, insecurity and conflict. Moreover, they pushed significantly to shift in natural, socioeconomic and institutional conditions that have resulted in high levels of vulnerability.

International and regional cooperation in support of pastoralism

Pastoralists, that constitute 12% of the Ethiopian population have been neglected and forgotten for

years. Gaps in previous governments' policies and strategies; the attitude that considers pastoralism as a backward livelihood system, without clearly understanding it; practices that restrict mobile pastoralism; and the absence of development plans that were participatory, have been observed as contributing factors to the underdevelopment of the pastoral areas.

Having acknowledged that failing to take pastoral people's way of life and ecology into account in the past is at the root of current problems in pastoral areas, the policy sets out not to repeat the same mistake.

4. KEY RECOMMENDATIONS AND CONCLUSION

Recent agriculture production in Ethiopia has made some progress, but it still needs further transformation to increase crop production in small-scale farming (SSF) systems by adapting to and mitigating climate changes.

As little attention is given to pastoralism, pastoralist adaptation capacity to climate changes and other uncertainties deteriorated over time. In pastoral communities due to, the lack of land, resources, adequate knowledge, and financial and policy support are also the main reasons that contributed to the low adaptive capacity of pastoralists.

Socio-economic importance of SSF and pastoralism in Ethiopia

There is a clear link that exists between agriculture, SSF and pastoralism productivity and poverty reduction in Ethiopia. As smallholder farmers are in some way considered synonymous with Ethiopia agriculture, more attention is given to SSF than Pastoralism.

Therefore, much more must happen for pastoralism to deliver better and inclusive development policies that enhance the adaptive capacity of pastoral areas that account for about 2/3rd of the country's land mass and support 12-15% of the population.

Risk and constraints of SSF and pastoralism

Agriculture: Agriculture in general and farming and pastoralism in particular, are the riskiest and the most complicated businesses. Both small holder farmers and pastoralists have distinct challenges and risks.

Climate: Climate is one issue that can primarily affect crop production and livestock management. Unreliable rainfall can cause agricultural production systems to be unachievable. Many smallholders and pastoral communities depend solely on rain to water their crops and livestock.

The standard and free grazing land in a pastoral area is considered as no-man-land, mostly, their communal land is liable for land grabbing through the expansion of 10 commercialized farming and establishment of national parks.

Limited Technology: Limited technology and education are perhaps the largest difficulties that smallholder farmers and pastoralists in Ethiopia struggle with.

Recommendation

While mitigating the effects of climate change and enhancing the adaptive capacity of smallholder farmers and pastoral communities remains crucial, it is vital to increase agricultural and pastoral production and productivity for SSF and pastoralism. This country profile therefore recommends:

- Provide training, education, and capacity-building for farmers, pastoralists and extension workers; on climate-smart agriculture pastoralism, more evidence and researchbased findings on the impact of climate smallholder change on farmers' production, productivity and livelihood help policymakers provide target extension and advisory services.
- Amplify the relationships with government and regional institutions (political representation, making

- devolution effective) in support of access to resource to look into land rights, climate change, livelihood diversification options, among others.
- Support an enabling environment for investing in basic infrastructure, services and facilities such as innovative ICT and microfinance options including fair market remuneration that are pastoral friendly, food and trade policies, ruralurban links and investments.
- Improving soil quality and restoring degraded and marginal land instead of expanding cropland through deforestation towards pastoral areas.
- As the current nature of pastoralism and pastoral communities' lifestyle is changing, government proactively needs to develop policies and strategies which are based on local customs and practical knowledge of pastoralism.
- Thus, to the extent that development policies promoted by governments and donors restrict mobility, they effectively increase the vulnerability of pastoralists to natural and man-made shocks.
- To end vulnerability of pastoral population, the policy that government put settlement as an alternative policy to promote sedentarism in pastoral area need to be revisited and discussed among the pastoralist communities as settlement may not be the most feasible system for pastoral areas where rainfall is highly variable.
- Moreover, it is important not to forget that dry lands cannot support sustained and reliable agriculture because of low and variable rainfall and high temperatures. Though this government do best as compared to the previous regimes, there is still a need to do more to bring pastoralists themselves to participate in the policy making processes that affect their livelihoods.

- Despite Ethiopia being a signatory for many international and regional convention ad, guidelines on women, like Convention on the Elimination of all Discrimination of Against Women (CEDAW), gender inequalities remain an issue in every sector. If real economic development is envisioned and to be achieved women's contribution to the economy need to be acknowledge, appreciated, and supported. An intensive investigation about women's involvement in the development of SSF and pastoralism will be vital. Hence, the development interventions need to acknowledge the different impact of development outcomes on men and women.
- Moreover, even though agriculture has ample potential to absorb a large number of people, youths tend to stand away from agriculture. Institutional related problems are the main factors affecting the rural youth job creation works in Ethiopia. Therefore, policy issues must revisit the rural job creation strategies from the point of view of its implementation focusing on the interest of youths.
- Ethiopia's land holding system and tenure security have been controversial issues for the last 5 decades. This has to be resolved by activating and enshrining property rights provisions for all Ethiopians; and, putting in place an integrated land administration and governance system is paramount.

REFERENCES

Abduselam Abdulahi Mohamed (2019). Pastoralism and Development Policy in Ethiopia: A Review Study. Department of Agricultural Economics and Agribusiness. Budapest International Research and Criticts Institute-Journal. 2(4) Management, Kebri Dehar University, Kebridahar, Ethiopia

AU-DREA. African Union, Department of Rural Economy and Agriculture (2010). Policy Framework for Pastoralism In Africa: Securing, Protecting and Improving the Lives, Livelihoods and Rights of Pastoralist Communities. www.africa-union.org

AU. African Union. (2015). Policy framework for pastoralism in Africa: Securing, protecting and improving the lives, livelihood and rights of pastoralist communities. Department of Rural Economy and Agriculture. Addis Ababa, Ethiopia

Boserup.E.1970 Women's Role In Economic Development: Allen Union London.D aniel Haile 1984 Legal Status of Ethiopian Women in Agricultural Development, Hawassa, Ethiopia

Bure C. 1998. The package extension approach and small holders, farmers arm productivity in high potential areas of Ethiopia: the case of Shashemene area. Ethiopia: Alemaya University;

Dessalegn Rehmeto T (2000). The Peasant and the State: Studies in Agrarian Change in Ethiopia 1950s-2000s.. Addis Ababa University

Diriba Welteji. (2018). A critical review of rural development policy of Ethiopia: access, utiliation and coverage. Agriculture and Food Security Vol 7 (55).

Follet, R.F., and D.A. Reed (2010). Soil carbon sequestration in grazing lands: Societal benefits and policy implications. Rangeland Ecology & Management 63:1, 4–15

International Labour Organisation (2021).
Promotion of Decent Work in Agribusiness,
ProAgro Ethiopia Project, International Labour
Organization (ILO), Geneva, Switzerland, 2021,

Kassa Tarekegn, Kusse Kamaylo, Duge Galts, and Endrias Oyka. (2022). Youth participation in agricultural enterprises as rural job creation work and its determinants in Southern Ethiopia. Advance in Agriculture.

Kassa B. (2003). Agricultural extension in Ethiopia. The case of participatory demonstrations and training extension system. J Soc Dev Africa.;18(1):49–83

Lemlem TekleGiorgis Habtemariam, Markus Gandorfer, Getachew Abebe Kassa and Alois Heissenhuber. (2016). Factors Influencing Smallholder Farmers' Climate Change Perceptions: A Study from Farmers in Ethiopia. Environmental Management volume 58, pages343–358

Lemma T, Beyene F. (2000). Assessment of effectiveness of extension program in Haraghe highlands: the case of maise-extension package a research project. Department of Agricultural Extension;

Moa Alemayehu (2019). The role of women in Agricutural economy in Ethiopia: The cas of Alira woreda in Western Wollega zone, Oromia regional state. International Journal of Sociology and Anthropology Research. Vol 5(5) 15-27 Online ISSN: ISSN 2059-121

Mohammed Yimer (2015). Pastoral Development Pathways in Ethiopia; the Policy Environment and Critical Constraints. Policy Brief. Department of Civic and Ethical Studies, College of Social Sciences and Humanities, Arba Minch University.

Tagel Gebrehiwot and Anne van der Veen (2013). Farm Level Adaptation to Climate Change: The Case of Farmer's in the Ethiopian Highlands. Environmental Management volume 52, pages29–44 (2013)

T. Moreda, B. Panchugopal, and R. Guta. (2017). "Factors affecting youth participation in micro and small agribusiness: the case of Kuyyu district, North Shewa zone of Oromia Regional State, Ethiopia," International Journal of Research in Economics and Social Sciences, vol. 7, no. 11, pp. 1–12, 2017

Y. Mastewal, T. Tewodros, S. Herman, A. Addisalem, and K. Selome, (2020). "Policies and interventions for rural youth employment in Ethiopia: a synthesis of literature review," Realising Sustainable Agricultural Livelihoods Security in Ethiopia (BENEFIT-REALISE) Program,