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Report No: PAD4750

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT
ON A PROPOSED

CREDIT TO THE REPUBLIC OF DJIBOUTI IN THE AMOUNT OF US$ 2.5 MILLION
CREDIT TO THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA IN THE AMOUNT OF US$115 MILLION
GRANT TO THE FEDERAL REPUBLIC OF SOMALIA IN THE AMOUNT OF US$70 MILLION
CREDIT TO THE REPUBLIC OF KENYA IN THE AMOUNT OF US$140 MILLION

GRANT FROM THE GLOBAL RISK FINANCING FACILITY (GRIF) TO THE PTA REINSURANCE COMPANY (ZEP-RE) IN THE AMOUNT OF US$28 MILLION

GRANT FROM THE HORN OF AFRICA MULTI-DONOR TRUST FUND TO THE REPUBLIC OF DJIBOUTI IN THE AMOUNT OF US$5 MILLION

FOR A

DE-RISKING, INCLUSION AND VALUE ENHANCEMENT OF PASTORAL ECONOMIES IN THE HORN OF AFRICA PROJECT

{RVP/CD CLEARANCE DATE}
{Finance, Competitiveness And Innovation Global Practice}
{Africa East Region}

CURRENCY EQUIVALENTS

(Exchange Rate Effective {Oct 13, 2021})

Currency Unit	=	
	=	US$1
US$	=	SDR 1

FISCAL YEAR
January 1 - December 31

Regional Vice President:	Hafez M. H. Ghanem
Country Director:	Boutheina Guermazi
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Task Team Leader(s):	Caroline Cerruti, Evie Calcutt, Bisrat Mekonnen, Sonia Plaza

ABBREVIATIONS AND ACRONYMS

AfDB	African Development Bank
ARC	African Risk Capacity
Boresha	Building Opportunities for Resilience in the Horn of Africa
CBA	Cost-benefit analysis
CBR	Cost-to-Benefit Ratio
CIGs	Common Interest Groups
CFF	Challenge Fund Facility
CGAP	Consultative Group to Assist the Poor
CLE	Centre Pour le Leadership et l'Entreprenariat
COMESA	Common Market for Eastern and Southern Africa
DFIL	Disbursement and Financial Information Letter
DIRISHA	Drought Index-insurance for Resilience in the Sahel and Horn of Africa
DRFIP	Disaster Risk Financing and Insurance Program
EAFS	External Assistance Fiduciary Section
E&S	Environmental and Social
ESCP	Environmental and Social Review Commitment Plan
ESRS	Environmental and Social Review Summary
ESMF	Environmental and Social Management Framework
ESMS	Environmental and Social Management System
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FCDO	Foreign, Commonwealth and Development Office of the United Kingdom
FCV	Fragility, Conflict and Violence
GBV	Gender Based Violence
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GRID	Green, Resilient and Inclusive Recovery
GRiF	Global Risk Financing Facility
GRS	Grievance Redress Service
GSMA	Groupe Speciale Mobile Association
HIPC	Highly Indebted Poor Countries
HoA	Horn of Africa
HSNP	(Kenya) Hunger Safety Net Programme
IBLI	Index-Based Livestock Insurance
ICT	Information and Communication Technology
IDA	International Development Association
IFAD	International Fund for Agricultural Development
IFR	Interim Financial Report
IGAD	Intergovernmental Authority on Development
ILRI	International Livestock Research Institute
IMF	International Monetary Fund
INDC	Intended Nationally Determined Contributions
IPCC	Intergovernmental Panel on Climate Change
KCSAP	Kenya Climate-Smart Agriculture Project

KDC	Kenya Development Corporation
KLIP	Kenya Livestock Insurance Program
LLRP	(Ethiopia) Lowlands Livelihood Resilience Project
LUCF	Land-Use Change and Forestry
MOA	Ministry of Agriculture of Ethiopia
M&E	Monitoring and Evaluation
MFIs	Microfinance Institutions
MoALFC	Ministry of Agriculture, Livestock, Fisheries and Cooperatives of Kenya
MoTRI	Ministry of Trade and Regional Integration of Ethiopia
MoU	Memorandum of Understanding
NARIG	National Agricultural and Rural Inclusive Growth Project
NBE	National Bank of Ethiopia
NDC	Nationally Determined Contributions
ND-GAIN	Notre Dame Global Adaptation Initiative
NDVI	Normalized Difference Vegetation Index
NGOs	Non-Governmental Organizations
NQIDP	National Quality Infrastructure Project
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
PDO	Project Development Objective
PCE	Private Capital Enabled
PCM	Private Capital Mobilization/Mobilized
PIM	Project Implementation Manual (operations manual)
PIU	Project Implementation Unit
PPP	Public Private Partnership
PSC	Project Steering Committee
PSNP	Productive Safety Net Program
PTC	Project Technical Committee
RRA	Risk and Resilience Assessment
RPLRP	Regional Pastoral Livelihoods Resilience Project
(RU)SACCOs	(Rural) Saving and Credit Cooperatives
SDL	State Department of Livestock of Kenya
SIIPE	Satellite Index Insurance for Pastoralists in Ethiopia
SoBs	Somalia Bureau of Standards
SOE	Statement of Expenditure
SomReP	Somalia Resilience Program
SPV	Special Purpose Vehicle
SQCC	Somaliland Quality Control Commission
TLU	Tropical Livestock Units
USAID	US Agency for International Development
VMGs	Vulnerable and Marginalized Groups
VSLAs	Village Savings and Lending Associations
WBG	World Bank Group
WFP	World Food Program
WTO	World Trade Organization

TABLE OF CONTENTS

DATASHEET

BASIC INFORMATION

Country(ies)	Project Name	
Djibouti, Ethiopia, Kenya, Somalia	De-risking, inclusion and value enhancement of pastoral economies in the Horn of Africa	
Project ID	Financing Instrument	Environmental and Social Risk Classification
P176517	Investment Project Financing	Substantial

Financing & Implementation Modalities

[ ] Multiphase Programmatic Approach (MPA)	[ ] Contingent Emergency Response Component (CERC)
[ ] Series of Projects (SOP)	[✓] Fragile State(s)
[ ] Performance-Based Conditions (PBCs)	[ ] Small State(s)
[ ] Financial Intermediaries (FI)	[✓] Fragile within a non-fragile Country
[ ] Project-Based Guarantee	[✓] Conflict
[ ] Deferred Drawdown	[ ] Responding to Natural or Man-made Disaster
[ ] Alternate Procurement Arrangements (APA)	[ ] Hands-on Enhanced Implementation Support (HEIS)

Expected Approval Date	Expected Closing Date
21-Apr-2022	31-Dec-2027
Bank/IFC Collaboration	Joint Level
Yes	Complementary or Interdependent project requiring active coordination

Proposed Development Objective(s)

The project development objectives are to enhance pastoralists' access to financial services for drought risk mitigation, include them in the value chains, and facilitate the livestock trade in the Horn of Africa

Components

Component Name	Cost (US$, millions)
Package of financial services for climate resilience	184.00
Livestock Value Chains and Trade Facilitation	175.00

Organizations

Borrower:	Ministry of Finance National Treasury and Planning Ministry of Finance Ministere des Finances
Implementing Agency:	Ministry of Trade and Regional Integration Centre Pour le Leadership et L'entreprenariat Ministry of Finance State Department of Livestock

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	432.50
Total Financing	432.50
of which IBRD/IDA	327.50
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	327.50
IDA Credit	257.50
IDA Grant	70.00

Non-World Bank Group Financing

Trust Funds	33.00
Disaster Risk Financing and Insurance	28.00

Horn of Africa Initiative Umbrella Trust Fund	5.00
Commercial Financing	72.00
Unguaranteed Commercial Financing	72.00

IDA Resources (in US$, Millions)

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount
Djibouti	2.50	0.00	0.00	2.50
National PBA	2.50	0.00	0.00	2.50
Ethiopia	115.00	0.00	0.00	115.00
National PBA	38.00	0.00	0.00	38.00
Regional	77.00	0.00	0.00	77.00
Kenya	140.00	0.00	0.00	140.00
National PBA	47.00	0.00	0.00	47.00
Regional	93.00	0.00	0.00	93.00
Somalia	0.00	70.00	0.00	70.00
National PBA	0.00	23.00	0.00	23.00
Regional	0.00	47.00	0.00	47.00
Total	**257.50**	**70.00**	**0.00**	**327.50**

INSTITUTIONAL DATA

Practice Area (Lead)

Finance, Competitiveness and Innovation

Contributing Practice Areas

Agriculture and Food, Fragile, Conflict & Violence, Social Protection & Jobs

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	High
2. Macroeconomic	High
3. Sector Strategies and Policies	High
4. Technical Design of Project or Program	High
5. Institutional Capacity for Implementation and Sustainability	High
6. Fiduciary	High
7. Environment and Social	Substantial
8. Stakeholders	High
9. Other	
10. Overall	High

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

[ ] Yes [✓] No

Does the project require any waivers of Bank policies?

[ ] Yes [✓] No

Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Relevant
Cultural Heritage	Not Currently Relevant
Financial Intermediaries	Relevant

NOTE: For further information regarding the World Bank's due diligence assessment of the Project's potential environmental and social risks and impacts, please refer to the Project's Appraisal Environmental and Social Review Summary (ESRS).

Legal Covenants

Conditions

Type	Financing source	Description
Effectiveness	Trust Funds, IBRD/IDA	The Recipient and the Project Implementing Entity have adopted the Part 1 Project Implementation Manual in accordance with the provisions of Section I.___ of Schedule 2 to this Agreement.
Type	Financing source	Description
Effectiveness	Trust Funds, IBRD/IDA	The Recipient has adopted the Part 2 Project Implementation Manual in accordance with the provisions of Section I.___ of Schedule 2 to this Agreement.

Type	Financing source	Description
Effectiveness	Trust Funds, IBRD/IDA	The Subsidiary Agreement between the Recipient and the Project Implementing Entity has been [executed and delivered] in accordance with the provisions of Section I.___ of Schedule 2 to this Agreement.

I. STRATEGIC CONTEXT

A. Country Context

1. **The Horn of Africa (HoA) is amongst the poorest and most fragile regions in the world**. The HoA includes the eight countries that are members of the Intergovernmental Authority on Development (IGAD). Most countries in the HoA are poor and extreme poverty is significant in the border regions. One third of the population lives below 1.9 dollar a day.[1] At the close of 2018, the countries in the HoA were hosting 3.9 million refugees or people living in refugee-like situations; and an estimated 8.95 million were internally displaced people. There is a high and rising level of undernourishment in the region, amounting to 27 percent of the regional population and expected to grow to 34 percent by 2030 (FAO).

2. **Several countries have come together to strengthen regional cooperation and address global challenges within the "Horn of Africa Initiative"**. These are Djibouti, Eritrea, Ethiopia, Kenya, Somalia and Sudan with a total area of around 2.5 million square kilometers, a population of 230 million and a combined gross domestic product (GDP) of around US$243 billion.[2] The Initiative is supported by the African Development Bank (AfDB), the European Union (EU) and the World Bank Group (WBG). Over 70 percent of the population lives in rural areas, where poverty is concentrated. As per available estimates, the population of the five countries is expected to grow to around 250 million by 2030. The sub-region has shared social and ethnic kinship, historical trade, and cultural affiliations with the rest of the world and has some of the oldest and complex civilizations. The proposed project will cover Djibouti, Ethiopia, Kenya, and Somalia.

3. **The HoA has vast rangelands, with a large pastoral and agro-pastoral population**. In the eight HoA countries, one fifth of the total population is made up of pastoralists or agro-pastoralists, i.e., around 50 million people (Table 1). Their main source of livelihood is the rearing of livestock, mostly in open grazing rangelands in the semi-arid areas. These rangelands cover most of the land mass in the region (Figure 1).

4. **Pastoralists are among the poorest population groups in the HoA countries**. For example, in Kenya, pastoralist communities score far lower than the country average across the board for all development indicators. In Somalia, the nomadic regions where most pastoralists reside has a staggering 99 percent of people classified as cash income poor. In Ethiopia, the poverty headcount ratio in pastoral areas was 27 percent in 2016.

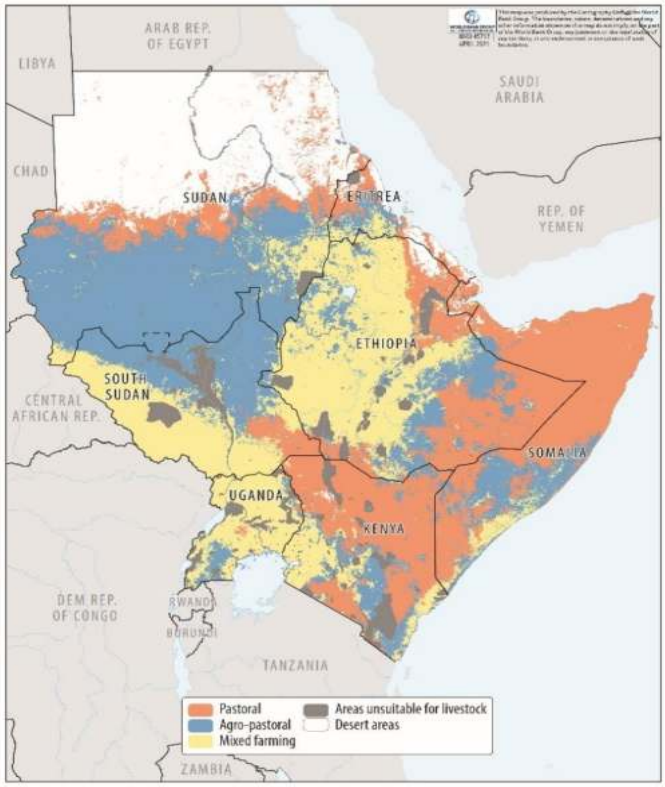
5. **The region is exposed to disasters, amplified by climate change, and recurrent severe droughts are a key factor to poverty and conflicts in pastoral economies (Annex 2)**. From 2008 until 2011, a series of large-scale droughts hit the HoA countries. The 2011 drought was particularly severe and led to major humanitarian interventions in Djibouti, Ethiopia, Kenya, Somalia and the Karamoja region of Uganda – over 10 million people required urgent food assistance (OCHA 2011). Prices for food rose significantly, e.g., grain prices in Kenya were 30-80 percent higher than average. From 2015 until 2017, another series of severe droughts hit the region. The 2015 one was induced by the El Niño weather phenomenon and was immediately followed in 2016 by a La Niña-type drought event. By July 2017, close to 20 million people were facing acute food insecurity (USAID, 2017). Droughts degrade rangelands, deplete livestock, and lead to underinvestment. Underinvestment lowers pastoral productivity and holds pastoralists in a poverty trap. Pastoralists move across national and clan borders in search of greener pastures and the pressure on scarce resources

[1] Horn of Africa Regional Economic Memorandum (HoA REM), 2021.
[2] WB 2020. Sudan joined the initiative in mid-2021 however the current political situation may undermine their participation.

exacerbates conflicts. The cross-border competition for scarce natural resources is highlighted as a key driver of fragility in the HoA Risk and Resilience Assessment (RRA). Countries in the region are exposed to other shocks but droughts have historically impacted significantly more people than any other disaster event (Figure 2). Early financial response to drought in Ethiopia, Kenya and Somalia would have saved $1.6 billion in humanitarian response and nearly $2.5 billion in avoided losses over a period of 15 years (USAID, 2018).

6. **Pastoralists have generally coped with drought through mobility and increasing herd size of low-quality animals, which dampens productivity and has contributed to rangeland degradation in some areas**. About 29 percent of the total land area in Ethiopia and 40 percent in Kenya is classified as degraded. However, such degradation is caused by growing population numbers, land use for economic development, and climatic impacts. It is particularly severe in northern, central, and northeastern regions of Ethiopia, with denser population causing increased pressure on natural resources; and in the central and western areas of Kenya due to more intense agricultural production.[3]

Figure 1: Rangelands in the HoA



Source: Adjusted from Cecchi et al (2010)

Table 1: Pastoral population in the HoA

Country	Total pop (million)	Of these pastoralists (%)	Total pastoralists (million)
Djibouti	0.9	45%	0.4
Ethiopia	98.1	15%	14.7
Eritrea	5.2	13%	0.7
Kenya	44.3	10%	4.4
Somalia	11.1	60%	6.7
South Sudan	12.2	60%	7.3
Sudan	40.9	20%	8.2
Uganda	40.1	23%	9.2
Total	**252.8**		**51.6**

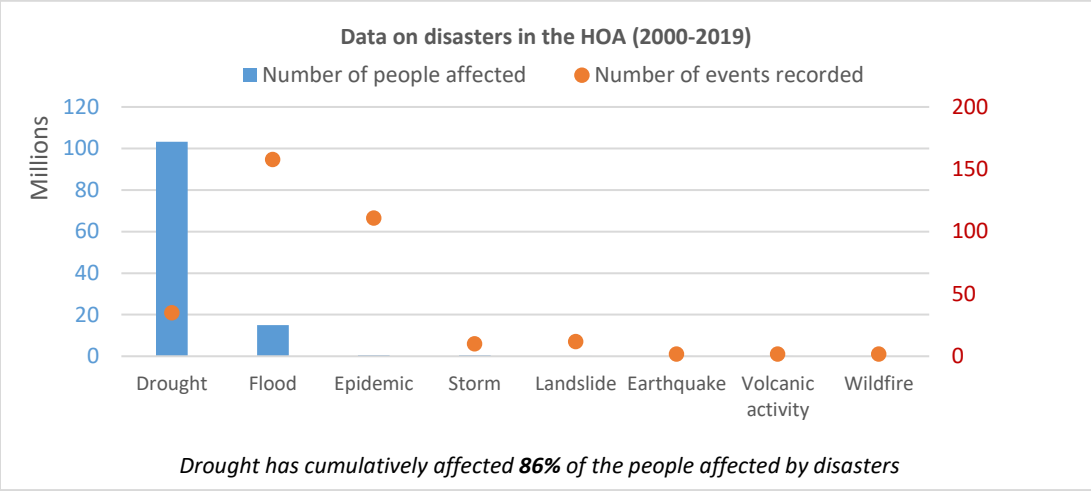
Table 2: Socio-economic indicators in the HoA

Country	Ag employment (%)	Rural pop (%)	Livestock contribution to GDP	Livestock contribution to Ag GDP
Djibouti	10	22	3.1	82.2
Eritrea	57	N.A.	15-17	35-49
Ethiopia	83	79	16.5	35.6
Kenya	60	72	12	42
Somalia	71	54	40	88.2
South Sudan	87	80	21 (former Sudan)	60 (former Sudan)
Sudan	75	65		
Uganda	72	76	5.2	18
Average	**65**	**64**	**16**	**53**

Source: DIRISHA Study (2021)

[3] Drought Index-insurance for Resilience in the Sahel and Horn of Africa -DIRISHA- study 2021.

Figure 2: Cumulative number of events / people affected by disaster events in 8 HoA countries



Source: www.emdat.be

B. Sectoral and Institutional Context

7. **The economies of countries in the HoA are highly dependent on pastoralism and livestock production as a source of livelihoods, income, and contribution to GDP**. In most countries, livestock contributes considerably more than one third of agricultural GDP (in Djibouti and Somalia more than 80 percent; average 53 percent for all countries – Table 2), and pastoralists are the main source of meat and milk products. Ethiopia has the largest national livestock herd in Africa with an estimated 128.6 million head of animals in 2018, followed by Sudan (108.8 million animals). Somalia has the largest camel population in the world. Kenya and Uganda also have large livestock herds.

8. **The impacts of the COVID-19 pandemic have been severe and compounded by other shocks**. According to in-country livestock experts, the main impact have been: (i) restrictions on mobility and market closures leading to reduced access to livestock inputs such as vaccines and veterinary services - as per a Mercy Corps study of Somali region in Ethiopia, livestock-keeping households lost about 20-40 percent of their income between March and May 2020 as markets were closed; (ii) border closures leading to restricted options for pastoralists to sell their animals to international markets; (iii) rising food prices; and (iv) reduced provision of agricultural extension services. The impacts of COVID-19 have been exacerbated by the locust invasions and poor rains in 2021.

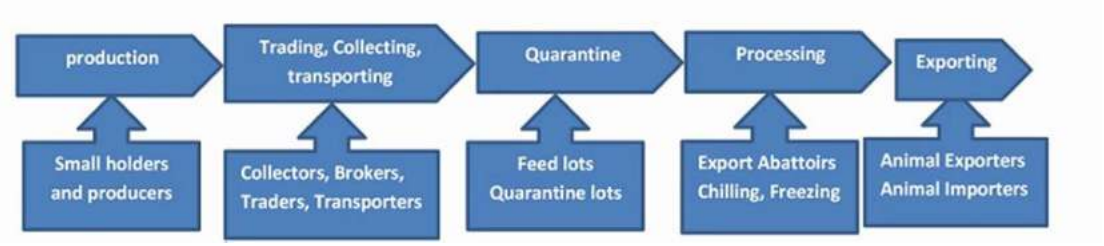
9. **The regional livestock trade is significant but mainly unrecorded and focused on live animals**. Livestock trade represents one of the few economic success stories in the Horn of Africa (Little, 2020). Annual exports from the Horn are estimated at close to US$ 1 billion.[4] Around 50 to 60 percent of livestock from northern Somalia (including Somaliland) are informally sourced from Ethiopia and they often follow trade corridors based on clan relations. This informal cross-border trade is vital to the formal export business in Somalia, which exports more than four million live animals in some years. The destination market is mainly the Middle East and is concentrated in the annual Haj season. The trade also contributes to a large import business, as many export traders either sell foreign exchange to importers or themselves import food, clothes and other products through Somali ports. Export trade is an important contributor to food security as the foreign exchange is used to import a range of consumer goods, especially food. Many of these products are then informally traded across the border to Ethiopia and to a lesser extent Kenya.

[4] This data includes exports from Sudan.

Economic factors (cost, custom compliance, waiting times, lack of foreign exchange in formal channels) are considered the main driver of informal trade, but there are also infrastructure, social and institutional factors. This trade is highly vulnerable to disease outbreaks.

10. **The livestock value chains are dominated by traders, with limited benefits going to the pastoral producers**. Livestock sales are often influenced by ethnic and family ties, due to the uncertain business environment, the absence of formal systems of credit enforcement, weak infrastructure, limited market support services and prevalent insecurity in pastoral areas (HoA REM, 2021). This is especially the case in Somalia. Pastoral producers are at the bottom of these market chains (Figure 3) and because of grazing needs for their herds, are often distant from key market centers, where they could benefit from higher prices and be less vulnerable to opportunistic middlemen. Beyond problems of special access and high numbers of intermediaries, other reasons explain the limited value derived by producers selling live animals, including: (i) lack of quality infrastructure to trace livestock and ensure standards; (ii) limited resources for disease control; (iii) transport systems (trucking or trekking) which stress animals and lower their weights and thus the price fetched at livestock markets; (iv) poorly timed sales due to lack of feed and food during drought means selling livestock when prices are lowest, rather than selling when rains and livestock prices are good – as a result the quality of the livestock sold does not meet exporters' requirements without the use of holding grounds; (v) lack of public livestock price information resulting in an asymmetry of information between traders and producers (e.g. in Kenya the Garissa livestock market's prices are reportedly double what is offered to the pastoralists). Some of those reasons can be addressed by services and infrastructure, but others are deeply rooted in longstanding selling and marketing practices.

Figure 3: Steps in the livestock value chain (meat and live animals)



Source: Ethiopia Logistics Trade Council

11. **Women are highly engaged in the pastoral economy, as laborers, consumers, and producers, both for markets and their households**. Despite the important role of women in rural economies, few services and solutions respond specifically to their needs and ambitions. Only around 7 percent of extension resources target women and 14 percent of donor resources target smallholder women farmers — provision far less than their proportion of the market. Women are highly vulnerable to climate change, further underlining the importance of improving the resilience of their livelihoods. Due to gendered social norms, and compared to men, women have less mobility, rights, and access to resources, as well as lower access to social capital, productive resources, and technology, affording them less capacity to adapt and diversify their livelihoods. But access alone is not enough; rural women must also get equitable returns from labor and markets. Service providers have opportunities to add value to rural women's lives and livelihoods.[5]

12. **Access to formal financial services and credit for pastoral producers is limited**. Financial institutions operate in pastoral areas, although the main branches are located in urban centers and located far from rural

[5] Consultative Group to Assist the Poor, Strategy on Women in Rural and Agricultural Livelihoods, 2021.

livestock markets. In Kenya, Equity bank, Cooperative Bank, KCB and NBK have established branches in Lodwar, Marsabit and West Pokot. Microfinance institutions (MFIs), SACCOs, mobile and agent banking operate in the pastoral areas of Kenya, Ethiopia and Somalia. Pastoralists participate in Village Savings and Lending Associations (VSLAs) to mobilize their savings and use safe boxes. However, they have limited access to credit from formal financial institutions due to the lack of collateral, lack of commercial business, lack of identification, and difficulty to follow loan defaulters. Poorly timed sales and exposure to drought are a limit to creditworthiness. Pastoral land is communal and cannot be charged as collateral. Pastoralist surveys undertaken during project preparation show that 17 percent of men and 6 percent of women surveyed borrow.

13. **Recent technological advances have made it possible for financial services to reach pastoralists in a more accurate and timely way**. Financial sector laws in Ethiopia, Kenya and Somalia are supportive of mobile payments. The Central Bank of Somalia recently licensed the two largest mobile money providers (Homuud and Somtel). Pastoralist surveys show that while the lack of physical presence of formal financial institution is an impediment to save in pastoral regions, about 40 percent of pastoralists own a mobile phone, and 44 percent of women-headed households save through mobile money. Drought index insurance, using satellite data and mobile accounts to provide quick payouts to pastoralists when the level of pasture falls below a certain level, has been successfully piloted in Ethiopia and Kenya and does not require loss adjusters like traditional insurance.

14. **Livestock value chains face a myriad of challenges depending on the country**. In Somalia, the entire system of quality infrastructure to trace livestock and ensure consistency of quality standards is missing which contribute to lower prices for Somalia livestock exports as importing countries need to do additional checks. The Somalia Bureau of Standards was launched in March 2021 with the mandate to address these issues and needs support to establish robust quality infrastructure and promote exports through standards harmonization. In Kenya, there is a disconnect between pastoralists and the end markets, with limited information on livestock prices at different levels, including final destination, and a lack of proper infrastructure; furthermore, many cattle breeds of pastoralists are not adapted to export markets, the exception being the Boran breed of Ethiopian/northern Kenya which is in high demand internationally. Formal live animal exports from Ethiopia, especially cattle, have decreased in recent years resulting in a loss of export earnings. Ethiopian export abattoirs have difficulty in sourcing livestock from pastoral areas which meet export requirements. Djibouti has invested in a brand-new livestock port terminal with capacity to export 2.5 million heads per year, which operates at 16 percent capacity since the logistics to bring in and handle livestock in sufficient quantity to load ships are yet to be addressed.

15. **While at the global level, livestock is an important contributor to Greenhouse Gas Emissions (GHG), the situation is more nuanced in the Horn of Africa, where pastoralism is the dominant livestock production system (Annex 3)**. HOA countries rank amongst the lowest GHG emitters in the world (both in absolute value and per capita). Furthermore, evidence tends to show that pastoralism is inherently more sustainable than high-input, fossil fuel-dependent, intensive, contained livestock production systems. Alternative activities for local communities are often detrimental to the environment (coal mining, poaching, charcoal burning etc.). If extensively grazed livestock are removed, it is not clear what replaces them. Many imagine the return of a 'wild' ecosystem, but numerous studies show that wildlife and termites in 'natural' systems may produce equivalent emissions, if not more. As a result, the most pressing concern regarding pastoralism in the HOA is more one of adaptation than mitigation.

16. **The project will support the climate adaptation of pastoralists and help them extract greater value addition from their livestock.** It will protect them against drought with enhanced access to financial services, strengthen their inclusion in the livestock value chain, and facilitate the regional livestock trade**.** Under Component

1, the uptake of savings and insurance products through digital channels will help pastoralists sustain their core breeding stock during droughts, reduce income losses and overgrazing (as pastoralists receive insurance payouts to buy fodder in times of severe drought, and do not need to increase herd size in anticipation of drought-related losses). As a result of its support to adaptation, the project achieves Climate Co-Benefits of 57 percent. Under Component 2, the project will upgrade the livestock value chain with better quality infrastructure to enhance the process of "moving up" the value chain from live animals to livestock products, and with trade facilitation and improved logistics. It will link pastoralists to traders and processors through market contracts and improve the quality of the livestock sold. The project will not support industrial livestock production, and will aim to enhance the value of pastoralist grass-fed livestock. Organized pastoralist groups with regular livestock sales and protection against drought will be more attractive to credit institutions, and access to credit will enhance productivity by enabling pastoralists to invest in livestock related businesses. To ensure the sustainability of the intervention, the project aims to mobilize private investments into the livestock value chain that will create reliable markets and stable prices for pastoralists.

17. **The project will complement various on-going interventions on physical and social resilience to strengthen the financial resilience of pastoralists**. Annex 4 provides a snapshot of interventions that enhance the provision of water, fodder, and animal health services in pastoral areas, increase the awareness to shocks with early warning systems, support better rangeland management and business development services to pastoralist groups. The WBG has ongoing operations benefitting pastoralists.[6] The HoA Initiative presents an integrated approach to support resilience in pastoral areas by ensuring access to groundwater (Groundwater project P714867), protecting against pest and transboundary diseases (Locust project P173702) and supporting pastoral production systems (AfDB project on food security). DRIVE will complement the above interventions with access to financial services, mobilization of private sector investment and trade facilitation, and target groups of vulnerable pastoralists who are interested in actively engaging in livestock production for trade in the locations already supported by other development partners.

18. **The project is designed as a regional intervention to benefit from economies of scale, specialization, and to support trade, so that countries gain higher value than each acting alone** (Box 1). Pastoralism is regional in nature, as herders reside along country borders and move within the neighboring countries as they search for pasture and water. The challenges faced by pastoralists in neighboring countries are identical requiring the same solutions. De-risking pastoralists with financial services such as drought insurance requires scale, technical capacity, and engagement with international markets to place the risk. Under Component 1, the setting up of a regional platform of services will lower the operational and premium costs, as well as acting as a public good allowing other countries to join when ready. Quality infrastructure requires costly investments into equipment (laboratories) and skills, and for a country like Somalia which has just created its standards agency, it makes sense to leverage on neighboring countries' capacity and experience. Regional collaboration also supports harmonization of standards and formal trade among the participating countries. Key livestock value chains (corridors) are also regional, and many pastoralist groups and traders already work across multiple borders (for examples, Somalis and Borana). All HoA countries are exporting livestock to the same countries in the Middle East and have an interest in addressing non-tariffs barriers and marketing collectively. The project will help HoA countries harmonize the implementation of strong quality assurance standards on livestock and livestock products.

[6] Regional Pastoral Livelihoods Resilience Project, Ethiopia Lowlands Livelihood Resilience Project, Kenya's Climate Smart Agriculture, National Agriculture Inclusive Rural Growth Projects, Kenya Social and Economic Inclusion Project, the Somalia Social Protection Support Project, and Strengthen Ethiopia's Adaptive Safety Net Project.

Box 1: Why a regional approach?

There are three main reasons for a regional approach:

***i. Peace building**: During drought, pastoralists cross borders, placing increased pressure on scarce resources which can in turn increase the risk of conflict. Through Component 1, pastoralists would be incentivized to save and receive insurance payouts in case of severe droughts to provide fodder and other inputs for their livestock during the early stage of drought, reducing resource competition, overgrazing, and tensions between pastoral communities.*

***ii. Risk pooling**: Component 1 will be implemented by a regional entity, to develop and share a risk market platform, creating economies of scale and reducing operational costs for countries. Discussions with (re)insurers highlighted that to achieve a more competitive placement of the risk, a higher volume of premium is needed. Thus, by coming together to pool risk and approach the (re)insurance market together, the national insurers will achieve reinsurance capacity at a lower price point, improving the financial sustainability of the insurance solution. Achieving this scale would also attract more interest from local financial institutions to provide payment and savings services to beneficiaries. The regional implementer could ensure a more efficient and transparent management of premiums and payouts and support private financial institutions in markets with underdeveloped financial services. Drought is a covariate risk, which may affect large parts of a country, hence the value of a regional approach as reinsurers can use the principle of diversification to offer a reduced price for this risk given the limited correlations with other African and global regions.*

***iii. Quality Infrastructure and Trade**: Modern quality infrastructure can be costly (e.g., testing laboratories, traceability systems etc.), and therefore it makes sense to optimize it along the livestock trade corridors (e.g. by having a single digital certificate from the quarantine centers to the livestock port terminal, and valid at the border post; or by specializing laboratories on processes undertaken for several countries). The live animal trade is eminently regional, and any improvement in logistics requires cross-border coordination. Harmonizing standards on livestock and livestock products through mutual recognition agreements and strengthening the capacity of standards agencies to perform quality assurance will support trade.*

Through a regional approach and its design, the project supports a vital sector for livelihoods in a Fragility, Conflict and Violence (FCV) context, contributes substantially to Climate Co-Benefits, mobilizes private capital and support strong gender outcomes, leveraging technology for financial services and market access.

C. Relevance to Higher Level Objectives

19. **The project is strongly aligned with the Africa Regional Integration Strategy**.[7] The strategy highlights the importance of leveraging the private sector for investing in regional value chains along key economic corridors and underscored the development of functioning regional markets as part of the strategic priorities. The project supports Pillar 2 on *Promoting Trade and Market Integration - Strengthening of selective regional value chains.* It develops the regional livestock value chain with improvements in quality through trade facilitation and logistics, quality infrastructure and risk mitigation arrangements. It also supports Pillar 4 on *Reinforcing resilience – agropastoralism*. The uptake of savings and insurance products will build the climate resilience of pastoralists and the improved connection to markets will enhance their incomes.

20. **The project is consistent with the FCV strategy to address long-term drivers of fragility such as climate change**.[8] It is well aligned with the priority recommendations outlined in the 2021 Horn of Africa RRA, particularly on supporting regional responses to FCV challenges and adopting multipronged approaches to tackle prevention and resilience.

[7] World Bank Group, Africa Regional Integration and Cooperation Assistance Strategy Update for FY21-FY23 Period, December 2020.
[8] World Bank Group Strategy for Fragility, Conflict, and Violence 2020–2025.

21. **The project supports the Green, Resilient and Inclusive Development (GRID)**. The GRID approach posits that poverty and climate change are interrelated and need to be addressed simultaneously and systematically. Component 1 leverages digital and satellite technology to help pastoralists adapt to climate change and to reduce their exposure to climatic uncertainty. Instead of relying on humanitarian assistance which arrives too late, pastoralists will receive insurance payouts at the onset of drought allowing them to purchase supplies to keep their animals alive or draw on their savings facilitated under the project for smaller shocks. The entire Component 1 is expected to generate adaptation climate Co-Benefits. Component 2 will facilitate private investment into the livestock value chains with seed capital and one bidding criteria will be climate adaptation or mitigation benefits. Through both components, pastoralists would be able to extract more value from their livestock, have access to reliable markets, reducing the need to maintain large herds, and the associated risk of overgrazing.

22. **The project contributes to the Private Capital Mobilization (PCM) agenda**. Component 1 leverages the capital of international reinsurers and local insurers by transferring to those the risk of drought faced by countries and pastoralists. Component 2 will aim to mobilize private capital in the regional livestock value chains from private firms, by providing seed capital to private investment when such investment makes commercial sense but is inherently risky given the target groups it seeks to benefit (pastoralists and agro-pastoralists). Component 2 is accounted for as PCM in the total project costs, and Component 1 reflected as Private Capital Enabled.

23. **Finally, the project complements the IFC HoA Livestock Sector Approach**. IFC has developed a regional strategy for the HoA to create markets for livestock and livestock products, with a focus on red meat. The Bank and IFC teams are collaborating on several initiatives under this project, using ongoing IFC advisory activities or investments to inform the public investments or financial support required to mobilize private capital into the livestock value chains (Annex 5).

II. PROJECT DESCRIPTION

A. Project Development Objective

PDO Statement

The project development objectives are to enhance pastoralists' access to financial services for drought risk mitigation, include them in the value chains, and facilitate the livestock trade in the Horn of Africa.

PDO Level Indicators

- Number of pastoralists having access to financial services and capacity building under the project (number), broken down by country (climate indicator).
- Percentage of pastoralists that received payouts within 30 days of official announcements of payout by calculation agent (citizen engagement indicator, measured after payouts have been triggered under the drought insurance)
- Number of pastoralist groups supported by the project and connected to markets, including savings groups.

- Increase in livestock and livestock product trade (customized by country).

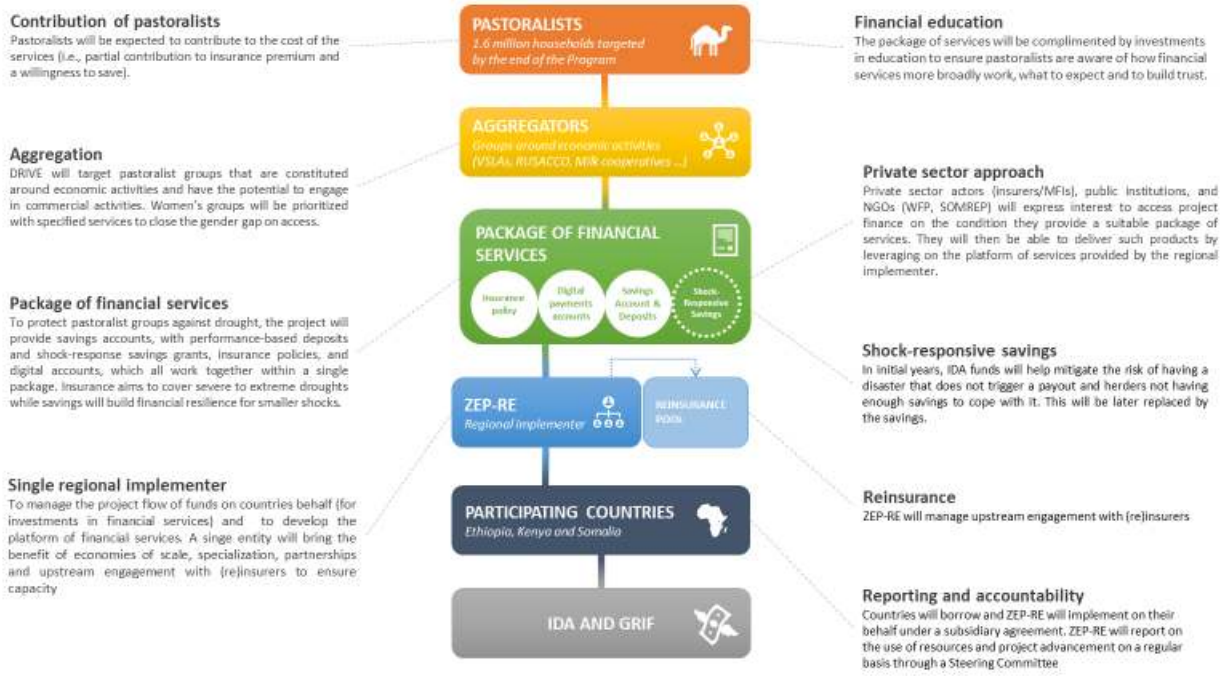
B. Project Components

Component 1: Package of financial services for climate resilience (US$184 million)

24. **This Component will support the provision of an integrated package of financial services to build the climate resilience of pastoralists.** Currently, due to the vulnerability of pastoralists to shocks and limited financial awareness, the number of pastoralists engaging with formal financial services is low and insufficient for vulnerable households to cope with major drought shocks without external support (Annex 6). DRIVE will support the delivery of a sustainable package of (i) savings for resilience, (ii) index-insurance, (iii) digital accounts and (iv) financial education and awareness creation. The Component will be implemented regionally by ZEP-RE, the regional reinsurance entity of COMESA, owned by member countries which has been assessed as having the mandate and the capacity for this role. ZEP-RE will partner with the local private and financial sector to design and deliver the products. Savings will enable pastoralists to smooth their income and manage costs of moderate droughts, backed by insurance to provide timely payouts when severe droughts occur, and digital accounts to ensure quick and effective transactions. Over time more resilient pastoralists will be better placed to access credit to expand their productive capacity. DRIVE intends to develop the financial markets and systems for savings and risk finance, with a future phase to leverage and increase access to credit.

25. **Each pastoralist joining the program will have access to a savings account, an index-insurance policy, and a digital payments account to pay premiums and receive payouts.** Figure 4 illustrates the structure of Component 1 and the design incorporates key lessons learnt as documented in Annex 7. Countries will borrow IDA funds, approve the policies underpinning Component 1, and delegate the project management responsibilities to a regional implementer to drive economic sustainability.

Figure 4: A flow chart of the component's structure



26. **Countries will participate through US$156 million of IDA as follows: Ethiopia: US$45 million, Kenya US$80 million, Somalia US$30 million, Djibouti US$1 million**. In addition, the project mobilizes a grant of US$28 million

from the Global Risk Financing Facility (GRiF) to be extended and managed by ZEP-RE. Table 3 below provides a breakdown of funds. 10 percent of the IDA funds will be used as an equity contribution to ZEP-RE from each country to cover the start-up costs of the project (see Annex 1), and the remaining 90 percent will be used to cover the cost of delivering the financial services, with around 30 percent of the component used for savings incentives, and 60 percent for insurance premium. The IDA will be complemented by US$13 million from the GRiF for premium financing for pastoralists and US$15 million to finance the implementation costs, including project management, capacity building and awareness creation, fiduciary management, and M&E (Annex 8). Djibouti's contribution (US$1 million of IDA, matched by US$1 million from GRiF) will be a premium contribution for a multi -year sovereign climate insurance product to be provided by African Risk Capacity (ARC), since a recent feasibility study[9] highlighted that a microinsurance product was not suitable.

Table 3: Component 1 Funds Breakdown

	Djibouti	Ethiopia	Kenya	Somalia	Total
IDA	**1**	**45**	**80**	**30**	**156**
- Startup costs (equity contribution to ZEP-RE)		4.5	8	3	15.5
- Savings		13.5	24	9	46.5
- Insurance premium	1	27	48	18	93
GRIF (extended to and managed by ZEP-RE)					**28**
- Implementation costs (incl. capacity building)		5	5	5	15
- Insurance premium	1	4	4	4	13

27. **The target beneficiaries will be pastoralist groups that are constituted around economic activities and have the potential to engage in commercial activities**. At least 250,000 households per year will benefit by the end of the five-year program in Ethiopia, Kenya, and Somalia, representing at a minimum 1.6 million pastoralists and their dependents, with 250,000 digital accounts in use. Of the pastoralist groups benefiting, at least 1,500 Village Savings and Loan Associations (VSLAs) will be supported and connected to markets. DRIVE will complement existing social protection programs[10] and strengthen their graduation strategies. It will facilitate the transition of more productive pastoralists from the fully funded social protection programs to a program where they are better linked to value chains (Component 2) and are thus able to contribute to savings and an insurance premium. Box 2 provides examples of potential beneficiary groups.

Box 2: Examples of potential pastoralist groups to benefit from DRIVE

In Ethiopia, several individual beneficiaries of drought insurance supported by the World Food Program (WFP) are also member of VSLAs. As of March 2021, there were 34 VSLAs having saved a total of about US$15,000. The Ethiopia Lowland Resilience Project aims to support the creation of 500 rural savings cooperatives and those could benefit from the services provided under the proposed DRIVE project (with de-risking, support to commercialization to better integrate and "move up" into the livestock value chains).

[9] Feasibility of index insurance for livestock in Djibouti. World Bank Group, 2020.
[10] The Hunger Safety Net Programme (HSNP) supported by the Kenya Social and Economic Inclusion Project (P164654), the Productive Safety Net Programme (PSNP) supported by series of projects (P163438, P169943), and the Somalia Social Protection Support Project (P168945) which supports the Baxnaano program.

The Somalia Resilience Program (SomReP) is a consortium of seven international non-governmental organizations (NGOs), which came together in 2011 to mutualize their resilience programs in Somalia. SomReP interventions cover most of the territory of Somalia. SomReP has so far reached 250,000 beneficiaries and is supporting 400 women-led Village Savings and Loan Associations (VSLAs) which could be targeted under Component 1. For the past two years SomReP has been collaborating with the Federal Government of Somalia, to explore options for the provision of satellite pasture-drought insurance for its beneficiaries.

Boresha (Building Opportunities for Resilience in the Horn of Africa) is a consortium of four NGOs working on improving resilience and economic opportunities of the borderland areas between Ethiopia, Kenya and Somalia (the Mandera Triangle). It is targeting 350,000 beneficiaries and supports 250 VSLAs, with programs focused on early warning systems, animal health, economic empowerment, and rehabilitation of rangelands. It has created awareness on drought insurance and promoted a voluntary drought insurance program which has enrolled about 800 livestock holders.

In addition to those, the pastoralist group surveys have identified 975 additional groups in Ethiopia, Kenya, and Somalia, with over 17,000 members to target in the launch phase of DRIVE.

28. **During severe droughts, significant savings are made if funds are quickly accessible to pastoralists, through a package of pre-positioned finance.** Uncertainties in the mobilization of resources and the timing of delivery can generate suboptimal responses for governments and pastoralists. If there is no financial protection at the household level, governments and/or humanitarian communities are the de facto responders. This response often requires evidence of the impacts on the ground and can arrive long after the disaster. This delay increases the overall cost, has irreversible welfare impacts and induces negative coping mechanisms by pastoral households that lead to malnutrition and distress livestock sales (see annex on economic analysis). For pastoral communities, who traditionally save by investing in their livestock herds, this support may arrive after the livestock have perished.[11] In contrast, ex-ante savings, insurance and credit can provide funding as a drought intensifies and timely access to funds is possible with the use of mobile money accounts. To reach out to remote pastoral groups, insurers and banks typically partner with mobile money operators, microfinance institutions and local community leaders (village champions).

29. **Pastoralist groups will be incentivized to save in a savings account rather than in cash, with the project providing a performance-based savings bonus if they save a certain amount.** Savings accounts are ones that allows one to deposit money, keep it safe, and withdraw funds, all while earning interest. Savings can be used for risk reduction or financial protection, with commitment savings for investments and precautionary savings for financial resilience. Each member of the pastoralist group will be encouraged to make savings contributions with the incentive of a performance-based savings bonus, if they meet the deposit amount and regularity requirements. Savings would be constituted around a specific purpose, since for women, evidence shows that savings linked to household expenditure resonate highly. This will be monitored through regular surveys and data collected by the regional implementer, with a target increase in savings contributions by 50 percent. The groups will be linked with formal financial institutions to facilitate the savings. As an additional incentive to take out an insurance policy to back their savings, the premium contribution required by the pastoralists themselves will be reduced to reflect the level of additional savings made alongside financial literacy training on the product.

[11] A major loss of about 50 percent of their animals during a severe drought typically requires between 5 years (herds of sheep/goats) and 10 years (herds of cattle) to rebuild, during which time they incur major losses of consumption of milk and meat and income from sales of live animals and animal products. Internal WB modelling shows lost consumption and sales income over 5 years of around USD$1,000 per TLU.

30. **During the early years of the project this component will include a reserve layer, akin to shock responsive savings, to provide support to the insured in response to moderate drought events.** Given it will take a number years for pastoralists to build up the level of savings required to help them meet the costs of moderate droughts, partial payments will be made, to complement their savings and mitigate the risk of drought event that does not trigger an insurance payout. The triggers for payouts from the reserve will be objective and pre-agreed to align with the established disaster management processes used within each country (using objective satellite and weather station data, food insecurity data, market price data). The data sources and process for triggering this reserve will be defined in the project implementation manual. Over time, as the awareness of the products builds and the savings develop/become more regular, the reserve layer will be scaled down.

31. **A drought index-insurance policy (also called Index Based Livestock Insurance-IBLI) will be used to back their savings in case of severe drought**. These policies are currently operational in Kenya and Ethiopia but not yet at scale.[12] The index insurance product is enabled by satellite technology which monitors the conditions of pasture on the ground. When the level of pasture falls below a certain level, the insurance payout is triggered automatically and paid directly by insurers to pastoralists. It is an asset protection rather than asset replacement product; this means the payouts reflect the cost of feed to keep the core breeding stock alive during a severe drought for one year rather than an asset replacement product where the premium reflects the value of the animal, reducing the cost of the product.[13] This product has the advantage of providing payouts at the onset of a drought, much faster than humanitarian assistance and enables pastoralists to buy fodder, water, and medicines to keep their core breeding stock alive during droughts. To Muslim communities, the product will be offered as Takaful (Islamic insurance). A 2021 technical feasibility study found that it is suitable for 53 percent of the HoA territory based on rangeland and weather conditions (including large parts of Ethiopia, Kenya, and Somalia where the project will operate). Detailed features of the product and lessons learnt are documented in Annex 7. Savings and payments accounts will be automatically opened as part of the insurance policy enrollment.

32. **Financial literacy will be provided to pastoralists.** Experience from existing drought insurance programs shows that the capacity building of pastoralists and financial service providers is critical to ensure that products meet the needs of the beneficiaries, and to develop trust. ZEP-RE will coordinate awareness creation activities of pastoralists with the financial service providers; products will be designed to be easily understood and ensure the inclusion of women to address some of the gender gaps identified in Annex 10. ZEP-RE has developed several programs to build's farmers financial literacy and increase their savings. ZEP-RE will also partner with others, such as African Risk Capacity to deliver capacity building initiatives for all stakeholders. Digital devices will be used to deliver financial literacy programs. An indicator – broken down by gender – will capture the awareness creation of pastoralists on the financial products offered. The project will partner with the Consultative Group to Assist the Poor (CGAP) to ensure that the savings and insurance products are meeting the needs of women herders, and the service providers are incentivized to deliver.

33. **The implementation of this component draws on extensive lessons learned from existing drought insurance programs for pastoralists (Annex 7) and aims to enhance sustainability with the following features**.

[12] About 20,000 households in Northern Kenya and 30,000 households in the Somali and Oromia (Borana area) regions of Ethiopia currently benefit from it.

[13] For example, in Kenya a premium of US$100 provides protection for 5 TLU (equivalent to 5 cows) worth around $2,500. For an asset replacement the premium cost would be $2,500. It is much more economical to protect livestock than replacing it.

- **Regional implementer providing a flexible platform of services**: To support a cost-efficient implementation, a single regional entity with experience in insurance and financial services will coordinate implementation of Component 1 on behalf of the countries. It will provide a regional platform of wholesale risk infrastructure services (data, product design, training, calculation agent, reinsurance) that can be used by stakeholders in each country (creating economies of scale) and will manage the administration of payouts from the reserve layer. The platform can provide a one-stop-shop with a generic insurance product and training resources, as well as providing more tailored support for local insurers with in-house capacity.[14] This regional approach offers value for money through risk pooling with the creation of critical business size to make it attractive to private (re)insurers and pooling drought risks into a larger, more diversified portfolio of risk. The implementer will work closely with local and international private sector actors (re)insurance companies, brokers and agents, banks, MFIs, and mobile money operators, distributors, etc.). The countries considered several options, which noted that ZEP-RE was well qualified for the role. See Annex 8 for further details on the role of the regional project implementer, ZEP-RE's expertise and the selection process.

- **Private sector approach to improve last mile delivery**: Private / financial sector actors, public institutions and NGOs will be instrumental in delivering the financial services. They will express interest (potentially in partnership with others) to the regional implementer for access to finance and other enabling services to deliver financial services to the groups. ZEP-RE will evaluate those expressions of interest based on a set of objective and transparent eligibility criteria related to the number of pastoralist groups they intend to protect and the type of services they plan to provide (Annex 9 sets out the eligibility criteria). Overall, this will incentivize innovation for last mile delivery. The use of digital technology can also be utilized by suppliers of feed and fodder to engage with the pastoralists directly, especially following payouts. In Kenya and Ethiopia, the local insurance markets are well developed and will underwrite the risk and retain an increasing amount. In contrast Somalia insurers have no experience in underwriting index insurance. They may need to be supported through a co-insurance pool with regional reinsurers/risk pools acting as direct insurers in the short-term.

- **Contribution of pastoralists**: Pastoralists will be expected to contribute to the costs of the services provided and each country will select the level of premium support to ensure demand and economic sustainability. The project will support a transition to progressively higher coverage of the premium costs by the beneficiaries over time. The countries are currently validating their approach[15] (for example, as the services are more nascent in Somalia and the government contribution may be higher than in other countries). Access to the services will encourage behavioral change from beneficiaries, by shifting some of the responsibility for drought management to the pastoralists themselves. When groups see the benefit of the services to stabilize their production levels during droughts, they will be more inclined to contribute toward the cost.

- **Linkages to reliable markets**: ZEP-RE will engage with livestock processors and exporters to strengthen the linkages of pastoralist groups with a strong structure and productive capacity through market contracts. Those will provide regular income to the groups, improving their capacity to contribute to the cost of financial services.

[14] For example, WFP noted that for their SIIPE program they have a well-designed product, but they would like to use the platform to support difficulties in placing their reinsurance requirements with international reinsurers due to foreign exchange availability.
[15] The Government of Kenya has indicated an initial premium finance contribution of around 75 percent, reducing over time.

- **Regular evaluations**: The team undertook pastoralist group surveys in Ethiopia, Kenya, and Somalia to understand the needs of potential beneficiaries, initial findings are shown in Annex 6. Those surveys will be repeated at regular intervals (every 12/18 months) to ensure that the packages of financial services meet the needs of pastoralist groups.

Component 2: Livestock Value Chains and Trade Facilitation (US$175 million)

34. **This Component intends to better include pastoralists in the livestock value chains and facilitate trade.** The pastoralist groups that benefit from Component 1 would be linked to investment opportunities under Component 2. The Component will support private investment in the livestock value chains so that pastoral producers can be linked to reliable markets and extract greater value addition from their livestock-rearing activities; the project will target pastoralist groups already formed and Box 4 illustrates the long journey to help those attain a certain level of commercialization. Activities will pay attention to animal welfare and will apply the 2014 IFC good practice note on Improving Animal Welfare in Livestock Operations.

Box 4: Anolei Camel Milk Cooperative in Isiolo (Northern Kenya)

This case study shows (i) the value of production groups, (ii) the time and effort required to better link pastoral producers to markets, and (iii) the concentration of value with the traders as opposed to pastoral producers.

The Anolei Cooperative was created in 1995 and is made up of 60 women rearing camels around Isiolo, 300 km from Nairobi. It was supported by the FAO, the Netherlands, and since 2013 the Swiss Veterinaries (VSF). The earlier intervention focused on strengthening the cooperative and training members on quality standards, linking them to small-scale dairy processors in Nairobi, disseminating mobile money, and undertaking gross margin analysis along the chain to identify areas in which the cooperative could reduce costs. The later intervention helped Anolei acquire a refrigerated truck. Before that, milk had to be transported on the roof of public buses. Before that, camel milk had often soured by the time it arrived in Nairobi after hours of travelling under the hot sun on public transport.

The market for camel milk is set to grow as camels are more resistant to drought and camel milk is believed to help with diabetes and autism, and suitable for lactose intolerant people. However mass production is a distant outcome, as suppliers are mainly nomads. The production requires scale, as breakeven is estimated to require 50 lactating camels any point in time, hence the importance of mutualizing production into groups.

Anolei supplies the Somali neighborhood of Eastleigh in Nairobi and VSF is developing exports to Kazakhstan. The camel owners receive approximately 60 to 80 Kenyan shillings per litre of milk, and the Eastleigh traders -not member of the cooperative- reportedly sell it for about 200 per litre. What would help the Anolei producers increase the value from their activity would be an outlet in Eastleigh to sell their milk directly to the consumers.

Source: Interviews by the team and https://www.biovision.ch/en/news/milk-expressway-from-the-savannah-to-the-city/;https://snv.org/cms/sites/default/files/explore/download/anolei_women_camel_milk_cooperative_in_kenya.pdf.

35. **The value chains supported will depend on each countries' priorities.** The live animal value chain currently exporting to the Middle East is critical for Djibouti, Ethiopia, and Somalia, and supports trade in other commodities that sustain the livelihood of pastoralists. Cross-border exports between HOA countries and the value of annual livestock exports are estimated around $1 billion.[16] In Kenya and to some extent Ethiopia, the

[16] Catley, A., J. Lind, and I. Scoones. 2013. *Pastoralism and development in Africa: Dynamic change at the margins*. Routledge.; Little, P., W. Tiki, and D. Debsu. 2015. Formal or informal, legal or illegal: The ambiguous nature of cross-border livestock trade in the Horn of Africa. Journal of Borderlands Studies 30 (3): 405–421.

focus will be on value addition through livestock products (primarily red meat) and targeted markets will both be domestic and export. Rising domestic markets are an opportunity since moving from live animals to transformed product export may face resistance from importing countries and will require diversifying export markets beyond the Middle East. The animal feed/fodder value chain will be supported in all countries and pastoralists will be incentivized to engage in fodder production and conservation, as a way to mitigate overgrazing in times of drought. The milk value chain is mainly domestic, and women and youth groups may be supported in this chain to improve their productivity.

36. **Three types of intervention are contemplated and will be tailored to the needs of each country**. Component 2 is intentionally designed to complement existing interventions on pastoral production systems by facilitating livestock trade and mobilizing private investment into the livestock value chains. Countries will participate in this component as follows: Djibouti US$5 million through the HoA Multi-Donors Trust Fund (MTDF – to be confirmed), Ethiopia US$70 million, Kenya US$60 million, and Somalia US$40 million. Annex 11 details the proposed interventions by country, and how they strengthen the regional livestock trade corridors**.**

    a. **Upgrading quality infrastructure**. The project will support capacity building and equipment to ensure compliance of livestock and livestock products with export standards. Quality infrastructure refers to testing facilities, traceability systems, certification services, inspection services and quarantine systems. It is critical to enable formal trade and enhance the quality of livestock and livestock products, to export higher value processed products (meat). Quality infrastructure will be the main focus of the project in Somalia and to a lesser extent in Ethiopia. Their quality standard agencies will benefit from in depth-capacity building from international firms (contracts covering all countries will be pursued), and the project will facilitate peer-to-peer learning between all those agencies, building on the existing collaboration between the Somaliland Quality Control Commission and the Ethiopian Standards Agency. Capacity building will also include livestock traders, exporters, investors and local communities to facilitate the implementation and compliance of standards. The project will also support the operationalization of Mutual Recognition Agreements in the HoA.

    b. **Trade facilitation and trade logistics**. A significant portion of the live animal trade is unrecorded, which points to issues of costs, customs, or lack of efficient infrastructure to enable formal trade. The project will strengthen quarantine facilities and their efficient linkages to ports with digitization of export and sanitary certificates; it will also improve the logistics on the transit of live animals. The analysis of the trade corridor between Ethiopia and Djibouti provides useful lessons for the Ethiopia-Somaliland corridor: the Djibouti port has invested into a brand-new livestock terminal which has the capacity for handling 2.5 million heads of livestock; Ethiopia seeks to increase their direct exports of live animals through Djibouti, but the supply is not sufficient to load ships to full capacity. Djibouti has a requirement that once live animals cross the border, they have 48 hours to be loaded onto ships. Therefore, in Ethiopia, activities that aim to transport live animals on the train rather than by trucks will be undertaken. The logistics processes to handle the livestock at the Djibouti port will be optimized. In addition, data infrastructure to better capture livestock trade and prices will be supported. The project will also support trade facilitation measures such as capacity building to eliminate non-tariff trade barriers, and regional coordination of policy and procedural reforms at the targeted border crossings. In addition, the project could support capacity building on trade negotiations for cross-border livestock trade.

c. **Seed capital to attract private investment in the value chains**. The project will provide seed capital to de-risk private investments into the livestock value chains, focusing on a few demonstration investments to show that sustainable business models can emerge to benefit pastoralists. Investments will have to be private sector initiated, commercially viable, and benefit pastoral producers. This will contribute to the PCM agenda. Grass-fed meat (Annex 12), camel milk and fodder appear to be promising value chains to attract private investment. The financial support will have two windows, one window for significant investments with substantial demonstration effects (i.e., that can be replicated and scaled-up) and a second window that will focus on women and youth business enterprises in pastoral areas, which could support livelihood diversification. One eligibility criterion for investments will be to provide adaptation or mitigation climate Co-Benefits, thus the whole amount of the seed capital sub-component is expected to generate climate Co-Benefits and this will be tracked as indicator. The seed capital will not support industrial livestock production and rather will aim to enhance the value of pastoralist grass-fed livestock and better market it. Lessons learned from the IFC Luna project highlighted the need to improve the marketing practices of pastoralists to provide livestock in the appropriate quality and frequency, which the project could support with seed capital to exporters willing to build such capacity. Emerging digital technologies to address the issues of livestock identification and traceability could also be supported. The management of the seed capital will follow a strong governance framework, with open expressions of interest, clear eligibility criteria, bankability and tracking of investments, and will be managed by a financial intermediary or an entity with appropriate governance and expertise, and ability to support the private sector.

37. **This component is informed by various studies and ongoing projects**. The WBG's Somalia Quality Infrastructure Diagnostic (2020) established a roadmap to strengthen quality infrastructure in the livestock sector, and the Somaliland trade review (2018) identified opportunities for trade facilitation. Somalia approved in 2021 a National Trade Policy (livestock represents 85 percent of export earnings) and a Livestock sector strategy in 2019, which are both ready for implementation. In Ethiopia, the WB' National Quality Infrastructure Development Project (P160279) has been strengthening quality infrastructure, IFC is providing advisory services to the Luna Export Slaughterhouse (IFC#37311) and has assessed key bottlenecks for Ethiopian ovine meat exports. The Ministry of Trade and Regional Integration provided an assessment of live animal export challenges. In Kenya, the IFC financed in 2019 a feasibility study to establish a public-private investment vehicle in Laikipia county to integrate communal, pastoralist and small-scale livestock, fodder and crop producers into the grass-fed beef value chain. The Djibouti private sector diagnostic (2021) identified livestock interventions as necessarily regional. IGAD has issued various studies on quarantine centers, livestock trade and traceability, and standards in the HoA. During project preparation, the team carried out studies on i) the Djibouti-Ethiopia live animal corridor; ii) livestock trade infrastructure and facilitation issues long the Berbera -Jigjiga corridor and Mogadishu seaport; iii) the business plan for the private operation of the Jigjiga quarantine center; iv) the business plan for Laikipia public-private investment vehicle.

38. **This component will be closely coordinated with the IFC.** IFC ongoing or upcoming advisory programs in Ethiopia, Kenya and Somalia will inform the identification of activities required to attract private sector investment. The outcome of collaboration will provide more insights on how public resources can be leveraged to de-risk investments which IFC could support in the future. Annex 5 details the ongoing collaboration.

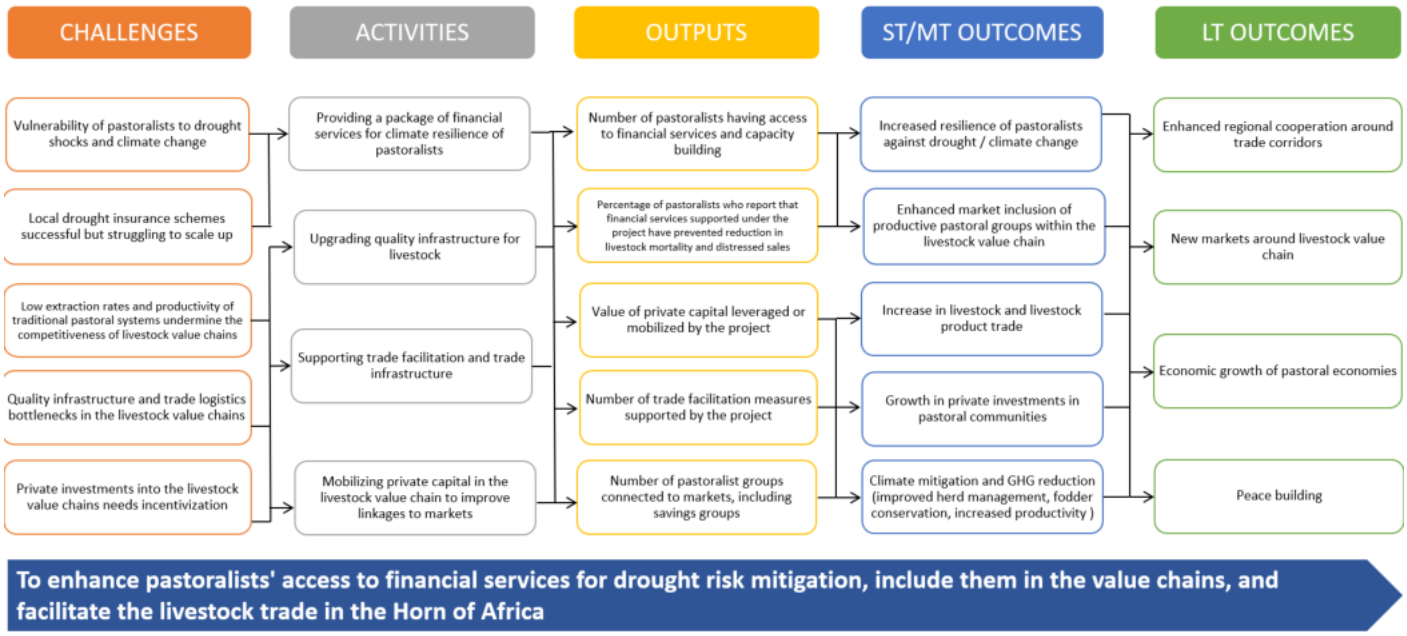
C. Project Beneficiaries

39. **The term "pastoralists or agro-pastoralists" is used to describe a wide range of people and situations and this project will be targeted at those communities and groups that are willing to engage in commercial livestock activities**. Interviews with stakeholders have highlighted the importance of precisely defining the intended beneficiaries. Some research categorizes pastoralists into four potential 'futures' depending on their access to markets and rangelands. To move-up through the wealth category, pastoralists need a minimum level of access to markets and rangelands; if this minimum level is not met pastoralists will be forced to move out of this livelihood. The primary target of the project will be pastoralists organized in groups with some access to rangelands or markets, where group formation exists or has been supported by other development partners, and which require additional support to commercialize production. The project will protect them against drought shocks and connect them better to markets. It will strengthen their investment and productivity, reduce their dependency on outside aid, and help them move to commercial activities, so they receive higher income from their livestock-rearing activities.

D. Results Chain

40. **The results chain for DRIVE is outlined in Chart 1 (Theory of Change).** The project addresses the challenges of high vulnerability to drought shocks and limited integration in the value chains. Activities will include a package of financial services for climate resilience of pastoralists, and the upgrade of quality infrastructure, trade facilitation and infrastructure, and private capital in the livestock value chain to improve linkages to markets. The outputs of the operation are focused on assessing the take up of financial services offered under the Program, the increased resilience of pastoralists groups, and the growth in their productivity and income. The project results are reflected in the intermediate outcomes which are expected to translate to broader impacts beyond the scope of the operation such as improved pastoral resilience through risk finance and trade, new markets around the livestock value chain and improved regional cooperation around trade corridors.

Chart 1: Theory of Change



E. Rationale for Bank Involvement and Role of Partners

41. **The World Bank (WB) has significant internal experience on designing and implementing financial protection solutions, and helps countries ensure that their budgets and citizens are financially protected in the event of a climate-related disaster**. Through funding and expertise (including actuarial, catastrophe risk modelling, underwriting), the WB has developed tailored financial protection solutions that increase the ability of national and local governments, homeowners, businesses, agricultural producers, and low-income populations to respond more quickly to disasters. Insurance is one such solution and the WB has supported the implementation of drought index insurance in a number of countries, including Kenya since 2015, and is working on cutting edge research in Africa, including with the regional risk pools, to strengthen the tools and products available for clients.

42. **The Bank and its development partners (AfdB, EU and others) are actively supporting regional coordination within the HoA initiative to address global threats.** The HoA Initiative presents an integrated approach to support resilience in pastoral areas by ensuring access to groundwater (Groundwater project P714867), protecting against pest and transboundary diseases (Locust project P173702) and supporting pastoral production systems (AfDB project on food security). DRIVE will complement those interventions by protecting pastoralists against drought with financial services, and connecting them better to markets, upgrading the livestock value chains and facilitating trade.

F. Lessons Learned and Reflected in the Project Design

43. **The operation incorporates numerous lessons from the experience of existing drought insurance programs and the provision of financial services in pastoral areas (Annex 7)**. The key ones are the need for aggregation, adequate targeting (productive groups), financial literacy, the value of a package of services and the link to the value chains. Financial services are a means to help pastoralists be more productive, rather than an end. An overarching lesson is the value of the two proposed components in the project despite added complexity.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

Component 1 – regional implementer

44. **Component 1 will be implemented by ZEP-RE (PTA Reinsurance Company)**. ZEP-RE is a specialized institution of the Common Market for Eastern and Southern Africa (COMESA) and an African multilateral insurance institution with a development mandate. Countries had the opportunity to assess options and noted that ZEP-RE would be well positioned to fulfill project management responsibilities. ZEP-RE will undertake financial management, procurement and environmental and social (E&S) risk management on behalf of the countries; and will provide a platform of shared services and risk infrastructure necessary for each country to scale up financial services access including insurance coverage. ZEP-RE will have staff in each country to liaise with authorities and provide regular reporting. ZEP-RE will sign subsidiary agreements with each country outlining their responsibilities, flow of funds, reporting and technical assistance to countries, as well as the process for countries to oversee ZEP-RE's activities. Annex 1 provides the assessment of Zep-RE and Annex 8 details the role of regional implementer.

Component 2 – country specific implementing agencies

45. **For Component 2, each country will have their own implementing entity.** In Djibouti, it will be the Centre Pour le Leadership et l'Entreprenariat (CLE); in Ethiopia the Ministry of Trade and Regional Integration with support from the Ministry of Agriculture; in Somalia the Ministry of Finance; in Kenya the State Department of Livestock, with the seed capital going through the Kenya Development Corporation (KDC). Since the project is multi-sectoral in nature and involves several line Ministries (Finance, Commerce, Agriculture and Livestock, Quality Infrastructure Agencies, Central Bank, ZEP-RE), a steering committee will be established in all countries to oversee the project and convened by the Component 2 implementing entity. This committee will meet every 6 months and will be supported by project technical committees with staff from each line ministry to ensure the ownership and technical quality of the activities. ZEP-RE will attend the steering committee to ensure a strong link between the groups supported under Component 1 and the activities under Component 2. On trade facilitation, public-private sector platforms will be established between exporters, Ministries of Trade and Ports and such platform is already in place on the Ethiopia-Djibouti corridor. The Secretariat of the HoA Initiative is also expected to play a coordinating role, by facilitating regular reporting to the HoA Ministerial meetings and hosting coordination meetings.

B. Results Monitoring and Evaluation Arrangements

46. **Monitoring and evaluation (M&E) will be undertaken by the implementing agencies and supplemented by global expertise.** M&E data will be collected from public and private sector partners and pastoralist surveys and aggregated by ZEP RE for Component 1 and national level Project Implementation Units (PIU) for Component 2. Project implementers will report to the World Bank on the use of resources and project performance, including information on the intermediate project results and progress towards the PDO. ZEP-RE is currently strengthening its Environmental, Social and Governance system to better report the development impact of its activities. All Component 2 implementing entities have experience of managing World Bank projects and undertaking M&E. The GRiF grant will support an impact evaluation of Component 1 with global expertise.

47. **The Project implementation will rely heavily on citizen engagement through pastoralist surveys carried out every 12/18 months by ZEP-RE.** The first survey available in early 2022 (Annex 6) will provide a baseline to measure changes in outcomes of the project activities. Two citizen engagement indicators will be collected through those surveys (percentage of pastoralists who report that financial services supported under the project have prevented reduction in livestock mortality and distressed sales; and who report an understanding of financial products). In addition, an independent impact evaluation of Component 1 will be performed at mid-term, utilizing trust fund resources from the Disaster Risk Financing and Insurance Program (DRFIP).

48. **Conflict modelling.** The project will engage local expertise to monitor the situation on the ground to ensure lending is not going to conflict affected areas, and a model will be developed to forecast and identify real and perceived factors most associated with changes in levels of both conflict events and population.

49. **Gender**. There is a gender gap in women's access to financial services in the HoA and involvement in the livestock trade. For the purpose of the project, the gender gap will be measured as the difference in the percentage of women who have a bank account compared to men, since the project will facilitate the opening of savings accounts in formal financial institutions so that pastoralists can save. The overall gender gap across all the countries (Ethiopia, Kenya, Somalia) in terms of access to bank accounts is 12 percent (simple average). The project will reduce the gender

gap by at least a quarter in all countries. The indicator will be percentage of women supported by the project who own a bank account. The project will aim to close the gender gap by supporting marketing strategies of financial products (through village champion model) and a financial education and outreach program to women groups. The conflict model will also report change in online news and social media sentiment about gender issues. Annex 10 provides details on the gender gap and how the project will close it.

C. Sustainability

50. **The project is designed to ensure that a sustainable program is in place after it ends**. Relative to the current approach of ex post and prone to leakage disaster relief, the project will result in significant savings, and promote a more sustainable pathway for pastoral livestock. It will do this by seeding a well-designed risk mitigation approach that uses progressive client contributions to share the costs of premium subsidies. Financial services provision will be undertaken by private sector providers, pastoralists will have increased their savings, and they will be linked to reliable markets to sell livestock. Those linkages will increase the quality of the livestock sold and the price fetched. Public premium financing may still be needed to support de-risking interventions in very vulnerable regions after the project ends, however, the expected positive impact will encourage the government through own revenue or support from development partners to continue offering subsidies though at lower levels, and relative to the current approach of ex-post disaster relief, the cost, efficiency and value of each dollar spend are expected to improve. Exporters/off-takers of livestock could complement the contribution of pastoralists because they would have an interest in ensuring that their producers are able to continue producing quality livestock on an ongoing basis. Pastoralists will be expected to increase their contribution as their financial awareness increases, and the linkages to the value chains improves their productivity and income, reducing the level of public support needed. To provide the enabling environment for a sustainable program, DRIVE will create a platform of risk infrastructure services that could be used by more countries and development partners, and possibly for a wider range of risk finance products, such as crop insurance. Developing the local financial sector will lead to more competitive products. This creates incentives for strong and sustained participation beyond implementation of the project.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis (if applicable)

51. **The financial modeling of Component 1 demonstrates high value for money for participating countries and pastoralists given the timely drought insurance payouts and ability to draw on savings (Annex 13).** To ensure the drought insurance product's cost efficiency, it is expected to payout during severe drought only. Insurance payouts therefore back savings to provide additional resources when needed the most. A scenario analysis calculated the Cost Benefit Ratio (CBR) of the insurance product from both the perspective of the government (macro-economic analysis) and the pastoralist households (micro-economic analysis). The CBRs were calculated for two scenarios: Scenario 1 no insurance or 'self-insurance' (without DRIVE), and Scenario 2 drought index insurance product purchased (with DRIVE). At the macro-level the CBR for Scenario 2 was 8.3 (worst drought years) and 3.5 (average drought years) times higher than under Scenario 1. At the micro-level the CBR for Scenario 2 was between 30-60 (worst drought years) and 12-24 (average drought years) times higher than under Scenario 1. The analysis also showed that on average in a bad year, such as 2010/11, the product had a Catastrophic Performance Ratio (CPR) of 3.13 (pastoralists get back US$3.13 back per US$1 of premium in severe drought) and very large numbers of

pastoralists would in fact have received 100 percent payout or US$700 – a CPR of 700 percent, representing a valuable product for a pastoralist concerned about the worst-case scenarios.

52. **For Component 2, the analysis is based on the available literature and identifies the key potential economic benefits as**: (i) Harmonization of standards and mutual recognition of conformity assessments through enhanced quality infrastructure, which will support formal trade. The use of standards and accreditation schemes reduce difficulties in assessing the quality of a product by enhancing the availability of reliable, accessible information on aspects of quality considered important by exporters, importers, and consumers. It helps domestic firms obtain international quality certifications at a lower cost, increase value added and enter new export markets. Research shows that investing 1 euro in quality infrastructure (metrology) yields benefits equivalent to 3 euros increase in GDP.[17] (ii) Increased efficiency in the livestock trade corridors through improvement in trade logistics and trade facilitation.[18] Research estimates that Africa is expected to have an increase in exports of animal products of 11.4 percent and an estimated 36 percent increase in beef exports if trade facilitation measures are removed. (iii) Reduction in the risk of conflict, as trade in the Horn of Africa has been shown as contributing to state-building[19] (iv) Higher incomes of pastoralists through the seed capital if they supply livestock to collectors/traders with better quality and timing.

B. Fiduciary

(i) Financial Management (FM)

53. **As part of project preparation, FM assessments were carried out by the World Bank to evaluate the adequacy of FM arrangements at the implementing entities of the countries.** The objective of the assessments was to determine whether the proposed FM arrangements (a) are capable of correctly and completely recording all transactions and balances relating to the project; (b) would facilitate the preparation of regular, accurate, reliable, and timely financial statements; (c) would safeguard the project's assets; and (d) would be subject to acceptable auditing arrangements. The assessments build significantly on the World Bank's knowledge of country FM systems and requirement, and experience and performance of implementing entities in other World Bank-financed operations.

54. **The FM assessment has progressed but will be refined as the project preparation progresses.** The arrangements for Component 1, which will be implemented by Zep-Re will need to be discussed with the counterparts, WFA and legal to firm up the proposed arrangements. In countries such as Ethiopia, discussions are still ongoing on the main implementing entities for the project. The assessment will be updated once these arrangements are confirmed.

55. **Based on the current FM assessments, fiduciary risk is considered High.** Main challenges are related to the following: (a) complex FM arrangement as the regional entity needs to work with countries consortia of service providers and pastoralists who are the end beneficiaries; (b) ZEP-RE which implements component 1 and will manage

[17] H. Kunzmann, T. Pfeifer, R. Schmitt, H. Schwenke, A. Weckenmann, Productive Metrology - Adding Value to Manufacture, CIRP Annals, Volume 54, Issue 2, 2005.

[18] For instance, in the Ethiopia-Djibouti corridor, a feasibility study will be undertaken to move livestock by train instead of trucks. The train transports a higher quantity of livestock in better conditions, allowing ships to be loaded in Djibouti to full capacity. While it is difficult to put a number on animal welfare and efficient shipping, work undertaken in the Ethiopia Trade Logistics Project shows that transport costs fall by 38 percent when using the train instead of trucks. Assuming 100,000 animals transported per year for a unit cost of US$10 per truck, the saving would be US$380,000 per year.

[19] Tobias Hagmann, Finn Stepputat, Trade Makes States, September 2022.

50 percent of the overall resources is new to Bank financed operations with understaffed project unit; (c) local financial intermediaries have rudimentary funds flow and banking systems particularly at the implementation level in Somalia - characterized by Anti Money Laundering (AML) and Anti -Terrorism Financing (ATF) risks; (d) in Somalia, lack of key financial management competencies and internal controls, potential over-reliance on consultants to oversee implementation, and lack of regulatory framework for key PFM aspects amongst others; (e) limited human resource capacity at Djibouti and no prior bank experience by KDC which implements the seed capital in Kenya, (f) in some cases weak internal audit function and (g) the introduction of seed capital activity which will require its own processes and procedures.

56. **The following mitigating measures are proposed:** (a) each country will sign a subsidiary agreement with Zep-Re which will clearly lay out the FM arrangements and related fiduciary responsibilities; (b) Zep-Re will create a separate entity (standard chart of accounts analysis segments) in its financial accounting system for this business line and for the countries involved to facilitate accounting, for reporting and auditing arrangements. In consultation with the Government and Bank team, Zep-Re with further strengthen controls towards fraud and corruption management; (b) Zep-Re will create a separate entity in its system for this business line and for the countries involved to facilitate for reporting and auditing arrangements; (c) the project will have one Operations manual which will in detail describe the arrangements of Component 1 and one for Component 2 in each country, the arrangements of seed capital and which clearly defines institutional arrangements; (d) FM arrangements, including funds flow arrangements and reporting arrangements, have been clearly defined in each country within the existing PFM legal country requirements and institutional arrangements; (e) eligible expenditures for Component 1 and seed capital activity have been clearly defined; (f) strengthening of staffing needs, internal audit reviews and capacity building initiatives have been recommended and (g) audit TORs designed to mitigate potential fraud and corruption risks and strengthen internal control systems.

57. **Subject to the successful implementation of the FM action plan and implementation and operation of the agreed mitigating measures as outlined, the proposed FM arrangements are considered adequate to support project implementation.** The FM arrangements will continue to require close monitoring from the World Bank side and a thorough implementation support and reviews within the initial implementation periods.

(ii) Procurement

58. **Governing procedure:** Procurement under the proposed Project will be carried out in accordance with the World Bank's 'Procurement Regulations for IPF Borrowers', Fourth edition, November 2020, as amended from time to time, hereafter referred to as 'Procurement Regulations'; the 'Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants', dated October 15, 2006 revised in January 2011 and July 1, 2016, and other provisions stipulated in the Financing Agreement will be applied for all procurement activities.

59. **Project Procurement Strategy for Development (PPSD):** The clients in the respective countries are preparing which set out the procurement arrangement and market approach options both for high value/high risk and low value/low risk procurement activities in the project. The PPSD will also incorporate an initial procurement Plan for the first 18 months of the project life. The PPSD shall be updated, at least annually, or as required, to reflect changes in the procurement arrangement which might be required due to a change in requirements, market conditions, procurement environment.

60. **Procurement capacity and risk assessment (PRAMS)**: The Bank team in the respective countries carried out a procurement capacity assessment, identified risks and proposed risk mitigation measures. The procurement capacity assessment covered issues related to procurement regulatory framework and management capability; Integrity and Oversight; Procurement Process and Market Readiness; and Procurement Complexity. Based on the capacity assessment, the Bank team determined that the implementing agencies in the respective countries have adequate capacity to implement the project with the overall project risk as "Substantial" with due consideration to the proposed risk mitigation measures provided in the Annex 1 to the PAD. The annex provides detail of the procurement capacity and risk assessment associated with each country's implementing agency.

61. **Systematic Tracking of Exchanges in Procurement (STEP).** The World Bank's STEP system will be used to prepare, clear, track, and update Procurement Plans and conduct all procurement transactions for all implementing agencies of the Project. Procurement staff of the implementing agencies not familiar with STEP, will be trained by the Bank STEP champions.

C. Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

D. Environmental and Social

62. **The project will be prepared under the Environmental & Social Framework (ESF), and all the Environmental and Social Standards 1-10 will be relevant**. The environmental risk of the Project is Substantial. While Component 1 has relatively limited direct impacts and is not expected to have significant indirect and induced adverse environmental impacts, Component 2 will be mostly TA, with the exception of Ethiopia where the project involves small scale civil works that entail some environmental risks and impacts. However, potential investments under Component 2 that (i) establish or upgrade testing, certification, and inspection services for livestock and meat value chains; (ii) establish quarantine facilities along the live animal trade corridors; and (iii) upgrade of primary and secondary market centers, are also likely to present environmental risks. These activities could result in habitat degradation or fragmentation, limited clearance of vegetation cover, pollution of groundwater and surface water resources, generation of air pollutants, noise, dust, risks to community health and safety, risks to workers' occupational health and safety, and overgrazing. The ESMF will include a screening procedure and a TOR for environmental and social impact assessments to be carried out after selection of sub projects, and which will recommend measures to avoid or mitigate significant adverse impacts.

63. **The social risk of the Project is assessed as Substantial**. Under Component 1, there is a risk that due to the mobility nature of pastoralists, the outreach and meaningful consultations with pastoral communities may be limited. The insurance product relies on mobile money for fast payouts and there is a risk that not all pastoralist households will own a mobile phone, or that mobile connectivity may be poor and hinder access to these services. Under component 2, social risks related to the construction of infrastructure are possible, including land acquisition and resettlement impacts. Social risks and impacts will be covered in the ESMF and Social Assessment, which are under preparation and will be consulted upon and publicly disclosed prior to project effectiveness. Country-specific ESMF will be prepared to capture country-specific issues. Social assessments in Kenya and Ethiopia will identify potential risks of exclusion and social impacts of Components 1 and 2. The conflict model will monitor and report on online sentiment about infrastructure, land acquisition and resettlement, and observe any relationship to violence.

64. **Instruments**. For Component 1, ZEP-RE's Environmental and Social Management System (ESMS) will be upgraded which is expected in March 2022. All financial services providers participating under the program will have to adhere to the requirements of the ESMS. KDC under component 2 for Kenya will also require an ESMS which is currently is under preparation and will be adopted prior to disbursement. The Environmental and Social Commitment Plans (ESCP) for all the four countries are under review. The ESCPs set out agreed measures to be taken by the Borrower to address the environmental, social and labor risks identified in the project. The ESCPs include all the procedures necessary to ensure compliance with the Bank's ESF, including commitments by the clients to prepare and implement (i) an environmental and social management framework (ESMF), (ii) site-specific Environmental & Social Management Plans (ESMPs), forming part of the ESMF procedures, Gender Based Violence (GBV) action plan for Ethiopia; (iii) the Stakeholder Engagement Plan (SEP); and (iv) the Labour Management Procedure (LMP). In addition, the Client will commit to carry out capacity building for the implementation of all ESF-related requirements. The Stakeholders Engagement Plans have been prepared for Kenya, Ethiopia and Somalia and are under review. Draft ESMF for Ethiopia, Somalia and Kenya are under review by the Bank.

V. GRIEVANCE REDRESS SERVICES

Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

VI. KEY RISKS

65. **The overall risk is assessed as high.**

66. **Political and governance risk is rated high.** Episodes of political instability have happened in the HoA as evidenced by the coup in Sudan in October 2021 and the ongoing conflict in Tigray, Ethiopia. Ethiopia and Somalia are classified as fragile and conflict-affected situations according to the WBG. Elections in Somalia are due to take place in 2022 but have been postponed several times. The newly agreed timeline is set to be concluded by February 25 with the conclusion of the parliamentary election. The poor rains in 2020 and 2021 have increased the risks of conflict between pastoralists and ranchers in several counties in Kenya, which has been exacerbated by the upcoming elections in 2022. Conflict situations would undermine the ability of the project to reach a large amount of pastoralist groups with financial services. Given the ongoing conflict in Ethiopia, the project will hire local expertise to monitor the situation on the ground to ensure lending is not going to conflict affected areas, and to forecast and explain change in population and change in levels of conflict events (this was recently done in Eastern DRC).

67. **Macroeconomic risk is rated high.** The economic recovery has been timid and fragile. The slow pace of vaccination continues to expose the region to emerging strains of coronavirus, holding back economic performance. Inflation has picked up due to rising food prices. The fiscal space is constrained: Djibouti, Ethiopia and Kenya are at

high risk of debt distressed while Somalia is in debt distress. Somalia is striving to stay on track of the IMF program and the HIPC triggers. The second Extended Credit Facility has stalled. Ethiopia is starting to renegotiate its debt under the Common Framework for Debt Treatments. Macroeconomic instability would make it difficult for the project to support trade facilitation and harmonization of standards across HoA countries, and attract private investment in the provision of financial services to pastoralists and the value chains. On the other hand, insurance is an effective public financial management mechanism as it removes risk from government balance sheets and passes it to the private sector; trade in livestock and livestock products is a significant contributor to exports earnings, ensuing the commitment of countries to facilitate the trade

68. **Sector strategies and policies risk is rated high.** The project focuses on financial sector and livestock trade. Exports of live animal and livestock products are highly vulnerable to diseases and regular bans issued by importing countries in the Middle East. For instance, in 2000, Saudi Arabia banned livestock export from the Horn because of the outbreak of Rift Valley fever. The ban lasted for nine years. In 2016, Saudi Arabia re-imposed a ban again, but suspended it during the Hajj. Investments in quality infrastructure under the project will help with the traceability and certification of livestock products. Interventions will be closely coordinated with the AfDB Food and Nutrition security project which will strengthen the inter-regional regulatory committee of IGAD- Gulf Cooperation Council to minimize trade bans. On the financial services, there is a risk of low take-up of the insurance product since pastoralists are expected to contribute to the cost. To mitigate this risk DRIVE will learn the lessons from previous programs, focusing on aggregation, a private sector driven approach, with significant awareness creation activities alongside alternative (cost-saving) distribution modalities. Another risk is related to the enabling policy environment for financial services, especially in Somalia where the insurance regulations are in the process of being adopted; the project will provide capacity building to the Central Bank to supervise and develop the insurance sector.

69. **Technical design risk is rated high**. The technical design is complex with four countries and five implementing agencies. It will be critical that the two components be closely linked to increase the productivity of pastoralists and allow them to extract more value from their livestock. The project intends to link groups supported by Component 1 to the value chains under the Component 2, however this will require a willingness of those groups to sell livestock on an ongoing basis to off-takers, and a willingness of off-takers to invest in their supply chains and build the capacity of pastoralists to provide livestock with the required quality. This will require a strong engagement of ZEP-RE and Component 2 implementing agencies with the private sector. In addition, as the project is cross-sectoral in nature, a strong coordination between all participating Ministries and ZEP-RE will be needed in each country and this will be done through the Steering Committees established in each country to oversee the project. In addition, this is a regional project which will require continuous coordination between countries. ZEP-RE will facilitate this coordination as it is owned by countries and has a strong presence on the ground and the project will also leverage the Secretariat of the HoA Initiative.

70. **Institutional capacity for implementation risk is rated high**. ZEP-RE will implement a World Bank project for the first time. Component 2implementing agencies have experience with implementing WB projects. The project aims to reach populations that are traditionally underserved, using a private sector approach. ZEP-RE will have to create multiple partnerships with local financial institutions and NGOs to ensure the delivery of financial services and they will have local presence. Financial literacy of pastoralists will be critical to ensure trust in the financial services provided, and contribution of pastoralists overtime. Through the GRIF grant, the project will provide financial literacy programs to pastoralists, and capacity building to ZEP-RE and local financial institutions to improve the last mile delivery. .

71. **Fiduciary risks are rated high.** Component 1 will be implemented by ZEP-RE, and IDA will pay ZEP-RE directly with oversight by each country and documentation of eligible expenditures. This will require a strong coordination between ZEP-RE and the countries to ensure timely disbursements and related accountabilities, and maintain the confidence of the private sector into the project. ZEP-RE will have a subsidiary agreement with each country and a strong presence on the ground to facilitate the coordination.

72. **E&S risks are rated substantial**. Although the negative E&S impacts of the project are limited given the focus on financial services and technical assistance under Component 2 in most countries (with civil works only expected in Ethiopia), the project focuses on pastoral areas which have substantial underlying E&S risks (gender-based violence, child labor, soil degradation, marginalized communities, conflicts). Private actors supported by the project to provide financial services or to invest in pastoral areas will be sensitized on the underlying risks and will have risk management systems in place. The project will have strong grievance mechanisms in place both at the level of ZEP-RE and each Component 2 implementing agencies, and a gender-based violence action plan.

73. **Stakeholder risk is rated high**. The project seeks to incentivize pastoralists to enter into regular sales of quality livestock, so as to increase productivity and incomes. Evidence from Kenya and Ethiopia suggests that the financial protection against drought afforded by insurance, has incentivized pastoralists to invest in their herds. The livestock value chains are clan-based and linking producers directly to off-takers/exporters may be opposed by the middlemen/intermediaries. Groups that benefit from interventions under the project (for instance by conserving rangelands or fodder) may be vulnerable to other pastoralist groups, which move their livestock to those less degraded rangelands when drought strikes. To mitigate this risk, the project will follow a highly localized approach to support groups that are already supported by development partners, have the capacity to become more productive, and in doing so, provide positive spillovers to other pastoralists in the same areas.

VII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Eastern Africa

De-risking, inclusion and value enhancement of pastoral economies in the Horn of Africa

Project Development Objectives(s)

The project development objectives are to enhance pastoralists' access to financial services for drought risk mitigation, include them in the value chains, and facilitate the livestock trade in the Horn of Africa

Project Development Objective Indicators

Indicator Name	PBC	Baseline	End Target
Pastoralists having access to financial services and capacity building for climate resilience			
Number of pastoralists and their dependents covered by financial services and capacity building under the project (Number)		0.00	1,600,000.00
Number of pastoralists and their dependents covered by financial services and capacity building in Ethiopia (Number)		0.00	500,000.00
Number of pastoralists and their dependents covered by financial services and capacity building in Kenya (Number)		0.00	800,000.00
Number of pastoralists and their dependents covered by financial services and capacity building in Somalia (Number)		0.00	300,000.00
Percentage of pastoralists that received payouts within 30 days of official announcements of payout by calculation agent (Percentage)		0.00	80.00
Pastoralist groups supported by the project and connected to markets			
Number of pastoralist groups supported by the project and		0.00	2,500.00

Indicator Name	PBC	Baseline	End Target
connected to markets (Number)			
Number of Village Savings and Lending Associations supported by the project and connected to markets (Number)		0.00	1,500.00
Increase in trade in livestock and livestock products			
Ethiopia - Number of live animals exported through Ethiopia Quarantine Centers (Number)		7,621.00	12,274.00
Kenya - Value of Livestock and Livestock products traded by pastoralists as a result of the project (Amount(USD))		0.00	115,000,000.00
Somalia - Increase in livestock and livestock product trade (Amount(USD))		398,000,000.00	473,000,000.00

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	End Target
Package of financial services for climate resilience			
Percentage of pastoralists in target areas who received the information to understand the financial products (Percentage)		0.00	80.00
Female headed pastoralist households who received the information to understand the financial products (Percentage)		0.00	80.00
Number of formal financial sector companies providing services to pastoralists under the project (Number)		0.00	30.00
Number of digital accounts in use during and at the end of the project (Number)		0.00	250,000.00
Percentage of women supported under the project who own a bank account in Kenya (Percentage)		33.00	37.00

Indicator Name	PBC	Baseline	End Target
Percentage of women supported under the project who own a bank account in Ethiopia (Percentage)		29.00	32.00
Percentage of women supported under the project who own a bank account in Somalia (Percentage)		25.00	27.50
Increase in the savings contributions of pastoralists supported by the project (Percentage)		0.00	50.00
Percentage of pastoralists who report that financial services supported under the project have reduced livestock mortality and distressed sales. (Percentage)		0.00	80.00
Amount of Private Capital Enabled or Mobilized through the project (Amount(USD))		0.00	572,000,000.00
Amount of Private Capital Enabled from (re)/insurers through Component 1 (Amount(USD))		0.00	500,000,000.00
Amount of Private Capital Mobilized through seed capital in Djibouti (Amount(USD))		0.00	2,000,000.00
Amount of Private Capital Mobilized through seed capital in Ethiopia (Amount(USD))		0.00	20,000,000.00
Amount of Private Capital Mobilized through seed capital in Kenya (Amount(USD))		0.00	40,000,000.00
Amount of Private Capital Mobilized through seed capital in Somalia (Amount(USD))		0.00	10,000,000.00
Livestock Value Chains and Trade Facilitation			
Amount of investments supported under component 2 that limit GHG emissions or support adaptation of pastoralists (Amount(USD))		0.00	72,000,000.00
No. of NQI professionals trained on quality infrastructure using cross-border collaboration (total) (Number)		0.00	1,000.00
No. of NQI professionals trained on quality infrastructure using cross-border collaboration (in Djibouti) (Number)		0.00	50.00
No. of NQI professionals trained on quality infrastructure using		0.00	400.00

Indicator Name	PBC	Baseline	End Target
cross-border collaboration (In Ethiopia) (Number)			
No. of NQI professionals trained on quality infrastructure using cross-border collaboration (in Somalia) (Number)		0.00	250.00
Number of testing for livestock products conducted by Somalia in line with international practice (Number)		0.00	100.00
Number of trade facilitation measures supported by the project (Number)		0.00	20.00

Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Number of pastoralists and their dependents covered by financial services and capacity building under the project	This reflects 250,000 pastoralists who are covered in year 5 by the package (savings, insurance, digital accounts), multiplied by the number of people in their households (average of 6.4). 50,000 pastoralists would be covered in year one, and this would increase by 50,000 per year.	Annual	ZEP-RE digital platform		ZEP-RE
Number of pastoralists and their dependents covered by financial services and capacity building in	This reflects 78,125 pastoralists who are covered in year 5 by the	Annual	ZEP-RE digital platform		ZEP-RE

Ethiopia	package (savings, insurance, digital accounts), multiplied by the number of people in their households (average of 6.4). The target for year one would be 15,625 increasing by the same amount every year.				
Number of pastoralists and their dependents covered by financial services and capacity building in Kenya	This reflects 125,000 pastoralists who are covered in year 5 by the package (savings, insurance, digital accounts), multiplied by the number of people in their households (average of 6.4). The target for year one would be 25,000 increasing by the same amount every year.	Annual	ZEP-RE digital platform		ZEP-RE
Number of pastoralists and their dependents covered by financial services and capacity building in Somalia	This reflects 46,875 pastoralists who are covered in year 5 by the package (savings, insurance, digital accounts), multiplied by the number of people in their households (average of 6.4). The target for year one would be 9,375 increasing by the same amount every year.	Annual	ZEP-RE digital platform		Zep-RE
Percentage of pastoralists that received payouts within 30 days of official	This indicator will measure the speed at which	When the insurance	Pastoralists Surveys	This information can only be collected and	ZEP-RE

announcements of payout by calculation agent	pastoralists are paid insurance payouts, once the insurance has been triggered following a severe drought	payouts are triggered after a severe drought		may be provided at any point in the period, not necessarily at the end of the project. Methodlogy is through pastoralist surveys	
Number of pastoralist groups supported by the project and connected to markets	Those will be groups supported under Component 1 with the package of financial services, and that will be connected to reliable markets either through the same Component 1 or through the seed capital under Component 2. This will be assessed through contracts and off-take agreements but also through regular sales of livestock from the groups to livestock processors and exporters.	Annual	ZEP-RE and Country Implementing Agencies under Component 2	Pastoralist Surveys and project activities	Zep-RE and country Implementing Agencies under Component 2
Number of Village Savings and Lending Associations supported by the project and connected to markets	Those will be groups supported under the project that are structured around savings (savings groups)	Annual	Pastoralist surveys and project activities	ZEP-RE and Component 2 Implementing Agencies	ZEP-RE and Component 2 Implementing Agencies
Ethiopia - Number of live animals exported through Ethiopia Quarantine Centers	Increase in the export of live animals from quarantine centers	Annual	Ethiopia MOTRI	Ethiopia MOTRI	Ethiopia MOTRI

Kenya - Value of Livestock and Livestock products traded by pastoralists as a result of the project	This will reflect the value of livestock and livestock products traded by pastoralist groups linked to value chains. This assumes that the project would contribute 2.5% of the total value of Kenyan livestock exports (according to the Integrated National Export Development and Promotion Strategy, the potential export value of live animals would be USD$1.8 b and meat at USD$2.8 b at the end of the strategy period).	Annual	Kenya Component 2 Implementing Agencies (KDC and SDL)	Survey of groups linked to value chains	Kenya Component 2 Implementing Agencies (KDC and SDL)
Somalia - Increase in livestock and livestock product trade	This reflects the impact of the project on the increase in the official trade in livestock for Somalia. In 2019-2020, livestock trade increased by 2.6%. The project assumes an annual increase of 3.5%.	Annual	Somalia Component 2 Implementing Agency through the Trade Portal	Somalia Component 2 Implementing Agency through the Trade Portal	Somalia Component 2 Implementing Agency

Monitoring & Evaluation Plan: Intermediate Results Indicators					
Indicator Name	**Definition/Description**	**Frequency**	**Datasource**	**Methodology for Data Collection**	**Responsibility for Data Collection**
Percentage of pastoralists in target areas who received the information to understand the financial products	This indicator aims to verify through surveys if pastoralist households have received capacity building to understand the financial products provided,	Every 18 months	Collection through pastoralist surveys	Information collected through surveys.	ZEP-RE
Female headed pastoralist households who received the information to understand the financial products	this indicator aims to verify through surveys if female-headed pastoralist households have received capacity building to understand the financial products provided, and aims to have no gender gap between men and women	Every 18 months	Pastoralist surveys	Pastoralist surveys	ZEP-RE
Number of formal financial sector companies providing services to pastoralists under the project	this will reflect the mobilization of microfinance institutions and banks around the provision of package of financial services, and in particular the opening of new savings accounts for pastoralists groups at those institutions	Annual	ZEP-RE	ZEP-RE through its partnerships	ZEP-RE
Number of digital accounts in use during and at the end of the project	This reflect the number of digital accounts that are in use as a result of the project, which could either	Annual	ZEP-RE	ZEP-RE through its partnerships and digital platform	ZEP-RE

	be payment accounts, or savings accounts				
Percentage of women supported under the project who own a bank account in Kenya	percentage of women supported under the project that own a bank account in a formal financial institution	every 18 months	Pastoralist surveys	Pastoralist surveys	Zep-RE
Percentage of women supported under the project who own a bank account in Ethiopia	percentage of women supported under the project that own a bank account in a formal financial institution	Every 18 months	Pastoralist surveys	Pastoralist surveys	ZEP-RE
Percentage of women supported under the project who own a bank account in Somalia	percentage of women supported under the project that own a bank account in a formal financial institution	Every 18 months	Pastoralist surveys	Pastoralist surveys	ZEP-RE
Increase in the savings contributions of pastoralists supported by the project	This indicator aims to verify how the project has incentivized the growth of savings from the pastoralist groups supported by the project	Every 18 months - the baseline would be established by verifying the amount of savings held by a sample of the groups that are supported in year 1 by the project	Pastoralist surveys	Pastoralist surveys	ZEP-RE

Percentage of pastoralists who report that financial services supported under the project have reduced livestock mortality and distressed sales.	This reflect the impact of the product in reducing livestock mortality after a drought. This will be collected after a severe drought happens.	At one point in time after a drought	Pastoralist surveys	This information can only be collected after a drought and may be provided at any point in the period, not necessarily at the end methodology is through pastoralist surveys	Zep-Re
Amount of Private Capital Enabled or Mobilized through the project	This reflects Private Capital Enabled (through Component 1) and Private Capital Mobilized (through Component 2)	Annual	ZEP-RE and Component 2 Implementing Agencies in each country	ZEP-RE and Component 2 Implementing Agencies in each country	ZEP-RE and Component 2 Implementing Agencies in each country
Amount of Private Capital Enabled from (re)/insurers through Component 1	This reflects Private Capital Enabled by transferring drought risk to local insurers and international reinsurers. This is the total sum insured.	Annual	ZEP-RE	ZEP-RE	ZEP-RE
Amount of Private Capital Mobilized through seed capital in Djibouti	Private capital mobilized through the seed capital	Annual	Djibouti Component 2 Implementing Agency	Djibouti Component 2 Implementing Agency	Djibouti Component 2 Implementing Agency
Amount of Private Capital Mobilized through seed capital in Ethiopia	Private Capital Mobilized through the seed capital	Annual	Ethiopia Component 2 Implementing Agency	Ethiopia Component 2 Implementing Agency	Ethiopia Component 2 Implementing Agency
Amount of Private Capital Mobilized through seed capital in Kenya	Private Capital Mobilized through the seed capital	Annual	Kenya Component 2	Kenya Component 2 Implementing Agency	Kenya Component 2 Implementing Agency (in

			Implementing Agency (in that case KDC)	(in that case KDC)	that case KDC)
Amount of Private Capital Mobilized through seed capital in Somalia	Private Capital Mobilized through the seed capital	Annual	Somalia Component 2 Implementing Agency	Somalia Component 2 Implementing Agency	Somalia Component 2 Implementing Agency
Amount of investments supported under component 2 that limit GHG emissions or support adaptation of pastoralists	climate adaptation or mitigation co-benefits will be an eligibility criteria for all investments under the seed capital sub-component	Annual	Component 2 implementing agencies	all Component 2 national implementing agencies by tracking all investments	all Component 2 national implementing agencies
No. of NQI professionals trained on quality infrastructure using cross-border collaboration (total)	This reflects the harmonization of standards by providing capacity building to quality infrastructure professionals using cross-border capacity building tools	Annual	cummulative target - through project activities	Through the project activities , and each Component 2 implementing Agency will track	Component 2 Implementing Agencies
No. of NQI professionals trained on quality infrastructure using cross-border collaboration (in Djibouti)	This reflects the number of professionals trained on standards (quality infrastructure) in Djibouti	Annual	project activities	Through the project activities , and each implementing entity will track	Djibouti Component 2 Implementing Agency
No. of NQI professionals trained on quality infrastructure using cross-border collaboration (In Ethiopia)		Annual	Project activities	Through the project activities , and each implementing entity will track	Ethiopia Component 2 Implementing Agency

No. of NQI professionals trained on quality infrastructure using cross-border collaboration (in Somalia)	This reflects the number of professionals trained on standards (quality infrastructure) in Somalia - this also includes the capacity building of the Somaliland Quality Control Commission staff	Annual	Through the project activities	Cumulative Target	Somalia Component 2 Implementing Agency
Number of testing for livestock products conducted by Somalia in line with international practice	This includes the number of testing processes undertaken by the Somalia Bureau of Standards and the Somaliland Quality Control Commission, as well as by entities with a mandate to check the quality of livestock and livestock products, to ensure that quality standards in line with international norms are observed	Annual	project activities	cumulative target	Somalia Component 2 Implementing Agency
Number of trade facilitation measures supported by the project	This reflects the number of interventions that facilitate livestock trade adopted in one location	Annual	Country Implementing Agencies under Component 2	Tracking through activities and semi-annual reporting	Country Implementing Agencies under Component 2

ANNEX 1: Implementation Arrangements and Support Plan

COUNTRY: Horn of Africa

De-risking, inclusion and value enhancement of pastoral economies in the Horn of Africa

Component 1

1. **Component 1 will be implemented by a regional entity, ZEP-RE on behalf of the countries.** Annex 8 presents ZEP-RE and their role, as well as the value for money regarding the regional implementation. ZEP-RE will have staff in each country to liaise with authorities and provide regular reporting. This will be funded by the GRiF grant.

2. **Each country will sign a subsidiary agreement with ZEP-RE to lay out roles, responsibilities, and oversight.** The agreement will detail the flow of funds, the results to be achieved by ZEP-RE under the project, the specific activities funded by the GRiF grant, the coordination and reporting mechanism by ZEP-RE, the circumstances under which countries may suspend disbursement or claw-back funds among others. ZEP-RE will provide capacity building to country counterparts on the program. In Ethiopia capacity building will be provided to the Ministry of Agriculture who will oversee the implementation of Component 1. In Somalia, capacity building will be provided to the Central Bank, the Ministry of finance and Ministry of Livestock. In Kenya capacity building will be provided to the National Treasury and State Department of Livestock.

Table 1: Component 1: indicative cost breakdown

	Djibouti	Ethiopia	Kenya	Somalia	Total
IDA	**1**	**45**	**80**	**30**	**156**
- Startup costs (equity contribution to ZEP-RE)		4.5	8	3	15.5
- Savings		13.5	24	9	46.5
- Insurance premium	1	27	48	18	93
GRIF (extended to and managed by ZEP-RE)					**28**
- Implementation costs (incl. capacity building)		5	5	5	15
- Insurance premium	1	4	4	4	13

3. **Financial Management.**

(a) Organization and Staffing

ZEP-RE has a finance and accounting department which has 16 staff headed by the CFO. The CFO reports to the CEO & Managing Director. The finance team is well resourced with the key accounting staff being qualified accountants and having a first degree at a minimum. They are also experienced for the expected financial management work. However, the project reporting section has only one staff. The staff are on 5-year contract basis. Finance department has clear definition of duties, responsibilities, lines of supervision, and limits of authority for all the officers, managers, and staff. The finance and Accounts staff are regularly trained. The company provides individual annual staff training budgets. Furthermore, the finance team must meet 20 Continuing Professional Development points annually from recognized institutions such as Institute of Certified Public Accountants of Kenya (ICPAK). The project will hire two

accounting staff to handle financial transactions and reporting for the project, a Finance Management Specialist and a project accountant based on TOR acceptable to the Bank. The accounting and staffing arrangements are considered to be adequate for the project.

(b) Planning and Budgeting

Budgeting will follow ZEP-RE budgeting procedures. The CFO is in charge of formulation and monitoring of budgets. The Board approves the Company budgets. The CFO gets submissions from all key account managers at ZEP-RE and prepares the draft budget. The CFO then submits the draft budget to the Operations Director for review and approval before being released to the Ex-Co Management Committee and CEO and finally to the Board for approval. The budget runs for the period 1 January and 31 December. The Board approves budgets by end of each year for the following year. The budget preparation process is manual using Excel based Models. Once approved by the Board, the final budget paper is loaded into the sun system broken down per month. ZEP-RE monitors budgets by preparation of monthly management reports which are generated from the accounting system. The reports are reviewed, and comments included for significant budget variations. These reports are generated on a monthly and quarterly basis for Board Review. The CEO can approve any variation below 5%, while all other variations have to be approved by the Board. ZEP-RE will ensure that the chart of accounts reflects the needs of the project and be modified as necessary. The planning and budgeting procedures are considered as adequate for the project.

(c) Accounting Systems, Policies, and Procedures

ZEP-RE uses sun accounting system. The system records all financial operating transactions. The systems allow for the proper recording of all financial transactions, including the allocation of expenditures in accordance with the respective components, projects, disbursement categories, and sources of fund. The system can produce the necessary financial reports. The staff is adequately trained to maintain the system. The management organization and processing system safeguard the confidentiality, integrity, and availability of the data. ZEP-RE has proper chart of accounts that can be easily updated to account for all its activities. The accounting system is able to segregate transactions, a ledger and financial reports for each restricted income funding/ project. The accounting system has capability to produce reports by project, by expenditure category, by unit, by end user and against the budget as may be mapped. It will therefore be able to extract financial reports per project expenditure categories and per component, which are key reporting requirements for the Bank. It would also be able to generate detailed transactions listing which will ease the process of generation of SoEs. The project will be set up as a separate entity and dimensional analysis for each country in Sun system to allow for effective financial reporting to the World Bank.

(d) Internal Controls and Internal Audit

ZEP-RE has a Finance procedure manual (2008) that guides the day-to-day financial operations. It provides for segregation of duties and ceilings for approval and authorizing of transactions including procurement functions. The entity maintains adequate and up to date cashbook, recording receipts and payments. Authorized signatories are clearly identified, and bank reconciliations are conducted every month. Controls are also in place for imprests and advances. ZEP-RE uses the Accrual concept of accounting as per IFRS guidelines. The procedures manual is based on the current business structure and any procedures to align to project activities would need to be incorporated accordingly. In the last two years as part of continuous improvement and due to internal changes on personnel and technology, there has been changes to the procedures. The policy manual is therefore in the process of being updated with recent changes to key staff titles and processes. The accounting policies applied by ZEP-RE are in compliance with the International Financial Reporting Standards (IFRS). ZEP-RE will prepare and submit to the Bank for approval

a Project Implementation Manual (operations manual).

The internal audit function has been outsourced to a reputable audit firm, KPMG. ZEP-RE usually requires an auditor to serve a maximum of 2 cycles of 3 years each. KPMG was just recruited for the year ended December 31, 2020. A review of the internal audit report prepared by KPMG revealed that they have put proper measures to review as per the Audit Charter. The management is positive on taking action on recommendations made by the Auditor. The Internal Audit Report is also presented for review to the Audit Committee. The project will be included as part of the review of activities under the Audit Charter. The Internal Auditor TOR will be enhanced to include the review of the project activities. The internal control procedures are considered adequate for the project.

(e) Financial Reporting

ZEP-RE will prepare and submit calendar quarterly IFRs as per the agreed format. The report will be submitted to the Bank and to the countries concerned within 45 days of the calendar quarter to which it is related. One IFR will be prepared which clearly shows the activities of each country. The country specific reports will be shared with each government at the same time that the IFR is submitted to the Bank. The IFR will clearly show the sources received, the uses of fund (premiums paid), the remaining balance in the account and the number of beneficiaries reached during the quarter. ZEP-RE will also prepare and submit to the Bank and each of the participating countries the annual audited project financial statements as per the agreed format.

(f) External Audit

PriceWaterHouseCoopers (PwC) is currently the external auditor of ZEP-RE. ZEP-RE usually rotates their auditors every 6 years (2 cycles of 3 years each). PwC is already in their second cycle. ZEP-RE, for the past three years has received unqualified audit opinions on their entity financial statements. There is evidence of implementation of external auditor's recommendations. ZEP-RE will engage an audit firm that is technically competent, independent and acceptable to the World Bank who will audit the project funds. The audit TOR will be cleared by the World Bank, the auditors will submit their firm profile to the World Bank for review, and their audit contract and fees will be prior approved by the World Bank before the contract is signed, and that it would be a fixed sum contract**.**

(g) Eligible Expenditure

Under component 1 (Risk Finance), IDA funds will be used to provide premium support to incentivize private financial institutions to provide a package of financial services with drought insurance, savings and payment, to pastoralist groups. It is envisaged that a consortia of insurers/finance firms/NGOs will express interest for premium finance based on their proposed estimates on the number of groups they intend to reach and the type of services they plan to provide. The expressions of interest will be assessed based on eligibility criteria which are currently under preparation and shall be approved by the Bank before disbursement under this component. Pastoralists will be expected to contribute to the cost of premium finance. The subsidiary agreement will document the disbursement tranches of the IDA funds, as well as the activities to be performed by ZEP-RE under the GRiF grant, for the benefit of the countries. The key expenditures expected under this component are described below:

i. **Payment of share capital to ZEP-RE from each country for start-up and implementation cost**– 10% of Component 1: payment would be share capital from the countries to ZEP-RE as a way to participate in the start-up and implementation costs of the program. This will provide ownership into ZEP-RE and right to dividends. For the

countries, this is a better value proposition than paying this amount as a management fee out of the IDA funds. The 10% is in line with usual fees for risk pools and is currently applied by ZEP-RE in the management of the COMESA yellow card scheme. This will be recognized as expenditure at the time each country receives documentation confirming their ownership. The details of this arrangement will be captured in the subsidiary agreement and the eligible expenditure recognized in the financing agreement to be signed with each country. The IFR to be submitted by Zep-Re will show how this funding is being used for startup and implementation of this project. This expenditure is to be financed from IDA allocation.

ii. **Package of financial services**: based on the agreements to be reached with the consortia of insurers/finance firms/NGOs, payment of premium will be made. To incentivize savings, the premium contribution required from pastoralists will be reduced correspondingly to the level of additional savings made by pastoralists. The financial services to be provided include premium payment for insurance coverage, direct savings incentives and reserve layer. Zep-Re will open a business line for this project which should allow it to clearly track the resources received, the premiums paid, saving incentives and reserve layer payouts provided, and the number of pastoralists that get the services per country. For the insurance coverage, the paid premiums will be the expenditure (use of fund) for this project. Final beneficiaries are expected to make contributions to the premium which will be recognized by the service providers in their proposal and eligibility criteria for financing. For the savings incentives, pastoralists would be paid directly into their savings accounts subject to conditions laid out in the operations manual which will include requirement on the beneficiaries such as i) have a savings account; ii) have made an initial deposit in this account; iii) have reached a certain amount of savings into the account after a set period. In addition to the regular premium payments, in case of "near miss" of the triggers, a reserve layer will be provided for the first three years of the project which will be paid to beneficiaries based on declaration of disaster by national agencies, approval by government and task team. In all cases, expenditure will be the actual premium and payout made to eligible beneficiaries. The detail of documents required for the advance payment and documentation of expenditure will be detailed out in the DFIL. Whether the intended beneficiaries obtained the insurance coverage and other services will be guided by the Operations manual which will detail these processes out as well as technically through M&E mechanisms of the project and the surveys to be conducted. This activity will be financed by both IDA and Global Risk financing Facility grant (GRiF).

iii. Capacity building, M&E and implementation cost: GRiF funds will be used to pay for the capacity building under the program, the implementation cost and M&E. Therefore, eligible expenditure category will be described in the GRiF grant agreement.

(h) Funds Flow and Disbursement Arrangement

Fund flow and banking arrangements for ZEP-RE. ZEP-RE will be required to open 5 US$ accounts, with commercial banks in Kenya that are acceptable to the World Bank, one each for the 4 participating countries and one for the technical assistance to ZEP-RE to be financed from the GRiF. The assessment has tried to propose the maintaining of one Designated account for all while delineating the recording and reporting for each country however, given the complexity of the project, maintaining separate accounts has been agreed up on.].

Component 1 will fund premium support to incentivize the provision of digital accounts, savings and insurance to pastoralists. Since a large portion of the risk will be transferred to international markets through reinsurance, the funding will be disbursed in US$ to cover for that portion of the premium (reinsurance), required for the project. It is

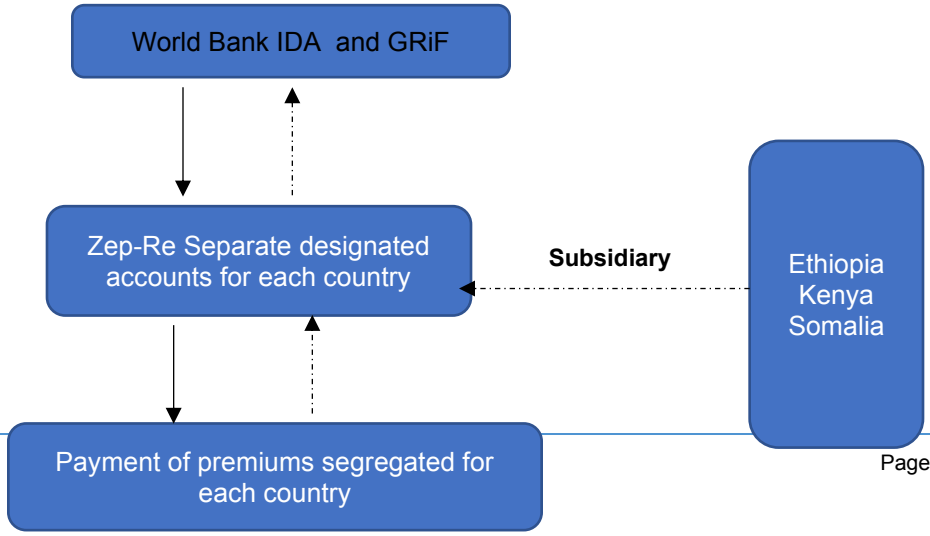
proposed that IDA funding flows directly to ZEP-RE into an account denominated in US$ for this purpose. Zep-RE, which will be responsible for this component, will share the risk and premium support between the local financial institutions and the international reinsurance beneficiaries in line with the agreed eligibility criteria. For all of the countries, the advances and documentation of expenditure for component 1 will be authorized by each country as signatories of the withdrawal applications. Up on receiving resources, Zep-Re will segregate the funding coming from each country and shall be accounted for separately to show, in terms of number of pastoralists covered, in each country.

Disbursement triggers under Component 1: To minimize the number of disbursements and allow for multi-year coverage of pastoralists (package of services for 2 years instead of only one), it is proposed to have a limited number of disbursement tranches. Advance to the designated account maintained by Zep-Re will be used for all activities. A forecast of payment will be presented by Zep-Re to each of the countries based on expected amount for increasing share capital, potential list of beneficiaries and services anticipated. Once this is cleared by the government and the Bank, advance will be provided to Zep-RE into the accounts opened for each country, with withdrawal applications approved by each country. Advance and documentation under each are described below:

- Share capital to Zep-Re from each country – the amount will be requested as part of the initial cash forecast request by Zep-Re. Documentation of expenditure will be through quarterly IFR with the evidence of increase of share capital for each of the countries.
- Package of financial services: ZEP-RE will request advance payment based on a list of pastoralists to be covered in each country. Actual premium payments and saving grants will be reported through IFRs which will be documented based on approval of the governments.
- Reserve layer: Advance payments will follow the same procedure as for the package of financial services, but will only be disbursed if the insurance triggers are not met but there is concern that drought conditions prevail. The triggers for payouts from the reserve will be objective and pre-agreed to align with the established disaster management processes used within each country, to be defined in the project implementation manual. At a minimum, there must be a declaration of drought by the governments or disaster agencies, the list of pastoralists and amounts to be provided under the reserve layer, and approval by the respective governments on this request.

The technical assistance aspect of Component 1 funded by GRIF will be made based on approved annual work plan and budget and two quarters of cash forecast to be submitted by ZEP-RE.

Figure 1. Fund flow and disbursement Arrangements – Zep-Re



4. **Procurement.** Since IDA resource is used for premium support, there is no procurement activity envisaged under this component for the IDA loan. However, Component 1 has additional grant from the GRiF, to which the World Bank procurement regulations will apply, thus the analysis below is provided for the GRiF grant.

(a) ***Procurement Regulatory Framework and Management Capability***. The procurement procedure in Zep-Re, as a commercial entity, is governed through an internal Procurement Policy and Procedures issued by the Finance department dated May 2021. The policy details Procurement Governance to ensure procurement of all goods and services are obtained at cost-effective prices, at the required specifications and quality and are delivered in time. However, it is noted that the policy framework as it is developed and executed is basic that cannot be relied on the project implementation.

(b) ***Integrity and Oversight:*** The internal Procurement Policy and Procedures provides for Code of Conduct governing all staff involved in the procurement processes to ensure that its employees will conduct themselves in a professional and ethical manner, maintain high standards of integrity and use good judgment in all the dealings; management of Conflict of Interest and guidelines on accepting Gifts from Vendors. Zep-Re has not established an internal dispute resolution mechanism to handle any emergent procurement related complaints that may emerge during the procurement process.

(c) ***Procurement process and market readiness***: Zep-Re undertakes very low value procurements currently mainly under goods and non-consulting services. Though the overall management capacity of the agency is adequate, the procurement function is organized under the Finance department staffed with only one procurement officer. This arrangement if found to lack the requisite capacity to handle the procurement activities under the project. There is no evidence to suggest that market access is restricted as the market do not appear to be a constraint in the current active private sector participation. There are sufficient private sector suppliers and consultants actively bidding and working on development projects to ensure prices are competitive. The detail market analysis will be discussed in the PPSD.

(d) ***Procurement Complexity:*** The expected procurements under the project are not complex as they will be consultancy services and minimal procurement of goods; however, Zep-Re lacks procedures and experience in the envisaged selection of consultants using QCBS, CQS and IC and hence, will follow the procedures in the Procurement Regulation and use the Bank's appropriate Standard Procurement Document.

(e) ***Procurement Risk:*** Based on the above assessments and findings, the overall procurement capacity and risk is assessed as **Substantial.** Mitigation measures are in the Table below.

Findings/Issues	Actions Proposed	Responsible	Targeted Date
Lack of adequate procurement manual	Develop a procurement manual for the project management	Zep-Re	By project effectiveness
Lack of experience in implementation of World Bank procurement Regulations and use of SPD's.	Training on the World Bank Regulations and use of SPD's.	Zep-Re	By project effectiveness
Lack of defined Procurement plan.	Aligning procurement plans to the approved budgets	Zep-Re	By project negotiation
Lack of a properly established procurement unit with adequate capacity.	Hire of a procurement specialist to Hand hold the agency's staff on procurement process management	Zep-Re	By project effectiveness

Component 2

Table 2: Component 2: indicative cost breakdown

	Djibouti	Ethiopia	Kenya	Somalia	Total
IDA	**1.5**	**70**	**60**	**40**	**171.5**
- quality infrastructure		20		19	39
- trade facilitation		26		8	34
- seed capital		20	40	10	70
- TA to support bankable investment opportunities in the livestock value chain			14		14
-project management		4	6	3	13
HoA MTDF (tbc)	**5**				**5**
- *quality infrastructure*	**1**				
-trade facilitation and project management	2				
- seed capital	2				

Djibouti

5. **The project will use the existing implementing entity for the Support for Women and Youth Entrepreneurship (P165558)**. The project is managed by the Centre Pour le Leadership et l'Entreprenariat (CLE).

6. **The Ministry of Agriculture will oversee the overall coordination.** Due to the multisectoral nature of the project, the Ministry of Finance will set up a Project Steering Committee (PSC) responsible for carrying out the following: (i) oversee overall implementation of the project; (ii) facilitate inter-agency coordination in project implementation; and (iv) review and approve annual project work plans and budgets. The PIU shall serve as the secretariat of the PSC. The PSC will comprise representatives from the main government stakeholders, Ministry of Finance, Ministry of Agriculture, Ministry of Commerce, Port and Free Zones Authorities of Djibouti, CLE and other government agencies as deemed appropriate. The PSC will be chaired by the Minister of Agriculture. It will include the State Ministers of all the members of the PSC and other government agencies as deemed appropriate. The committee will meet on a bi-annual basis and ensure a smooth implementation and coordination based on a common action framework.

7. **To ensure smooth implementation and coordination, a Project Technical Committee (PTC) will be established,** composed of technical representatives of government institutions and agencies, that have active engagement in the project including, Ministry of Finance, Ministry of Agriculture, Ministry of Commerce, Doraleh Multipurpose Port, Chamber of Commerce, and the CLE. The PTC will meet regularly (at least monthly) to technically review progress on the implementation of the agreed work plan, address any challenges, and take up to the MoF any issues that may need high-level support or intervention. The PIU will work with the Ministry of Agriculture to regularly organize technical meetings and ensure active participation.

8. **The implementation arrangements under the proposed project will be governed by the guidelines and procedures set out in the Project Implementation Manual (PIM).** The PIM includes operational procedures, FM, procurement methods and procedures, safeguards, and M&E of the project and procedures for overall project management. The PIU will be responsible for the implementation of all project components by working with the relevant institutions, and private sector players.

9. **Financial management.**

(a) Organization and Staffing

Based on the assessment, CLE has recently improved substantially its FM performance under another Bank-financed project (P165558). Nevertheless, currently, CLE has limited human resource capacities and its experience in implementing Bank-financed projects is fairly recent. The DRIVE project will almost double the Bank funding managed by CLE and an assessment of the adequacy of current arrangements will have to be conducted during the first months after effectiveness.

(b) Accounting Systems, Policies, and Procedures

The general accounting principles for the project will be as follows: (a) project accounting will cover all sources and uses of project funds, including payments made and expenses incurred. Project accounting will be based on cash accounting; and (b) project transactions and activities will be separated from other activities undertaken by CLE. CLE will utilize the current (Quickbook) software to record the daily transactions and produce the Interim Un-Audited Financial Reports (IFRs). For the purpose of the project, CLE will develop an implementation manual which will contain an FM chapter describing in detail the FM procedures, including internal controls. It will also contain information about the detailed roles and responsibilities between CLE and various stakeholders. Amending the current manual to include the specific activities of the DRIVE is also an option.

(c) Internal Controls and Internal Audit

For the purpose of the project, CLE will develop an implementation manual which will contain an FM chapter describing in detail the FM procedures, including internal controls. It will also contain information about the detailed roles and responsibilities between CLE and various stakeholders. The option to amend the current manual to include the specific activities of the DRIVE is also an option. This will be agreed with CLE during project appraisal.

In addition to the external audit reviews, to provide additional assurance on the results achieved and the usage of funds, CLE will enter into a contract with an internal auditor to conduct technical/performance audit of all activities implemented under the project. This had been suggested earlier by the Bank but not realized so far.

(d) Financial Reporting

CLE's performance on IFR submission for another Bank financed operation is improving which will be closely monitored. CLE will produce the quarterly IFRs from its accounting systems and submits the same to the Bank.

(e) External Audit

CLE will get into a contract with an independent external auditor with Terms of Reference (ToRs) acceptable to the Bank to audit the Project Financial Statements. A technical/performance audit will be conducted to cover all activities of the project. The audit will be comprehensive and will ensure that the principles of economy, efficiency and effectiveness are adhered to in project execution. The audit will include: (i) the auditor's validation that the activities have been effectively implemented; (ii) a confirmation on the results/outputs achieved and if these are in line with the project development objectives; (iii) observations and proposed recommendations to enhance project performance; and (iv) the implementing agency's response on all significant issues raised in the audit.

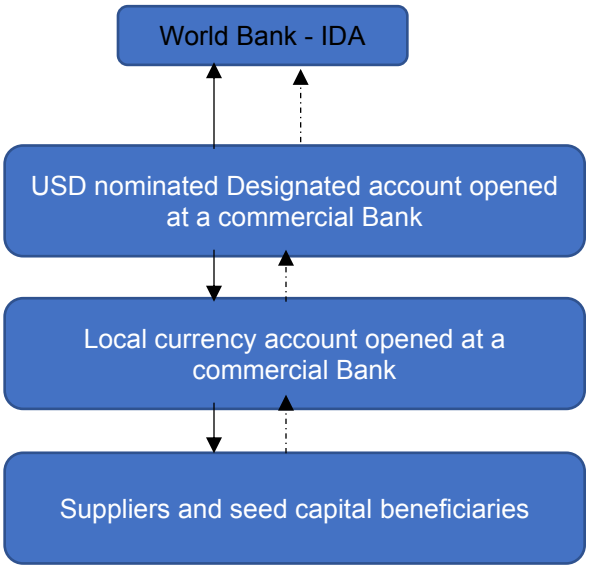
(f) Eligible Expenditure

Eligible expenditures have been defined as works, goods, consulting services, training and operating costs for the activities under the component. In addition to these, there will be a seed capital that will be provided to de-risk private investments into the livestock value chains. The eligibility criteria, the governance and approval structure will be defined in the operations manual. Once the criteria are met, the seed capital resource will be recognized as expenditure for the project. The M&E system of the project will continue to monitor and evaluate the impact of the investment and its contribution to the PDO.

(g) Funds Flow and Disbursement Arrangement

A segregated Designated Account (DA) in US dollars will be opened for CLE under the project name at a commercial bank in Djibouti acceptable to the World Bank. Withdrawals of eligible expenditures will be made on the basis of Statements of Expenditure (SOE) following the applicable procedures as detailed in the Disbursement and Financial Information Letter (DFIL) and the World Bank's Disbursement Handbook. CLE will be responsible for submitting replenishment requests on a monthly basis. All requests for withdrawals should be fully documented, maintained and made available for review by the Bank and project auditors. All disbursements will be subject to the terms of the Financing Agreement and to the procedures defined in the DFIL.

Figure 2. Fund flow and disbursement Arrangements – Djibouti



10. **Procurement.**

(a) The Center for Leadership and Entrepreneurship (CLE) will manage the procurement. CLE is already implementing another WB financed project on women and youth entrepreneurship (P165558) and its procurement performance is currently rated as satisfactory. Procurement will mainly consist of selection of consultants (firms and individuals) as technical assistance to the Borrower and acquisition of small information system (e.g. digitalization of quarantine certificate, financial management). Scope of procurement is hence manageable by the CLE given its existing capacity. Djibouti has confirmed they want to be part of component 1 for a sovereign climate insurance, in amount of $ 1 million. This would be provided by African Risk Capacity (ARC) through single source selection given the technical team confirmed that ARC is the only provider of such service and the PPSD should reflect the single source selection justification based on market analysis.

(b) Procurement Regulatory Framework and Management Capability. Overall and as per MAPS assessment, the

national procurement system is in line with international procurement standards. However, the national procedures still have limitations, particularly in terms of ineffective complaint mechanism and lack of provisions on safeguard standards. WB standard procurement documents are used for international and national procurement competition. The Djibouti Center for Leadership and entrepreneurship has a clear system of accountability with procurement processing overseen by the national procurement commission. CLE is implementing another WB financed project and has gradually improved procurement management capacity. Realistic Procurement plans aligned with the budget were prepared and duly approved by the Bank through STEP. There has been a recurrent turnover of procurement staff and now the recently appointed officer is actively supported both internally and by the Bank but can be overloaded with this additional project.

(c) Integrity and Oversight. As per national institutional regulations, the oversight of procurement processes is conducted through the centralized national procurement commission for every contract above DjF 5 million ($28,000). National supreme audit institutions have also the right to oversight activities of CLE. The agency hasn't a known procurement complaint mechanism and will rely on procedures set out in WB procurement regulations. As of this stage of project preparation, no known report on fraud and corruption or complaint was reported.

(d) Procurement Process. While PPSD preparation is still ongoing, procurement envisioned in this project will mainly consist of selection of consultants for technical assistance/studies, small goods and contracting a sovereign climate insurance. Except the latter which will be procured using direct selection of ARC, procurement activities are simple in value and comparable to those already managed by CLE. Procurement processing under the agency has not shown limitation in competition or issues in contract management.

(e) Procurement Complexity. Overall, Procurement under the project is of low complexity where the scope of the Procurement is certain and easily quantifiable. All procurement will be centralized within CLE with supervision by the national procurement commission. It is anticipated that delivery/contract implementation related risks are largely within the supplier'/contractor's control, even though impact of covid-19 remains a potential risk.

(f) Market Readiness. For the planned procurement contracts, the local market should be suitable, but some consultant's services may require exploring international market. The latter was found responsive to Djibouti opportunities as observed in the implementation of the active project under implementation by CLE.

(g) Procurement risk. Given the existing capacity within CLE in implementing WB project and the relatively low value contracts envisioned, the procurement residual risk is assessed as moderate at this stage of project preparation. Major risk factors and proposed mitigation measures are summarized in the table below and may be adjusted after completion of PPSD.

Findings/Issues	Actions Proposed	Responsible	Targeted Date
Risk of managing the procurement activities effectively due to excessive workload on the staff for this additional project Procurement delay	i)CLE to avail an additional resource person to support this project. ii)Procurement Training PIU and the new procurement officer. CLE should make sure there is proper procurement planning and timely processing in close coordination with the national procurement commission.	PIU WB PIU/WB	one month after effectiveness
Impact of covid-19 to procurement competition or contract execution	Advertisement of procurement opportunities should be as wide as possible to maximize competition in a context of covid-19 environment and regional conflict.	PIU	Ongoing

Ethiopia

11. **The Ministry of Trade and Regional Integration (MoTRI) and Ministry of Agriculture (MoA) will collaborate to implement jointly the Component 2 of DRIVE**. Each will contribute with their expertise and be responsible for their respective activities, and the project will have two coordinators, one from MoTRI and one from MoA . Additionally, the MoA will oversee the implementation of Component 1 by ZEP-RE.

12. **To ensure cost-effective implementation, the fiduciary responsibilities (financial management, procurement, E&S risk management) will be undertaken by the existing implementing entity for the National Quality Infrastructure Project (NQIDP- P160279).** The NQIDP is under MoTRI and aims to improve the delivery of local quality assurance services to enterprises in Ethiopia. The current technical staffing of NQIDP will be reassessed to fit the needs of DRIVE and include MoA staff. The PIU will report to both Ministries on their respective activities and to MoF on the overall project. Once the NQIDP closes, the same PIU will fully transition to implementing DRIVE Component 2.

13. **As a result of the multisectoral nature of the project, the Ministry of Finance will set up a Project Steering Committee (PSC)** responsible for carrying out the following: (i) oversee overall implementation of the project; (ii) provide policy guidance for project implementation; (iii) facilitate inter-agency coordination in project implementation; and (iv) review and approve annual project work plans and budgets. The PIU shall serve as the secretariat of the PSC in coordination with ZEP-RE. The PSC will comprise representatives from the main government stakeholders Ministry of Finance (MoF), MoTRI, MoA, National Bank of Ethiopia (NBE), Ministry of Irrigation and Lowland Areas (MoILA), Ministry of Peace (MoP) and other government agencies as appropriate. The PSC will be chaired by the Minister of Finance or any other institution designated as chair by MoF. It will include the State Ministers of all the members of the PSC, and other government agencies as deemed appropriate. The committee will meet on a bi-annual basis and ensure a smooth implementation and coordination on the basis of a common action framework. ZEP-RE will attend the steering committee to provide a strong link with Component 1.

14. **To ensure smooth implementation and coordination, a Project Technical Committee (PTC) will be established,** composed of technical representatives of government institutions that have active engagement in the project including MoTRI, MoF, MoA, MoP, National Bank of Ethiopia (NBE), MoILA, ZEP-RE and any other stakeholder that could come onboard during implementation. The PTC will meet regularly (at least monthly) to technically review progress on the implementation of the agreed work plan, address any challenges, and take up to the relevant ministry any issues that may need high-level support or intervention. The PIU's project coordinators (both from MoTRI & MoA) will be the responsible party to regularly organize this meeting and ensure active participation in coordination with ZEP-RE.

15. **The implementation arrangements under the proposed project will be governed by the guidelines and procedures set out in the Project Implementation Manual (PIM).** The PIM includes operational procedures, FM, procurement methods and procedures, safeguards, and M&E of the project and procedures for overall project management. The PIU will be responsible for the implementation of all project components by working with the relevant institutions, private sector players, and regulatory agencies.

16. **Financial Management.**
    (a) Organization and Staffing

    The MoTRI has a well-established FM function that is familiar with World Bank requirements. A PIU within the ministry is responsible for managing the Bank financed operation NQIDP. The Ministry is staffed with 38 regular finance staff responsible for budget, finance, internal audit and property management. The project unit is staffed with financial management specialist, one accountant and a cashier. As the existing project closes in June 2022, the PIU should be retained or recruited with the same number of accountants. Both Ministries will have the responsibility to ensure that qualified and experienced staff remain throughout the life of the project.

    (b) Planning and Budgeting

The PIU will follow the budget arrangement of the government[20]. The budget for the implementation of Component 2 of the project will be prepared annually and should be cleared and approved by the World Bank. It should also follow the Government's budget calendar to have the budget approved and proclaimed under the name of the ministry following the government's budget approval system. Budget control and Monitoring practice of the MoTRI will be recorded into the IFMIS. Overall, there are fair budget control. For project purposes, the ministry will be required to maintain up to date budget tracking records and budget versus actual expenditure variance analysis will be prepared quarterly as part of the IFRs and used as a management tool for decision making. Replanning sessions will be carried out at mid-year as needed and any adjustment following this will need to be communicated to the MoF through supplementary budget process.

(c) Accounting Systems, Policies, and Procedures

The Government's accounting policies and procedures (modified cash basis of accounting) will be used for accounting of the project. Additionally, an FM Manual will be developed as part of the PIM. The Manual will reflect the FM arrangements for the project mainly focusing on the areas of budget, accounting, internal control and internal audit, fund flow, auditing, transaction coding and reporting aspects, FM role and responsibilities of implementing entities, and so on. The FM Manual should receive the World Bank's 'no-objection' before Project effectiveness.

(d) Internal Controls and Internal Audit

MoTRI uses the government's internal control procedures. The reviewed internal control systems were found to be adequate. There is proper segregation of duties on payment cycle. Other internal controls including bank reconciliation, cash count, and property management are in place. Project implementation would be subject to same rules, and they would be required to maintain a separate asset register for project assets, or the project assets should be clearly identified in the asset register system of the entities with complete information.

The MoTRI has established internal audit that reports to the MoF. The Internal Audit unit is currently staffed with 6 internal audit officers. The internal audit units at the ministry will incorporate the project audit in their annual audit plan and review the project's books of accounts regularly and produce separate audit report or include in the consolidated reports. Reports issued on the project accounts should be accessible to the World Bank for supervision and follow up of action taken. Copies of the project documents (PAD, PIM, financing agreement, financial management manual) will be provided to the internal auditors for references. Training will be provided to the internal auditors to enhance their capacity.

(e) Financial Reporting

MoRTI prepares monthly reports for treasury resources and submits the same to MoF within 15 days of the month end. For Bank financed operations, the ministry submits IFRs within 45 days of the quarter end. Experience has shown that IFRs are submitted on time with acceptable quality.

(f) External Audit

The audit firm recruitment will be made by the MoRTI. The auditor will conduct audit on the project. The audit firm to be used by the MoRTI will be in consultation with the Office of Federal Auditor General (OFAG). The OFAG or

[20] The recurrent and capital expenditure of MoRTI are finally approved by the Ministry of Finance (MoF) and proclaimed under the name of the ministry. s

acceptable audit firms approved by the Bank could be delegated to conduct the audit for the project. MoRTI will enter into contract with the audit firm selected through the Bank's procurement processes if the audit is delegated by the OFAG.

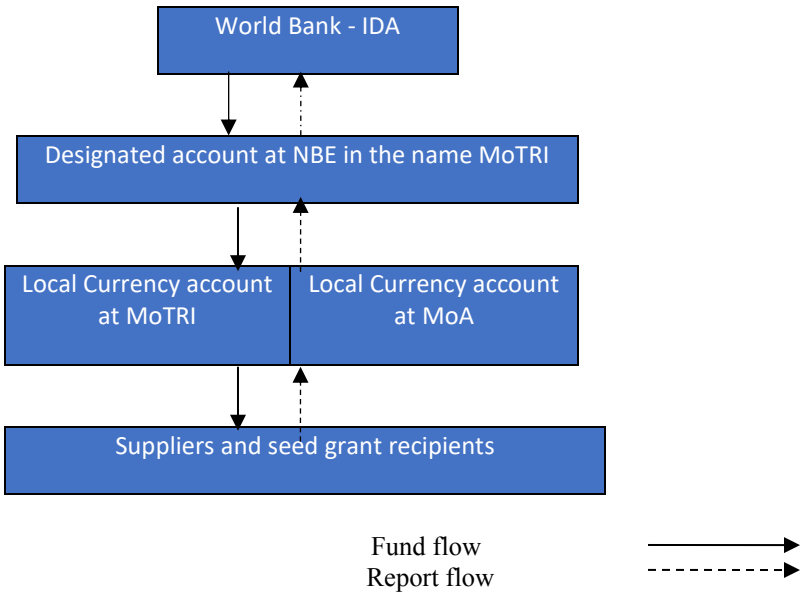
(g) Eligible Expenditure

Eligible expenditures have been defined as works, goods, consulting services, training and operating costs for the activities under the component. In addition to these, there will be a seed capital that will be provided to de-risk private investments into the livestock value chains. The eligibility criteria, the governance and approval structure will be defined in the operations manual. Once the criteria are met, the seed capital resource will be recognized as expenditure for the project. The M&E system of the project will continue to monitor and evaluate the impact of the investment and its contribution to the PDO.

(h) Funds Flow and Disbursement Arrangement

The project will follow channel two fund flow mechanism of the government whereby fund from IDA will flow directly to MoTRI. IDA funds will be deposited into a separate designated account to be opened by the MoTRI at the National Bank of Ethiopia (NBE). The authorized ceiling of the Designated Account will be two quarters of forecasted expenditure based on the approved annual work plan and budget. Fund from the designated US$ account will be further transferred in to pooled Birr account to be held by MoTRI.

Figure 3. Funds Flow and Disbursement Arrangements – Ethiopia



17. **Procurement.** Procurement activities in the Ethiopian side will be implemented using the existing structure in the MoTRI. The procurement Team reports to the Finance and Procurement Directorate which is responsible to oversee Procurement and Financial Management functions in the ministry. In addition, the MoTRI has also established Bid Endorsing Committees (BEC) which reviews and approves procurement decisions for large value activities in accordance to Government's procurement procedure as specified in the procurement proclamation and directive. However, as specified below under sub para 11 (iv), the procurement team in the MoTRI lacks prior experience on

World Bank financed projects. In addition, the team is established to carry out procurement under government financed projects and may not have idle capacity to manage the workload coming along with the new project. Thus, the procurement team shall be supported by competent procurement experts which will be recruited under the Project Implementation Unit.

(a) The assessment reviewed the procurement legal framework, organizational structure, functions, staff capacity, and complaint handling system and procurement cycle management and the overall adequacy of the system and capacity to implement the project in the Ethiopian side. In addition, the assessment was supported by input from the national procurement system assessment using internationally recognized methodology (MAPS II-Methodology for Assessing Procurement Systems) which was concluded at the end of FY20. Currently, PPPAA in collaboration with the WB prepared procurement reform strategy and action plan to address gaps noted on the procurement system and performance.

(b) Public procurement is governed by the Public Procurement and Property Administration Proclamation (No. 649/2009) and the procurement Directive issued in June 2010 and amended in December 2015. Among other provisions, the proclamation stipulates the organization responsible for procurement, the key procurement principles and operational procedures, and the complaint-handling system. It also reestablishes the Federal Public Procurement and Property Administration Agency (PPPAA) as regulatory body. Currently PPPAA is revising the procurement proclamation to ensure that it accommodates emerging developments and addresses gaps identified in the MAPS assessment.

(c) Open bidding is the default procurement method for which notices are published in the newspaper having national circulation (Ethiopian Herald). The associated bidding documents are prepared using the Standard Bidding Documents issued by PPPAA and contains all the necessary sections including standard conditions of contracts that allow appropriate allocation of responsibilities, risks and liabilities among contracting parties. However, the SBDs and the resulting bidding documents lack provisions as prescribed in the Regulation para 5.4 (c) and (d) related to Bank's Anti- corruption Guideline and ESHS risks and impacts. The client shall ensure that the bidding documents are consistent with the requirements of the provision or advised to use the Bank's SPDs even for procurement from the national market. Recently, the Bank issued a modified SPD applicable for works procurement from the national market which will be used in this project, as appropriate.

(d) Procurement complaint handling system: The procurement complaint handling system follows a three-tier structure that allows aggrieved bidders to lodge first level complaint to the head of the procuring entity and an appeal to a Complaint Handling Board (CHB) and finally the court if aggrieved bidder is not satisfied with CHB's decision. The CHB is established as quasi- independent body with representatives from the private sector and reports to the MoF. The time for submission of complaints and review and decision by different bodies is adequate and clearly specified in the procurement documents. In addition, the system mandates "standstill period" that pauses the procurement process to allow resolution of complaint before procurement action is advanced to contract award and signing stage. However, the assessment has also revealed weaknesses in the system like the restrictions on the aspects of the procurement on which potential bidders can lodge complaint like selection of procurement method, inconsistency between the procedure and the practice, inadequate structure that undermines the neutrality and independence of the system, and inadequate disclosure of complaint decisions etc.

(e) Procurement capacity in the MoTRI: The procurement function in the MoTRI is organized as a "Team" and staffed with 5 experts (1 Team Leader and 4 procurement staff) with adequate qualification and experience in procurement. However, the majority of the procurement in the ministry are low value and standard procurement and thus, the team lacks experience on complex procurement. In addition, the team lacks prior experience on Bank financed projects. However, the PIU for National Quality Improvement Project (P162079) is

housed in the ministry and managing complex procurement activities with support from qualified procurement experts working in the PIU. The PIU is also supported by a dedicated Bid Endorsing Committee that reviews and approves procurement decisions related to the project. The procurement staff in the PIU have adequate experience on the requirements of the new procurement Regulation with satisfactory performance in implementing the procurement activities in the NQI project. Thus, the client will fill the gap in the capacity and experience of the procurement team with similar arrangement by establishing new PIU or continuing with the existing PIU.

(f) Market: The envisaged procurement activities in the Ethiopian side are simple, low value -low risk activities that can be sourced from the domestic market. However, some of the procurement activities are relatively high value and complex that demand approaching the international market. The client shall use flexible approach, on a case-by-case basis, to address the challenges associated with the ongoing internal conflict and COVID.

(g) Procurement Risk: Based on the above assessments and findings, the overall procurement capacity and risk is assessed as **Substantial**. Mitigation measures are in the Table below

Findings/Issues	Actions Proposed	Responsible	Targeted Date
The procurement team and staff in the MoTRI lack capacity and prior experience on Bank financed projects	(i) The project will establish Project Implementation Unit staffed with qualified procurement experts (at least 2) or assign the existing PIU to continue implementing the new project. (ii) The IA will establish clear working relationship with the permanent procurement team and ensure that the procurement team in the permanent structure involve in the procurement processing for the new project.	MoTRI	By project effectiveness
The restrictions due to the ongoing internal conflict and COVID is likely to affect procurement performance in the project.	(i) Employ flexible procurement approaches available in the procurement regulation based on discussion and agreement with the Bank on case-by-case basis.	PIU	Throughout project implementation
The national SBDs are not fully consistent with the requirement of the procurement regulation for use of national procedure	(i) Modify the national SBD incorporating all requirements specified as a condition to use the national procedure and secure Bank's clearance **Or** (ii) Use the Bank's SPD for all procurements including procurement from the domestic market	PIU	Throughout project implementation
Delay in evaluation of bids and lack of contract management capacity impacted procurement performance in the NQIP	(i) Provide training to procurement and technical staff Establish contract management capacity to follow up and support implementation of works contract, in particular.	PIU	Annually Ongoing

Kenya

18. **The Ministry of Agriculture, Livestock, Fisheries and Cooperative (MoALFC), through the State Department of Livestock (SDL), will undertake the management of Component 2 and facilitate coordination with the other participating countries**. SDL currently implements the Regional Pastoral Livelihoods Resilience Project (RPLRP), closing in December 2021. The existing team has skills in Environmental and Social matters and Financial Management. The facilitation of private investment through seed capital will be undertaken by Kenya Development Corporation (KDC), a development financial institution under the National Treasury. KDC's mandate includes the promotion of private sector investment. The MoALFC and National Treasury will enter into a subsidiary agreement with KDC to implement activities related to private sector support. The project will hire a coordinator with appropriate skills to coordinate between implementing agencies, the HOA secretariat, and participating

governments.

19. **As a result of the multisectoral nature of the project, the MoALFC in coordination with National Treasury will set up a Project Steering Committee (PSC) responsible for carrying out the following**: (i) oversee overall implementation of the project; (ii) provide policy guidance for project implementation; (iii) facilitate inter-agency coordination in project implementation; and (iv) review and approve annual project work plans and budgets. The PIU in SDL shall serve as the secretariat of the PSC in coordination with ZEP-RE. The PSC will comprise representatives from the main government stakeholders NT, ZEP-RE, SDL, Ministry of Industrialization, Trade and Enterprise Development, KDC, representatives from the private sector and from pastoral organizations and other government agencies as deemed appropriate. The PSC will be chaired by the PS SDL and/or PS National Treasury. The committee will meet on a bi-annual basis and ensure a smooth implementation and coordination on the basis of a common action framework.

20. **To ensure smooth implementation and coordination, a Project Technical Committee (PTC) will be established**, composed of technical representatives of government institutions that have active engagement in the project including SDL, NT, Ministry of Industrialization, Trade and Enterprise Development, ZEP-RE, KDC and any other stakeholder that could come onboard during implementation. The PTC will meet regularly (at least monthly) to technically review progress on the implementation of the agreed work plan, address any challenges, and take up to the ministry any issues that may need high-level support or intervention. The SDL project coordinator will be the responsible for organizing technical meetings regularly to deliberate issues related to implementation of the project.

21. **Financial Management**
(a) Organization and Staffing

Each of the implementing agencies will handle its own allocated funds to implement relevant activities. At SDL, accounting of the project accounts at MoALFC will be handled by the project FM unit that is headed by a qualified Principal Accountant with adequate experience in donor funded project. KDC has a finance and accounts department which has 10 staff headed by the Deputy Director Finance. The Deputy Director Finance reports to the Director General. The finance team is well qualified with the key accounting staff being qualified accountants and having a first degree as a minimum. They are also experienced for the expected financial management work. The Deputy Director Finance is on 5-year contract beginning 1st July 2021 while the rest of the staff are on a permanent contract basis. Each member of staff has a job description, which clearly defines the duties, responsibilities and reporting lines. The authority limits are defined in the job descriptions. Training needs are identified during the appraisal process and included in the training program administered by the Human Resource department. Finance staff are also required to undergo Continuous Professional Development as prescribed by the professional body. The project will designate an accountant based on a CV acceptable to the Bank who will handle financial transactions and reporting for the project. The accounting and staffing arrangements are considered to be adequate for the project.

(b) Planning and Budgeting
For SDL, the Public Finance Management Act 2012 guides budgeting and related regulations as well as the FM Manual developed by the MoALFC for projects. Specific budget provisions will also be included in the PIM. For KDC, budgeting will follow KDC and Kenyan budgeting procedures. The Deputy Director Finance is in charge of formulation and monitoring of budgets. The Board approves the budgets. The Deputy Director Finance gets submissions from all departments and prepares the draft budget. He then submits the draft budget to the Leadership Team for review before being released to the Finance and Investment Committee and finally to the Board for approval and to The National Treasury for inclusion into the printed estimates. The budget runs for the period 1 July to 30 June. The Board

approves budgets by end of each year for the following year. The budget preparation process is manual using Excel based Models. Once approved by the Board, the final budget is loaded into the Navision system. SDL and KDC will be monitoring budgets by preparation of monthly management reports which are generated from the accounting system. The reports are reviewed, and comments included for significant budget variations. These reports will be generated on a monthly and quarterly basis for Board Review. KDC will ensure that the chart of accounts reflects the needs of the project and be modified as necessary.

(c) Accounting Systems, Policies, and Procedures

At SDL, the ministry uses a manual accounting system which runs parallel to IFMIS. The project will need to use IFMIS for project accounting. KDC runs the Navision 2018 ERP system which has the capability of recording transactions per project, including allocation of expenditure by category, disbursement categories and source of funds. The staff is adequately trained to maintain the system. The management organization and processing system safeguard the confidentiality, integrity, and availability of the data. KDC will use its existing accounting system but segregate the accounting for the project funds. The project will be set up as a separate entity in Navision system to allow for effective financial reporting to the World Bank.

(d) Internal Controls and Internal Audit

At SDL, the MoALFC PIU has developed a comprehensive FM manual used for projects with adequate provisions for necessary financial controls. This will be supplemented by the PIM. The DRIVE FM arrangements will be mainstreamed along the internal control framework, with the PMU taking the lead in executing project activities and maintaining the necessary controls. The project FM manual contains adequate internal control measures necessary to enhance accountability over project funds.

KDC has a Finance and Accounts policy procedure manual that guides in day-to-day financial operations. KDC Finance and Accounts policy procedure manual has provided for segregation of duties and ceilings for approval and authorizing of transactions. The entity maintains an adequate, up-to-date cashbook, recording receipts and payments. Bank reconciliations are prepared monthly and there is control over imprest and advances. Every month a senior accountant prepares the bank reconciliations, which is approved by the deputy director after being reviewed by the assistant finance Manager. KDC uses the Accrual concept of accounting as per IFRS guidelines. The procedures manual is based on the current business structure and any procedures to align to project activities would need to be incorporated accordingly. The accounting policies applied by KDC are in compliance with the International Financial Reporting Standards (IFRS). KDC will prepare and submit to the Bank for approval a Project Implementation Manual for component 2 of the project.

MoALFC has an internal audit function with qualified audit staff and adequate capacity to provide fiduciary oversight over project funds. The internal audit department has 4 staff and is headed by the Manager, Internal Audit. At KDC, the department is adequately staffed with qualified accountants. The internal audit has put proper measures to review as per the Audit Charter. The audit team follows up on the implementation of audit findings by tracking through the teammate audit management system. Quarterly reports are discussed by the Audit Committee of the Board to ensure that the same are closed. The project will be included as part of the review of activities under the Audit Charter. The Internal Auditor TOR will be enhanced to include the review of the project activities.

(e) Financial Reporting

KDC and SDL will each prepare and submit calendar quarterly IFRs as per the agreed format. They will each also prepare and submit annual audited project financial statements as per the agreed format. The quarterly IFRs will be

submitted to the World Bank within 45 days after the end of the calendar quarter to which it is related. The audited financial statements and the audit management letter will be submitted to the World Bank within six months after the end of the financial year.

(e) External Audit

At SDL, the audit will be done the Office of the Auditor General. The Auditor General audited the former institutions that merged to form KDC (ICDC, IDB and Tourism Finance Corporation). The previous entities of ICDC and IDB capital were audited by KPMG while the Auditor General Audited Tourism Finance Corporation. Unsupported loans, absence of loan records, unsupported long-term liabilities were some of the findings noted in the audit reports of the previous entities. For the seed capital activity, KDC will engage an audit firm that is technically competent, independent and acceptable to the World Bank who will audit the project funds. The audit TOR will be cleared by the World Bank, the auditors will submit their firm profile to the World Bank for review, and their audit contract and fees will be prior approved by the World Bank before the contract is signed, and that it would be a fixed sum contract.

(f) Eligible Expenditure

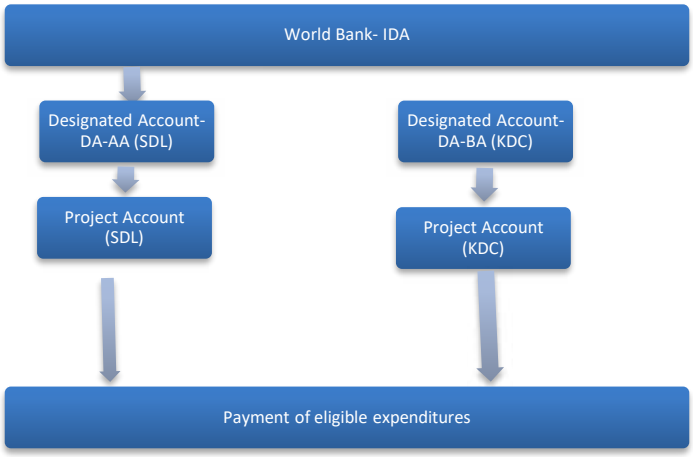
Eligible expenditures have been defined as works, goods, consulting services, training and operating costs for the activities under the component. In addition to these, there will be a seed capital that will be provided to de-risk private investments into the livestock value chains. The eligibility criteria, the governance and approval structure will be defined in the operations manual. Once the criteria are met, the seed capital resource will be recognized as expenditure for the project. The M&E system of the project will continue to monitor and evaluate the impact of the investment and its contribution to the PDO.

(g) Funds Flow and Disbursement Arrangement

SDL and KDC will be required to open a dollar account with Central Bank of Kenya which will be managed by the National Treasury. They will each open a local currency project account with a commercial bank acceptable to the Bank for KDC and with existing regulations for SDL. Component 2 will be funding disbursements the seed capital that will better connect pastoralists to market, attract private investment into the value chains and facilitate the regional livestock trade.

Funds from IDA will be disbursed to two USD Designated Account managed by the National Treasury. The funds will then be transferred to a local currency project account where eligible payments will be made from. Signatories to the local currency project bank account will be in line with the SDL and KDC mandates. An initial advance will be given to the project based on a 6-month forecast approved by the World Bank. Thereafter, the project will be required to replenish their designated account by submitting electronic withdrawal applications to the Bank on the basis of reimbursement of expenditure (Statement of expenditure). The Bank will process the withdrawal application and deposit funds into the Designated Account. Payments in regard to project eligible expenses should be made from the local currency project account. Other disbursement methods that will be available to the project are direct payments, reimbursement, and Special commitments.

Figure 4. Funds Flow and Disbursement Arrangements – Kenya



22. **Procurement** for component 2 will be implemented by the State Department of Livestock (SDL) in the Ministry of Agriculture, Livestock, Fisheries and Cooperative of Kenya.

(a) Procurement Regulatory Framework and Management Capability*:* Procurement procedures in SDL are regulated by an Act of Parliament-PPAD,2015 and its associated implementing regulations PPADR,2020, the Ministry of Finance and Planning together with the Public Procurement Regulatory Authority (PPRA) provides further guidance on procurement procedures from time to time through circulars. The legal framework is explicit and comprehensive. Reg 5 (1) clearly states that the PPADA, 2015 shall not apply where the agreement specifies the procurement procedures to be followed and hence, the procurement procedures of donor entities/development partners take precedence over the PPADA, 2015. Competitive bidding at the implementing entity is consistent with that generally evident in the country, and the implementing entity's procurement for national competitive bidding (NCB) is through open competitive bidding as detailed in the legal framework. The entity prepares annual Procurement Plan (PP), which is realistic within the approved budget, and the plans are then approved by Cabinet Secretary. Procurements are done within the plan. At this stage, SDL has limited capacity and resources, and tend to rely on dedicated project-specific project management units and the procurement regulations of donors/development partners like World Bank. At the project level, procurement is generally supported by adequately experienced consultants. Therefore, the project requires dedicate project implementation team including procurement officer.

(b) Integrity and Oversight: SDL is audited by the Kenya National Audit Office (KENAO) annually and reported to parliament, equally PPRA Compliance department undertakes procurement compliance audits. External audits are carried out on donor-funded projects annually and reported to the respective donors. Entity is required to comply with all findings and recommendations of the audit. Bid evaluations follow the national legislation and World Bank requirements, which give specific guidelines on how to address these issues during evaluation. However, the approval authorities remained with position's directions. Although the Entity procurement complaints are managed through the Public Procurement Appeals Review Board (PPARB), but the Agency needs to have a dedicated and effective complaints management system for the project known by the bidding community to review and resolve complaints / disputes at appropriate stages of the Procurement cycle.

(c) Procurement Process and Market Readiness: SDL has well trained and experienced procurement professionals and the procurement processes are well documented in the PPADA,2015 and PPADR,2020 which guides every process of the procurement. Equally SDL has experience in the implementation of the World Bank project.

(d) Procurement Complexity: The nature of the expected procurements under the project are not complex as they will be consultancy services and minimal procurement of goods which SDL is quite able to handle. However, Zep-Re lacks procedures and experience in the envisaged selection of consultants using QCBS, CQS and IC and hence, will follow the procedures in the Procurement Regulation and use the Bank's appropriate Standard Procurement Document.

(e) Procurement Risk: Based on the above assessments and findings, the overall procurement capacity and risk is assessed as **Substantial**. Mitigation measures are in the Table below.

Findings/Issues	Actions Proposed	Responsible	Targeted Date
Limited capacity and resources	Dedicated procurement staff within the PIU	SDL	By project effectiveness
Lack of clear internal complaints management system.	Develop clear internal mechanism to resolve complaints / disputes at appropriate stages	SDL	By project effectiveness
Inadequate disclosure and publication of the contract awards.	Enhanced reporting of procurement opportunities and contract awards in the PPIP.	SDL	Within six months of project effectiveness
Inadequate application of procurement regulations.	Training on World Bank Procurement Regulations	SDL	By project effectiveness and continue as needed.

Somalia

23. **The project will be implemented by the Federal Government of Somalia through the Ministry of Finance with the involvement of other ministries and participating Federal Member States on relevant activities**. A Project Implementation Unit (PIU) is to be established within the Ministry of Finance to coordinate the project's implementation. This unit will be responsible for the overall project implementation and coordination with stakeholders. The technical line ministries will be responsible for technical inputs for activities relevant to their sectors, with specific responsibilities clarified within a series of Memorandum of Understanding (MoU) between the Ministry of Finance and sectoral ministries to ensure agreement and buy-in. All the TOR of the contracts benefiting Somaliland will be approved by the relevant technical counterparts in Somaliland. It is envisioned that for activities on quality infrastructure that will benefit the Somaliland Quality Control Commission, contracts will be procured in bulk to benefit several agencies and will be paid by as direct payments by the World Bank on request by the Government.
    .

24. **A Project Steering Committee consisting of the Directors General of the beneficiary ministries and chaired by the DG Ministry of Finance will oversee the project**. Main ministries include the Ministry of Commerce and Industry, the Ministry of Livestock and Rangelands, the Somali Bureau of Standards and the Ministry of Finance for project oversight as well as ZEP-RE. It is expected that the steering committee will convene at least three times annually to review progress in meeting the development objectives, monitor the results framework and provide corrective measures as warranted. The PIU will act as a Secretariat to the Steering Committee. ZEP-RE will attend the steering committee to provide a strong link with Component 1.

25. **A Project Technical Committee consisting of technical staff from the beneficiary ministries will be established**. It will meet regularly (at least monthly) to technically review progress on the implementation of the agreed work plan, address any challenges, and take up to ministries any issues that may need high-level support or intervention. The PIU's project coordinator will be the responsible party to regularly organize this meeting and ensure active participation in coordination with ZEP-RE.

26. **The implementation arrangements under the proposed project will be governed by the guidelines and procedures set out in the Project Implementation Manual (PIM).** The PIM includes operational procedures, FM, procurement methods and procedures, safeguards, and M&E of the project and procedures for overall project management. The PIU will be responsible for the implementation of all project components by working with the relevant institutions, private sector players, and regulatory agencies.

27. **The PIU is expected to include approximately have 10 key staff.** Staff will be engaged locally under Terms of Reference agreed with the Word Bank through competitive and transparent processes and may include civil servants as well as specialists sourced locally and administrative staff. It is foreseen that for the duration of the project, external technical assistance to the PIU will be required. Such technical assistance would include a provision for ad-hoc capacities that can be temporarily and ad short notice drawn-on if needed. Such draw-down TA could be used, for instance, to temporarily augment specific technical capacities, to undertake specialized and targeted capacity building and to address particular challenges and problems as they may arise. Among the specialists include a Stakeholder Engagement Specialist.

28. **Financial management**.

(a) Organization and Staffing

The External Assistance Fiduciary Section (EAFS) already established under the Office of the Accountant General is staffed with mainstream civil servants. The EAFS unit has been fully operational at FGS for the last 6 years. The Office of the Accountant General will designate an Accountant to the Project Implementation Unit. The EAFS and the PIU staff will be trained on Bank FM procedures. Throughout the implementation of the project, the Government is expected to ensure the EAFS and PIU are staffed with FM staff with relevant and adequate qualification and experience acceptable to the Bank.

(b) Planning and Budgeting

The Government will prepare a detailed project budget prepared based on the specific activities to be executed over the life of the project**.** The EAFS Unit working closely with the PIU will prepare and submit to the Bank the project's annual work plans, budget & cash flow forecast, and related procurement plans for each project component for the necessary approvals by the task team leader (TTL) at the Bank. The work plans, cash flow projections and budget will include the figures for the year analyzed by months and quarters. The cash budget for each month and quarter will reflect the detailed specifications for project activities, schedules (including Procurement Plan), and expenditure on project activities scheduled respectively for the quarter. All annual cash budgets will be sent to the TTL at least two months before the beginning of the Government budgeting process (June/July) for review and approval. Given the unpredictable nature of the drought related activities, it will be challenging to accurately estimate the amount of resources earmarked for allocation in the annual appropriation more importantly given that the project is likely to be effective mid-Government fiscal year. This budget will be agreed with the Bank for it to be included in the Government Appropriations and the relevant sector within the FGS budget. Monitoring of budget execution will be done through regular submission of SFMIS generated

quarterly reports to the Bank. The Government will prepare the budget utilization reports for the entire project which will be submitted to the Bank 45 days after the end of the quarter as part of the Interim unaudited Financial Reports (IFRs). Any significant variances between actual and budgeted performance will be discussed with the Bank as part of project implementation support and possible budget amendments processed through the Government mid-year annual budget supplementary window.

(c) Accounting Systems, Policies, and Procedures

To facilitate preparation of the relevant reports and annual financial statements, the project budgets and expenditures will be recorded, classified and reported through the FMISs according to the approved Standard Chart of Accounts (SCoA).

(d) Internal Controls and Internal Audit

The EAFS will ensure that requests for funds commitments/withdrawals, invoices and payment requests are consistent with signed contracts before processing and release of funds/payments. They will also monitor and report on the utilization of project funds, including the fiduciary standards and the reliability of the FM systems. A Project Fixed Assets Register will be prepared, regularly updated, and physical verification of assets routinely carried out. The Fixed Assets Register (FAR) in SFMIS will reflect details of suppliers; description and location of goods; original costs; disposal of assets; assets reference (identification) numbers; serial or registration numbers; dates of purchase; assets additions; condition of assets; assets' useful life and residual value. Contracts Registers will also be maintained in SFMIS with respect to all contracts with consultants, contractors, and suppliers.

To further strengthen internal controls, the internal audit reports shall be prepared and shared with the EAFS/PIU and made available to the World Bank team during Project supervision. The internal audit capacity to be strengthened and linked with other governments' and development partners' capacity-building interventions. The internal auditors will carry out risk-based systems audits to strengthen the project's internal control systems. The Annual Workplan for the Internal audit function will include a review of the operations of the project among other Bank supported projects.

(e)Financial Reporting

The Government will extract from SFMIS, the Interim Unaudited Financial Reports (IFRs) and submit to the World Bank not later than 45 days after the end of the quarter. These reports shall form the basis for funds drawdown. The quarterly reports shall provide details on all funds received under the project as a whole as well any counterpart funds received under the project (if any). The reports shall include a statement showing: period and cumulative inflows by sources and outflows by main expenditure classifications (components/sub-components); beginning and ending cash balances of the project; and supporting schedules comparing actual and planned expenditures. Expenditures would be classified by component and by activities. The project is likely to experience delays in consolidation of accountability report for the decentralized activities due to limited access to the implementation sites in the wake of COVID-19 pandemic.

(f) External Audit

The Auditor General FGS will carry out Project External Audit with support of Technical Assistance (TA) as necessary. It is expected that the TA firm shall be procured by financing from the PFM pipeline project currently under preparation. However, the project will be expected to finance incremental costs relating to the Office of the Auditor General operational activities in undertaking the project audit.

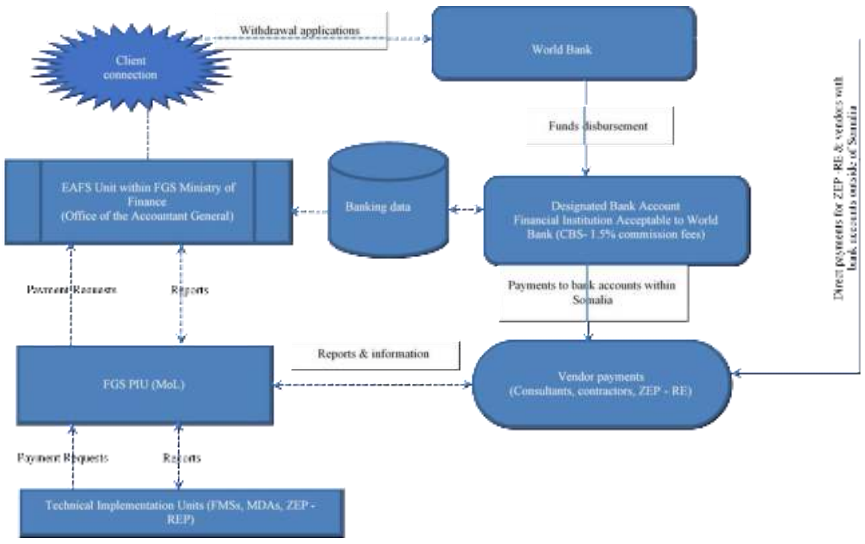
(g) Eligible Expenditure

Eligible expenditures have been defined as works, goods, consulting services, training and operating costs for the activities under the component. In addition to these, there will be a seed capital that will be provided to de-risk private investments into the livestock value chains. The eligibility criteria, the governance and approval structure will be defined in the operations manual. Once the criteria are met, the seed capital resource will be recognized as expenditure for the project. The M&E system of the project will continue to monitor and evaluate the impact of the investment and its contribution to the PDO.

(h) Funds Flow and Disbursement Arrangement

For the funds disbursed to directly to Government for Component 2, the Government shall open a designated bank account in a financial institution acceptable to World Bank. The signatories to this account shall be as per existing mandate provided by Government which is Panel A: Director General of MoF and Director Finance and Administration as alternate and Panel B: Accountant General and Deputy Accountant General as the alternate. Initial withdrawal shall be based on lump sum amount based on the cash forecast. Subsequent withdrawals shall be based report based and approved by Government. All project expenditures shall be incurred and reported in USD.

Figure 5. Funds Flow and Disbursement Arrangements – Somalia



29. **Procurement**. The Project will be implemented by the Federal Ministry of Finance (FMOF) with involvement of other Ministries and participating Federal Member States on relevant activities. The PIU will be responsible for the overall project implementation and coordination with stakeholders and will be staffed with the relevant staff including the Project Coordinator and Procurement Specialist. The PIU staff for the Project will be hired by the government for the duration of the Project through a competitive procurement process. The Procurement Specialist of the Project will work alongside the relevant government staff in the FMOF for knowledge and skills transfer to enable them to gradually take over project's activities. In this regard, FMOF will nominate procurement personnel (counterpart staff) for skill transfer during the Project implementation. The technical line ministries will be responsible for the technical inputs for activities to their sectors.

(a) A procurement capacity assessment of the implementing agencies has been done by the Bank at FMOF. The objectives of the assessment were: (a) to evaluate the capability of the implementing agency to undertake

procurement and the adequacy of the systems that are in place to administer procurement (b) to assess the ability of the implementing agency to effectively carry out the procurement processes; (c) to develop an action plan to be implemented as part of the Project in order to address the deficiencies detected by the assessment aimed at minimizing the risks identified; and (d) to propose procurement supervision plans for the Bank considering the relative strengths and weaknesses and risks revealed by the assessment. The project implementation will be implemented by the Federal Ministry of Finance with involvement of other Ministries and participating Federal Member States on relevant activities.

(b) The assessment reviewed that the implementing agency has (i) basic familiarity with the World Bank's procurement Regulations. The FMOF is currently implementing World Bank funded projects but the procurement support is mainly being provided by Consultants recruited under the established Project Implementation Units (PIUs). The agency is not adequately staffed with adequate/qualified procurement experts but could benefit from the existing PIUs (implementing similar Bank financed project) which have experience on Bank financed project and currently housed in the Ministry of Finance (ii) national procurement law is not fully operational (iii) Weak capacity of bidders/suppliers – Bidders are not familiar with bidding procedures of public procurement. Thus, sometimes bids submitted are of poor quality and with unintentional deficiencies that end up being rejected. (iv) inadequate experience in contract management (v) This being a fragile environment, the market is unstable and sometimes suffer from limited interest from international contractors/consultants or high price bids/proposals because of country security risk and this sometimes leads to low response to published tenders and also the market is impacted by fraud and corruption risk (vi) weak record keeping (incomplete procurement files) and (vii) lack of adequate complaint handling mechanism.

(c) To mitigate the risk, at the FMOF will establish a PIU staffed with a qualified Project Coordinator and a Procurement Specialist among other key staff to oversee the project procurement activities. The PIU will be responsible for the overall Project coordination, implementation, management and oversight and will also facilitate the procurement activities of the participating Ministries and Federal Members States. The Procurement Specialist of the Project will work alongside the relevant government staff in the FMOF for knowledge and skills transfer to enable them to gradually take over project's activities. In this regard, the Ministry will nominate procurement personnel (counterpart staff) for skill transfer during the Project implementation. Also, the FMOF procurement capacity will be enhanced through on-the job training and the World Bank will also provide a need-based training periodically during the Project implementation. The summary of risks and proposed risk mitigation measures are as indicated in Table 1.

(d) **Risk Assessment:** The risk for procurement is considered ***"High."*** The risk is reduced to a residual rating of ***"Substantial"*** in view of the mitigation measures proposed in the Table below.

Findings/Issues	Actions Proposed	Responsible	Targeted Date
Inadequate knowledge and experience of World Bank Procurement Regulations	i) Recruit a Procurement Specialist with Knowledge and experience of World Bank procurement Prior review of all contracts regardless of the value	FMOF	By project effectiveness.
Inadequate knowledge and skills in Contract Management	Conduct training tailored towards addressing weakness in contract management for PIU staff	FMOF/PIU /WB	1st training within 3 months of project effectiveness and other trainings as needed during Project Implementation period

Need for systematic filing system in order to have complete records of the procurement processes	Establishment of a satisfactory filing system	FMOF	Within four months of project effectiveness.
Inadequate complaint handling mechanism	Establish adequate internal complaint handling mechanisms following the WB procurement regulations	FMOF	Within two months of project effectiveness
National procurement law is not fully operational	(i) As the local procurement regulations are being approved, WB procurement regulations should be applied/used (ii) The customized World Bank Standard Procurement Documents to be used while approaching the national market. ii) Provision of support on public procurement reforms	FMOF/WB	Within the period of project implementation.
Weak capacity of bidders/suppliers	The implementing agency should always have time for bidders/suppliers/Consultants to explain and clarify the bid/quotation/Proposal document before the submission and conduct workshops (pre-bid/pre-proposal conferences) for bidders/Consultants on how to submit acceptable bids/proposals.	FMOF	During Project Implementation
Fraud and Corruption	i) Prior review of all procurement activities and enhance internal FM controls, mechanisms across the project activities Ensure that the Bank's prescriptions in fighting fraud and corruption are included in all bidding documents and contracts.	FMOF	During Project Implementation
Being a fragile environment, the market is unstable and sometimes suffer from limited interest from international contractors/consultants	Encourage joint venture with local firms/Consultants.	FMOF	During Project Implementation

Procurement Oversight and Monitoring Arrangements for the whole Project (Zep-RE and all countries)

30. **Procurement oversight and monitoring arrangements**. The World Bank exercises its procurement oversight through a risk-based approach comprising prior and post reviews as appropriate. The World Bank sets mandatory thresholds for prior review based on the procurement activity risk rating, as determined in the Procurement plan that will be agreed with the Bank throughout the course of project implementation. The prior review threshold applicable in the project for the different risk levels is provided in the table below:

Procurement Prior Review Thresholds (US$ millions)

Type of procurement	*High risk*	*Substantial risk*	*Moderate risk*	*Low risk*
Works	5.0	10.0	15.0	20.0
Goods, ITs and non-consulting services	1.5	2.0	4.0	6.0
Consultants (firms)	0.5	1.0	2.0	4.0
Individual consultants	0.2	0.3	0.4	0.5

31. **The World Bank shall carry out post-reviews of procurement processes undertaken by the Borrower to determine whether procurement implementation comply with the requirements of the Legal Agreement**. The Bank may use a third party such as a supreme audit institution, acceptable to the Bank, to carry out post reviews. Any such third party shall carryout the reviews in accordance with the terms of reference (TOR) provided to it by the Bank. The procurement reviews will be carried out using the online PPR system established by the Bank and the client in the respective countries are urged to ensure that procurement activities are processed through STEP system and procurement information and documents are uploaded timely.

32. All contracts at or above the mandatory procurement prior review thresholds are subject to international advertising and the use of the Bank's SBDs (or other documents agreed with the Bank).

33. **Procurement Arrangements**. For the high or substantial risk and relatively high value contracts of the project, arrangements are provided in the following table.

Additional Financial Management Elements for the Project

34. **External Audit.** The auditors in all cases will also provide a Management Letter, which will inter alia outline deficiencies or weakness in systems and controls, make recommendations for their improvement, and report on compliance with key financial covenants. All the institutes have the responsibility to prepare audit action plan and status report of implementation of action plan on the audit findings. The action plan and the status report of implementation must address all the findings in detail.

Table 1. External Audit

Country	Implementing Entity	Audit Type	Auditor	Due Date
Regional implementer	ZEP-RE	Project financial statements Management Letter	Independent external audit firm	Six months after the end of each fiscal year
Djibouti	CLE	Project financial statements and management letter	Independent external audit firm	Six months after the end of each fiscal year
Ethiopia	MoTRI	Project financial statements Management Letter	Auditor General or by an auditor designated by Auditor General	Six months after the end of each fiscal year
Kenya	SDL and KDC	Project Financial statements Management Letter	Office of the Auditor General or by an Auditor contracted by the Auditor General	Six months after the end of each fiscal year.
Somalia	MoF (Office of the accountant General)	Project Financial statements Management Letter	Auditor General with support of TA as necessary	Six months after the end of each fiscal year

35. **Disclosure of Audit Report.** In accordance with the World Bank's policies, the World Bank requires the recipient to disclose the audited financial statements in a manner acceptable to the World Bank; following the World Bank's formal receipt of these statements from the borrower, the World Bank makes them available to the public in accordance with the World Bank Policy on Access to Information.

Table 2. Banking Arrangements, Eligible expenditure and Supporting Documents

Country	Imp. Entity	Designated Account (US$)	Other Project Bank Accounts	Eligible expenditure	Supporting documents (to be further detailed in DL)
Regional	Zep-Re	DA-A, DA-B, DA-C, DA-D	None	**Share capital** - Advance to the designated account to be made and documented when the share capital subscription of countries into Zep-Re has been made	IFR showing Evidence of the increase of the share capital for the countries and use of resources for start-up and implementation aspects
			None	**Payment of premium and financial services package** - once this is transferred to the selected service providers and insurance coverage is obtained **Payment under Savings incentive grant** – actual grant paid to beneficiaries **Payment under reserve layer** – actual payout to beneficiaries	Quarterly IFR showing premium paid, payout made and list of beneficiaries reached and amounts paid for each country
			Local currency account	**Technical assistance** - category of expenditure to be described in the grant Agreement.	Quarterly IFR to be submitted within 45 days of the quarter end
Djibouti	CLE	DA-AA	Local currency account	Goods, works, consultancy and non-consultancy services and operating costs - at the time of the occurrence of the expenditure	SoEs to be submitted monthly
				Seed capital - at the time of transfer to the beneficiaries	
Ethiopia	MoTRI	DA-BB	Local currency account	Goods, works, consultancy and non-consultancy services and operating costs - at the time of the occurrence of the expenditure	Quarterly IFR to be submitted within 45 days of the quarter end
				Seed capital - at the time of transfer to the beneficiaries	
Kenya	SDL	DA-CC	Local currency account	Goods, works, consultancy and non-consultancy services and operating costs - at the time of the occurrence of the expenditure	SoEs to be submitted monthly

	KDC	DA-DD	Local currency account	Seed capital - at the time of transfer to the beneficiaries	
Somalia	MoF	DA-EE	Not applicable	Goods, works, consultancy and non-consultancy services and operating costs - at the time of the occurrence of the expenditure	SoE to be submitted monthly
				Seed capital - at the time of transfer to the beneficiaries	

Note: DA = Designated Account.

36. **Fraud and Corruption.** ZEP -RE and all implementing entities are expected to adhere to the Bank Anti-Corruption Guidelines as outlined under the Banks policy and procedure for IPF operations. Unless otherwise negotiated, all agencies are expected to adhere to the Bank Anti- Corruption Guidelines. The Assessment recommends the applicable Anti-Corruption Guidelines applicable to this operation has to be documented in all legal agreements and subsidiary agreements under the project.

37. Possibility of circumventing the internal control system with colluding practices as bribes, abuse of administrative positions, mis-procurement etc., is a critical issue and may include: (a) late submission of supporting documents; (b) poor filing and records; (c) lack of system integration; (d) lack of budget discipline; (e) unauthorized commitment to suppliers, bypassing budget and expenses vetting procedures; (f) incorrect digitation of livestock. These are mitigated as follows: (i) specific aspects on corruption auditing would be included in the external audit TOR; (ii) FM Procedures (as part of Operations Manual) approved and in operation for the project (iii) strong FM arrangements (including qualified Project Accountants in the implementing entities, (iv) periodic IFRs including budget execution and monitoring; and (v) measures to improve traceability of livestock and accountability and transparency are built into the projects' design.

Financial Management Action Plan (to be completed during appraisal) Action		**Date Due by**	**Responsible**
GENERAL ASPECTS	Prepare, agree and sign the required subsidiary agreements between the countries and Zep-Re with clear description of financial management aspects such as fund flow, financial reporting, auditing, monitoring and evaluation, etc.	Project effectiveness	Ministries of Finance of countries and Zep-Re
	Provide training to FM staff and Internal Auditors operating at different levels on World Bank procedures and project operational arrangements	Within 3 months of effectiveness	WB team
	Prepare a draft FM section of the Project Implementation Manual for component 1 and 2 of each country including seed capital management	Project effectiveness	Zep-RE and country specific ministries
	Prepare and agree on terms of references for external audit review	Within 2 months after effectiveness	Implementing entities with the WB Support
Zep-Re	The project will hire 2 accountants to help in running the financial affairs of the project.	Within 1 month after effectiveness	Zep-RE FM

Financial Management Action Plan (to be completed during appraisal) Action		Date Due by	Responsible
	Conduct regular capacity building training	Continuous, with the first being 3 months after effectiveness	ZEP-RE Project Manager
	The project will be set up as a separate entity in Sun system for each country to allow for effective financial reporting to the World Bank.	Within 1 month after effectiveness	ZEP-RE FM
	Internal audit department to review the pipeline and TA every six months with the reports submitted to the WB 60 days after the end of the semester.	Every six months after disbursement	ZEP-RE Internal Audit; Project Manager and FM
Djibouti	Recruit accountant at CLE	At the latest 3 months after effectiveness	CLE
	Contract with internal auditor to review project accounts	At the latest 3 months after effectiveness	CLE
	Conduct Technical/ performance audit annually	The audit will be submitted to the World Bank 6 months after the close of each fiscal year	CLE
ETHIOPIA	The project Annual Work Plan and Budget for the following year is finalized and submitted to the Bank for no objection not later than March 31st of each year.	Annually	MoTRI
	Develop a chart of account suitable for the project and customize IFMIS to accommodate the project reporting requirement	Within one month of project effectiveness	MoTRI
	Recruit one FM specialist one accountant for the project	Within one month of project effectiveness	MoTRI
	Provide annual training to all accountants and internal auditors	Annually	MoTRI and WB
	Internal audit to include the project in the annual audit plan and provide the required review service;	During implementation	MoTRI
KENYA	The project will be set up as a separate entity in Navisions to allow for effective financial reporting to the World Bank.	Within one month of project effectiveness	KDC
	Internal audit department to review the project every six months with the reports submitted to the WB 60 days after the end of the semester.	Every six months after project effectiveness	KDC
	Ensure that there is a strong PMU in SDL that will ensure that KDC always has a budget and the funds flow is smooth.	Within one month of project effectiveness	SDL
	Provide capacity building training annually	Annually	SDL, KDC and WB

Financial Management Action Plan (to be completed during appraisal) Action		Date Due by	Responsible
Somalia	Submission of budget two months before the beginning of gov't budget cycle.	Annually	MoF

(f) **Implementation Support and Supervision Plan.** The World Bank's FM team will provide implementation support over the project's lifetime. The project will be supervised on a risk-based approach. Supervision will cover but not be limited to the review of audit reports and IFRs and advice to the task team on all FM issues. Based on the current assessed risks, and on a preliminary basis, the project will be supervised at least twice a year and may be adjusted when the need arises.

Table 3. Implementation Support Plan

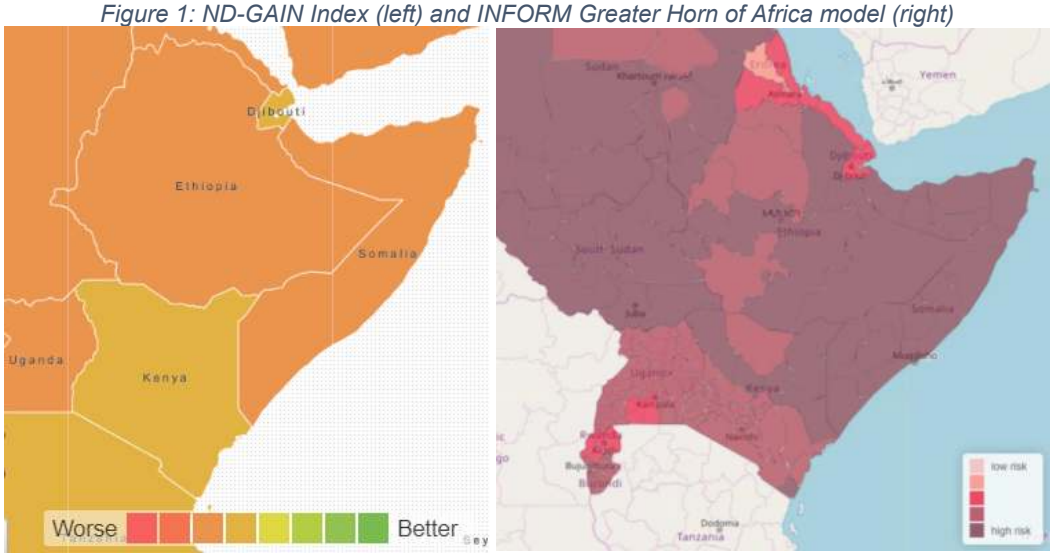
FM Activity	Frequency
Desk reviews	
IFR review	Quarterly
Audit report review of the program	Annually.
Review of other relevant information such as interim internal control systems reports	Continuous as they become available.
On-site visits	
Review of overall operation of the FM system	Semiannually (implementation support mission)
Monitoring of actions taken on issues highlighted in audit reports, auditors' management letters, internal audit, and other reports	As needed, but at least during each implementation support mission.
Transaction reviews (if needed).	As needed.
Capacity-building support	
FM training sessions by World Bank FM team.	Following the project transition and thereafter as needed.

ANNEX 2: Impact of climate change on drought risks in the HoA and the need for adaptation

The present annex aims to highlight the current and anticipated impacts of climate change, and especially of increasing drought shocks, in the Horn of Africa, on the livestock sector, and on pastoralist communities.

1. **The HOA is globally one of most vulnerable regions to climate change.** According to the ND-GAIN Index, Kenya, Ethiopia and Somalia are among the 20 percent most vulnerable to climate change (with Ethiopia and Somalia among the most vulnerable 10 percent).[21] All three countries are ranked as high-risk by the INFORM Risk Index, with a high level of hazard, exposure and vulnerability to climate risks and a low level of coping capacity.[22]

Figure 1: ND-GAIN Index (left) and INFORM Greater Horn of Africa model (right)

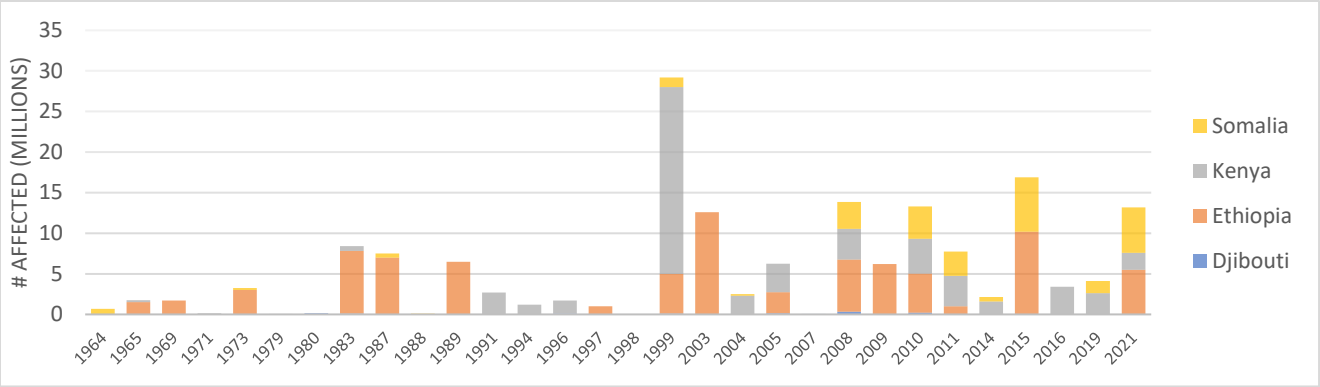


2. **Since the 20th century, observed mean temperatures and hot extremes in the HOA have increased more rapidly than global averages.[23]** Rains have become more erratic in terms of quantity, timing, and geographical distribution, making agricultural and ecological droughts, and river flooding, more frequent. The trend of countries with two rainy seasons (e.g., southern Ethiopia and southern Somalia) is of the long rains becoming weaker with increased vulnerability when this reduction is paired with the failure of the short rains. As a result, droughts and heatwaves have been more frequent in the last 30–60 years. During the last decade, a series of severe droughts has impacted on millions of people in the region (Figure 2). From 2008 to 2011, large-scale recurrent droughts hit the HoA countries. The 2011 drought was particularly severe and led to major humanitarian interventions in Djibouti, Ethiopia, Kenya and Somalia – over 10 million people required urgent food assistance.[24] From 2015 until 2017, another series of severe droughts hit the region. The 2015 one was induced by the El Niño weather phenomenon and was immediately followed in 2016 by a La Niña-type drought event. By July 2017, close to 20 million people were facing acute food insecurity.[25] The region currently faces an exceptional prolonged and

[21] The ND-GAIN Country Index summarizes a country's vulnerability to climate change in combination with its readiness to improve resilience. Out of 182 countries, Somalia is ranked 173rd, Ethiopia is ranked 155th and Kenya is ranked 147th and Djibouti is ranked 123rd.
[22] The INFORM Risk Index is a global risk assessment tool according to three dimensions: hazard & exposure, vulnerability and lack of coping capacity. Somalia is ranked 1st, Ethiopia is ranked 12th, Kenya is ranked 27th, Djibouti is ranked 38th.
[23] IPCC WGI 6th Assessment Report 2021, Regional fact sheet: Africa, available at: *https://www.ipcc.ch/report/ar6/wg1/downloads/factsheets/IPCC_AR6_WGI_Regional_Fact_Sheet_Africa.pdf*
[24] OCHA 2011
[25] USAID, 2017

persistent agro-pastoral drought with over 20 million people in need of urgent food aid in December 2021.[26]

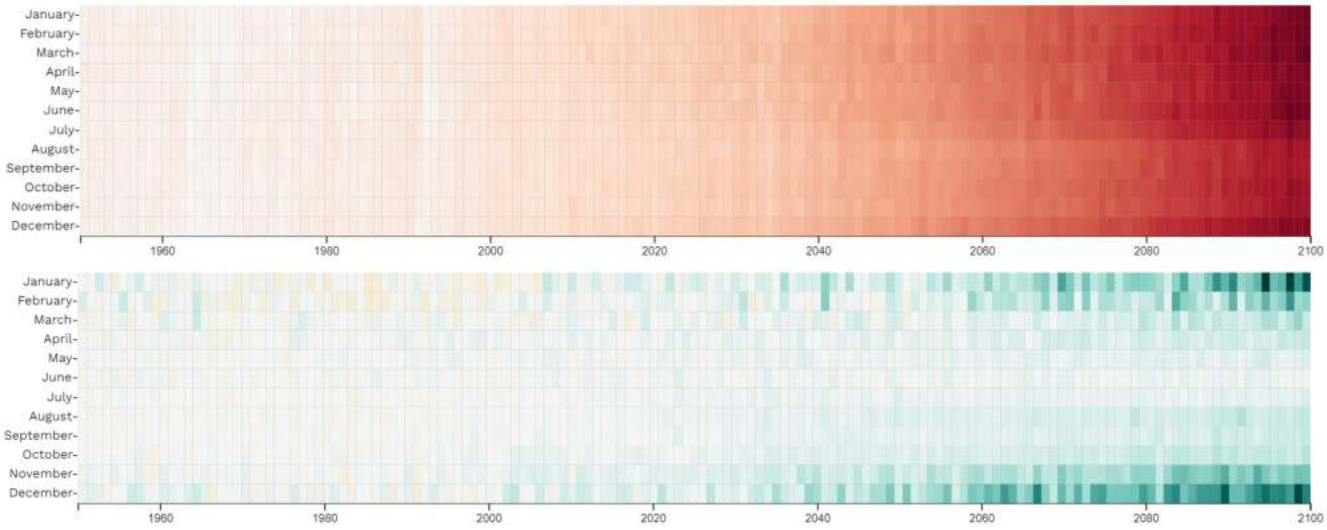
Figure 2: Number of people affected by droughts in the HOA, 1960 to 2021



Source: EM-DAT

3. **Climate modeling for the region suggests that weather-related hazards will intensify as climate change impacts increase.** Projections for East Africa from the 2021 IPCC WGI 6th Assessment Report shows an increase in average annual temperature of between +1.8°C to +3.2°C by 2050[27] (Figure 3). Projections for average mean precipitation shows higher inter-seasonal variability with higher occurrence of heavy rains events. Additional increases in global warming are expected to lead to higher frequency and intensity in temperature extremes, consecutive dry days and heavy precipitation, thus increasing the occurrence of droughts and heatwaves.

Figure 3: Change in mean temperature (top graph) and change in total precipitation (bottom graph) by seasons for East Africa[28]



Source: IPCC Interactive Atlas, available at: https://interactive-atlas.ipcc.ch/

[26] *https://fews.net/east-africa*,
[27] Compared with pre-industrial averages, depending on the emissions pathway
[28] Compared with pre-industrial averages, according to a high emission scenario (SSP5 – 8.5), comparison between 30+ models.

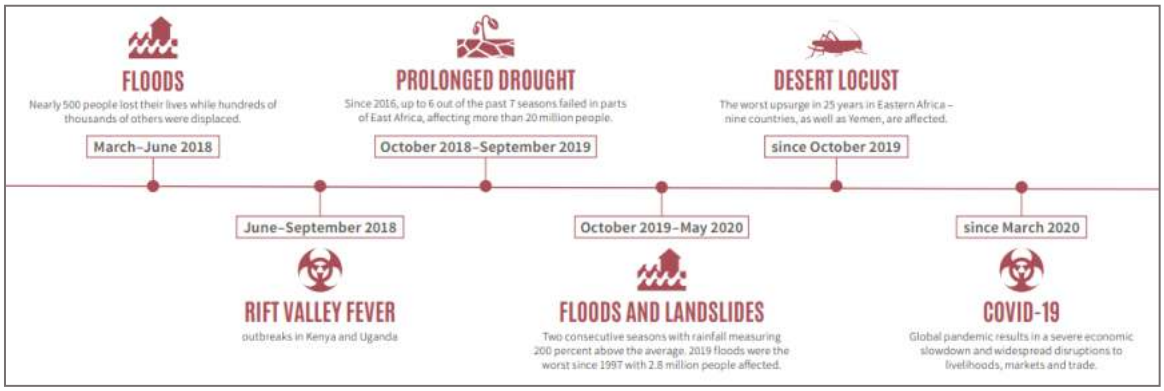
4. **Despite common trends, future climate patterns may vary by country.** Table 1 highlights country-specific projections for mean temperature increase and rainfall variability.

Table 1: Projected climate change in HOA countries[29]

Country	Temperature (increase)	Precipitation	Rainfall pattern
Djibouti (2050)	0.6°C - 2.4°C	Unclear (lack of data)	Increase in drought
Ethiopia (2060)	1.1-3.1°C	Variation within the country; drier and wetter areas; [increase in rainfall offset by rise in temperature and drought)]	Increase in rain variability and extreme events, e.g. drought, but also floods due to heavy precipitation events [HPE}
Kenya (2050)	0.8 - 1.5°C (2030s) 1.6-2.8°C (2060s)	Varies by model: Northern part wetter, Southern part drier; Consistent increases	Increases in 'hot' days and 'hot' nights: 17-45% of days; 32-75% of nights
Somalia	Rise in temperatures	Southern Somalia: Increases in precipitation of up to 10%	Shorter spring rains; increase in extreme events (droughts)

5. **Disaster's compounding is a key concern in the region (Figure 4)**. Over the past 5 years, extreme weather events overlapped with other types of disasters: a severe locust swarm in 2019-2020, disease outbreaks in Kenya and Uganda in 2018 and the COVID-19 health and economic shock since 2020. When extreme weather events and other shocks compound within an economy, they generate non-linear effects that can amplify economic losses: the compound impacts can be larger than the sum of the individual shocks. Climate change is expected to exacerbate this trend in the future.

Figure 4: Timeline of ongoing shocks in the HoA, 2018-2020



Source: FAO, 2020

6. **Drought shocks in the HOA have major human, financial and macro-economic impacts and are a key factor to poverty and conflicts**. Example of the impact of drought on HOA countries include:
    - **In Kenya,** the overall impact of the 2008-2011 drought in Kenya was estimated at USD12.1 billion and

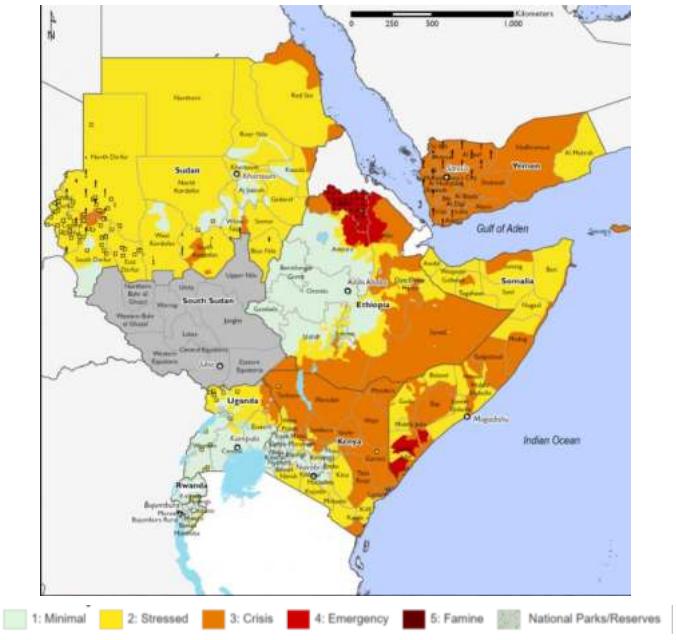
[29] Ministry of Foreign Affairs of the Netherlands (2018), *Climate Change Profile: Greater Horn of Africa*, available at: *https://reliefweb.int/sites/reliefweb.int/files/resources/Greater%2BHorn%2Bof%2BAfrica.pdf*

total needs for recovery and reconstruction amounted to USD1.7 billion.[30] Prices for food rose significantly, e.g., grain prices in Kenya were 30-80 percent higher than average.

- **In Somalia,** the 2017 drought impacted around 6.7 million people – more than half the population – and displaced 926,000, with humanitarian needs amounting to USD 1.5 billion.[31] Droughts have a significant impact on Somalia's public finance: Since 2010, more than USD 4.5 billion has been spent on emergency responses.
- According to a USAID study, early financial response to drought in Ethiopia, Kenya and Somalia would have saved $1.6 billion in humanitarian response and nearly $2.5 billion in avoided losses over a period of 15 years.[32]

7. **Observed impacts from the ongoing prolonged drought range from large reductions in household food, income sources, purchasing power, and coping capacity.[33]** A third consecutive season of below-average rainfall in late 2021 has led to significant crop and livestock losses and above-average food and water prices in southern and southeastern Ethiopia, most of Somalia, and eastern and northern Kenya. Livestock mortalities are highest in Oromia and Somali regions of Ethiopia, southern and central Somalia. The ongoing drought in the HOA also poses many macroeconomic challenges, including shrinking foreign exchange reserves, local currency depreciation, and the withdrawal of international economic support. These in turn are exacerbating food insecurity in several countries by driving high staple food, fuel, and water prices. For instance, in Somalia, economic challenges coupled with the drought have contributed to price hikes, with sorghum and rice prices rising up to 25-70 percent above the five-year average in November 2021.

Figure 5: FWES-NET IPC v3.0 Acute Food Insecurity Phase November 2021 - January 2022



[30] Kenya Post Disaster Needs Assessment 2011, available at: *https://www.gfdrr.org/sites/default/files/publication/pda-2011-kenya.pdf*
[31] Somalia Post Disaster Needs Assessment 2018, available at: *https://www.undp.org/publications/somalia-drought-impact-and-needs-assessment*
[32] USAID (2018), *Economics of resilience to drought in Ethiopia, Kenya and Somalia,* available at: *https://www.usaid.gov/sites/default/files/documents/1867/Summary_Economics_of_Resilience_Final_Jan_4_2018_BRANDED.pdf*
[33] *https://fews.net/east-africa/food-security-outlook/november-2021*

8. **Without adequate adaptation and mitigation measures, climate change and weather-related risks could have significant socioeconomic, financial, and macroeconomic impacts across HOA countries.** Hundreds of millions of people are expected to be at greater risk of food insecurity, disease, energy shortages and poverty due to water scarcity, extreme heat, pollution or flooding. Climate change is also expected to cause more frequent internal and cross-border migration, social unrest and even conflict in extreme cases.[34]

9. **The livestock sector is particularly vulnerable to climate change and increased drought shocks.** Droughts degrade rangelands, deplete livestock, increase occurrence of diseases and lead to underinvestment. Underinvestment lowers pastoral productivity and holds pastoralists in a poverty trap. Pastoralists move across national and clan borders in search of greener pastures and the pressure on scarce resources exacerbates conflicts. Examples of recent drought impacts include:

    - **In Kenya,** the 2011 drought led to substantial deaths of domestic animals to an estimated amount of Ksh 56.1 billion (USD 780 million). As well, the subsequent decline in production of meat, milk and other by-products, together with the need to spend significant amounts in providing veterinary attention, water and feed for the animal amounted to approximately Ksh 643.2 billion (USD 9 billion).[35]
    - **In Somalia,** the 2017 drought affected over 900,000 livestock dependent households (pastoralists and agro-pastoralists). Somalia lost over 6.4 million of its total livestock population valued at over USD 350 million in addition to losses in productivity in terms of milk yield and body weight valued at about USD 1.2 billion.[36]

10. **Pastoralists are one of the most exposed population when it comes to climate variability**. As drought and reduced rainfall reduce available grazing lands, pastoral communities are increasingly under threat of losing their livelihoods and coming into conflict with settled agrarian communities. The increased frequency and severity of droughts linked with climate change poses many challenges among livestock dependent families in the HOA with the impacts expected to be far reaching.[37] For instance, a study in Kenya showed that the immediate challenges of climate change to the livestock sector include:[38]
    - the decline in quality and quantity of animal feeds and forage;
    - a reduction in water availability;
    - heat stress;
    - biodiversity change;
    - changes in the distribution and occurrence of livestock pests and diseases; and
    - increased livelihood and income vulnerability affecting food security, purchasing power and resilience.

[34] United Nations Office for Disaster Risk Reduction (2021). GAR Special Report on Drought 2021.
[35] Kenya Post PDNA 2011
[36] Somalia PDNA 2017
[37] Thornton, P. K., van de Steeg, J., Notenbaert, A., & Herrero, M. (2009). *The impacts of climate change on livestock and livestock systems in developing countries: A review of what we know and what we need to know.* Agricultural systems, 101(3), 113-127.
[38] Simpkin P, Cramer L, Ericksen P, Thornton P. 2020. *Current situation and plausible future scenarios for livestock management systems under climate change in Africa.* CCAFS Working Paper no. 307. Wageningen, the Netherlands: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS).

11. **Thinking of averting climate related risk may drive pastoralists to make unsustainable livelihood decisions,** such as liquidating productive assets, borrowing at high interest rates, withdrawing children from school to work in the farms and defaulting to pay existing loans.[39] Furthermore, pastoralists have generally coped with drought through mobility and increasing herd size, which has resulted in rangeland degradation in some areas.

12. **DRIVE aims to improve the resilience of pastoralist communities against drought and better adapt to climate change**.

    - *Under Component 1,* the uptake of savings and insurance products will help pastoralists sustain their core breeding stock during droughts, reduce income losses and other negative coping mechanisms. This will directly reduce their vulnerability to climate-events, and the need to invest in low quality larger herd sizes.
    - *Component 2* is expected to further reduce pastoralists vulnerability by growing their income and strengthening their inclusion in the livestock value chain. The project will upgrade the livestock value chain with better quality infrastructure to "move up" the chain from live animals to livestock products, and with trade facilitation and improved logistics. It will link pastoralists to traders and processors through market contracts improve the quality of the livestock sold. The project will aim to enhance the value of pastoralist grass-fed livestock. Organized pastoralist groups with regular livestock sales and protection against drought will be more attractive to credit institutions, and access to credit will enhance productivity by enabling pastoralists to invest in livestock related businesses.

[39] Jensen, N. D., Mude, A. G., & Barrett, C. B. (2018). *How basis risk and spatiotemporal adverse selection influence demand for index insurance: Evidence from northern Kenya.* Food Policy, 74, 172-198.

ANNEX 3: Pastoral systems and Greenhouse Gas (GHG) emissions

1. **At the global level, the livestock sector is a major contributor to Greenhouse Gas (GHG) emissions, representing between 12 and 14 percent of total human-induced emissions**.[4041] This is mainly due to methane and nitrous oxide emissions, two particularly potent GHGs, predominantly linked with enteric fermentation and manure. Other sources of emissions are linked with land use, i.e. deforestation to produce crops necessary for animal feed. Deforestation depletes carbon pools and release important amount of CO2 when done through forest fire.

2. **In the Horn of Africa, where pastoralism is the dominant livestock production system, the situation is more nuanced.** HOA countries rank amongst the lowest GHG emitters in the world (both in absolute value and per capita). Furthermore, evidence tends to show that pastoralism is inherently more sustainable than high-input, fossil fuel-dependent, intensive, contained livestock production systems. Livestock in the HOA should also be considered with regards to its critical role for food security, livelihood and the economy, and its deep cultural roots. In the arid rangelands, where most crops are unable to grow, livestock is often the only viable economic activity. [42] Alternative activities for local communities are often detrimental to the environment (coal mining, poaching, etc.). If extensively grazed livestock are removed, it is not clear what replaces them. Many imagine the return of a 'wild' ecosystem, but numerous studies show that wildlife and termites in 'natural' systems may produce equivalent emissions, if not more. As a result, the most pressing concern regarding pastoralism in the HOA is more one of adaptation than mitigation.

3. **In line with the World Bank Green, Resilient and Inclusive Development strategy (GRID) and the Paris Agreement, the DRIVE Project will identify and finance climate adaptation and mitigation activities and promote sustainable practices in the livestock sector**. Component 1 will increase the financial resilience of pastoralists, thus reducing their incentives to manage drought risk through increase in herd size. Activities financed under Component 2 will be subject to eligibility criteria including climate adaptation or mitigation outcomes (i.e. supporting pastoralists to conserve fodder in larger scale in good time, promoting sustainable herd management practices, increasing productivity to decrease GHG emissions per animals, etc.). Overall, the project will support pastoral systems which are more sustainable than intensive feedlots.

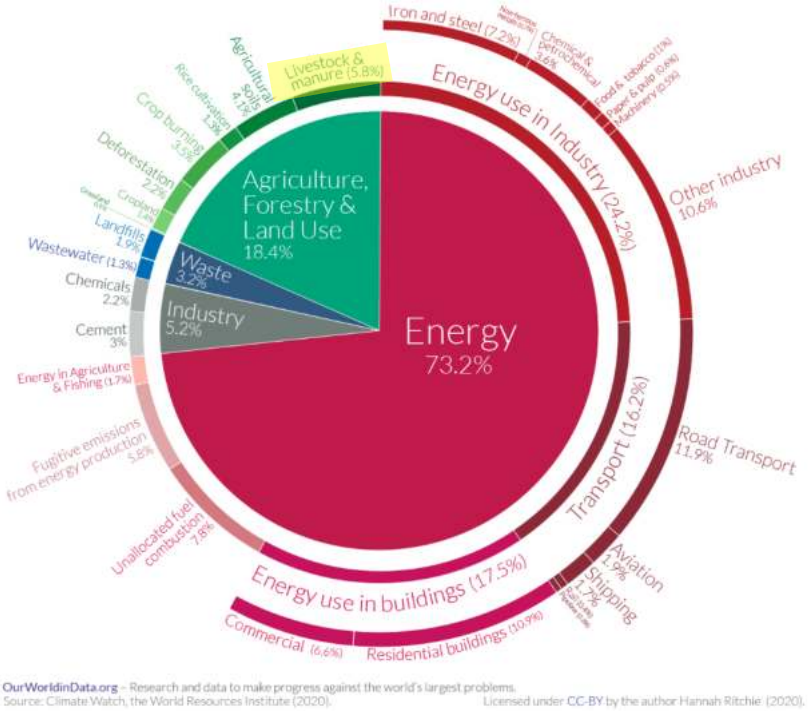
A. <u>What share of GHG emissions comes from agriculture and livestock?</u>

4. **Globally, agriculture is the second-largest contributor to global GHG emissions, after the energy sector (including transports)**.[43] In 2018, the sector emitted 5.82 GtCO2e, which represented 18.4 percent of total emissions.[44] The large majority of emissions comes from livestock production (around 5.8 percent of global emissions). According to the 2021 IPCC report[45] atmospheric methane concentration growth accelerated since 2007, largely driven by

[40] *https://www.climatewatchdata.org/*.
[41] Gerber, P.J., Steinfeld, H., Henderson, B., Mottet, A., Opio, C., Dijkman, J., Falcucci, A. & Tempio, G. 2013. *Tackling climate change through livestock – A global assessment of emissions and mitigation opportunities.* Food and Agriculture Organization of the United Nations (FAO), Rome
[42] Houzer, E. and Scoones, I. (2021) *Are Livestock Always Bad for the Planet? Rethinking the Protein Transition and Climate Change Debate.* Brighton: PASTRES
[43] *https://www.climatewatchdata.org/*
[44] Including Land-Use Change and Forestry (LUCF). LUCF can either be a source of emission due to loss of tree cover, soil degradation and desertification or a source of carbon sequestration, i.e. the process of absorbing carbon dioxide emissions in soils. The agriculture sector account for around 12 percent of total emission when excluding LUCF.
[45] Final Government Distribution Technical Summary IPCC AR6 WGI

emissions from agriculture / livestock. With increase in demand for animal source food and thus in number of animals and intensification of livestock farming, the importance of the livestock sector in terms of its contribution to global GHG emission is expected to continue to rise.

Figure 6: Global GHG emissions by sector (2016, CO2eq)



5. **Livestock production is also a major cause for adverse environmental impacts** such as groundwater pollution, loss of tree cover and decreased biodiversity, degradation of soils and desertification through overgrazing and increased conflicts in pastoral areas. Besides, not only is the livestock sector implicated in climate change, but also that climate change negatively affect livestock, either directly though drought-related loss of animals, or indirectly by limiting the feed and water resource availability for livestock, affecting metabolic activity and increasing the occurrence of new zoonotic diseases.

6. **Most of livestock-related emissions come from industrialized countries**. In absolute value, HOA countries make a negligible contribution to global GHG emissions, estimated at 0.59% of global emissions. When accounting for relative emissions (emissions per capita), HOA countries are also among the world's lowest emitters (Table 2).

Table 2: Ranking for climate change emissions and vulnerability

Countries	Emission % (global)	Emissions Rank (215 countries)	Rank Per Capita Emissions (188 countries)
Djibouti	0.003	173	146
Ethiopia	0.27	98	182
Kenya	0.13	93	156
Somalia	n/a	176	183
Sudan	0.1810	91	155

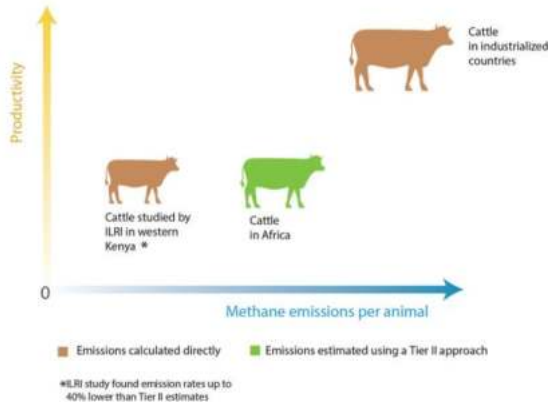
Source: Climate Change Profile: Greater Horn of Africa, Government of Netherland, 2018[46]

[46] *https://reliefweb.int/sites/reliefweb.int/files/resources/Greater%2BHorn%2Bof%2BAfrica.pdf*

B. What is the impact of pastoral practices on GHG emissions?

7. **Whereas livestock-related emissions from industrialized countries are rather well documented, little is known for countries relying on pastoralist systems**.[47] It has been estimated that livestock contribute 70 percent or more of agricultural GHG emissions in the HOA.[48] Other estimates shows that enteric fermentation and manure contribute to more than 80 percent of agricultural emissions in Eastern Africa (*Figure 2*). Alternatively, an ILRI study found that emissions from cattle in small-scale livestock systems are around 40 percent lower than those based on findings from cattle in industrialized countries, suggesting a much lower contribution.[49]

Figure 3: Uncertainty in livestock-related methane emissions, direct measures versus estimates



Source: ILRI

8. **One additional factor to take into account is that pastoralism is often located in areas where other economic activities are not viable.** In the arid rangelands of HOA, crops or trees are unable to grow or yields are low, livestock is often the only viable economic activity.[50] Alternative activities for local communities are often detrimental to the environment (coal mining, poaching, etc.). If extensively grazed livestock are removed, it is not clear what replaces them. Many imagine the return of a 'wild' ecosystem, but numerous studies show that wildlife and termites in 'natural' systems may produce equivalent emissions, if not more.

9. **Evidence shows that pastoralism is inherently more sustainable than alternative industrialized farming practices.** Indeed, the amount enteric methane and manure emissions from livestock (and therefore of GHG emissions) depends on variety of factors, highlighted in Table 3:[51]

[47] The IPCC's methodology to quantify GHG emissions is based on extrapolations from emission factors from livestock systems for farm animals raised in high-income countries (*Tier I estimate*). There may be large uncertainties in their applicability to African livestock systems.
[48] Tubiello F, Salvatore M, Cóndor Golec R, Ferrara A, Rossi S, Biancalani R, Federici S, Jacobs H, Flammini A (2014) 'Agriculture, forestry and other land use emissions by sources and removals by sinks.' (Statistics Division, Food and Agriculture Organization: Rome, Italy)
[49] *https://www.ilri.org/news/science-helps-tailor-livestock-related-climate-change-mitigation-strategies-africa*
[50] Houzer, E. and Scoones, I. (2021) *Are Livestock Always Bad for the Planet? Rethinking the Protein Transition and Climate Change Debate.* Brighton: PASTRES
[51] Some studies highlighting the below available here: *https://mazingira.ilri.org/publications/*

Table 3: Factors influencing GHG emissions

Factors	Comments
Animal species	Different animals show different feeding behavior. For example, cattle are grazers while goats are browsers (they eat more leaves and shrubs than cattle and emit less). This affects the quality of the diet, which in turn affects methane emissions per feed intake.[52] Cattle are the animal species responsible for the most emissions. The bulk of livestock assets owned by pastoralist households in the HOA is sheep and goats.[53]
Animal size	A large animal eats more and therefore produces more methane, because methane is strongly related to feed intake. If emissions are calculated per head, they are lower in pastoral areas, because the animals tend to be smaller than in feedlots.
Animal movement	In industrialized farming practices such as feedlots, animals are confined, whereas in pastoral areas they roam around and cover large distances. Movement requires energy, which in turn requires feed intake which does not go into production, but which still produces methane emissions.
Diet intake and diet composition	This is a key factor affecting enteric methane emissions and varies a lot between feedlots and pastoral systems (grains versus grass). Better-quality feed such as natural pastures improve the digestibility and reduce rumen retention time of feeds. Furthermore, in pastoral systems, animals experience scarcity (e.g. during the drought season), which reduces emissions but also production due to restricted feed intake.
Farming practices	Urban production systems have a high share of GHG emissions due to the use of external inputs such as fossil fuel for feed production and processing, use of grain as feed resources, use of fertilization for feed production, transportation of inputs, and larger body weight of animals.
Animal numbers	There are no reliable data sources of how many animals really live in pastoral areas (at least for Africa), because these systems are extremely fluid. This causes huge uncertainties in the GHG emission footprint of pastoral areas.
Soil cover and soil conditions	In feedlots, a positive amount of GHG is being emitted, whereas in grazing conditions, GHG emissions are being counterbalanced by soil carbon sequestration. According to the IPCC, soil carbon sequestration through sustainable rangeland management is the mechanism responsible for most of the mitigation potential.[54]

10. **Overall, pastoralist systems contribute to a lower share of than industrialized farming practices in terms of absolute emissions,**.[55] This is due to the smaller size of herds and smaller animals, with a lower share of cattle over small ruminants, and to grass-fed diet and lower intake of feed. When taking into account soil conditions and carbon

[52] Goopy, Ndung'u, Onyango, Kirui and Butterbach-Bahl, Calculation of new enteric methane emission factors for small ruminants in western Kenya highlights the heterogeneity of smallholder production systems *https://www.publish.csiro.au/an/AN19631*

[53] https://www.researchgate.net/publication/311442517_The_futures_of_pastoralism_in_the_Horn_of_Africa_pathways_of_growth_and_change_-EN-_-FR-_Les_perspectives_d'avenir_du_pastoralisme_dans_la_Corne_de_l'Afrique_les_voies_de_developpement_et_de_changemen

[54] Smith, P., D. Martino, Z. Cai, D. Gwary, H. Janzen, P. Kumar, B. McCarl, S. Ogle, F. O'Mara, C. Rice, B. Scholes, O. Sirotenko, 2007: Agriculture. In Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [B. Metz, O.R. Davidson, P.R. Bosch, R. Dave, L.A. Meyer (eds)], Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. *https://www.ipcc.ch/site/assets/uploads/2018/02/ar4-wg3-chapter8-1.pdf*

[55] ILRI corporate report 2016-2017 *https://cgspace.cgiar.org/handle/10568/92517*

sequestration from grassland, GHG emissions from pastoral systems are even lower compared to industrialized farming.

11. **However, in terms of GHG emissions intensities, i.e. the production of GHG per unit of product such as per kg of milk or meat, pastoral systems tend to perform poorly because the aim here is not to maximize output** (in contrast to feedlot systems). In pastoral systems, animals have multiple purposes ("savings account", insurance, transport, prestige, dowry, etc.), and these are often overlooked when comparing pastoral with other systems. Industrialized practices rely on improved and better management practices such as veterinary services, housing and feeding and nutrition that improves productivity thereby reducing the emission per unit of product.

C. What actions HOA countries are putting in place to reduce agricultural GHG emissions?

12. **Following the COP21 in Paris at the end of 2015, all HOA countries submitted Intended Nationally Determined Contributions (INDC) or Nationally Determined Contributions (NDC)[56],** making commitments to lower emissions. While each NDC reduction action reflect each country's priorities, similar proposed actions include agriculture and food security (e.g. drought resistant seeds; different crops; conservation agriculture), water resources (e.g. expansion of irrigation, water efficiency), forests (afforestation/reforestation/agroforestry), disaster response, livelihoods, and coastal zones.

Table 4: INDC/NDC Emission Targets and Adaptation Actions

Country	Submitted INDC/NDC	GHG reduction targets (2030 - except for Djibouti 2035)	Proposed Mitigation or Adaptation Actions in the Agriculture Sector
Djibouti	INDC: 11/11/2016[57]	Unconditional: 40% Conditional: Additional 20%	• Development of agro-pastoral perimeters as an adaptation strategy
Ethiopia	NDC: 09/03/2017[58] Updated: 31/12/2020[59]	Conditional: 64%	• Irrigation: rainwater harvesting and improved water use efficiency; • Improved crop varieties; • Enhanced ecological farming, sustainable land management and improved livestock production (including drought tolerant vegetation)
Kenya	INDC: 28/12/2016[60] Updated 24/12/2020[61]	Conditional: 30% Additional 2%	• Enhance resilience of agriculture, livestock, and fisheries value chains by promoting climate-smart agriculture and livestock development; • Mainstream climate change adaptation in land reform
Somalia	NDC: 11/04/2016[62]	NDC proposed projects without emissions targets	• Adoption of sustainable land management to build resilient rural livelihoods and enable national food security

[56] *INDC:* http://www4.unfccc.int/submissions/indc/Submission%20Pages/submissions.aspx
NDC: http://www4.unfccc.int/ndcregistry/Pages/Home.aspx
[57] https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Djibouti%20First/INDC-Djibouti_ENG.pdf
[58] https://www4.unfccc.int/sites/submissions/INDC/Published%20Documents/Ethiopia/1/INDC-Ethiopia-100615.pdf
[59] https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Ethiopia%20First/Ethiopia%27s%20NDC%20update%20summary%202020.pdf
[60] https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Kenya%20First/Kenya_NDC_20150723.pdf
[61] https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Kenya%20First/Kenya's%20First%20%20NDC%20(updated%20version).pdf
[62] https://www4.unfccc.int/sites/submissions/INDC/Published%20Documents/Somalia/1/Somalia's%20INDCs.pdf

Sudan	INDC: 02/08/2017[63] Updated: 31/05/2021[64]	NDC notes needs for baselines; proposed actions listed	• Crop diversification and introduction of improved drought-resistant varieties/ early maturing varieties in areas affected by rainfall decrease/variability; • Agroforestry to enhance agricultural production as well as empower vulnerable communities

Source: Climate Change Profile: Greater Horn of Africa, Government of Netherland, 2018

D. How will DRIVE support climate adaptation and mitigation activities?

13. **According to the IPCC, options with large potential for mitigation in livestock systems include better grazing land management, with increased net primary production and soil carbon stocks, improved manure management, and higher-quality feed.** Reductions in GHG emissions intensity (emissions per unit product) from livestock can also support reductions in absolute emissions, provided appropriate governance to limit total production is implemented at the same time.[65]

14. **Component 1 of DRIVE will aim to increase the financial resilience of pastoralists to drought shocks, which is expected to lead to positive climate adaptation and mitigation outcomes.** By increasing pastoralist resilience, the project will reduce their incentive to manage drought risk through increase in herd size, and therefore limit emissions.

15. **Through the provision of seed capital under Component 2, DRIVE will seek to attract private investment in the livestock value chains to create reliable markets for pastoralists**. One bidding criteria will be climate adaptation or mitigation benefits (i.e. supporting pastoralist to conserve fodder in larger scale in good time, promoting sustainable herd and land management practices, increasing productivity to decrease GHG emissions per animals, etc.). This is a balancing act, as DRIVE's objective is to make pastoral livestock more productive, thus reducing emission intensity (emissions per kg of meat), but which could increase absolute emissions if it leads to increase in herd size. To avoid this negative outcome, the project will not support industrial livestock production, and will aim to enhance the value of pastoralist grass-fed livestock. The project team has identified innovative business models that could qualify under the seed capital scheme such as:
    - Regenerative Agriculture and Grazing techniques that can sequester atmospheric carbon in agricultural soils with the objective of reversing desertification and environmental degradation.
    - Seaweed livestock feed that increases animal weight gains and reduces methane emissions. Evidence shows that *Asparagopsis taxiformis* seaweed (red seaweed that exist along the Kenya coastline), when added to livestock feed, increases growth rate and reduces livestock methane emissions by over 40 to over 90%.
    - Investment in grass/fodder production by pastoralists and small firms to de-risk production and promote trade.

[63] https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Sudan%20First/28Oct15-Sudan%20INDC.pdf
[64] https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Sudan%20First/Sudan%20Updated%20First%20NDC-Interim%20Submission.pdf
[65] Climate Change and Land: an IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems, IPCC 2019, available at: https://www.ipcc.ch/site/assets/uploads/sites/4/2021/02/210202-IPCCJ7230-SRCCL-Complete-BOOK-HRES.pdf

ANNEX 4: DRIVE builds on a decade of investments in pastoral areas

1. **DRIVE builds on World Bank and development partners' projects in targeted countries**. DRIVE will leverage the infrastructure created by the Kenya Climate-Smart Agriculture Project (P154784 -KCSAP), a US$250 million project supporting increased agricultural productivity and resilience of smallholder farmers and pastoralists to climate change. Through KCSAP farmers have been organized into 9,000 Common Interest Groups (CIGs) and 1,100 Vulnerable and Marginalized Groups (VMGs), some of which are in the North Eastern Development Initiative counties and involved in livestock-related activities. DRIVE supports groups to access financial services and link them better to market. KCSAP has supported complementary activities like integrated weather and market information systems that are contributing to pastoralist groups' productivity.

2. **The National Agricultural and Rural Inclusive Growth Project (P153349 -NARIG) supports the increase in agricultural productivity of targeted rural communities in Kenya**. Launched in 2016, the project operates in some pastoral counties (Samburu, Turkana, Narok) targeted by DRIVE. Through NARIG pastoralists formed CIGs and VMGs and improved their capacity to plan, implement, and manage commercial projects. They have been equipped with appropriate skills to improve their productivity. Over 19,000 CIGs have been formed and consolidated to over 300 producer organizations, of which several are in livestock production and ready to commercialize and can benefit from market linkage.

3. **The Regional Pastoral Livelihoods Resilience Project (RPLRP), closed in December 2021, focused on enhancing the livelihoods resilience of pastoral and agro-pastoral communities in Ethiopia, Kenya, and Uganda**. Through RPLRP, pastoral communities benefited from better rangeland management, connection to markets and drought risk support. DRIVE will build on the foundation laid by RPLRP by providing a package of financial services that include drought insurance, trade facilitation and better connection to off takers/exporters of livestock.

4. **In Ethiopia, the Lowland Livelihood Resilience (P164336 – US$400 million) improves the resilience of pastoral and agro-pastoral communities.** The project will improve rangeland management, public service delivery and the skill base and market access. The strong focus on rangeland management and pasture improvement (US$ 202 million) complements DRIVE, as well as the improvement of agriculture extension and veterinary service delivery capabilities. The upgraded Pastoral Training Centers and Farmer Training Centers will help pastoralists improve their productivity. The training supported by the Lowland project on improving animal productivity, feed and forage technologies and community-based breed improvement for cattle, camel, and small ruminants will help improve animals' quality and fetch better prices.

5. **The upcoming Ground Water for resilience project (US$370 million) will increase the sustainable use and management of groundwater by beneficiary groups in the HoA.** The project will support the delivery of inclusive groundwater services to the same borderland areas targeted by DRIVE. The project will improve groundwater infrastructure and use sub-project, emphasizing sustainable access and use at community level. It is a necessary complement to DRIVE as it will address water access at community level, vital for investing in irrigated animal feed production and making water available for livestock during droughts. The table below shows interventions from other development partners.

Project Name	Area	Dates	Project Information
Build Resilience for Food and Nutrition Security in the Horn of Africa	IGAD Countries	In prep.	• Funded by AfDB • Strengthening the resilience of pastoral and agropastoral production systems to climate change, supporting agribusiness development, and strengthening the adaptive capacity to climate change.
Regional Pastoral Livelihoods Resilience Project (RPLRP)	Ethiopia, Kenya, and Uganda	2015–2021	• Funded by WBG • Total project cost: USD 197 million • Natural resources management (Component 1); and market access and trade (Component 2).
Drought Resilience and Sustainable Livelihood Programme for the Horn of Africa (DRSLP)	Ethiopia, Eritrea, and Somalia	2013 – 2018	• Funded by AfDB • Focuses on market access and trade: developing market related infrastructures to improve livestock and agriculture products mobility (quarantine stations, checkpoints, and slaughtering facilities), trade and value chain development.
Lowlands Livelihood Resilience Project	Ethiopia	2019 – 2025	• Funded by WBG/IFAD • Total project cost: USD451 million • Focuses on integrated rangeland development and management (Component 1), livelihood improvement and diversification (Component 2), and improving basic services and capacity building (Component 2).
Rural Financial Intermediation Program	Ethiopia	2011-2020	• Funded by IFAD • Total Cost US$248 million, including US$100 million from IFAD • Provide poor rural people with sustainable access to a range of financial services
Feed the Future Resilience in Pastoral Areas-North	Ethiopia	2012 – 2019	• Funded by USAID • Feed the Future, farms and firms gained access to over USD16 million in finance to buy quality agricultural inputs, like seeds and fertilizer, and expand operations
The RESET Plus Innovation Fund	Ethiopia	2020-2022	• Funded by the European Union • Support 20,000 social entrepreneurs with resilience-building in five regions in Ethiopia • Piloting drought insurance in Borona and South Omo
Kenya Climate Smart Agriculture Project	Kenya (24 counties)	2017 – 2022	• Funded by WBG • Total project cost: USD250 million. • Focuses on supporting investments in smallholder agropastoral production systems (Sub-Component 1.2) and supporting investments in pastoral production systems (Component 1.3).
National Agricultural and Rural Inclusive Growth Project (NARIGP) (P153349)	Kenya (24 counties)	2017 – 2022	• Funded by WBG • Project cost (only for Turkana and Samburu counties): USD200 million. • Focuses on support community-driven development (Component 1), strengthen producer organizations and value chain development (Component 2) and supporting county community-led development (Component 3).
The Future Kenya Live-stock Market Systems Activity	Kenya (5 counties)	ongoing	• Funded by USAID. Implemented by ACDI/VOCA • The project aims to build vibrant market systems in livestock and other industries, enabling households to generate more income within the sector and diversify their income sources.
Resilient Fisheries and Livestock Value Chain for	Somalia	2021 – 2024	• Funded by EU / FAO • Total project cost: USD16 million

Inclusive and Sustainable growth in Somalia			• The project aims to create new jobs, increase and diversify livelihoods, foster inclusive economic opportunities, and rehabilitate primary infrastructures within the fisheries and livestock sectors.
Livestock Marketing and Resilience Programme	Sudan	2014 – 2021	• Funded by IFAD/GEF/ Facility for Refugees, Migrants, Forced Displacement and Rural Stability • Total project cost: USD128.7 million • Support livestock business development activities, where small scale farmers are provided with better market access and information.
Cross-Border Collaboration Programme in Western Ethiopia and Sudan	Sudan	2018 – 2021	• Funded by BMZ and EU • Total project cost: USD24 million • Promotes cross-border cooperation and trade to help achieve both national and regional development goals.
Sustainable development of livestock for livelihoods in Africa	Africa	2017 – 2021	• Funded by EU • Total project cost: EUR20 million • Focuses on continental level/inter-regional/cross-border coordination; knowledge management; policy guidance; facilitation of common positions; monitoring and evaluation, quality control, capacity building
Reinforcing Veterinary Governance in Africa	Sub-Saharan Africa	2014 – 2017	• Funded by EU and the African, Caribbean and Pacific Secretariat • Total project cost: EUR31.2 million • Focuses on the establishment of adequate and affordable veterinary services at national level; strengthening regional institutions to play their coordinating, harmonizing, supporting and integration roles between their member states in line with the One Health concept.
Livestock Marketing and Resilience Program	Sudan	Ongoing	• Funded by the EU • Total project cost: USD119.2 million • Focuses on community livestock productivity and marketing; livestock value chain expansion; climate change preparedness and policy facilitation; and sustainable access to external finance.
Resilience and Livelihood improvement for Youth through systems	Kenya (5 counties)	2019 – 2023	• Funded by the Embassy of Sweden. Implemented by a consortium composed of Mercy Corps (lead), Technoserve and Agora Global • Budget for inception phase: USD 520,000 (Total project cost to be defined at a later stage) • The overarching goal is to increase incomes of poor and marginalized female and male youth (ages 18-35 years) and build resilience to shocks and stresses in order to reduce their losses.
AgriFI Kenya	Kenya (all counties)	2017 – 2024	• Funded by the EU and EIB • Total project cost: EUR45 million, leveraging an additional EUR50 million from the EIB. • Focuses on supporting SMEs who integrate smallholder farmers in their value chain.
IDEAS	Kenya (15 counties)	2017-2020	• Funded by the EU • Focuses on promoting local economic development. Many counties chose to invest funds to establish agro-processing facilities.
Productive Sectors Development program	Somalia	2020-2022	• Funded by UNIDO • USD 800,000 • Support an enabling environment for the development of Somali productive sectors

ANNEX 5: Coordination with IFC

1. DRIVE is closely coordinated with the IFC advisory activities and seeks to open up opportunities for investment.

2. **Ethiopia:** IFC has invested in LUNA Export Slaughterhouse PLC which is exporting livestock carcasses and meat to the U.A.E. and Saudi Arabia. The Luna abattoir is ISO 22000 and Halal certified. The IFC project represents Luna Slaughterhouse PLC's backward integration into feed crop farming and animal fattening by establishing a modern livestock farm and securing quality livestock on a long-term sustainable basis. It is expected to improve access to markets for approximately 5,000 pastoralists and increase the integration of the Ethiopian meat export sector, domestically and internationally, through replication and demonstration effects. Domestically, the Company would be the first semi-intensive goat farm in Ethiopia. The backward integration from meat export into livestock production is expected to achieve better fattening and conditioning leading to higher meat yield and income.

3. **Lessons learned**. The Luna Project shows the need to closely coordinate private and government players in the Ethiopian Livestock Value Chain to establish direct links between pastoralists and export abattoirs. DRIVE could replicate this model, thereby transforming goat/sheep/camel rearing and export in Ethiopia. It could also assist private sector companies with repositioning of imported Ethiopian goat meat in the Gulf market by improving product quality and introducing complete traceability. DRIVE will continue to coordinate with IFC upstream to leverage more IFC private investments into the livestock value chain including in livestock logistics (modern trucks), private quarantine activities, equipment upgrading for fodder production, equipment upgrading for abattoirs and any other investment that leverages private capital into the livestock value chain.

4. **Kenya.** In 2019, the IFC advisory undertook a feasibility study on the red meat value chain in Laikipia County. The location and the existence of large commercial farms that are ideal for fodder production place Laikipia at the center of red meat production. The feasibility study identified a commercially viable business opportunity for grass-fed red high-value meat. Laikipia could play an essential role in finishing the livestock to the correct weight through grass-based feedlot while other counties supply livestock to the system. To address the challenges of fragmented markets, poorly finished livestock, and sustainable supply, the study recommended the formation of a Special Purpose Vehicle (SPV) to secure private finance. The IFC investment team is currently assessing the opportunity, and DRIVE is expected to provide seed capital to help the county government raise private commercial funding in the SPV.

5. **Somalia**. IFC is preparing the SOMLIVS (604267) project which aims to improve the business environment of the livestock sector through a public-private dialogue, livestock breeding policy and legislation, veterinary services including disease surveillance and extension services. SOMLIVS will identify 4-5 opportunities that could lead to IFC investment as well as strengthening investment promotion in the livestock sector. This work will include the development of an investment policy and sector profile for livestock, training on investment promotion and outreach. DRIVE would complement IFC activities through the potential identification of investment leads that could initially get support from the challenge fund. The challenge fund could set the stage to leverage IFC MAS, IFC SME venture program to deploy capital in Somalia. Similarly, DRIVE will build on the existing work of IFC advisory which has established a trade portal, and support the Minister of Commerce and Industry on updating livestock trade and value chains in this portal. IFC will identify missing laws and regulations including livestock and fisheries trade. DRIVE will focus on upgrading quality infrastructure in Somalia while SOMLIVS will provide training to the private sector to enable compliance with export requirements.

ANNEX 6: Highlights of the Pastoralist Groups Surveys

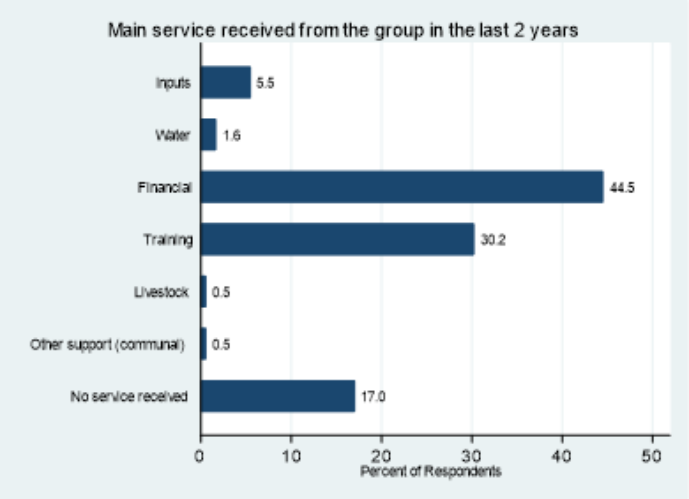
1. **Methodology**. The task team are currently working with the International Livestock Research Institute (ILRI) and other partners to survey pastoral group, and other key informants through phone surveys and focus group discussions in Ethiopia, Kenya and Somalia. Analysis of survey outputs will be used to identify a set of options for the pastoral production groups that could benefit from the project, their needs and preference in relation to financial services (Component 1), and how they could be linked to activities under the value chains component (Component 2). The surveys will collect data on the household, group membership and key economic activities, income, and assets (including livestock ownership and usage), access to and experience of financial services (including savings, mobile payments, insurance, and credit) and financial management of shocks. The participants have been sampled from a database of over 1,000 pastoral production groups from Kenya (Marsabit, Isiolo, Samburu, Turkana, Wajir, Garissa), Ethiopia (Afar, Somali, Borana regions), and Somalia (Puntland, Ballet Xawa districts). Efforts have been made to ensure the sampling frame includes both "formal/well-organized" and "less/poorly" organized pastoral groups.

2. **Highlights**. Building on the findings of the surveys is some further work assessing the options for distributing index-based drought insurance and other financial services to pastoralists, most notably on understanding how to build on existing community structures and quantifying the cost of proposed options. In Kenya, a first round of surveys has been completed with pastoralists from 15 groups, including milk cooperatives, livestock and beef producers, and specific women's groups (182 participants in total, of which 51 (27 percent) were from female headed households). The data collection is being finalized in Ethiopia and Somalia, alongside interviews with key informants such as NGOs, local administration officials, social development officers, district development officers and local authority officials in each of the countries.

3. **Findings.** The initial findings from the Kenya surveys highlight that the number of pastoralists with mobile phones, bank account access and cash savings is low, as is the take up of index insurance and credit. Overall, the use of financial services is similar across male and female headed household, although male headed households are more likely to have cash savings and those savings will be deposited are more likely to be bank account.

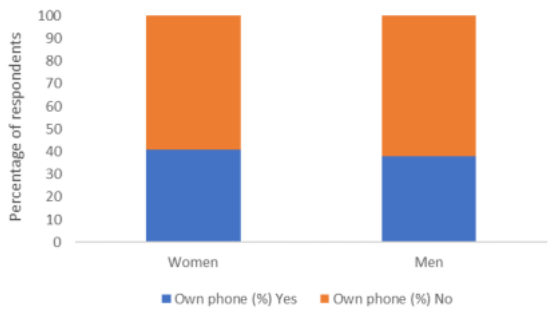
Survey findings in Kenya

Group characteristics

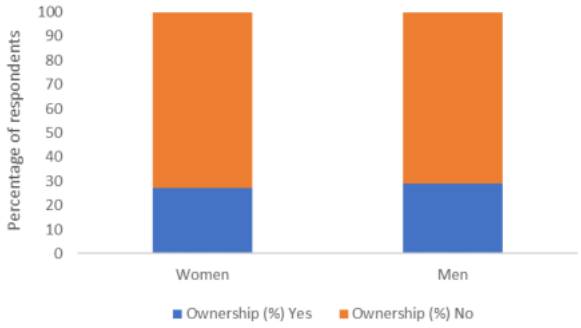


Financial services

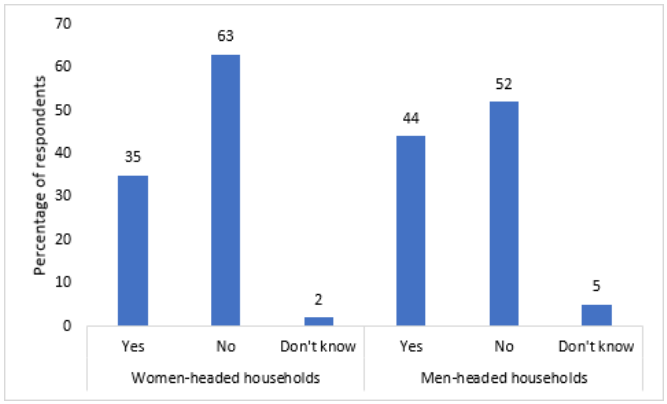
Percentage of respondents owning a mobile phone



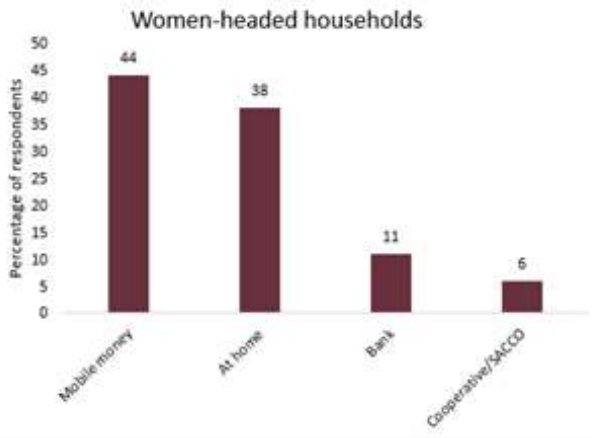
Ownership of a bank account

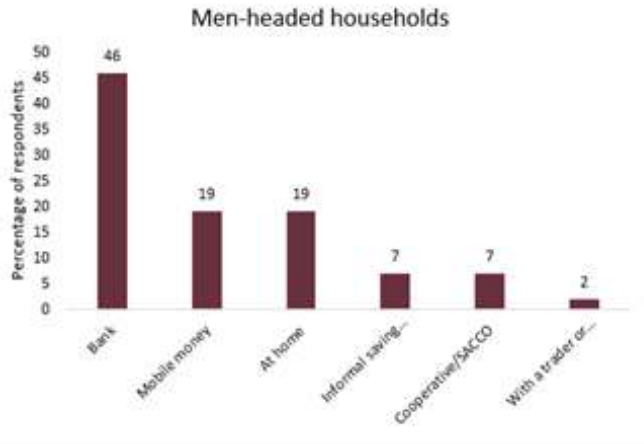


Percentage of respondents with cash savings currently

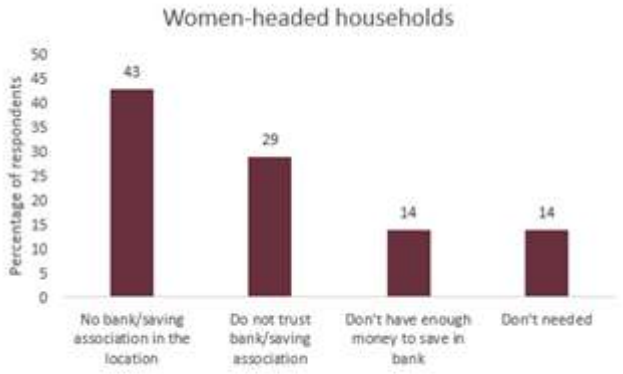


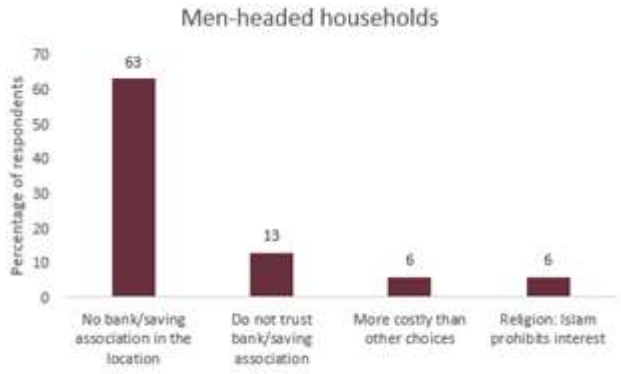
Where does your household keep the largest part of the cash savings?



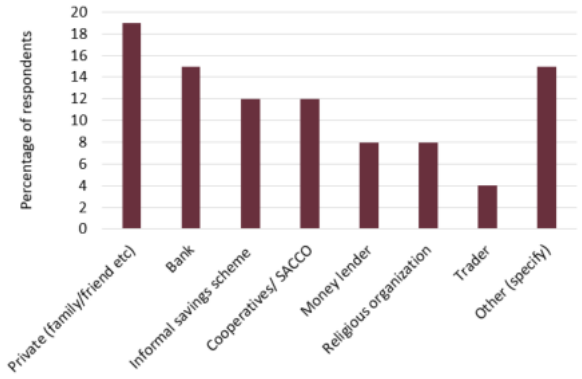


Reasons for not saving in banks, cooperatives, SACCO, microfinance institutions etc.

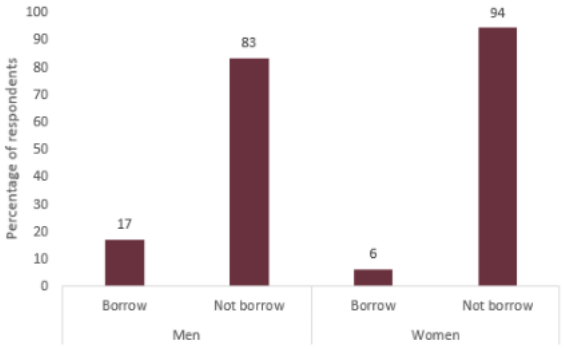




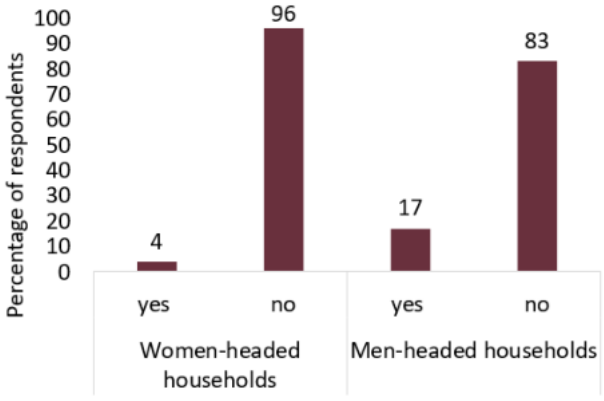
Main sources of credit



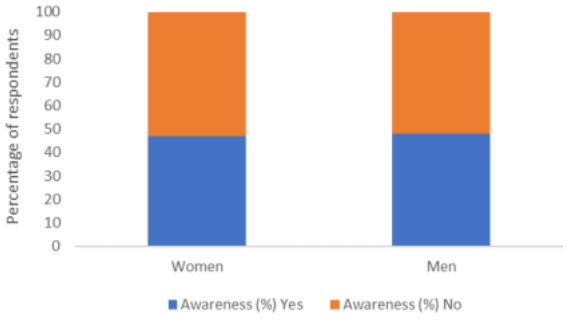
Percentage of respondents who borrow money



Purchase of drought index insurance



Awareness of drought index insurance



ANNEX 7: Component 1 - Lessons Learned

1. **This Component will support the provision of an integrated package of financial services to build climate resilience**. Greater financial access in the agriculture sector is important to eradicate extreme poverty and achieve balanced economic growth. Access to finance is one of the key ingredients to increase agricultural production and enhance the growth and resilience of rural and agricultural households. Products that combine savings and insurance are attractive because they enable households to build assets while protecting them against shocks. However, while savings help protect against mild to moderate shocks, they are often inadequate to protect against severe shocks. Adding an insurance component can provide much-needed protection. Even short-term savings help households to weather financial shocks (either emergencies that increase expenses or conditions that result in shortfalls in income) and to make mobility-enhancing investments, such as saving for a training to build skills (The Aspen Institute Financial Security Program, 2020). In addition, insurance backed savings can provide an incentive for more regular and longer-term savings (Microinsurance Innovation Facility, 2012).

2. **Drought index insurance for pastoralists in Kenya and Ethiopia has been extensively tested and proven as an early-response instrument and is ready for major scale-up in Kenya, Ethiopia and for introduction into Somalia.** Existing experiences to date are the micro-level drought index insurance programs for vulnerable pastoralists in Kenya and Ethiopia; and the large-scale macro-level applications such as the Kenya Livestock Insurance Program (KLIP) and the Satellite Index Insurance for Pastoralists in Ethiopia (SIIPE) (WFP, 2016).[66] Over the past decade these programs have responded to the major seasonal and annual droughts that have affected large regions, with over 86,000 policies sold (ILRI, 2019) and paying out more than 15 million dollars to more than 45,000 pastoralists, enabling them to keep their core livestock herds alive. While neither KLIP nor SIIPE have been the subject of a formal cost-benefit analysis to date, evidence presented in Table 1 shows that these programs are reducing the needs for distress sales during droughts.

Table 1: Benefits of existing drought index insurance programs in the HoA

Micro-level Drought Index Insurance (Kenya / Ethiopia)	KLIP (Kenya)	SIIPE (Ethiopia)
In Kenya, IBLI helps increase productive investments, protect insured pastoralists from forced asset depletion (livestock sales) and or reduced household consumption (S. Janzen and Carter 2013, 2019). It sharply improves herd survival rates by considerably reducing the risk of catastrophe losses (through investments veterinary services,	For KLIP, self-reported satisfaction with the program was high and most beneficiaries reported using the payouts at least partly for **expenses on their livestock (maintenance, restocking, production equipment) and for household needs.** Increasing the demand for the private sector to provide services like water tracking and animal feed.	For SIIPE, while it is still too early to assess its impact given that so far there has only been one moderate drought insurance payout, a 2019 evaluation found that there were positive impacts of the programme at the pastoralist community level and that **awareness of insurance** and SIIPE was relatively high (C4ED

[66] Another example of the potential use of the index insurance approach for macro-level government supported schemes are the sovereign covers provided by the African Risk Capacity (ARC).

resulting in reduced herd sizes) and contributes to increased milk production, more activity in livestock markets during non-shock seasons, and **greater household income** per adult equivalent and improvements in children's mid-upper arm circumference (Jensen, Barrett, and Mude 2015). In Ethiopia, during the severe **2016/17 drought, 93% of surveyed pastoralist IBLI policyholders reported that in response to anticipated drought insurance payouts they increased purchases of livestock inputs** (forage/fodder and veterinary services). They also adjusted their animal migrations and invested more in non-livestock activities. When IBLI payouts were received, 80% of respondents reported spending these on livestock inputs of fodder, water and veterinary services in order to keep their animals alive, as well as using some of the payouts for food, education and human health services (Taye et al. 2019).	There is also evidence showing that KLIP is supporting the development of a micro-level commercial IBLI market in target areas. For example, KLIP is contributing significantly to **insurance awareness creation among pastoralists** and helping pastoralists get used to insurance-based payouts for fodder purchases (Chelang'a et al. 2018). In addition, there is qualitative evidence for positive spill overs, such as **sharing payouts with neighbors**. Despite the short lifetime of the program, KLIP households experience slightly **lower levels of food insecurity and higher level of general insurance awareness** (GIZ CED, 2018). **Distressed sales were reduced by 50 percent for those received payout in drought years,** stabilizing livestock market prices after the insurance payout (GIZ 2018).	2019). In Ethiopia, a study found that formal index insurance does not crowd out informal risk sharing. In fact, index insurance was seen to crowd-in informal risk-sharing mechanisms (i.e., households are more willing to make informal transfers to peers who take up livestock insurance). (Takahashi et al 2018).

3. **Learning lessons from existing drought index-insurance schemes in the HOA, the target beneficiaries will be pastoralist groups, and new and more cost-effective ways of marketing and delivering coverage will be utilized**. In Ethiopia and Kenya, the voluntary micro-level schemes based on pastoralists buying the insurance directly have struggled to achieve significant scale, due to the high administrative costs in serving pastoralists, often located in extremely remote areas, and annual sales peaked at about 7,000 policies with low levels of renewals. Government-supported large-scale macro-level livelihoods protection schemes have expanded to enroll about 20,000 vulnerable pastoralists in Kenya (Kenya Livestock Insurance Program, KLIP) and 30,000 in Ethiopia (Satellite Index Insurance for Pastoralists in Ethiopia, SIIPE). However, in Kenya the large-scale KLIP program has also faced issues such as poor targeting (government officials enrolling the beneficiaries), delayed premium payment, delayed payouts (major delays have been experienced in settling payouts to individual pastoralists because their registration and bank account details were often poorly collected and recorded at time of enrollment), awareness creation (pastoralists are not always aware they are enrolled if they do not contribute), and financial sustainability (in Kenya the KLIP is fully funded by Kenyan government – in other words pastoralists do not contribute towards the premium costs at all). In Ethiopia, SIIPE has faced forex shortages for reinsurance premiums.

4. **The FCDO funded Drought Index-insurance for Resilience in the Sahel and Horn of Africa study (DIRISHA, 2021)[67], provides a comprehensive summary of the evidence and presented practical lessons for any future index-insurance programs.** The foundations of DRIVE design (component 1) are based on the key conclusions of this study. Most notably through aggregation (targeting groups) and delivery through new distribution channels building on through existing structures (e.g., pastoralist cooperatives, livestock input dealers, milk processors etc.), having parallel investments in livestock input and output markets through component 2), and integrating with other pastoral development initiatives, including social protection programs. Feasibility studies on index insurance in Djibouti (2020) and Somalia (2019) were also completed. Whilst the Somalia review concluded that an index insurance program was technically, operationally, and financially feasible as part of a broader drought risk management strategy, this was not the case in Djibouti and instead the country has requested a sovereign product.

5. **Whilst experience from index insurance products highlights its value, lessons also highlight that insurance should not be implemented in isolation:**
    a. **Basis risk**, defined as the risk that the index used to trigger the payouts is not well correlated with the actual losses incurred. The existence of basis risk gives rise to the possibility of no payout being made following severe events with relatively high losses (known as negative basis risk events) or payouts may be made following only minor events with relatively low losses (known as positive basis risk events). The existence of basis risk results in a high reputational risk to the program, as policyholders may not receive insurance payouts even after severe droughts (negative basis risk events). Providers of index-based insurance have attempted to minimize these risks through investments in more sophisticated risk models. While such efforts may reduce basis risk to some extent, basis risk cannot be eliminated entirely, and it is valuable to have a model and trigger that is well understood by the policyholder. This is a particular challenge in data poor environments, where it takes time to calibrate the model over years. Over the lifetime of the project investments will be made to improve the index further.
    b. **Losses below the trigger for a partial payout**. Experience has shown that index-insurance coverage which attaches at relatively low return periods of losses (usually any loss less than a 1-in-4-year event) is unsustainable for the insurance market and very expensive for policyholders. Reinsurers are increasingly unwilling to provide cover at low return periods. Meanwhile, policyholders (and those funding the policies), especially those with very little disposable funds, are concerned with the potential for incurring significant losses from drought events which are is deemed to fall below the attachment point of the policy.
    c. **Losses incurred by other covariate shocks not covered under the policy.** The coverage under the index-insurance layer is designed to provide payouts following drought and is not intended to cover disaster losses arising from other types of events such as flood or locust. Evidence from ILRI suggests flood is a significant risk, particularly in Puntland region of Somalia.

6. **To best mitigate these risks the component incorporates a project reserve layer and will incentivize savings to help pastoralists manage the risk associated with losses from drought below the insurance trigger,**

[67] *https://cgspace.cgiar.org/handle/10568/114255*

and/or losses incurred due to other covariate and idiosyncratic shocks. Ideally, pastoralists would have enough savings to manage a moderate level of uncertainty and risk, alongside an insurance product to manage severe shocks. However, the current level of savings is very low, and the project will provide appropriate incentives to support households' ability to save in an ongoing way. In the initial years (as the savings accumulate) the project will include a reserve layer to provide partial payouts in the form of 'shock response savings deposits' in the event of near misses such as drought events that may be locally significant but do not reach the insurance trigger, or basis risk events. This is particularly important in the early years as pastoralists will not have built up the savings required to meet additional emergency costs or income shortfalls. Over time, as product awareness increases and the savings develop/become larger and more regular, the reserve layer will be scaled down. The triggers for payouts from the reserve will be based on objective data, for example including satellite and weather station data, food insecurity data, and market price data to align with the established disaster management processes used within each country. The triggers will be pre-agreed by countries and regional implementer and defined in the project implementation manual.

7. **Data and technology have improved insurance product reliability and further refinements will be made**. The product is enabled by satellite technology which monitors the vegetative condition of natural pasture and rangeland on the ground in what is commonly known as a "forage availability" index: when the level of forage availability measured by the satellite index falls below a certain level, an insurance payout is triggered automatically, and pastoralists directly receive payouts through mobile money. Prior to the start of the grazing season, the policyholder pays an upfront amount ('premium') and, in return receives a payout when the level of pasture/forage availability falls below a pre-agreed level ('trigger').[68] Thus, payouts are made as pasture/forage resources are depleted, but before livestock perish and the worst of the drought impacts are felt. Satellite images measure the vegetation condition and provide a clear indication on the magnitude of the drought event (current index insurance products in the HoA use the Normalized Difference Vegetation Index – NDVI). This way the payout is proportionate to the reduction in pasture/forage availability. NDVI is one of the most common and widespread satellite-derived indices, which provides an almost global coverage at regular time intervals. When processing the index, it is possible to either mask or minimize the influence of evergreen invasive species such as prosopis.

8. **The insurance product has been refined using 15 years of experience to reach pastoralists in a more accurate, timely and affordable way.** It will be takaful compliant and designed to keep animals alive in an affordable way and to rapidly trigger and distribute payouts without the need for evidence on livestock dying.[69] Based on the extensive lessons learnt the drought-index insurance policy with be characterized as:

- **Premium**: Target premium rate of 15%.
- **Subsidy**: ZEP-RE are working with the countries to design a graduated subsidy program. The subsidy will be capped and targeted at the vulnerable with productive capacity. The program design will incorporate a graduation to higher pastoralist contributions over time. Initially pastoralists are expected to contribute between 10-30% of cost (through premium or savings deposits).

[68] The insurance product is not expected to payout every year and the expected payouts depend on how the product is structured.

[69] Based on lessons learnt in 2015/16 the commercial drought index insurance products were updated from a predicted mortality index for asset replacement to a forage availability index for asset protection.

- **Total Sum Insured**: The sum insured will be based on the feed needs in the event of severe drought (the product can be designed to cover the partial or full needs). This varies by country and region and is based on the prevailing livestock herds within the communities (preliminary analysis and research indicates total feed needs are between US$100-US$200 per TLU).
- **Trigger**: Insurance is most cost effective for managing less frequent events. The long-term goal is for an insurance product with an attachment around the 1 in 5-year event, with payouts increasing up to a suitable exit point. In early years this attachment may be lower given the lack of financial protection for moderate events, but as savings build the product can be amended.
- **Policyholders**: Group insurance policies will be issued to leverage on existing savings and productive community structures. Under such policies the group are the policyholder, with each member of the group listed in the contract annex such that payouts are made directly to the members.[70]
- **Policy period**: Two-year policies under development.
- **Payouts**: Payouts to be made through digital platforms such as M-PESA. [71]

9. **Pastoralist groups will be incentivized to save using a performance-based savings bonus to build their financial resilience to shocks**. Savings accounts allow people to deposit money, keep it safe, and build up financial resilience in good years while earning interest, and then withdraw money in bad years. Savings can be used both for risk reduction and financial protection, using commitment savings to save for investments and building precautionary savings to be used for financial protection, in case of emergency. Savings products can be most effective, especially for women, when they are linked to a tangible purpose, such as school fees, or health care costs. Examples of incentivizing savings, and savings linked to insurance for crop farmers is provided below.
    a. WFP has been implementing the Rural Resilience Initiative (R4), a multi-country integrated risk management programme, in Ethiopia, Bangladesh, Burkina Faso, Kenya, Madagascar, Malawi, Mozambique, Senegal, Zambia, and Zimbabwe. This initiative focuses on enhancing smallholder resilience to climatic shocks by promoting climate adapted practices focused on reducing risk, enhancing access to microinsurance, and increasing saving capacity to buffer the impacts of shocks not covered by insurance. In 2020 around 170,000 households in Kenya and Ethiopia are covered by crop insurance (55 percent women) and around 4,000 savings groups (85,000 farmers) were supported under the program.[72] Participants establish small-scale savings, which are used to build savings, i.e., “risk reserves” by organizing beneficiaries in community groups called Village Economic and Social Associations and strengthening Rural Saving and Credit Cooperatives (RuSACCOs). Savings help build a stronger financial base for investing and act as a buffer against short-term needs and idiosyncratic shocks, such as illness and death. WFP is a key partner of DRIVE and will access the premium finance under DRIVE to scale up their drought-index insurance program for pastoralists.

[70] The task team are continuing assessments to inform alternative ways to channel the funds to the beneficiaries, including exploring alternative distribution modalities and policy design to minimize the cost of the insurance product. For example, the product could also be issued as a micro-level policy (individual pastoralist are the policyholders and receive payouts directly), or a meso-level policy (risk aggregators are the policyholders and receive payouts that they can deliver to pastoralists at their discretion).
[71] Surveys show that pastoralists much prefer payouts through digital payments rather than banker’s cheque. DRIVE will offer alternatives for payout disbursement mechanism.
[72] R4 annual report available at: *https://www.wfp.org/publications/r4-rural-resilience-initiative-2020-annual-report*

b. In Kenya, research supported by the World Bank for social enterprise Digifarm showed that female farmers experience on average 2.5 times as many emergencies as Kenyans overall. However, women farmers manage to save, informally, at the same rates as Kenyans overall, while earning less money with more volatility, experiencing more emergencies, and struggling with more expenses. Based on these insights, Digifarm is currently developing a savings product that would allow female farmers to cater for emergencies.[73]
c. In Mali and Senegal, social enterprise myAgro has developed a layaway savings program that enables smallholder farmers to save little by little for agricultural inputs such as seed, fertilizers and tools to improve their productivity by using a prepaid scratch card model. For instance, farmers can save for drought resistant seeds. myAgro indicates that its increases net income by $150 – $300 per farmer.
d. In Côte d'Ivoire, recent research conducted among cashew nut workers showed that workers offered a direct-deposit commitment savings account increased their labor productivity and earnings by 10 percent, which translates into an 18 percent increase for workers who opened an account.[74] Such savings can be used for investments in risk reduction.

10. **DRIVE is designed to boost the economic sustainability of financial services in the region by moving away from small-scale pilots and incorporating key lessons learned into the design.** DRIVE will incorporate the following key lessons learned from existing programs that have scaled up in low-income countries.
    1. **Ensure a balance between savings and insurance.** Ongoing customer education is critical to prevent the risk that the products are substitutive rather than complementary.
    2. **Ensure a balance between flexibility and simplicity.** Contributions and access to savings may be flexible or restricted but ultimately should depend on customer preferences and paying ability.
    3. **Distributing to groups is key.** Distributing to group members appears to be the main determinant for products to reach scale. This enables efficiency, contributes to product understanding, and improves uptake.
    4. **Provide appropriate incentives to support households' ability to save in an ongoing way.** This includes offering appropriate, accessible accounts without expensive fees, building in rewards into product design, building in mechanisms that easily capture large spikes in income flows, for example through offtake agreements that pay directly into savings accounts.

[73] Varangis, Panos; Buchenau,Juan; Ono,Toshiaki; Sberro-Kessler, Rachel; Okumura,Asuka.2021.Women in Agriculture : Using Digital Financial Services - Lessons Learned from Technical Assistance Support to DigiFarm, Fenix, and myAgro.
[74] Gender Innovation Lab, 2018, Working Under pressure: improving labor productivity through financial innovation

ANNEX 8: The Value of Regional Implementer for Component 1 and presentation of ZEP-RE

1. **Countries will borrow IDA funds, approve the policies underpinning Component 1, and delegate the project management responsibilities to a regional implementer to drive economic sustainability.** The regional implementer will be responsible for project and financial management of Component 1 in line with World Bank standards. It will provide a platform of shared services and risk infrastructure necessary for each country to scale up financial services access including insurance coverage. These services will include payments, facilitating the formation of savings groups and opening of savings accounts, insurance product design, coordination and provision of reinsurance, calculation agent, capacity building to countries and financial services providers, and awareness creation on savings and insurance. Payments will include direct claim payments to pastoralists and facilitating the use of savings deposits from pastoralists to banks and MFIs. Figure 1 gives a detailed description of the role.

2. **The value-add of using a regional entity is driven by a range of factors:**
    - **Economies of scale** – create savings in the operational costs.
    - **Engagement with (re)insurers and partnerships** – efficiently structure the (re)insurance program and work with partners in the upstream design to ensure capacity in the market.
    - **Centralized management of funds in hard currency** – reduces currency risk as well as risk of late payment of premium, which in turn reduce insurance loading by underwriters. Furthermore, this limits the number of transactions hence creates savings in transactional costs.
    - **Project management costs** – ZEP-RE is an operational regional entity with technical expertise in IBLI and management of risk pools. Their structural and operational nature results in cost optimization. Alternative options would be more costly. Option 1 would be to work with a regional public entity, but which would lack insurance expertise. This option would entail significant costs in hiring appropriately skilled personnel or capacitating existing personnel within the regional entity on IBLI, takaful and microinsurance. Option 2 would be to implement Component 1 nationally with national reinsurers in each country acting as implementing units. This would have limited risk pooling, economies of scale and resulted in higher transaction costs overall.

3. **Having individually implemented national programs would result in higher costs:** implementation by national reinsurers in Ethiopia, Kenya and Somalia would duplicate many of the same activities and related expenditure items, on expertise, software, technical services, and communication. Table 1 below sets out the costs of the program under a ZEP-RE versus national implementation, based on experience from existing programs and a budget proposal from ZEP-RE. The comparison shows a cost savings of US$28 million (ignoring the more qualitative benefits of a regional approach mentioned above).

Figure 1: Activities to be undertaken by ZEP-RE

Project managment	**Coordinate and implement the program on behalf of the countries in line with World Bank standards**
• Develop in-country implementation plans • Scale up financial protection coverage, utilizing lessons learned on existing programs • Communicate and report on performance and project implementation against targets, identifying operational challenges and possible solutions • Provide shared risk infrastructure for insurance prodcuts including a data repository; and shared services and technical support (e.g., oversight on calculation agent, policyholder registration, premium collection, claim payments) • Develop regional (re)insurance program	
Fiduciary management	**Fiduciary role in line with World Bank FM, Procurement and E&S standards**
• Develop financial plans and budgets for project operations • Develop premium financing management system, including level and structure of premium finance and plans for graduation • Assess proposals for premium financing support from the private sector based on objective criteria • Audit usage of project finance and review pricing and fees of distribution partners that bid for premium finance • Procure enabling instruments/infrastructure and TA required to support the project • Meet fiduciary, reporting, monitoring and procurement standards. Meet Environmental and Social Risk Management standards	
Country and stakeholder engagement	**Facilitate an enabling policy environment and partnerships across the financial sectors**
• Coordinate and report to each country Steering Committee/Technical Working Group, which will provide oversight on project implementation • Align DRIVE to existing country programs to avoid duplication (for example targeting of DRIVE versus social protection interventions) • Review adequacy of insurance laws and regulations for financial services and provide capacity building support to regulators • Coordinate partnerships with financial institutions and other risk aggregators involved in provision of financial services to pastoralists	
Product design	**Review and customize insurance product for a range of contexts**
• Review, adapt and strengthen existing NDVI based drought index insurance risk models as necessary, for example by complementing with soil moisture indices; review appropriateness of index triggers (attachment/exit) for varying product type (alongside partners such as ARC Ltd, ILRI) • Conduct product performance review • Establish and maintain a data repository	
Distribution	**Leverage technology to optimize distribution and increase access and reach**
• Identify aggregators and groups to market and deliver package of financial services (savings, payments, insurance) • Deploy village champion model to mobilise pastoralists into groups, create awareness and increase financial literacy • Provide digital platform and required infrastructure to enroll policyholders and collect premium • Develop and manage sales agent certification and refresher training • Develop product sales infrastructure (including appropriate software, sale agent recruitment and training). Develop ICT infrastructure for quick payouts • Manage and review consumer complaints and queries	
Awareness building	**Advance deeper understanding and appreciation of IBLI across the livestock value chain**
• Develop training material and deliver various education programs targetting policyholders and other stakeholders in the livestock value chain • Develop publicity material using various media • Mainstream financial services (including insurance) in extension services	
Monitoring and evaluation	**Support monitoring and evaluation procedures**
• Provide reports to support M&E • Contribute data, information and analysis towards impact evaluation studies	

Table 1: Indicative costs savings from regional implementation over 5 years (US$)

Item	ZEP Re	National Implementation	Cost saving	Activities
Expertise	$5m	$15m	$10m	Lawyers, auditors, actuary, geospatial specialist, ICT, gender specialist, E&S specialist, M&E specialist, etc.
Software	$0.3m	$1m	$0.7m	Servers, platform maintenance costs (registration, premium collection, payments)
Technical services	$5m	$15m	$10m	Data processing, product design, rating reinsurance structuring, calculation agent
Communication	$0.3m	$0.5m	$0.2m	TV and radio ads
Distribution	$15m	$20m	$5m	Training, village champions, GRM
Project management	$3m	$5m	$2m	Client engagement, travel, premium financing management, data collection, M&E
Total	**$29m**	**$57m**	**$28m**	

About ZEP-RE

4. **ZEP-RE (PTA Reinsurance Company) is a specialized institution of the Common Market for Eastern and Southern Africa (COMESA).** Its mandate is to facilitate trade through insurance and reinsurance business specifically; to promote insurance penetration, to provide technical assistance to the insurance industry in the region, and to create and administer risk pools. ZEP-RE was established in 1990 through an Agreement of Heads of State and Governments of COMESA and commenced business operations in 1993 with its headquarters in Nairobi, Kenya.[75] Nearly 47 percent of ZEP-RE's business is in HoA countries. In 2018 regional governments expanded the mandate of ZEP-RE to deepening financial inclusion.

5. **Financial Capacity: ZEP-RE is an investment grade rated development institution with a very strong balance sheet and capacity to provide reinsurance protection.** The rating further reflects ZEP-RE's strong operating performance as evidenced by its 10-year (2011-2020) weighted average return on equity (ROE) of 10.6 percent. Shareholding has grown from an initial 5 members to 37 members, which include 6 governments, 13 state-owned companies, 14 private insurance companies and 2 development finance institutions.[76]

[75] Signatory member states within HoA include Djibouti, Kenya, Eritrea, Ethiopia, Somalia, Sudan, and Uganda.
[76] Country shareholders are Rwanda, Sudan, Djibouti, Zambia, Kenya, Mauritius. DFI shareholders are African Development Bank and DEG

6. **Development insurance capacity:** ZEP-RE has extensive experience with large scale agricultural schemes and regional risk pools (Figure 3). ZEP-RE has over 36 years of experience in managing the COMESA Yellow Card (CYC) and Regional Customs Transit Guarantee (RCTG) Schemes - two regional insurance schemes that facilitate cross border regional trade through free movement of goods and people. CYC is a regional third-party motor vehicle insurance risk pool that covers damage caused by visiting motorists established in 1994. RCTG is a cross border custom guarantee bond scheme used for the transit of goods established in 2010. As manager ZEP-RE is responsible for business acceptance, payment of claims, administration, investment management and financial reporting of the Schemes. ZEP-RE works closely with other reinsurers and has Memorandums of Understanding with African Risk Capacity Limited and Swiss Re.

7. **ZEP-RE has been building capabilities and partnerships to support the uptake of agriculture and micro insurance to deepen financial inclusion**. This has been through investment in insurTech and intermediary capabilities that support end-to-end digital insurance delivery, provide risk management solutions and credit underwriting services to support MFI lending to micro and rural households.

8. **ZEP-RE has ongoing schemes that support the uptake of savings**. Ongoing projects in Rwanda and Uganda provide savings-linked life insurance products to customers who are registered into a savings scheme and mobile banking platform. The lives insured amount to 90,000 (Rwanda) and 190,000 (Uganda). ZEP-RE's subsidiary ACRE Africa partnered with MFIs to mobilize farmer groups and provide them with financial training (budgeting, record keeping and to provide risk mitigation and management) so as to increase their savings capacity.

Figure 3: ZEP-RE experience in supporting agricultural insurance schemes and managing various risk pools

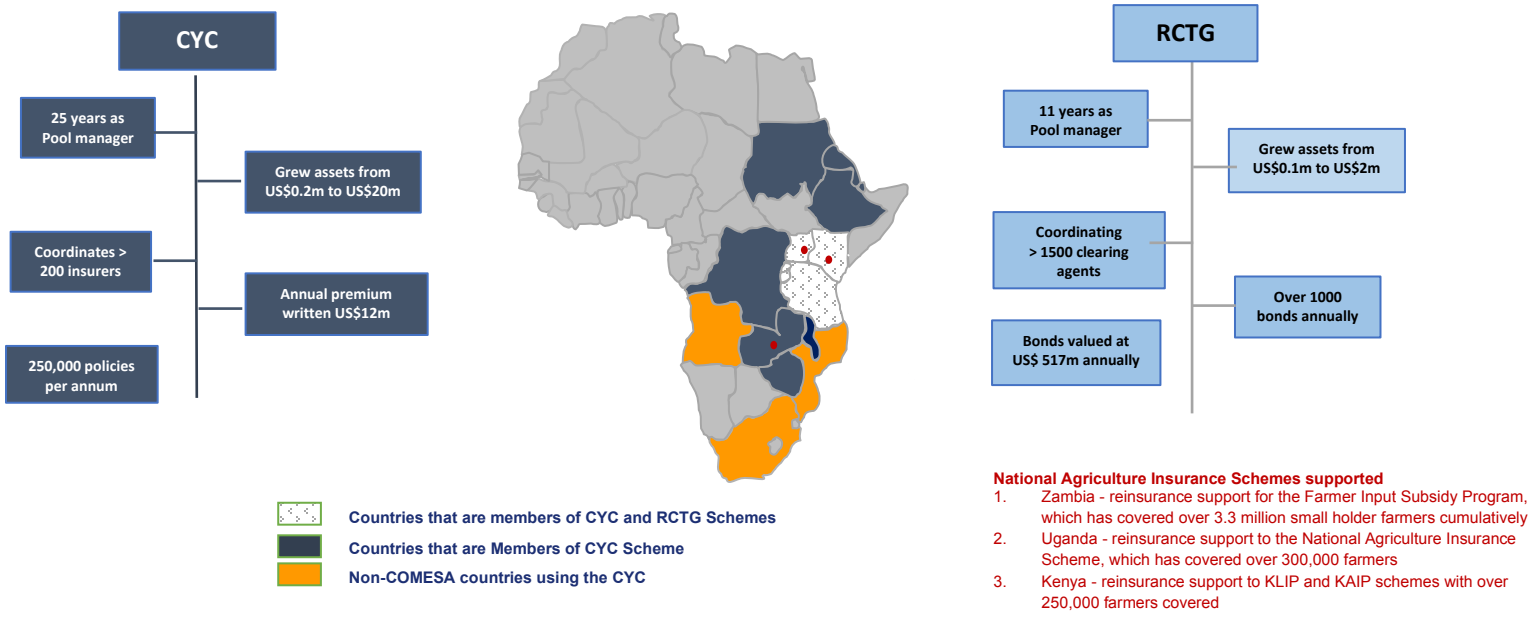
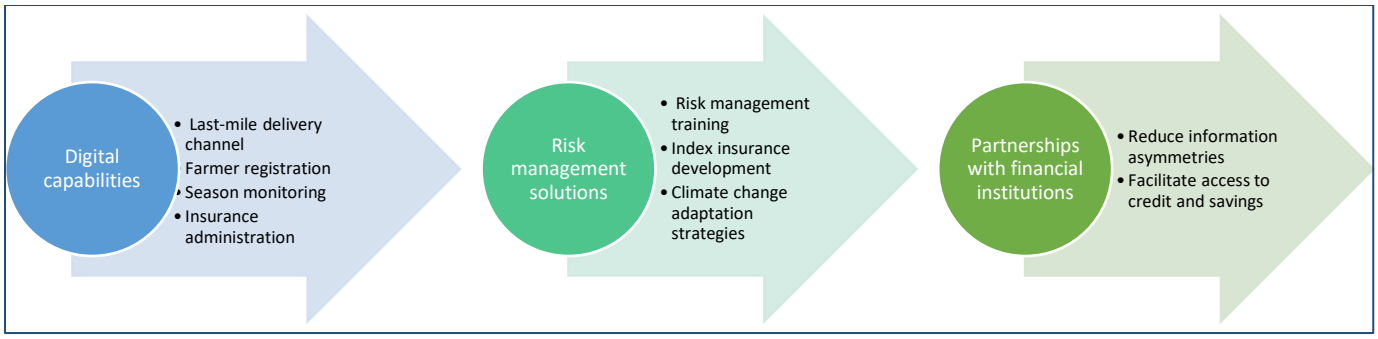


Figure 4: ZEP-RE value proposition for deepening financial inclusion



9. **Strong knowledge of the market.** ZEP-RE and its subsidiary ACRE Africa operate in markets in the African continent and have the knowledge and data relevant to sustainably support micro insurance programs. Furthermore, ZEP-RE will leverage their Takaful capabilities to develop sharia compliant products, which is mandatory in Somalia and may be required in Kenya.

10. **Regional presence.** ZEP-RE is a regional entity mandated to promote trade. It has strong relationships with COMESA member governments and key stakeholders across the financial sector in the target countries, including insurance regulators. The project will benefit from ZEP-RE capacity to influence regulatory and policy reforms to support inclusive risk finance. Furthermore ZEP-RE has significant investments in the region within insurance markets and in the real sector including in agriculture. This creates incentives for strong and sustained participation, even beyond implementation of the project.

ANNEX 9: Eligibility criteria Component 1 and seed capital Component 2

1. The eligibility criteria for pastoralists and private sector to participate in Component 1 and for the seed capital under Component 2 are presented in the same Annex as there is a deliberate intent to link the two during implementation. They will be further detailed in the PIM.

a) **Eligibility criteria under Component 1**

i. For pastoralist groups

Any pastoralist group may request support under the project as long as:

- The group is composed of pastoralists whose main economic activity is linked to livestock rearing, and is located in areas suitable for the drought insurance product
- The group is structured around economic activities (for instance: fodder production group, VSLA, funeral society etc)
- The group has the capacity and willingness to engage in commercial activities (that is, sell livestock for commercial purpose)
- The group has the willingness to contribute to the cost of the package of financial services provided, and the willingness to save.
- The group's members should not be beneficiary of any government-run social protection program.

ii. For private and financial sector firms, NGOs etc that express interest for financial support

Any private and financial sector firms/NGOs that express interest for financial support on behalf of pastoralist groups will have to meet those criteria:

- Clearly identify the group(s) covered by the package of financial services, which should meet the above criteria for pastoralist groups
- Provide a package of financial services of value for the group(s) and be responsible for marketing and distribution
- Demonstrate how the package will improve the groups' productivity
- Provide awareness creation and financial literacy to pastoralist groups
- Collect premium contribution from beneficiaries
- Identify how the group(s) could be linked to value chains activities
- Present a sustainability plan
- Demonstrate efforts to enhance women' access to financial services

b) Eligibility criteria under Component 2 – seed capital

2. The pastoralist groups that benefit from Component 1 should be linked to the investments supported under Component 2 – seed capital. The project will consider social enterprises that can generate profit for shareholders and improve the livelihoods of the pastoral communities. The supported investments will focus on grass-fed red meat and auxiliary value chains like animal feed production, camel milk production, live animal export, processed livestock products etc. The financial support will have two windows, one window for significant investments with substantial demonstration effects (i.e., that can be replicated and scaled-up) and a second window that will focus on women and youth business enterprises in pastoral areas. The eligibility criteria are presented for Kenya since the seed capital will mobilize most of the resources under Component 2 while being much smaller in the other countries. The management of the seed capital will follow a strong governance framework, with open expressions of interest, clear eligibility criteria, bankability and tracking of investments, and will be managed by a financial intermediary (Kenya

Development Corporation in Kenya) or an entity with appropriate governance and expertise, and ability to support the private sector.

3. **Operationalization**. In Kenya the seed capital will be managed by the Kenya Development Corporation, which will have to appraise all the investments, undertake due diligence, and monitor their performance and development impact.

4. **Desired social-economic outcomes**. Business ventures that will receive seed capital support will be expected to prove how they will deliver and sustain social impact in the pastoral economy while sustainable. The particular focus will be on creating reliable markets and stable prices for livestock/livestock products from productive pastoralist groups. The measure of success will be the number of pastoral households supplying livestock/livestock products and services to the business ventures that benefit from the seed capital, prices offered, and support availed to pastoralists to improve quality and production. The business ventures must prove that they are promoting sustainable development outcomes in their business dealings.

5. **What the funds from the project will support.** The support will be in the form of seed capital (equity and quasi-equity); the use of funds will be for specific activities that maximize impact. The aim will be to strengthen the supply chain and ensure the pastoralists are better connected to reliable markets. Funding must be used for a specific project in Kenya and will be milestone based, where disbursements are based on mutually agreed milestones that must be delivered/achieved.

6. **Facility size**

    a. Large business window – Up to US$10 million per transaction

    b. The special window for women and youth (US$ 50,000 to 300,000) per transaction.

7. **Eligibility criteria**

    a. For the large business window

- The business venture must be commercially workable and contribute to pastoral livestock value chain development. The business venture must be technically sound and have anchor investor(s) and creditor(s) willing to supply finance.
- The business venture must show the methods and degree of coordination with livestock producers and demonstrate how the producers will benefit.
- Demonstrate institutional governance structures and the ability of the management team to implement the proposed business/project (adequate internal resources/ ability).
- Demonstrate how the business model will deliver and sustain social impact in the pastoral economies and methodology for tracking results
- The business venture must assess the environmental and social risks and impacts and provide risk mitigation and be willing to adopt an environmental and social risk management framework aligned with World Bank standards.

- Commit to promote fair trade and willingness to implement transparent and auditable mechanisms for tracking benefits and commit to apportion reward equal to each value chain actor's efforts.
- Demonstrate how the business model supports either climate mitigation (reduction of GHG (Greenhouse Gas) emissions) or climate adaptation of pastoralists
- Demonstrate that the investments cannot be realized without seed capital from the project.
- Must not be engaged in business activities that fall under World Bank E&S Exclusion List.

b. For the special window for women and youth:

This window targets women and youth-owned enterprises that have invested in livestock value chain related activities. The businesses ownership might be a limited company, or a cooperative engaged in livestock or related business activities. Potential businesses will receive capacity building training and support to refine the business proposal to benefit from the financial support provided by the project. The focus will be to support transformational social enterprises that empower women and youth in pastoral counties. The financial support will be structured around performance-based conditions: disbursements tied to achieving prior agreed milestones.

The eligible enterprises will be expected to meet the following conditions: -

- Must have women or youth as majority shareholders or have direct benefits through offtake agreements or other forms of engagements.
- Must demonstrate commercial viability, and owners should contribute at least 30 per cent of the required investment cost.
- Must demonstrate a good governance structure, especially for these enterprises under cooperative.
- Must have the potential to scale and offer fair employment terms to the employees.
- Must support either climate mitigation (reduction of GHG (Greenhouse Gas) emissions) or climate adaptation of pastoralists
- Enterprises with the ability to attract credit from financial institutions will be given preference.
- Must not be involved in activities under the World Bank E&S Exclusion List

ANNEX 10: Gender issues

1. **The livestock sector is characterized by gender-differentiated roles**. For example, in sub-Saharan Africa, milking is traditionally the responsibility of women, whereas selling or slaughtering dairy livestock is undertaken by men (FAO 2013). Analysis in each country shows that:

    (a) **Ethiopia: There is a long history of gender inequality with poorer women and girls especially facing multiple disadvantages.** Women experience high rates of unemployment (6.5 percent), seasonal employment (37 percent), and temporary employment (13 percent), with these rates increasing as a result of COVID-19.[77] Data suggests that women access to formal credit is less than men. According to FAO, despite a slight increase in the number of microfinance and financial cooperatives, the use of credit remains low in the country. Only 15 percent of female landholders and 21 percent of male landholders reported taking out loans. Although there are no policy barriers to women access to credit, women face challenges since they do not own assets, have limited awareness about credit and insurance products, lack of collateral and lack of trust of women in society.

    (b) **In pastoralists areas of northern Kenya, gender norms as well as lack of economic opportunities and access to finance further disempower women**. Savings are maintained through livestock. Findings from a recent program showed that access to new savings products do not replace the savings in livestock but increase savings in cash as well. [78]

    (c) **Somalia: analysis of gender gaps in relation to financial and digital access suggests that women face discrimination and considerable socioeconomic barriers** to accessing jobs and livelihood opportunities. Key constraints faced by women pastoralists comprise limited access to three important factors: information, access to finance and business skills training. Lending to women and female-owned businesses is virtually nonexistent.[79] Drought also impact disproportionally women who are responsible for food security.

    (d) **Women have been adversely affected by the COVID-19 pandemic, and measures to contain the spread of the virus have deepened some of the existing challenges faced.** In the face of drops in demand or disruptions in the supply chains, jobs have been lost and loans not being paid. Due to known barriers women in business face, there is a legitimate concern that without a deliberate effort, women pastoralists and operating in the livestock sector will not be able to get information on products to increase resilience.

2. **This project will contribute to close the gender gap on access to financial services since they are key enablers of asset ownership which is one of the objectives of the World Bank Group Gender Strategy**. It will target financially excluded pastoralists and rural women who are economically active but have not had access to savings products and drought insurance, to provide them with more market-informed income generating opportunities to strengthen their financial inclusion. The project takes a gender sensitive approach both in project design and implementation, including targeted community outreach that involves both female and male pastoralists groups on the benefits of savings and insurance, and where interested women can get access. Savings and drought insurance will help stabilize women's income allowing them to continue their activities. In some countries where drought insurance has been piloted, women bought it to avoid disruption in the food provision in the household.

[77] FAO. National gender profile of agriculture and rural livelihoods. 2019. https://www.fao.org/3/ca3224en/ca3224en.pdf
[78] Jaya Tiwari,Emily Schaub and Naziha Sultana. 2019. Barriers to "last mile" financial inclusion: cases from northern Kenya. Development in Practice. Volume 29.
[79] Somalia Country Partnership Framework, 2018.

3. **Identified gender gap**. The identified gender gap is women's access to formal financial services. Women face greater difficulty in accessing those services compared to men as men are more likely than women to have a bank account. In sub-Saharan Africa, only 37 percent of women have a bank account, compared with 48 percent of men.[80] In Ethiopia, 41 percent of men have an account, compared to 29 percent of women. In Kenya, 48 percent of men used bank services compared to 33.7 percent of women in 2019. A recent SOMREP survey (2021) finds that 74 percent of the surveyed businesswomen do not have accounts with a formal financial institution in their (or business) name in Somalia. There are limited individual women businesses in the urban areas that access financial services, and it is very difficult for women in IDP camps, rural areas, and poor suburbs of the main cities to access financial products (Women business access to finance in Somaliland, 2021). In addition, men are more likely to borrow and save through formal channels compared to women (22.5 percent of men used informal saving groups in 2019 compared to 37.4 percent of women in Kenya). There is a lack of gender-disaggregated data on provision and adoption of financial services, which presents a constraint in assessing women's access in pastoralist areas.

4. **The gender gap is more limited in mobile money.** The GSMA survey (2021) finds that the gender gap in mobile money active usage is 8 percent in Kenya and 5 percent in Somalia. The initial findings from the Kenya and Somalia surveys highlight that the number of pastoralists with mobile phones, bank account access and cash savings is low, as is the take up of index insurance and credit. However, the gender gap between men and women on mobile money usage is smaller in Kenya and Somalia. This showcases the importance of leveraging digital channels to better target women and increase their financial inclusion. Overall, the use of mobile money is similar across male and female headed households, although male headed households are more likely to have cash savings and those savings more likely to be deposited in a bank account while women have their cash savings in mobile money.

5. **For the purpose of the project, the gender gap will be measured as the difference in the percentage of women who have a bank account compared to men** as illustrated in the table below. The emphasis on bank account is driven by the objective of the project to increase pastoralist groups' linkages to markets. Access to reliable markets to supply livestock on an ongoing basis would require the ability to manage larger flows of money, hence the need for a bank account in a formal financial institution. The overall gender gap across all the countries (Ethiopia, Kenya, Somalia) in terms of access to bank accounts is 12 percent. The project will reduce the gender gap by at least a quarter in each country.

	Ethiopia	**Kenya**	**Somalia**	**Simple Average**
% of men with bank account	41%	48.2%	35%	
% of women with bank account	29%	33.7%	25%	
Target to close the gender gap	*32%*	*37%*	*27.5%*	
Gender gap	**12%**	**14.5%**	**10%**	**12%**

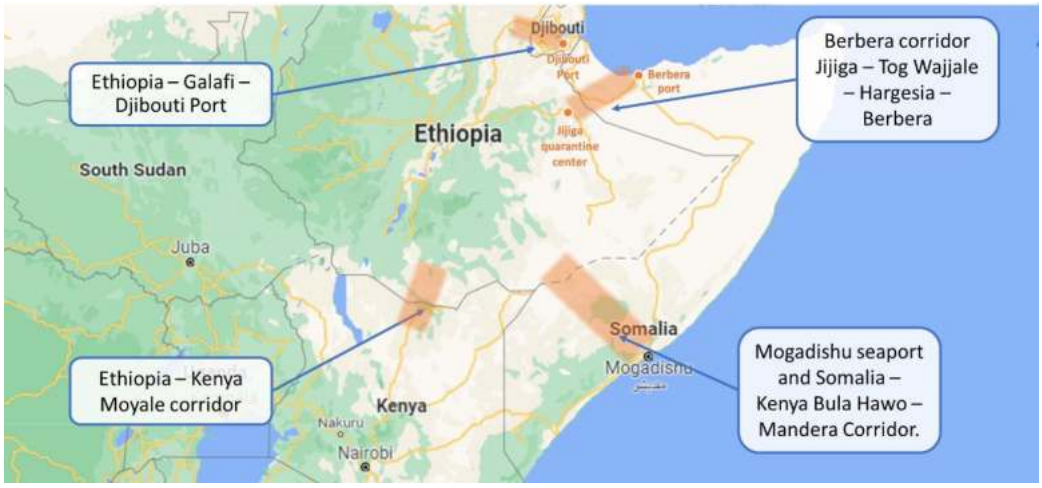
[80] Hanan Morsy, Access to Finance: Why Aren't Women Leaning In?

6. **Planned activities to close the gender gap**. The program will encourage a gender-sensitive approach to the development of strategies and sector policies that help address the gender gaps identified.

   (a) Under Component 1, ZEP-RE will rely on an extensive network and expertise in working with rural women to address their socioeconomic needs. They will use the "village champion" model to sensitize pastoralists on the financial products offered and half of the village champions will be women. They will also mobilize formal financial institutions to provide financial services to pastoralists through incentivization of savings.
   (b) The findings of the pastoralist surveys are informing product design, marketing activities and awareness campaigns. Pastoralists surveys will be undertaken every 12/18 months to monitor progress under the indicator.
   (c) The project will fund activities aimed at increasing financial knowledge with emphasis to female pastoralists and agro-pastoralists. The project will support awareness creation on financial services for pastoralist women, underwriters, extension officers, livestock off-takers. With increased awareness and understanding of insurance, demand for financial services will be enhanced for women. Bidders for Component 1 will be encouraged to have an outreach strategy for targeting women.
   (d) Where relevant, the project will prepare a Gender Based Violence (GBV) assessment to identify existing GBV referral services available that will be shared with women with an intention to increase their awareness on where help can be accessed. Finally, the project will ensure that all feedback and grievance mechanisms in place are accessible to women.
   (e) As part of the risk model forecasting violence and population change, online news and social media language sentiment about project components, gender and other social and environmental issues will be ingested and monitored so that reported on or discussed issues may be identified in real time.

ANNEX 11: Detailed Component 2 activities and support to livestock trade corridors

1. The Component 2 aims to better connect pastoralists to market, attract private investment into the value chains and facilitate the regional livestock trade. This component focuses on four regional livestock trade routes and on the value chains of live animals and livestock products (including feeds).



Djibouti (US$5 million for Component 2 from the HoA MTDF to be confirmed)

2. The activities will have a strong focus on trade facilitation along the Ethiopia-Djibouti corridor, through the enhancement of the logistic performance of livestock transit originating from Ethiopia, and the optimization of the livestock terminal that Djibouti has invested on and that is currently operating at a maximum of 16% of its 2.5 million livestock heads capacity. The activities will also strengthen quality infrastructure to move up the value chain, and generate economic spillovers on the local economy by better integrating the local private sector in the regional livestock value chain.

3. Three types of interventions are contemplated for Djibouti:

- **Sub-component 2.1: Quality infrastructure (US$1 million).** The project will provide capacity building and equipment to strengthen the quality standards and capacity of Djibouti to move from a live animal transit country to an exporter of livestock products.

- **Sub-component 2.2. Regional livestock trade facilitation (US$1.7 million)**

The project will support the improvement of livestock transport/transit processes between Djibouti and Ethiopia, by strengthening the bilateral Livestock Trade Promotion Working Group and the digitization of the quarantine certificate between Mile and Jigjiga in Ethiopia, and the Doraleh Multipurpose in Djibouti, with system integrations, processes harmonization, and capacity building.

- **Sub-component 2.2: Support to local productive capacities, in connection with the regional livestock corridor (US$2 million)**

The project will seek to support the local private sector participation in the regional livestock corridor, building productive capacities. The project will finance economic and financial feasibility studies, to assess how Djibouti

can move up the value chain of halal meat products, by analyzing the entire value chain, i.e., supply and demand, trade agreements, positioning opportunities on regional and international markets, and evaluating the preferred option of a center for the processing of livestock products in accordance with international standards in the form of an investment plan to support the mobilization of investment from a private operator under a Public Private Partnership. The project will also support the development of economic activities around the livestock value chain linked to services at the port livestock terminal; production, marketing and quality assurance of livestock products; cold chains; efficient logistics on the livestock transit corridor. The project will supplement the support with non-financial services, in particular business development services to the beneficiaries of financing to ensure the implementation of investment plans and effective improvement of their operations.

- **Sub-component 2.3: project management cost (US$0.3 million)**

Category of activities	Potential activities	Type of procurement
Quality infrastructure	Capacity building and equipment to strengthen the capacity of Djibouti to move up the value chain	Firm providing capacity building and testing equipment
Regional livestock trade facilitation	Improvement of livestock transport/transit processes through strengthening of the Livestock Trade Promotion Working Group – Stakeholders	Tripartite consultations with the beneficiary institutions concerned (Mile and Jijiga Quarantine Centre in Ethiopia, and the Port DMP in Djibouti): Terms of reference and specifications
	Digitization of the quarantine certificate between Mile and Jigjiga in Ethiopia, and the port: system, procedures, equipment and capacity building.	Information system acquisition and related materials Recruitment of a firm for deployment, configuration, procedures, and capacity building
Support for local productive capacities, in connection with the regional livestock corridor	Economic and financial feasibility studies, to assess how Djibouti can move up the value chain of halal meat products, by analyzing the entire value chain, i.e., supply and demand, trade agreements, positioning opportunities on regional and international markets, and evaluating the preferred option of a center for the processing of livestock products in accordance with international standards in the form of an investment plan to support the mobilization of investment from a private operator under a Public Private Partnership.	Recruitment of a firm for technical assistance
	Development of economic activities around the livestock value chain related to services to the livestock port terminal; production, marketing, and quality assurance of livestock products; cold chains; efficient logistics on the livestock transit corridor.	Challenge Fund /seed capital
	Business Development Services to the beneficiaries of the challenge funds to ensure they improve their operations	Recruitment of a firm for advisory services

Ethiopia (US$70 million for Component 2)

4. Livestock export in Ethiopia faces various constraints along the export corridors. Information from MoTRI & MoA shows that the livestock value chain is highly dominated by middlemen who export livestock through informal channels into major destination markets in the Middle East. The data shows that even though the volume of exports is increasing, the value that the country gets out of it is decreasing. The major challenges in livestock export can be summarized as informal trade, under/over invoicing, livestock logistics, poor production & sourcing, poor quality assurance (manual ear tagging, certification & standardization), lack of traceability, price management.

5. To resolve these challenges, MoTRI & MoA have prioritized and designed interventions on improving livestock infrastructure, improving tracking & traceability, and diversifying destination markets for Ethiopian exports. The Livestock Master Plan of Ethiopia also plans to strengthen the quarantine and inspection systems to reduce the risk of introducing and disseminating livestock diseases through the export route. A livestock quarantine facility is an isolation space where livestock are inspected for diseases, medicated, cleaned, protected from other diseases, fed, standardized, certified and are made ready for their journey to next stages of the value chain. Well-developed quarantine and certification systems that comply with international standards and meet requirements of importing countries are critical infrastructure for live animal exports.

6. To formalize live animals export through the main corridors, Ethiopia is constructing five quarantine centers in Mille (Afar), Mettema, Humera, Jigjiga and Almhar. According to MoA, in 2020/21, a very small number of cattle has been exported through facilities related to the Jigjiga quarantine center while 1042 sheep/goat and 778 camels have been exported through Mille. MoA has signed Public Private Partnership (PPP) agreement with a private sector company for the operation and management of the Mille quarantine center and intends to replicate this arrangement to Jigjiga quarantine center in the Somali region of Ethiopia.

7. The support to the livestock value chain and trade facilitation is divided into three parts i) quality infrastructure capacity building ii) facilitation of regional livestock trade and iii) support for local productive capacities in connection with the regional livestock corridor. Specific activities in the project include:

    - **Sub-component 2.1: Quality infrastructure capacity building (US$20 million):** the project will support TA and capacity building on revision of national quality standards for livestock products, identification & accreditation of both private and government laboratory facilities, building capacity for product certification and testing services for livestock products. It will also enable operators of facilities to be able to effectively use existing testing equipment. The project will also support the certification of labs that are built by private companies inside or in the vicinity of quarantine centers. The project supports harmonization of livestock standards between Ethiopia, Kenya, Somalia, and Djibouti so that certifications given in one country are equally applicable and acceptable in the other country. In addition, to leverage the capacity created by the ongoing WB financed project NQIDP, this project will support the training of Quality Assurance professionals from HoA countries in the region at Ethiopian quality assurance centers.

    - **Sub-component 2.2: facilitation of regional livestock trade (US$26 million):** On Jigjiga quarantine center, the project will support a technical and economic feasibility study to bring the quarantine center under a PPP arrangement for operation and management. On the Jigjiga-Berbera trade route, the project will

support the development of trade facilitation agreement (including customs and tax modernization at the border) to speed up the transit of live animals coming from Jigjiga to the Berbera port. If a border post is required, the project will finance the construction and operationalization of the post. In the same route (Jigjiga and environs), the project will conduct awareness creation on the value of using market centers for selling their livestock, promotion of market centers, training of pastoralists in the region. On the Mile quarantine to Djibouti port route, to optimize existing infrastructure, a feasibility study for transferring quarantined livestock from trucks to the Ethio-Djibouti train will be assessed. This would significantly improve the time animals spend in transportation from Ethiopia to Djibouti and avoid another 21 days quarantine in Djibouti. If this activity is found feasible, the project will support the construction of a transfer station and finance the procurement of cattle wagon that take the cattle to Djibouti port. If the transfer station is not found to be feasible, the project will support the construction of a rest stop before the cattle enter Djibouti (in boarder area between Ethiopia and Djibouti) from Mille Quarantine, so that the cattle is properly rested before entering Djibouti and can be loaded within 48 hours onto the ships. The project will strengthen Ethiopia's Livestock Market Information System and will link Mille & Jigjiga Quarantine Centres with Djibouti and Berbera ports using IT systems that make information exchange efficient between the stated quarantine facilities. The project will support trade integration and facilitation reforms to enhance regional livestock trade. These include studies & TAs that increase convergence of national trade policies and regulations of Ethiopia with the region, in view of simplifying business environment for traders, reduce unnecessary administrative burden and enable logistics companies to operate effectively and efficiently within the regions.

- **Sub-component 2.3: Support to local productive capacities (seed capital to facilitate private investments in viable businesses that benefit pastoralists and connect them better to markets (US$20 million).** This activity will provide a Challenge Fund Facility (CFF) that enhances capacities, quality, productivity, and market access of local firms and leverages private capital to be invested in the livestock export sector. Each beneficiary of the fund will specify the nature of the problem, objectives and scope of interventions, detailed costing, targeted results and concrete plans to enhance linkages between pastoralists and the export oriented private sector. The approval of each proposal is subject to identification of direct linkages between pastoralists located in areas where Component 1 of DRIVE has de-risked and fund disbursements will be tied to performance indicators for the private sector. The funds can be used in various ways (for example, equipment upgrading for fodder production, equipment upgrading for abattoirs, compliance training/certification, procurement of livestock trucks, technical assistance, modernization of private quarantines – such as in Adama, …etc). Access criteria, management procedures and application process will be defined in the agreed operations manual of the CFF. The fund will not cover more than 60 percent of the total cost of the CFF proposal. No single firm may receive total grant funding more than US$300,000 from this fund. The CFF will be managed by a full-time manager hired by the project implementation unit. The project will also support a feasibility study and operationalization of a system to link pastoralists with export abattoirs or live animal exporters (learning from the coffee sector where Ethiopian coffee is tracible, and farmers are directly linked with exporters). This will help pastoralists to be compensated for the animals that they bring to the market and exporters to get competitive prices that encourage them to off take more animals and integrate better to local/international markets.

- **Sub-component 2.4: project management costs (US$4 million).**

8. The project will **support local productive capacities, in connection with the regional livestock corridor and niche markets.** Different studies & technical assistances will be provided for the identification and development of local value chains for entering new markets by establishing links between local pastoralists and international buyers and promoting cost-effective freight forwarding and export logistics, including cold chain. Added to this, the project will support identification of potential niche markets for grass-fed red meat from pastoral regions of the HOA.

9. The project will enable a **Public Private Dialogue & Awareness Creation platform** supporting PPD forums to bring policy makers, private sector, pastoralist groups, … etc to discuss and take action that improves the livestock value chain. In addition, this activity will conduct successive awareness creation programs and media campaigns to break information asymmetries between pastoralists, abattoirs, exporters etc.

10. **Complementarity with ongoing WB project (LLRP) in Ethiopia:** The WB is supporting livelihoods of pastoralists through the Lowlands Livelihood Resilience Project -LLRP (P164336). Among other interventions, LLRP, under component two, supports access to rural financial services through formation of 500 Rural Saving and Credit Cooperatives (RUSACCOs) and 20 Cooperative Unions in lowland areas. The support includes training on financial literacy, leadership skills, entrepreneurship and business plan preparation, provision of basic materials and equipment (furniture, safe box, stationary materials etc.). In addition, upon fulfillment of certain criteria, mainly consistent with mobilization of own savings, the RUSACCOs will be provided with seed capitals. The seed capital injection aims in leveraging the RUSACCOs lending capacity to their members to expand their businesses and productivities.

11. **Thus, building on the LLRPs initiatives, DRIVE will further scale up the access to rural financial services in selected target areas**. More specifically, DRIVE's support will focus on providing the next level technical support and credit capital to selected RUSACCOs and Unions to further strengthen their capacities. The support will aim in improving their competitiveness through quality and market-oriented livestock production and trading as well as forging enhanced linkages with exporters of live animals and export abattoirs.

12. **Complementarity with ongoing WB project (NQIDP) in Ethiopia:** The project will complement the existing WB project National Quality Infrastructure Project (P160279), which has the objective of improving the delivery of quality assurance services to enterprises in targeted sectors. The NQIDP is supporting textile/garment, leather/leather products and agro-processing (fruits, vegetables & honey) value chains. DRIVE will expand the sectors and target local quality assurance provision to live animal & meat sectors (described in Comp 2, sub-component 2.1).

Category of activities	Potential activities	Type of procurement

1. Quality Infrastructure capacity building	TA and capacity building to MoTRI, MoA and private sector on revision of national quality standards for livestock products, identification & accreditation of facilities and product testing & certification of services of livestock products. The project also supports harmonization of livestock standards between Ethiopia, Kenya, Somalia, and Djibouti so that certifications given in one country are equally applicable and acceptable in the other country.	Consultancy Services
		Procurement of goods
2. Facilitation of regional livestock trade	Jijiga quarantine center: technical and economic feasibility study to bring under a PPP arrangement for operation and management, advice on the risk allocation and PPP documentation, and preparation of a roadmap and business plan.	Consultancy Services
	Jigjiga and environs: awareness creation on the value of using market centers for selling their livestock, promotion of market centers, training of pastoralists in the region	Consultancy Services
	Jijiga-Berbera trade route: the development of a trade facilitation agreement (including customs and tax modernization at the boarder) to speed up the transit of live animals coming from Jigjiga to the Berbera port. If a border post is required, the project will finance the construction and operationalization of the post.	Consultancy services
		Consultancy Service
		Works
	Mile quarantine to Djibouti port: feasibility study will be conducted for a livestock transfer station close to the Mille quarantine and the train route to transfer quarantined animals to the train that goes directly into Djibouti port. If this is deemed feasible , the project will support the construction of a livestock terminal and procure animal train wagons to take the livestock to the port and ensure better transport conditions and animal welfare.	Consultancy services
		Consultancy Service
		Works
		Procurement of goods
	Strengthen Ethiopia's Livestock Market Information System including linking Mille & Jigjiga Quarantine Centers with Djibouti and Berbera ports	Consultancy services
		Procurement of goods
	Trade integration and facilitation reforms to enhance the regional livestock trade: the project will support studies that increase the convergence of Ethiopia national trade policies and regulations with the region, to simplify business environment for traders, reduce unnecessary administrative burden and enable logistics companies to operate efficiently within the HoA.	Consultancy services

3. Support for local productive capacities and the private sector	Challenge Fund Facility (CFF): Development of local value chains for entering new & existing markets by establishing links between local pastoralists and international buyers and promoting cost-effective freight forwarding and export logistics, including cold chain. The CFF could be used for commercial fodder production, upgrading of abattoirs, ...etc. The activities supported should be limited to private sector investments that upgrade livestock export	Challenge fund
	Identification of potential international niche markets (in Europe, North America, Japan, …etc) for grass-fed red meat from pastoral regions of the HOA	Consultancy Services
	Study and support the establishment of a system to link pastoralists with export abattoirs or live animal exporters (take learning from the coffee sector where Ethiopian coffee is tracible, and farmers are directly linked with exporters)	Consultancy Services & Various Trainings

Kenya (US$60 million for Component 2)

13. Component 2 will support the origination of private-sector led viable investment opportunities in the livestock value chain. The project will support preliminary studies to identify potential business opportunities, prepare business plans and investment memoranda. The project will work closely with IFC MAS and Advisory to ensure the identified businesses are sound and commercially viable. Through the Kenya Development Corporation, the project will provide seed capital to businesses with a strong link with pastoral production systems. The project will give preference to investors willing to get into offtake agreements with the pastoralists. Component two will have two subcomponents: (a) Technical assistance to support bankable investment opportunities in the livestock value chain; (b) Seed capital to facilitate private investments in viable businesses that benefit pastoralists and connect them better to markets.

- **Sub-component 2.1: Technical assistance to support bankable investment opportunities in the livestock value chain (US$16 million)**. The project will support feasibility studies on potential businesses in pastoral areas that could be of interest to the private sector. The activities under this component will include the finalization of the livestock master plan, undertaking feasibility studies and market sounding, and developing mechanisms for pastoral communities' participation. The project will help aggregate groups covered under Component 1 into Farmer Producer Organizations and link them with private sector investors. The project will promote strong pastoral involvement by strengthening the Livestock Identification and Traceability Systems and support the deployment of smart contracts using digital innovations. This will be implemented by SDL.

- **Sub-component 2.2: Support to local productive capacities (seed capital to facilitate private investments in viable businesses that benefit pastoralists and connect them better to markets (US$38 million)**. The project implementation manual will include detailed eligibility criteria to select companies that will receive financial support and how such support will be structured. The project will consider social enterprises that can generate profit for shareholders and improve the livelihoods of the pastoral communities with positive impact on the environment. The supported investments will focus on grass-fed red meat, live animal export and auxiliary value chains like feed production, camel milk production, live animal export etc. The financial support will have two windows, one window for significant investments

with substantial demonstration effects (i.e., that can be replicated and scaled-up) and a second window that will focus on women and youth business enterprises in pastoral areas. The project will collaborate with IFC to have a strong pipeline that could benefit from further investments. The table below provides a list of potential opportunities that could be realized through a private-public partnership or purely private-sector approach. This will be implemented by KDC.

- **Sub-component 2.3: Project management costs (U$6 million).** This will cover both SDL and KDC.

Category of activities	Potential activities	Type of procurement
Feasibility studies	Feasibility studies to improve the bankability of the private sector investments under consideration and ensure development impact and direct benefits to pastoralists	Consultancy services
E&S capacity building for KDC	Training, staffing and capacity building to ensure KDC can screen appropriately and mitigate E&S risks for the investments that will benefit from seed capital	Consultancy services
Capacity Building to SDL	Capacity building to ensure SDL has the capacity and staffing to coordinate the project.	Consultancy services/trainings
catalyze private sector investments at the county level.	DRIVE project will work with counties with sizeable livestock populations to determine private sector investments' feasibility and viability in the livestock value chain. For example, IFC sponsored work that established the potential for a grass-fed high-quality beef business opportunity in Laikipia county. The project will support similar work in other counties to generate a pipeline for potential investments.	Seed capital (financial intermediary operation)
support public-private partnerships in livestock value chains.	The project will explore potential for public private partnerships in areas of animal feed production, animal finishing and fattening using state-owned holding grounds and provide financial support where it proves viable.	Seed capital (financial intermediary operation)
support businesses that integrate women in the livestock value chains	The project will identify and support women entrepreneurs in accessing seed capital to invest in milk collection, storage and processing, participation in livestock trading.	Seed capital (financial intermediary operation)
Support businesses that integrate youth in the livestock value chain.	The project will identify and support youth to undertake investments in livestock value chain. For example animal feed production, animal transportation services, animal finishing and fattening for organized markets..	Seed capital (financial intermediary operation)

Somalia (US$40 million for Component 2)

14. The activities will have a strong focus on quality infrastructure which is incipient in the country and on two trade corridors: (i) the Berbera corridor, a critical gateway for Ethiopia to export its live animals; (ii) the Mogadishu seaport. Three types of interventions are contemplated:

- **Sub-component 2.1: Upgrading quality infrastructure (US$19 million)**: Somalia is developing its national quality infrastructure system and the Somalia Bureau of Standards (SBS) was created in early 2021.

Strengthening the national quality infrastructure system will support the private sector to export live animals and processed livestock products. This subcomponent will also support the Somaliland Quality Control Commission (SQCC).

i. Both institutions face some challenges including support for standards development in terms of procedural scope and operations, for implementing metrology, certification and testing services that are not yet operational. Similarly, there is need for a quality assurance system for livestock products. This sub-component will improve livestock product quality by supporting (i) technical assistance to SBS and SQCC covering standards, accreditation, metrology and conformity assessment. The technical assistance will also include testing, laboratory procedures, livestock quality and regulations, establishment of quality systems and operation of a traceability system; and (ii) goods and services including equipment and testing supplies.
ii. DRIVE could help to build SBS and SQCC's systems and quality infrastructure by strengthening the existing collaboration with Quality Infrastructure Agencies and other international National Quality Infrastructure bodies. For example, SQCC has established and MOU with the Ethiopian National Quality Infrastructure Institutions. Both institutions have been undertaken exchanges on food testing, quality testing. Similarly, the Ethiopia National Metrology Institute of Ethiopia has done some assessments of the instruments of SQCC.
iii. Activities will ensure a full coordination between the SBS and SQCC on harmonization of standards, and address the share of laboratories, certification and participation on capacity building seminars.

- **Sub-component 2.2: Trade facilitation and trade logistics (US$8 million).** A diagnostic study was undertaken to identify how to improve trade infrastructure and logistics services along the corridor. Some of the potential activities include: TA on regulations, digitization of trade data on livestock, transport procedures for the trade portal, and the development of a traceability system supporting digitization of certification on the Jigjiga-Berbera corridor, and the assessment of a trucking system to facilitate cross-border road transport permits. The Ethiopia DRIVE project will support the PPP arrangement for the Jigjiga quarantine center, which could then be directly connected to the Berbera port through digitization of export procedures, similar to what will be done for the Ethiopia-Djibouti corridor.

- **Sub-Component 2.3: Support to local productive capacities (seed capital to facilitate private investments in viable businesses that benefit pastoralists and connect them better to markets (US$10 million).** This activity will be identified in coordination with the IFC's HoA Livestock Sector Approach to ensure that the activities proposed enable private investment into the livestock value chain.
- **Project management costs (US$3 million)**

Category of activities	Potential activities	Type of procurement

Quality infrastructure advisory services and equipment	Upgrading quality infrastructure for livestock. (i) TA on quality infrastructure in the livestock sector to the Somalia Bureau of Standards (SBS)and the Somaliland Quality Control Commission (SQCC) to use of testing equipment, conduct quality and safety tests of livestock products, training and others; (ii) procurement of equipment and testing laboratory supplies; (iii) TA and capacity building to MOCI, Somalia Bureau of Standards (SBS) and SQCC on adoption of national quality infrastructure standards for livestock products, identification of facilities for accreditation and appropriate equipment for product certification and testing services of livestock products, effective and efficient operations of the laboratory including the hiring of an international resident advisor to work with the staff on a part-time basis for one year as they work to develop the quality infrastructure system.	Competitive bidding, for a specialized firm on improving National Quality Infrastructure covering standards, accreditation, metrology and conformity assessment. Technical assistance, goods and services, and capacity building
Facilitation of regional livestock trade with advisory and equipment	TA to identify key trade infrastructure facilities (rest stops, cold chain, veterinary centers, feed access, quarantine centers), regulations and feasibility study for the main facility gaps along the Jigjiga-Berbera corridor and Mogadishu Port based on the findings of the assessment (preparation study)	Firm for technical assistance and performance assessment
	Digitization of trade data on livestock for the trade portal, marketing information, trade and transport procedures and support for maintenance. Assessment of sharing information through the trade portals among the HOA countries	Consultant to populate the portal and set up database
	Develop a traceability system supporting digitization of certification on the Jijiga-Berbera corridor and Mogadishu Port Assessment of Trade infrastructure and logistic gaps: Mogadishu seaport and Ethiopia Berbera corridor Jijiga – Tog Wajjale – Somaliland - Hargesia – Berbera. Support for establishing a trucking system to reduce cumbersome procedures for obtaining the cross-border road transport permits (Ethiopia-Berbera corridor). Implementation of the loading and unloading animal's code to prevent overloading of animals on truck transport and into ships	Information system acquisition and related materials Firm for deployment, configuration, procedures, and capacity building
Support for local productive capacities, in connection with the regional livestock corridor and niche markets	Identification and development of local value chains for entering new markets by establishing links between local pastoralists and international buyers and promoting cost-effective freight forwarding and export logistics, including cold chain. Seed funding will be channeled through a challenge fund.	Challenge fund
	Improved compliance of livestock exported products in the niche markets identified by the trade infrastructure study.	Recruitment of a consultant/firm to develop a plan, review Non-trade barriers, awareness campaigns

ANNEX 12: Opportunities for pastoralists in the grass-fed red meat value chain

1. **Grass-fed red meat is gaining market traction because of consumers' health concerns and the contribution of livestock production to GHGs emissions**. Grain-fed meat tends to produce more GHGs, mainly methane, due to dietary intake, contributing to more emissions with a longer stock effect. While animals finished using grass feeds take time to mature and reach slaughter weight, their meat tends to fetch better retail prices (often twice the price compared to conventional grain-fed beef). Conscious consumers are willing to pay more due to the perceived benefits associated with grass-fed beef. The global market for grass-fed beef is increasing; for example, it grew 15 times in sales between 2012 and 2016 in the USA, and prices averaged 70% above grain-fed meat. The increased demand for grass-fed beef is advantaging livestock production in pastoral regions where land is available and livestock is naturally reared. To tap this growing demand, pastoralists need support to improve production quality and connect better with the markets.

2. **One of the identified drawbacks in pastoral production is the lack of aggregation**. Herders are not aggregated and therefore cannot attract services that might contribute to their improved productivity. A lot of investment is required to help farmers practice livestock keeping as a business for better returns. But first, pastoralists should be aggregated into groups to attain economies of scale and form peer-to-peer learning groups in the short term. Group formation will address barriers to accessing services required to improve production. For example, herders will access breed improvement services like artificial insemination, access vaccination and veterinary drugs and medicine affordably and on time. The change to organized production will be gradual but systematic, from traditional production approaches to state-of-the-art technology. As pastoralists move to produce for the market, they will require modernized animal finishing techniques to have higher-quality cattle at harvest. An organized, deliberate, and consistent breeding regime will deliver cattle of uniform size and weight, critical qualities required by the market. Applying emerging technologies like blockchain will become essential for identification and traceability, improving efficiency in the value chain, and enhancing transparency. In addition, countries will need to get international certification for its grass-fed beef production system and develop a brand image.

3. **Governments should address pastoralists' weak and dysfunctional linkages to the livestock value chain to make grass-fed meat production attain its full potential**. In Kenya, the abattoirs continue to operate below capacity because they are not getting enough supplies despite the vast livestock population (National Export Development and Promotion Strategy, 2018). The livestock supply becomes worse during droughts as pasture conditions deteriorate and animals become emaciated. Tremendous potential exists when the animal population is considered. The livestock population was 3.4 million exotic (dairy) cattle, 14.1 million indigenous cattle, 17.1 million sheep, 27.7 million goats, and 2.9 million camels, as captured in the 2019 population and housing census. Kenya has six export-grade abattoirs, and all are operating below capacity, serving local markets. Good meat fetches reasonable prices: in high-end restaurants in Kenya, a 200g piece of beef will cost $10 or more, and pastoralists cannot produce this high-grade meat.

4. **The conditions are similar in Ethiopia, which has the largest livestock population in Africa**. The national herd comprises 57 million cattle, 30 million sheep and 23 million goats, yet it does not feature in global export statistics. With the growing middle class and urbanization, where 20% of the population lives in cities and towns, the demand for meat protein is increasing. Export potential remains unexploited simply because abattoirs are not able to get a

consistent supply of quality animals. Current meat production of 1 million tons, valued at $5.1 billion per year (FAO[81], 2019) gives a snapshot of its potential. Increased urbanization and expanding middle class are raising local demand for meat products creating opportunities for livestock producers. However, improving productivity through better animal genetics and finishing is necessary to translate this rising demand into increased income for the pastoralists. High entry barriers for pastoralists due to limited access to market information, lack of organizations for better bargains and weak public support discourage a market-focused production system.

5. **In Ethiopia, pastoralists are not incentivized to participate in the economic transaction, thus adopting subsistence rather than a market-oriented production system**. The market for chilled sheep or goat carcasses is significant if the export abattoirs could maintain consistency in quality and quantity. However, to get a supply of required grades, better linkage with pastoralists will be necessary to ensure their primary source is aware of the requirements and offer better prices for animals meeting required quality. Complementary investments like leather processing are booming businesses and could be leveraged for meat processing considering animals converted to meat are primary sources of skin and hides.

6. **Livestock population in Somalia is equally large and the biggest camel population worldwide**. Somalia meat market is nascent and faces enormous challenges, but opportunities are also tremendous if the public sector could help address challenges related to quality infrastructure, disease control and certification. Somalis in the diaspora (estimated at 1 million) constitute a big market for Somali meat and what is required to address market access barriers. The meat processors operating in Somalia identified a lack of a consistent livestock supply that meets required standards as main production challenge. Investments around livestock finishing could address the current supply constraints of quality animals. Addressing quality infrastructure and sanitary and phytosanitary conditions will enable Somali meat to reach niche markets in Europe and the USA where Somali population is estimated 390,926 and 120,671 respectively. Supporting the meat exporters to identify and service diaspora markets will be a key contribution towards harnessing huge red meat potential in Somalia. Third-party logistics investment might be an area from which exporters from Somalia could benefit.

[81] https://www.fao.org/3/ca4807en/ca4807en.pdf

ANNEX 13: Economic Analysis

1. **The economic analysis is focused on Component 1, as evidence shows that early financial response saves lives and livelihoods, as well as reducing the overall cost**. In Ethiopia, Kenya and Somalia, economic analysis from USAID showed that early response would have saved US$1.6 billion in humanitarian response and nearly US$2.5 billion in avoided losses over a period of 15 years (USAID, 2018). Early response requires pre-arranged financial instruments and delivery systems to channel the funds. In the case of pastoralists these pre-arranged instruments include savings and insurance, alongside digital payment accounts. Traditional disaster relief can result in mobilization delays and higher costs as financing is arranged during the shock, it will also only provide a 1:1 cost compensation ratio unless a pre-arranged risk transfer policy is in place. In contrast, savings held by the pastoralists themselves can be used for early response, before the drought impacts on livestock quality and prices, and insurance can provide certainty of significant funding in severe drought years.

2. **The analysis presented shows the value of an insurance policy to provide significant payouts in the severe drought years when it is most needed and highlights the importance of savings (self-insurance) in the years when the drought insurance does not pay out.** Savings will help protect against moderate to severe shocks and insurance to protect against more severe shocks, whilst savings are accumulated there will also be a reserve layer to provide 'shock-responsive savings'. The economic impact of Component 1 is assessed through a qualitative and quantitative review of the economic benefits of the prospective drought index insurance program and the rationale for the use of public funds. This assessment builds on evidence from existing drought index insurance programs for pastoralists at the micro and macro level. The quantitative assessment does not fully account for the broader ex-ante benefits of insurance such as supporting behavioral change and crowding in access to savings and credit, neither does it account for the risks of low take-up and other operational challenges and is thus complemented by a qualitative discussion. The economic justification for building the resilience of pastoralists against drought broadly follows three aspects: i) macro-economic fiscal benefits, ii) micro socioeconomic and welfare benefits and iii) climate and environmental.

Macro-economic fiscal benefits

3. **Financial resilience is a core mandate of ministries of finance, putting in place pre-arranged predictable funding for when disasters strike, to protect the fiscal balance, subnational governments, households, and businesses.** This complements investments on physical resilience, which reduces the risk to prevent disasters, and investments on social resilience, which help households and societies cope with shocks.[82]

4. **Insurance supports macro-fiscal sustainability and fiscal discipline.** Supporting drought insurance can help to reduce and better manage the contingent liability on governments balance sheet from drought, which would otherwise implicitly fall on the governments' budget and/or the international humanitarian system. Historical data shows that this contingent liability can be extremely high for governments: in Somalia, a 2017 drought led to damages and losses in the livestock sector of US$1.6 billion and recovery needs of up to US$110.5 million, with over 900,000 livestock dependent households affected.[83] In Kenya, the total impact of the 2008 to 2011 drought has been estimated at

[82] Boosting Financial Resilience to Disaster Shocks, WBG 2019
[83] Somalia Post Disaster Needs Assessment (PDNA) 2017 available at: *https://www.gfdrr.org/sites/default/files/publication/GSURR_Somalia%20DINA%20Report_Volume%20I_180116_Lowres.pdf*

US$6.3 billion for the livestock sector, with recovery needs of around US$1.7 billion.[84] Transferring some of the risk to an insurer, provides a source of financing in the event of drought, but also reduces the volatility of budget needs which is detrimental to governments stability (Museru et al., 2014).

5. **While humanitarian aid is critical for the welfare of populations affected by climatic disasters, uncertainties in the mobilization of resources and in the timing of delivery, as well as the risk of political capture of resources, can generate suboptimal responses**. Ex-post commitments (either through budget reallocation or humanitarian aid) can have a high opportunity cost and often require evidence of the impacts on the ground before dispersing which takes time to collect, and often the relief (compensation) does not reach the intended beneficiary until long after the disaster occurred. This delay in disbursement of relief has irreversible welfare impacts and induces negative coping mechanisms that lead to malnutrition and distress sales of assets, especially livestock. Insurance however can provide timely, transparent, and auditable funding for early action to protect welfare, keep livestock alive and reduce conflict.

6. **Conversely, ex-ante planned insurance offers the potential for timely payouts immediately after an event is triggered and has been shown to be highly cost-effective in terms of reduced need for asset depletion and distress sales of livestock**. Cost-benefit analysis (CBA) shows that large-scale ex-ante parametric or index insurance can be a highly cost-effective instrument compared to traditional humanitarian aid. For example, African Risk Capacity (ARC) estimates that by providing timely insurance payouts through an ARC ex-ante drought index insurance, the value of each US$1 spent on insurance is equivalent to approximately US$3 spent on traditional ex-post disaster relief through budget and or other responses[85]. Conversely, Clarke and Hill (2013)[86] estimated slightly more conservative benefits for ARC with a cost: benefit ratio of between x1.28 to x1.90 according to different scenarios. In Mexico, de Janvry et al 2016[87] conducted a cost-benefit analysis for CADENA's crop weather index insurance components from 2005 to 2013 and concluded that while the costs of insurance appear to relatively high relative to payouts, the benefits exceed the costs for most of their modelled scenarios. Humanitarian aid and risk transfer solutions such as drought index insurance are not necessarily mutually exclusive, and a combination of risk financing instrument is often the most sustainable solution**.**

7. **Insurance is the only disaster risk financing instrument that can leverage additional capital in catastrophe drought years without government's having to allocate more budget or take on more debt to mitigate the impact.** Government support for premiums can have a budget neutral or positive impact overall. In bad years insurance policies leverage capital from the private sector to increase available finance without government taking on more debt for example with borrowing, every US$1 of investment from government provides US$1 for response (cash or in kind). Conversely with an insurance policy, in a bad year every US$1 of investment in drought premiums can return US$10 to US$15 (assumed premium rates 10% to 6.7%) for drought response when the funding is needed most. It is more efficient for insurers and reinsurers over governments to hold this capital at risk as they can diversify their risk by spreading it over multiple products and geographies. Payouts from these schemes can replace disaster relief and can provide greater scalability coverage than say social protection programs for a much lower cost (Jensen 2017).

[84] Kenya PDNA 2011, available at: https://www.gfdrr.org/sites/default/files/publication/pda-2011-kenya.pdf
[85] http://www.africanriskcapacity.org/2016/10/29/how-arc-works/
[86] Clarke, D.J. and R. Vargas Hill 2013. Cost-benefit analysis of the African Risk Capacity facility. IFRI Discussion Paperhttps://www.ifpri.org/publication/cost-benefit-analysis-african-risk-capacity-facility
[87] De Janvry, A., E. R. Ritchie and E. Sadoulet. 2016. Weather Index Insurance and Shock Coping. Evidence from Mexico's CADENA Program. Policy Research Working Paper 7715. World Bank Group, Finance and Markets Global Practice Group, June 2016

8. **Many governments globally and in Africa provide financial and other support to agricultural insurance schemes to support their public policy objectives.** In the case of DRIVE the policy objective is de-risk pastoralists and increase their access to markets making them more financial resilient and productive in the longer term. Market failures around the availability of high-quality data, consumer financial awareness, access to reinsurance markets and cost-effective ways of marketing and delivering the product, mean purely private sector or commercial agricultural insurance schemes have not reached scale in Kenya and Ethiopia. Premium financing support is the most common form of public intervention by governments to make insurance more affordable and accessible to resource poor farmers and pastoralists in low/middle income countries (Carter et al 2019). Governments promote premium financing to make cover more affordable and accessible to farmers and to encourage uptake of private commercial insurance thereby reducing the budgetary pressures on public finance in times of major catastrophes – droughts, floods etc. This investment in promoting insurance further supports objectives of increasing modernization and investment in the sector, strengthening farmer resilience and food security, and boosting agricultural GDP. Thus, many governments in Africa provide public support to agriculture insurance in alignment with these objectives where they consider the social benefits of the subsidy outweigh their social costs.[88] There is strong evidence in Africa that households insured under agriculture insurance schemes increased their investments (See Annex 5).

9. **There is a strong body of literature to show that affordability is major constraint to uptake of micro-retail agricultural insurance by smallholder crop and livestock producers and that demand is highly price-elastic meaning that smart public support for premium finance can be very effective in increasing demand and uptake of insurance by these smallholders** (Hill et al 2016[89] Schaeffer et al 2016; World Bank 2017[90]).[91] "Smart" premium finance should be designed and implemented in ways that provide maximum social benefits while minimizing distortions in the market and mistargeting of clients. Poorly designed premium finance programs can undermine efficiencies and incentives within the insurance industry; for example, they can encourage overuse of health care by beneficiaries and overinvestment in risky, sometimes environmentally damaging agricultural activities. A subsidy should be designed with a clearly stated and well-documented purpose. It should address a market failure or equity concern and should successfully target those in need with minimum inefficiency. Smart subsidies are designed with a clear exit strategy or long-term financing strategy in mind, as well as a good M&E system that tracks subsidies' performance; this is paramount for the success of any subsidized insurance scheme.

10. **The role of premium financing as a means of making climate risk and agricultural insurance more accessible and affordable to governments in developing countries and/or vulnerable rural and farming populations has been widely accepted by bilateral and multilateral donors for a number of years.** At the Paris Climate Summit in 2015,

[88] For detailed discussion on rationale for public intervention in ag insurance, see Mahul & Stutley (2010).
[89] Hill, R. V., G. Gajate-Garrido, C. Phily and A. Dalal. 2014. Using Subsidies for Inclusive Insurance: lessons from Agriculture and Health. MicroInsurance Paper No. 29, MicroInsurance Innovation Facility, International Labour Organization.
[90] Hazell, Peter, Rachel Sberro-Kessler, and Panos Varangis. 2017. *When and How Should Agricultural Insurance Be Subsidized? Issues and Good Practices.* International Labour Organization and the International Finance Corporation. *https://documents1.worldbank.org/curated/en/330501498850168402/pdf/When-and-How-Should-Agricultural-Insurance-be-Subsidized-Issues-and-Good-Practices.pdf*
[91] Premium subsidies for agricultural insurance schemes are exempt from the World Trade Organization (WTO) rules on subsidies. Indirect subsidies are exempt under the green box for measures that reduce exposure and losses to catastrophe climatic and natural disasters. Conversely, WTO rules specify that governments should not be providing direct subsidies on farm inputs and crop output (price support).

the G7 countries committed to provide US$420 million of bilateral and multilateral funding to increase coverage of climate risk insurance to 180 million people out of the overall target of 500 million to the most exposed to climate risk/climate change. Today major donors such as the USA (USAID), UK (Foreign, Commonwealth & Development Office) and Germany (KFW), are co-funding the costs of climate and disaster risk finance and insurance either at a macro-sovereign risk level or through smart premium subsidies for micro-level agricultural insurance programs. For example, the German government is providing premium support under the InsuResilience Global Partnership through several programmes, including the InsuResilience Investment Fund, the InsuResilience Solutions Fund and the African Risk Capacity, with premium support of EUR 18 million in 2021[92]. InsuResilience specifically identify two main instruments to improve the affordability and sustainability of insurance solutions namely premium financing and capitalization of risk carriers[93]. Premium financing is also a feature of multinational development banks including the African Development Bank which is supporting African governments to co-finance ARC sovereign risk insurance premiums through the Africa Disaster Risk Financing (ADRIFI) program; the Asian Development Bank (e.g., micro-level crop weather index premium subsidies in Cambodia) and the World Bank (Global Index Insurance Facility, GIIF and the Global Risk Financing Facility, GRiF).

11. **Evidence shows that the public cost of Component 1 (premium finance) would be offset by the expected benefits (decrease in public spending due to insurance payouts), and the ex-ante benefits of having financial protection instruments in place.** An impact evaluation conducted for DRIVE will develop a new methodology to better assess and quantify the broader ex-ante benefits. The economic analysis below has been performed using indicative assumptions based on the product as described in Box 1.

[92] InsuResilience 2021a. Realizing Sustainable and Affordable Climate and Disaster Risk Finance and Insurance: *http://www.kipp-agentur.de/irfiles/IR_Magazine_211028.pdf*
[93] InsuResilience 2021b. Smart Premium and Capital Support: Enhancing Climate and Disaster Risk Finance Effectiveness Through Greater Affordability and Sustainability

Box 1: Indicative drought index insurance product assumed for VFM assessment

Under DRIVE, around US$140m of public funding will be made available to support drought insurance premiums. For the purposes of this analysis, we assume that public premium finance will cover 75 percent of the premium cost, this means that assuming a fixed level of premium support each year governments will contribute around US$28m and pastoralists US$9m, for a total premium of US$37m per year.[94] In the longer-term the premium finance from government is expected to be reduced as pastoralists increase their savings, financial awareness, and income.

In a perfect market, savings and credit would be used by pastoralists to manage uncertainty and risk, with insurance only used for the most severe losses. However, given the lack of near perfect markets in the pastoral regions of the HoA, and limited access to precautionary savings and credit to smooth consumption losses, insurance might need to be offered initially at a lower attachment to help manage the risk. The product here assumes an attachment point for payouts of 1 in 5 years per season. The intention would be to increase this attachment point as the level of savings and productivity of the pastoralists increases (increasing the attachment point will reduce the cost).

The drought index insurance product utilized by DRIVE will target a loss ratio of around 70%, this means that on average $0.70 per $1 of premium is given back to the pastoralist. This is more affordable than existing products in Kenya and Ethiopia due to incorporating key lessons learned into the design, for example the aggregation approach of distribution (targeting pastoralist groups through group or meso insurance) will reduce the administration and operating (A&O) costs for insurers, as will access to the platform of wholesale services provided by the regional entity. Based on a WB pricing assessment, assuming a sum insured of US$700 per policy (the cost of maintaining 5 TLUs alive with water, fodder, and medicine during a severe drought), this product would cost around US$100 per policy per year. The exact premium cost will ultimately depend on how frequently the product is expected to pay, the number of TLUs being protected, the number of beneficiaries insured and the market appetite for underwriting this risk. Table 1 sets out the indicative contribution to premium finance per year and policy.

Table 1: Indicative premium levels

Contributors	Share	Total costs 5 years (USD)	Cost per year (USD)	Cost per policy per year (USD)
Government	75%	$ 140,000,000	$ 28,000,000	$ 75
Pastoralists	25%	$ 47,000,000	$ 9,000,000	$ 25
Total	**100%**	**$ 187,000,000**	**$ 37,000,000**	**$ 100**

12. **A historical costing analysis based on actual satellite NDVI data for 19 years (2002/03 to 2020/21) across Ethiopia, Kenya, and Somalia, shows that drought insurance payouts would have been triggered every year, with significant payouts far exceeding the premium in four of the last nineteen years.** Figure shows the modelled historical payouts over the three countries using a product as documented in Box 1. The graph highlights the likelihood of no payouts at all is very small due to severe drought conditions occurring almost every year but in different parts of the region (variance across space and time), validating the efficiency of a risk pooling mechanism. The total premium cost assumed is US$37 million per year with average payouts of US$26 million per year, and an average loss ratio of 70%.[95] On average the premium cost is greater than the payouts, as would be expected for any insurance product, but more importantly during severe drought years the premium investment is leveraged to provide significant funding in a time

[94] The actual level of premium finance is currently being validated by each country and is expected to vary by country, for example, the subsidy will likely be higher in Somalia where the product is more nascent. The number of beneficiaries with insurance policies in place (and thus annual spending on premium) is expected to increase year on year during project implementation and thus the assumption of flat annual premium spend is a simplification.

[95] Internal WB calculations.

of extreme need. Figure 2, 3 and 4, show the same analysis for each of the countries, based on their individual project commitments.

13. **The modelling shows that catastrophic drought losses in pasture can be expected roughly 1 in 6.5 years as evidenced by the huge payouts (loss ratios) in 2003/04, 2010/11 and most recently 2016/17 and that in catastrophic years, drought losses correlate closely across the three HoA countries.** In severe drought years insurers would have injected substantial liquidity into the pastoral sectors to permit pastoralists to make timely purchases of fodder/feed supplements to keep large numbers of animals alive. The largest single payout in 2010/11 of US$ 118 million (loss ratio 313%) would have made a very significant contribution to avoiding livestock deaths and the need for ex-post disaster compensation - governments would have benefited from the leverage provided by insurance payouts of US$3.13 for every US$1 of paid premium as opposed to the 1:1 cost-compensation ratio of traditional disaster relief. The benefits of savings are to manage the costs not met by an insurance product and increase the resilience of pastoralists in years of moderate but not severe drought.

Figure 1: Indicative payouts across Ethiopia, Kenya, and Somalia from 2002/03 to 2020/21

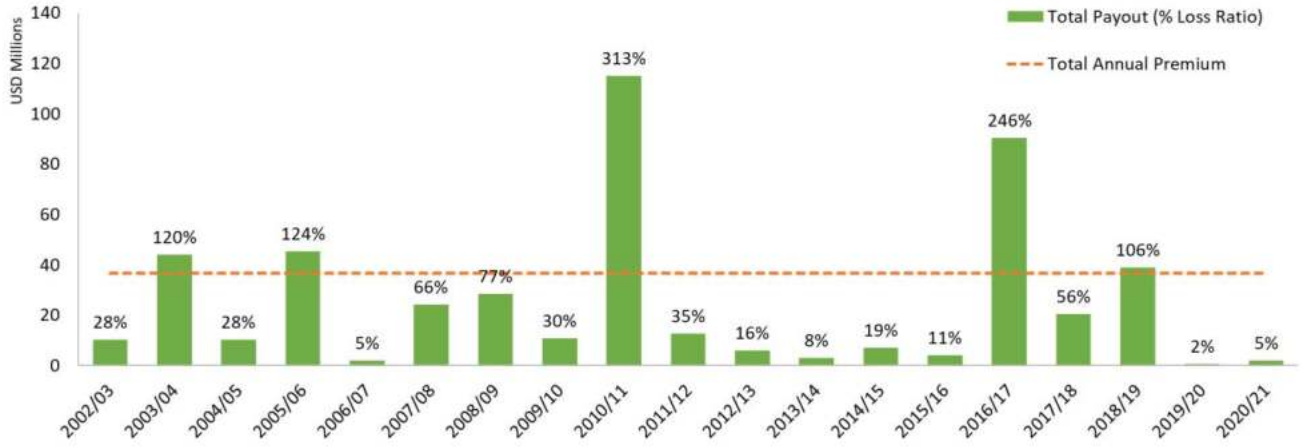


Figure 2: Indicative payouts across Ethiopia from 2002/03 to 2020/21

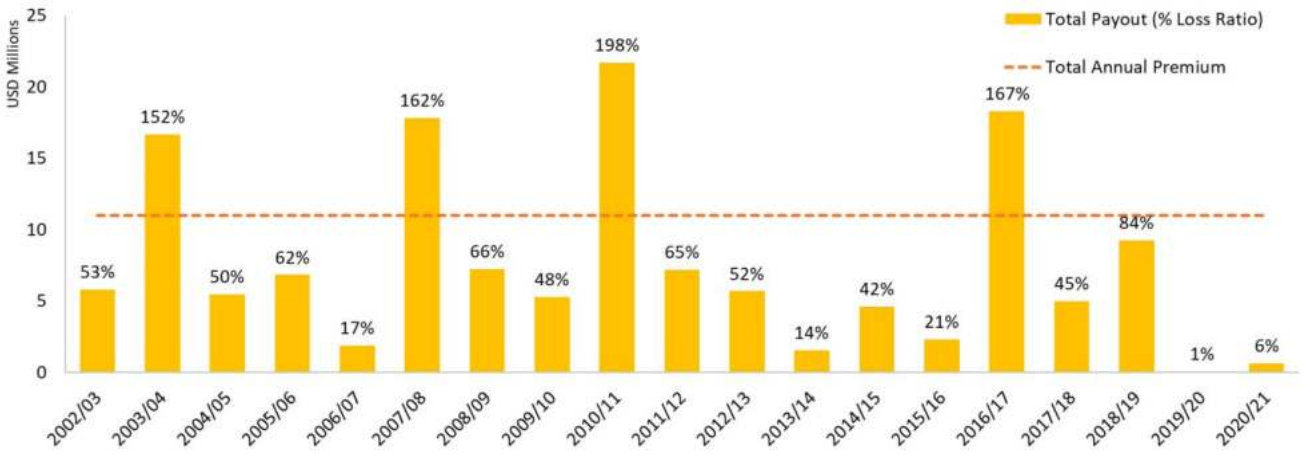


Figure 3: Indicative payouts across Kenya from 2002/03 to 2020/21

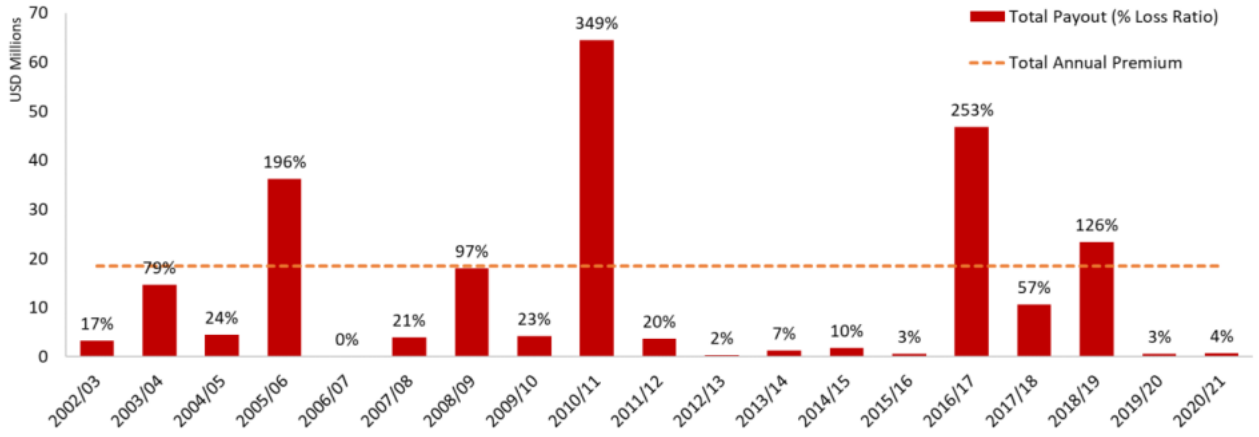
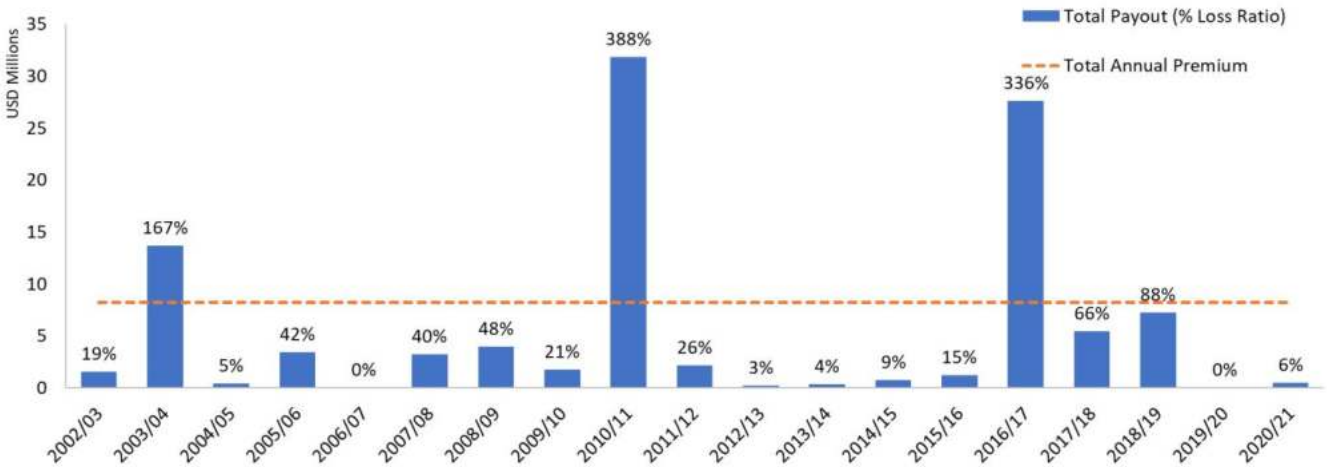


Figure 4: Indicative payouts across Somalia from 2002/03 to 2020/21



14. **A scenario analysis presented in Table 2, of the average, best and worst five-year periods show the benefits of government using public financing to support insurance and savings deposits held by the pastoralists, rather than retaining the risk on the government's balance sheet ('self-insurance').** The analysis shows that under the modelled assumptions for Scenario 1 (No insurance or self-insurance), "average droughts years" in Ethiopia, Kenya, and Somalia result in losses of about 3% of the herds per year or 66,000 TLUs with an average market value of US$500 per TLU this would have equated to direct losses of US$33 million per year, or 330,000 TLUs valued at US$165 million over 5 consecutive average years. Over the worst five-year drought period 2007/08 to 2011/12 under Scenario 1, an estimated three quarters of a million (775,000) TLUs would have died (7.5% of total TLUs), with direct losses of livestock valued at US$388 million. Pastoralists who incur a major loss of about 50 percent of their animals typically require between 5 years (herds of sheep/goats) and 10 years (herds of cattle) to rebuild their herds[96] during which time they incur major losses of consumption of milk and meat and income from sales of live animals and animal products.[97] The indirect costs over 5 years are estimated at a further US$775 million for the severe drought period 2007/08 to 2011/12 or a total economic cost of about US$1.2 billion. Conversely had drought insurance been in place (Scenario 2) insured pastoralists would have received a total of US$195 million in payouts during the worst years to enable them to keep their core breeding stock and to minimize mortality rates in their herds thereby avoiding the bulk of the US$ 1.1 billion of direct and indirect losses. Under the best (lowest drought-prone) 5-year period 2011/12 to 2015/15 the total estimated livestock losses would have been on 132,000 TLUs (1.3% of herds per year) valued at US$66 million with a further US$132 million in lost consumption and income and the total drought insurance payouts would only have amounted to UDS$33 million.

15. **Nearly all the modelled scenarios show that the introduction of subsidized drought index insurance is highly cost-effective in keeping animals alive**. With government premium finance of $140 million over 5-years, the cost benefit ratio (CBR) for the insurance program in terms of premium contribution versus insurance payouts ranges from 1:0.24 (for the best -lowest drought years 2011/12 to 2015/16), 1:0.59 in an average year with no catastrophe losses and 1:1.39 in the worst 5-year drought period. However, if one compares Scenario 2 with Scenario 1, the cost benefit ratio is much higher: 1) for average years 1:1.2 (direct losses of TLUs which are avoided) or 1:3.54 if direct and indirect saved losses are taken into account; 2) for the worst drought years scenario the benefit cost ratio is 1:2.77 (direct losses saved) rising to 1:8.30 (direct and indirect losses saved); 3 in the best (lowest drought) five year period the ratio is between 1:0.47 and 1:1.42.

[96] Sandford and Habtu, 2000
[97] Internal WB modeling shows lost consumption and sales income over 5 years of around USD$1,000 per TLU.

Table 2: Scenario analysis of economic impact to government over 5 years

Scenario	*Best* (lowest) drought years (2011/12 – 2015/16	Average drought years (excluding cat. drought years)	*Worst* drought years (2007/08 – 2011/12)
Scenario 1: No insurance product			
Direct cost: value of lost animals	US$66 million (132,000 TLUs)	US$165 million (330,000 TLUs)	US$388 million (775,000 TLUs)
Indirect costs: Lost consumption & Income (5 years) to rebuild herd	US$132 million	US$330 million	US$775 million
Total economic cost	US$198 Million	US$495 million	US$1.16 billion
Scenario 2: Insurance product as defined in Box 1			
Direct cost of insurance premium (75% of commercial premium)	US$140 million	US$140 million	US$140 million
Insurance payouts	US$33 million	US$83 million	US$195 million
Scenario 2 versus Scenario 1			
Cost benefit ratio (Total economic cost versus premium contribution)	1:1.42	1:3.54	1:8.30

16. **Further analysis shows the benefits of risk diversification from a purely pricing perspective is limited given the high correlation in catastrophic years between the three countries but reaching scale will encourage more interest from reinsurance market supporting a better price.** This analysis modelled different reinsurance pricing structures and compared the costs based on the three countries approaching the market together or individually. Although the impact on the reinsurance cost is limited, as noted elsewhere there are several broader benefits achieved (including on operational costs) through a regional program leading to significant economies of scale. This analysis did however highlight that if other countries / regions / products were able to join the program in the future (such as the Sahel countries which present a discrete risk zone, uncorrelated with the HoA, or crop insurance products), the impact on reinsurance pricing could be significant.

Micro socioeconomic and welfare benefits

17. **Evidence shows that de-risking pastoralists against drought (through financial resilience investments) decreases their recourse to negative coping mechanisms such as distress sales of animals, forced displacement, and lower purchase of food, improving their social economic and welfare outcomes.** In Kenya, a study showed that it is three times more expensive to restock a core herd of sheep and goats following a drought than to keep animals alive through feeding during drought events (USAID 2017, Resilience in the HoA). Another study showed that the cost of drought to households can increase from USD 0 to USD 50 if the support is delayed by 4 months, and to USD 1,300 if it is delayed by 6-9 months (Hill, Clarke, 2013). Keeping animals alive during drought also leads to significant health

benefits for children, who can maintain their milk consumption and nutrition. This also leads to education benefits, as droughts often lead to increased child labor to support the family, and to an inability to pay school fees. Table 3 shows other types of benefits linked with maintaining livestock alive.

Table 3: Subsistence and commercial uses of livestock[98]

Traditional subsistence uses of livestock	Commercial uses of livestock
Milk consumption	Sale
Meat consumption	Hire for transport
Using skins for shelter and clothing	Sale of milk
Blood as a food	Sale of meat
Marriage and social obligations/traditions	Sale of skins
Paying fines	Hire for ploughing
Gifting and bonds	NA
Transport of water, goods or family	NA
Ploughing and cart pulling	NA
Riding	NA
Grinding and threshing	NA
Producing manure for fields	NA
Producing manure as fuel	NA
Capital investment and savings	Collateral

18. **Drought index insurance has the highest potential benefits for more productive households and enables investment in risky but productive activities.** Under the feasibility study for the Kenya Livestock Insurance Program (KLIP) a detailed household-level economic modelling and simulation exercise was conducted to examine the effects of drought related losses to livestock on pastoralists livelihoods and income and the potential benefits of livestock asset protection insurance. The analysis showed that drought index insurance has the highest potential benefits for more productive households with medium (10-20 TLU) and larger herds (>20 TLU) by building the resilience of herders to drought and increasing their livestock offtake productivity and incomes – this finding is one of the main reasons DRIVE is targeting the more productive pastoralists (see Box 2). Insurance can lead to behavioral change and increased productivity of farmers and agro-pastoralists. By putting a price on risk, it incentivizes farmers to reduce costly risk-avoidance behavior and grow crops with are better adapted to the agro-climatic conditions in their location. Once de-risked farmers have the protection to intensify investments leading to long-term growth and they may also choose to allocate more resources to riskier but more profitable activities. This means that wider coverage of insurance is expected to stimulate productivity and help avoid vulnerable falling or being trapped into poverty. In the context of drought index insurance, initial studies have shown that pastoralists covered with insurance invest in livestock veterinary and vaccination services, reduce their herd size (most likely as the insurance presents an alternative to maintaining precautionary savings in larger herd size) and this has contributed to increased income and milk productivity of livestock. In India, the crop insurance schemes were shown to increase the adoption of more climate resilient crops (Mobarak and Rosenzweig, 2014).

[98] ICRC Livestock Study in the Greater Horn of Africa, 2004

Box 2. Economic Welfare Analysis for Livestock Drought Index Insurance in Kenya

Livestock production in Northern Kenya is prone to droughts that can cause catastrophic herd losses. *Extreme droughts occurred 4 times between 2005 and 2015. Average livestock mortality rates from 1999-2013 ranged from 9-18% per year. Because households rely extensively on livestock, widespread livestock mortality directly led to increasing poverty and food insecurity in the region. Over time, the recurrent droughts caused an increase in poverty and decline in productivity of households.*

Catastrophic herd losses from droughts can have immediate welfare effects by reducing livestock income available for consumption. *While severe droughts can immediately push the better-off poor, and non-poor into poverty, they could severely push the ultra-poor and the poorest with extremely low livestock income into destitution.*

The biggest impacts of livestock insurance are expected to be realized in the longer term, whereby livestock insurance could help pastoralists to stabilize their herds over time and protect the herd from falling below the viable size necessary to avoid collapsing into the poverty trap. *Research identifies the existence of a critical herd size of about 10-15 TLU to maintain an average pastoral household with about 6-7 family members. With limited productive non-livestock livelihood options and the need for seasonal migration as adaptation to climate variability, pastoral households in northern Kenya consume a good portion out of their own herd each season (e.g., through direct slaughtering or off-taking for cash). Households with small herd sizes (below the critical threshold) thus tend to deplete their herds over time. Furthermore, as poor households tend to be too credit constrained, this prevents them from being able to restock their herds up to the economically viable and sustainable levels. They tend to be trapped with a small, collapsing herd size and low consumption –poverty trap researchers found this in this vulnerable pastoral region.*

Livestock asset protection insurance that is designed to keep the core breeding stock alive during severe droughts could have large long-term impacts. *For the more productive households with medium and larger herds, livestock insurance could help them by stabilizing their herd accumulation and enabling more regular sales. Commercial livestock asset protection insurance could be attractive to this group, given that it could be less costly for the insurance contract to disburse early payouts to keep livestock alive than to replace lost livestock and that there could be multiplier effects from protecting the critical breeding herd through herd accumulation.*

Without any form of livestock insurance protection, vulnerable Poor (<10 TLU) are very likely to lose all their livestock and therefore their livelihoods in severe drought events*. However, livestock insurance might have the smallest long-term welfare effects on the poorest with small and non-viable herds as by itself livestock insurance is unlikely to help them to reach a viable herd size.*

Source: World Bank 2015. Kenya: Agriculture Insurance Solutions Appraisal

19. **By de-risking pastoralist production, insurance can increase the creditworthiness of pastoralists and support access to credit, allowing them to become more productive (Carter et al., 2016).** For crop farmers there is evidence on the benefit of bundling insurance and credit, given the low premium cost relative to the input costs. To improve financial decision-making, insurance should be complemented by other financial products which are currently unavailable to communities vulnerable to drought. By de-risking the vulnerable, insurance can increase their creditworthiness and support access to credit, allowing them to become more productive.

20. **In addition to access to financial services, Component 1 will improve the financial inclusion of pastoral communities with awareness creation and financial literacy activities**. Cai et al. (2016) demonstrate that subsidies complemented with financial education can increase future insurance adoption. Awareness creation and financial education are necessary to ensure that pastoralists are aware of how products like savings and insurance works and

what to expect and to build trust among pastoral communities. This is a key lesson from programs in Kenya and Ethiopia. This requires investments in extension and local marketing of the product to be adapted to local cultures and that is why local insurers and aggregators should be driving the marketing and scaling-up of the product. As pastoralists gain an understanding of the product and its benefits and trust in the local providers/aggregators, pastoralists and their local leaders are expected to agree to the principle of paying towards the costs of their insurance premiums and to receive partial premium subsidy support only for an agreed period. As part of the awareness creation, pastoralists will be guided on the likely extent of drought, on the best timing to use their savings.

21. **From the pastoralist's perspective, the insurance complemented by savings, represents high value for money in addition to the broader socioeconomic and welfare benefits of timely payouts.** In case of a very severe drought, pastoralist policyholders will receive a payout of US$700, which covers the cost of keeping 5 TLUs alive for one year**.** This is expected to help keep their herds alive and healthy during severe drought conditions. In comparison, the cost of replacement for five cows has been estimated to around US$2,500. Based on the product as per Box 1, the premium for one policy is expected to be around US$100 per annum (US$500 over 5 years), of which the pastoralist will pay on average about 25% of premium or US$25 per policy per year.

22. **The drought index insurance product as per Box 1 has a catastrophic performance ratio (CPR) [99] of between 300-400 percent on average (pays US$3-4 back per US$1 of premium in severe drought years), which represents a valuable product for a pastoralist who cares about the worst-case scenarios.** A loss ratio of 70 percent means that on average $0.70 per $1 of premium is given back to the pastoralist. However, an average does not provide information about how much consumers get back when they experience loss of production. Instead, the CPR is especially important when insuring already vulnerable herders. Figure 1 shows that on average in 2010/11 the product had a CPR of 3.13 (or loss ratio of 313%) and very large numbers would in fact have received 100% payout or USD700 – a CPR of 700%.

23. **If pastoralists lose the bulk of their herds during a drought, they may not be able to recover their herds to be viable sizes that can provide consumption for the household, insurance payouts in severe years helps maintain herds and are far more economical than doing nothing.** Table 4 below shows the expected benefits to an individual household of buying drought index insurance on average, and during the best (lowest) drought years and worst drought years (five-year periods) versus the counterfactual of retaining the risk ('self-insurance'). In the best drought years pastoralist households are assumed to lose no TLUs, on average it is assumed they will lose between 20 to 40% of TLUs over 5 years, and this could increase to between 50% and 100% of their livestock (5 TLUs) in a single catastrophic year or over a bad 5 year-period. Under Scenario 1 the direct cost to a pastoralist household of losing between 50% and 100% of their livestock (5 TLUs) is valued at US$1,250 to $2,500. As noted above it can take 10 years to rebuild a cattle herd and 5 years for shoats, and while the household is trying to rebuild its herd it suffers major secondary losses in terms of lost consumption of milk, blood, and meat plus lost income from reduced sales of live animals, milk, and meat products as well as reduced calving rates etc which are estimated to cost US$1,000 per lost TLU over the 5 years or an additional loss of between US$2,500 to US$5,000 per household. In the best-case scenario, a pastoral household may, however, avoids any drought related livestock losses over 5-years. Under Scenario 2 (with insurance), the modelling shows that some households may receive the equivalent of two full years of payouts or US$1,400.

[99] Morsink, Karlijn and Clarke, Daniel and Mapfumo, Shadreck, How to Measure Whether Index Insurance Provides Reliable Protection (July 18, 2016). World Bank Policy Research Working Paper No. 7744, Available at SSRN: *https://ssrn.com/abstract=2811392*

Conversely there are a relatively small number of pastoralists who will not receive any payouts at all over the 5-years because the droughts are not severe enough in their locations to trigger a payout. This analysis shows that at the individual household level the benefits of drought insurance are extremely high in comparison to the costs of the premiums in severe drought years.

24. **Insurance is only expected to pay out in severe years, and this savings are needed.** Figures 5 and 6 below show the potential payout experiences for pastoralist households. In Figure 5 for the Jubbada Hoose Region of Somalia, there are significant payouts in the most recent five years from 2016/17 to 2020/21, which in total is close to two full payouts over five years (US$1,400), which is similar to the worst drought years example in Table 4. Figure 6 shows that in Yabello Insured Unit, Oromia Region, Ethiopia, insured pastoralists would have received no payouts between 2011/12 to 2015/16 as these were relatively good rainfall and pasture availability years, but in the last five years 2016/17 to 2020/21 they would have received the maximum 100% payout of $700/HH in 2016/17 severe drought year and a further $300/HH in 2018/19 which was another moderately severe drought year.

Table 4: Scenario analysis of the economic impact on a pastoralist household over 5 years

Scenario	*Best* (lowest) drought years (2011/12 – 2015/16)	Average drought years (excluding cat. drought years)	*Worst* drought years (2007/08 – 2011/12)
Scenario 1: No insurance product			
Direct cost: value of lost animals	US$0	US$500-1,000	US$1,250-2,500
Indirect costs: Lost consumption & income (5 years) to rebuild herd	US$0	US$1,000-2,000	US$2,500-5,000
Total economic cost	**US$0**	**US$1,500-3,000**	**US$3,750-7,500**
Scenario 2: Insurance product as defined in Box 1			
Direct cost of insurance premium (25% of commercial premium)	US$125	US$125	US$125
Insurance payout	US$0	US$350	US$1400
Scenario 2 versus Scenario 1			
Cost benefit ratio (Total economic cost versus premium contribution)	1:0	1:12-24	1:30-60

Figure 5: Indicative payouts for the Jubbada Hoose region of Somalia across 2002/03 to 2020/21

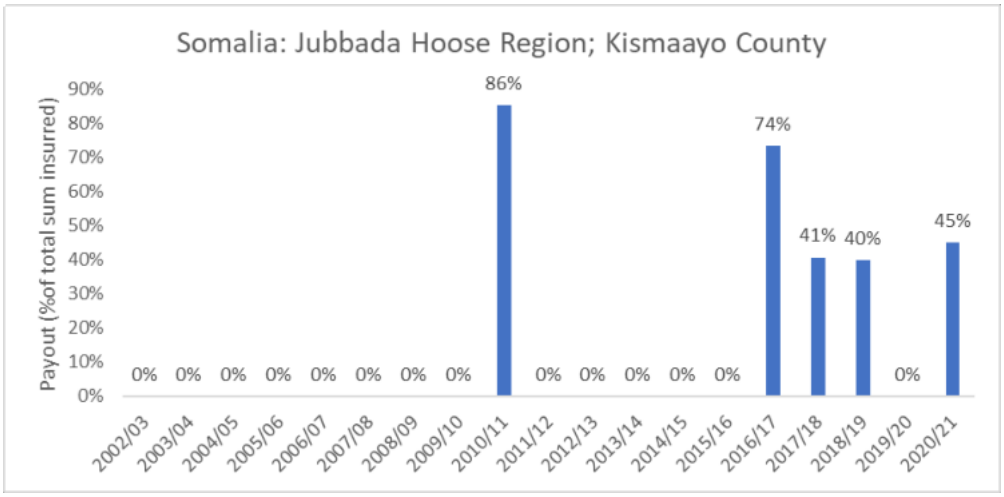
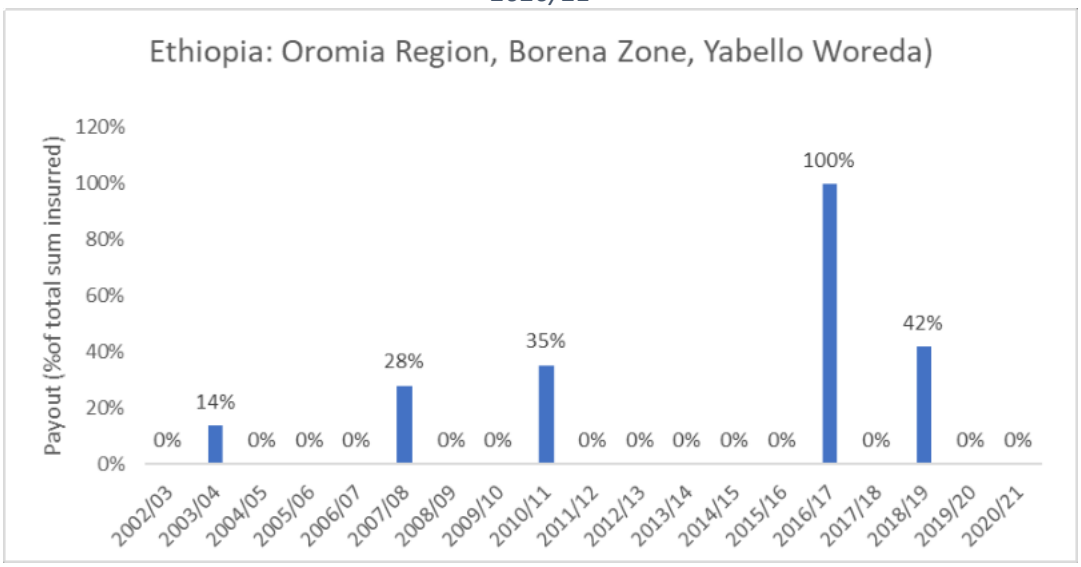


Figure 6: Indicative payouts for the Oromia Region, Borena Zone, Yabello Woreda of Ethiopia, across 2002/03 to 2020/21



Climate and environmental benefits

25. **Increasing the resilience of pastoral communities against drought improves rangeland management and decreases GHG emissions.** Evidence from ILRI shows that de-risking pastoralists improves herd management practices: once de-risked, pastoralists do not need to increase the size of herds to anticipate drought-related losses. Smaller herds reduce over-grazing, improve rangeland management, and decrease GHG emissions (climate mitigation). Activities under Component 2 will also bring incentives for pastoralists to shift to smaller but more productive herds, thus limiting GHG emissions. For instance, by providing incentives for pastoralists to sell their animals at a younger age, or by financing animal transportation by train instead of trucks.

Component 2 economic benefits

26. **Cross-border trade plays an important role in Sub-Saharan Africa, contributing significantly to development, poverty reduction, and job creation**. Across the continent, cross-border trade accounts for 43 percent of the entire population's income. In the HOA, total livestock exports are estimated about US$1 billion. Cross-border trade can help to prevent and mitigate conflict. For example, Somali borderlands and cross-border trading play an important role in peace building. The activities under this component could support indirect benefits in the peacebuilding in the region.

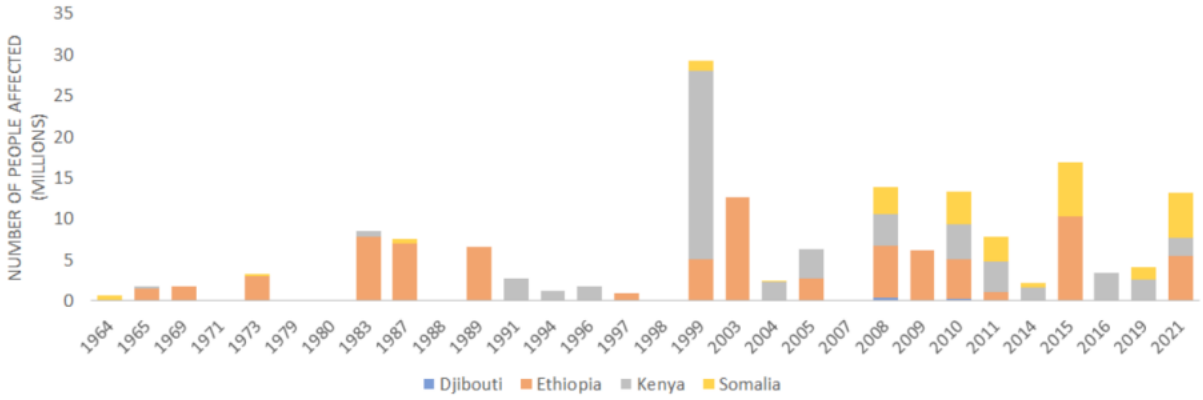
27. **The proposed activities under Component 2 are expected to lead to a reduction in trade costs, speed up the clearance of livestock and livestock products moving across borders, and boost trade**. Research estimates that Africa is expected to have an increase in exports of animal products of 11.4 percent and beef exports of 36 percent if trade facilitation measures are removed by the Africa Continental Free Trade Agreement. The activities on improving standards and harmonization of standards will facilitate access to international markets since animals will reach ports with reduced risks of rejection on diseases, and in a better physical condition, hence will fetch higher prices. Improving standards will increase exports of livestock. Harmonization of standards will remove unnecessary duplication efforts across countries. In addition, the mutual recognition of standards, certification and conformity assessments will make it easier for exporters to comply with the regulatory requirements of importing markets. Implementing trade facilitation measures will generate gains in export values. Research shows that investing 1 euro in quality infrastructure (metrology) yields benefits equivalent to 3 euros increase in GDP.

ANNEX 14: Infographics - DRIVE in a nutshell

The issue

PASTORALISTS ARE AMONG THE POOREST POPULATION GROUPS IN THE HOA. RECURING CLIMATE SHOCKS AND LACK OF MARKET CONNECTION ARE HOLDING THEM INTO A "PRODUCTIVITY TRAP"

On average each of the 28 drought events affected over 3 million people in the region, although the number affected is highly dependent on country and population size. The majority of the drought events in the region are clustered around severe drought years, 2005, 2008-2011, 2015 and 2019.



Pastoralists are vulnerable to drought shocks & climate change

Low extraction rates and productivity of pastoral systems

Quality infrastructure and trade logistics bottlenecks in the livestock value chains

Private investments in the value chain are low due to high risks perception

Opportunities

DRIVE WILL BUILD ON REGIONAL STRENGTHS AND COMPLEMENT VARIOUS INTERVENTIONS TO ENHANCE THE RESILIENCE OF PASTORALIST COMMUNITIES

Strong regional cooperation through the HOA Initiative

Successful drought insurance pilot programs (KLIP, SIIPE, IBLI Kenya and Ethiopia)

Livestock trade represents one of the few economic success stories in the Horn of Africa

DRIVE is a regional project implemented in 4 HOA countries: Djibouti, Ethiopia, Kenya, Somalia

$359 million

TOTAL PROJECT COST with financing from IDA and GRiF

PDO

« To protect pastoralists against drought with enhanced access to financial services, include them in the value chains, and facilitate the livestock and livestock products trade in the Horn of Africa »

THE PROJECT WILL HAVE TWO COMPONENTS

Component 1: Package of financial services for climate resilience (US$184m)

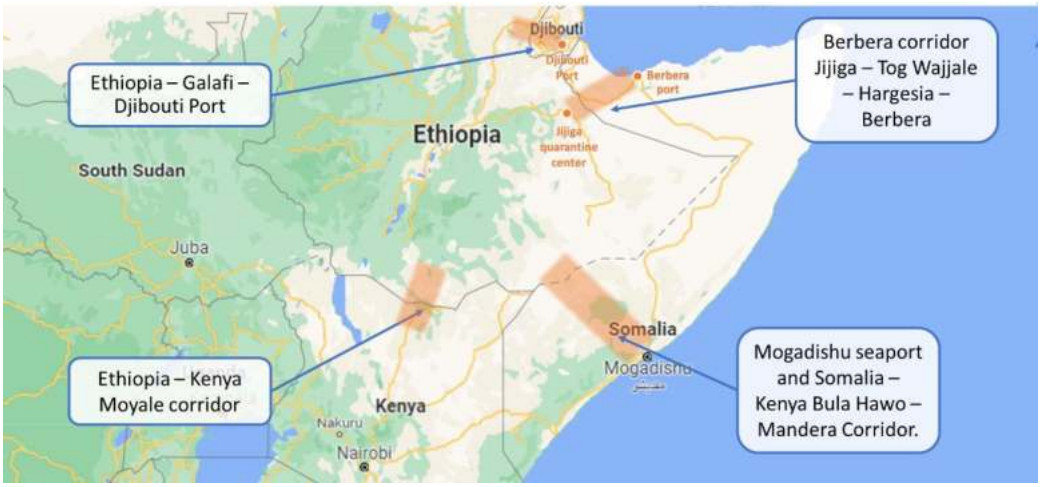
will support the provision of an integrated package of financial services to build climate resilience

Component 2: Livestock Value Chains and Trade Facilitation (US$175m)

will better include pastoralists in the livestock value chains and facilitate trade in the HOA

STRONG LINKAGE BETWEEN COMPONENTS

Drive will focus on 4 key trade corridors targeted under the HOA initiative



EXPECTED OUTCOMES AND KEY RESULTS

1.6 million
pastoralists having access to financial services

$572 million
Amount of private capital enabled or mobilized through the project

2,500
Pastoralist groups connected to markets

20
trade facilitation measures supported by the project

1. Building pastoral resilience through financial services
2. Creating markets around livestock value chain
3. Enhancing regional cooperation and peace building
4. Climate mitigation (improved herd management, fodder conservation, increased productivity)
5. Closing the gender gap on access to financial services

EVIDENCE FROM THE LITERATURE ON THE VALUE-FOR-MONEY OF DROUGHT INSURANCE