

# Validating options for distribution of drought insurance under Component 1 in Ethiopia

For the World Bank Contract

### Acknowledgement

This report has been prepared by ACRE Africa to inform the preparation of the De-Risking, Inclusion, and Value Enhancement of pastoral economies In the Horn of Africa project (DRIVE). This publication was produced with financial support from the Financial Resilience Program (FRP), a trust fund managed by the Finance, Competitiveness, and Innovation Global Practice at the World Bank with funding from the United States Agency for International Development (USAID).



# Table of Contents

List of Figures1
List of Tables1
Acronyms1
1. Introduction
1.2 Background2
1.3 Methodology4
2. Situation Analysis7
2.1 Overview of Agricultural index-insurance in Ethiopia7
2.2 IBLI Delivery Situation Analysis from Borana zone (Oromia) and Somali region
i) Oromia Region – Borana Zone9
ii) Somali Region – selected <i>woredas</i> 12
iii) Challenges and Opportunities of Delivering index-based livestock insurance in Borana and Somali
3. Insurance Delivery Channels
3.1 Steps and Approaches used in developing insurance delivery channel
3.2 Selection Criteria27
3.3 Proposed Insurance Delivery Model/Channel
4. Recommendations
References



## List of Figures

Figure 1 IBLI and SIIPE intervention areas in Ethiopia selected for this study	1
Figure 2 Interview with IBLI Focal person for Oromia Insurance SC	6
Figure 3 Community Group Discussion in Borana, Oromia	6
Figure 4 IBLI Delivery Channel Validation Workshop, in Addis Ababa, Ethiopia.	6
Figure 5 Agricultural insurance projects in Ethiopia, from 2006 to present	8
Figure 6 IBLI Sales Trend	10
Figure 7 IBLI Borana Agent Recruitment Process	12
Figure 8 SIIPE Fund Flow	16
Figure 9 e-Learning Materials – Borana (top) and Somali (bottom)	17
Figure 10 Steps of Developing Insurance Delivery Channel/Model	26
Figure 11 Proposed Livestock Insurance Delivery Channel	30
Figure 12 Microinsurance (MI) Product Development, Management, and Administration Platform	35

### List of Tables

Table 1 List of Respondents and Institutions	5
Table 2 Livestock Insurance Situation Analysis in Borana and the Somali Region: Summary	18
Table 3 Livestock Insurance Situation Analysis in Borana and Somali Region: Summary	27
Table 4 Agent Selection Criteria – Trust and Capacity	28
Table 5 Agent Selection Criteria – Mobility and Financial Literacy	29
Table 6 Enabling Factors for Delivering Livestock Insurance – Rankings by Stakeholders	34
Table 7 Index-Insurance Delivery Cost in Ethiopia	36
Table 8 Expected Expense Type and Amount for Proposed Insurance Delivery Channels	37
Table 9 Distribution of MFIs/Prime Co-ops in Borana	39



Acronyms	
AIC	Awash Insurance SC
ASALs	Arid and Semi-Arid Lands
BoANRD	Somali Regional Bureau of Agriculture and Natural Resource Development
BoLDP	Somali Regional Bureau of Livestock and Pastoralists Development
CAFOD	Catholic Agencies for Overseed Development
CAHW	Community Animal Health Workers
CGIAR	Consulting Group on International Agricultural Research
CIFA	Community Initiatives Facilitation & Assistance
CIFA	Community Initiatives Facilitation and Assistance
CST	CAFOD, SCIAF, and Trócaire
DA	Development Agents
DRIVE	De-Risking, Inclusion, and Value Enhancement of Pastoral Economies
EIC	Ethiopian Insurance Company
ETB	Ethiopian Currency – Birr
FAO	Food and Agriculture Organization
GDP	Gross Domestic Product
НоА	Horn of Africa
IBLI	Index-Based Livestock Insurance
ICT	Information and Communications Technology
ILRI	International Livestock Research Institute
Ю	International Organization
КҮС	Know Your Client
MI	Microinsurance
NDVI	Normalized Difference Vegetation Index
NGO	Non-Government Organisations
OIC	Oromia Insurance Company
PDO	Pastoralist Development Offices
PPP	Public-Private Partnership (PPP)
PSNP	Productive Safety Net Programme
RuSACCO	Rural Savings and Credit Cooperative Organization
SCIAF	Scottish Catholic International Aid Fund.
SMFI	Somali Micro Finance Institution
SNNP	Southern Nations and Nationalities region
TSI	Total Sum-Insured
UN	United Nations
USAID	United States Agency for International Development
VAM	Vulnerability Analysis and Mapping
VESA	Village Economic and Savings Associations
VIPs	Village Insurance Promoters
WB	The World Bank
WFP	World Food Programme



### 1. Introduction

The following report describes the options for distributing index-based drought insurance and potentially other financial services to pastoralists in Ethiopia. It focuses on current practices in two pastoral areas— Oromia and Somali—as well as lessons learned from existing (voluntary and subsidised) index-based livestock insurance products. These two regions account for close to 60% of the pastoralists in Ethiopia.

The study's specific goals are to 1) understand how to build on existing community structures to propose delivering agricultural insurance in pastoral areas and 2) calculate the costs of various options for the delivery channels. Output from this work, will help the project design and support potential financial services, and distribution actors come up with proposals for how the project implementer can get premium financing.

The report is divided into four sections. The first section, the Introduction, explains the study's background and the methodology used to collect primary data from various stakeholders. Following that, a situation analysis is presented in which current livestock insurance practices in the Oromia and Somali regions are addressed. Existing index-based livestock insurance delivery routes and diverse community arrangements are discussed in this section. The report's primary component is the third section, which discusses several alternative options for delivering livestock insurance. This section also includes information on digital and financial issues. The last part of the report gives ideas for getting insurance products to pastoralists in Ethiopia as part of the DRIVE project.

### 1.2 Background

Ethiopia is home to an estimated 12 million smallholder farmers, who account for over 90% of total agricultural output. Ethiopian agriculture is nearly entirely rain-fed. Although the country contains around 5.3 million hectares of irrigable land, only about 15% of this potential has been realised through irrigation (CSA, 2020). Furthermore, Ethiopian agriculture is vulnerable to various risk factors, including rainfall unpredictability, severe droughts, floods, pests, and animal and crop disease epidemics.

On the other hand, Ethiopia is thought to have the most significant livestock population in Africa. Livestock is a vital household asset in mixed farming operations and pastoral and agro-pastoral systems. Livestock and livestock products have contributed to an average of 14% of Ethiopia's export income and 40% of



agricultural GDP (CSA, 2019 and 2020). Contrary to its potential, environmental and humanitarian problems, in particular, are the principal sources of increased vulnerabilities in Ethiopia's dryland regions.

State and non-State actors have devised strategies and interventions to address these difficulties and the increased danger of climate-induced shocks to pastoral families and communities. Some of the primary initiatives advocated by these actors are financial inclusion and social protection/safety nets (Clapp and Isakson, 2018). This has since grown into a disaster risk financing tool incorporating the two. Finance is believed to be the "glue" that holds State/non-State interventions against natural disasters (such as droughts, floods, or cyclones) together, acting as a kind of reconstruction, social protection, and financial inclusion. Disaster risk financing is also thought to strengthen the resilience of smallholders (farmers and pastoralists) and hence their livelihoods.

Disaster risk financing tool as a form of index insurance was first piloted in Ethiopia in 2006, in Southern Nations, Nationalities and peoples (SNNP) region in Alaba *woreda* with the support of the World Bank. Commercial Index-based livestock insurance was first launched in the Borana zone of the Oromia region in 2012. Recently, there have been several agricultural index-insurance programs and products in Ethiopia pastoral systems, IBLI (in Borana and East Hararghe zones of Oromia region and Dassenech *woreda* in SNNP region) and SIIPE (in Somali region) are the major ones. As of 2022, more than 50,000 pastoralists have had livestock insurance covered at least once since 2012. This report details the current trends of IBLI in Borana and SIIPE in Somali regions to develop an alternative insurance delivery channel in Ethiopia's pastoral systems.

Despite the positive signs of progress, several challenges hinder the scaling up of index insurance in pastoral areas. Among others are the financial literacy of pastoralists, the limited capacity of insurers (and underwriters), regulatory and policy challenges, and infrastructural issues. Although there have been efforts to address most of these challenges and improvements have been registered in recent years, there are critical aspects that public-private partners are recognising. In particular, delivering the index-insurance product is identified as one vital factor to address for successful upscaling.

To investigate existing practices of delivering financial services, including livestock insurance, in the pastoral areas of Ethiopia, ACRE Africa, has conducted a detailed study in the Oromia and Somali regions of Ethiopia. Following the investigation, this study identifies potential delivery channels for the HoA-DRIVE



project in Ethiopia. Provided that there are several options for delivering insurance to pastoralists, the experts conducted a cost-benefit analysis to identify the best alternative.

### 1.3 Methodology

This study employs a multi-layered data collection approach. It starts by mapping out key players in the insurance industry – from both public and private organisations. Next, it identified current and past agricultural index-insurance projects in Ethiopia. Directly relating to the intention of the HoA-DRIVE project, index-based livestock insurance projects in the Oromia and Somali regions have been selected (refer to the map below). These two regions qualify for the investigation under several selection criteria. Among others, the presence of agents, active engagement of public and private sectors, application of mobile platforms (now or in the past), and sufficient number of pastoralists investing in livestock insurance are the major ones.



Figure 1 IBLI and SIIPE intervention areas in Ethiopia selected for this study



We then mapped various stakeholders directly or indirectly involved in the chain of delivering livestock insurance in the two regions. They are categorised into eight groups to draw samples, as in Table 1. From each category, representative organisations, institutions, businesses, and members of the pastoral community were selected. In total, there were 102 individuals who took part in this research, representing different groups of targeted respondents. These were based on a review of the literature and practised in the fields of agricultural index insurance and financial services.

Target Respondents	Numbers	Description
Financial Institution (FI)	10	2 banks
		3 MFI
		3 VSLA
		2 Cooperative/SACCO
Input suppliers	6	2 Feed/Hay suppliers
		1 Livestock pharmaceutical
		1 Livestock Breeders/Al
		3 Veterinary Service providers (CAHWS)
Community Development	11	4 NGOs
programs		3 CSR programs
		2 Social public protection
		2 Government entity representatives
Insurer/Reinsurer	7	1 Reinsurer
		4 Insurer (two rounds)
		1 Regulator
Businesses	6	2 Livestock traders
		2 Shopkeepers/kiosks4
		2 Abattoirs & Quarantine
Mobile Network Operators	1	1 MNO
(MNO)		
Pastoral group leads/heads	5	5 Leads, religious leaders
Pastoralists (4 group	40 pastoralists	There is a mix of men and women, rich and
discussions)		poor, and young and older.
Validation Workshop	15	Regulator, insurers, re-insurer, Gov't, NGO
Total	102	

### Table 1 List of Respondents and Institutions

Representative organisations/institutions were chosen from each category based on their expertise. This was accomplished by using purposive sampling techniques that were closely related to the study's objectives. Semi-structured data collection tools (see Annex 1) were developed for each group separately. Insurance companies were subjected to two different sorts of data collection techniques. The first part focuses on financial service delivery, challenges (operational, regulatory, infrastructural, and so on), and



digital services. The second part of the data collection focuses on reflections and cost-benefit analysis of the proposed agency delivery model in this report - Section 3.



Figure 2 Interview with IBLI Focal person for Oromia Insurance SC



Figure 3 Community Group Discussion in Borana, Oromia



Figure 4 IBLI Delivery Channel Validation Workshop, in Addis Ababa, Ethiopia.



### 2. Situation Analysis

This section sets out the overview of the agricultural index insurance in Ethiopia. Its emphasis is on the existing practices of delivery channels – livestock insurance and broadly other financial services in the study regions. This will help understand what challenges and opportunities exist to link with delivering insurance to pastoralists in the respective regions in the context of DRIVE.

### 2.1 Overview of Agricultural index-insurance in Ethiopia

Ethiopia's insurance market is modest. There are a total of 19 insurers, one of which is state-owned. In 2017, non-life premiums totalled \$300 million, while life insurance premiums totalled \$20 million (ATA, 2020). Agricultural insurance is still at its infant stage in the country, despite its potential to support small-scale farmers and pastoralists.

With its 2006 pilot program in Alaba Woreda, SNNP, Ethiopian Insurance Corporation pioneered the agricultural insurance in Ethiopia. The project, which used rural primary cooperatives as a distribution mechanism, was supported by the World Bank. A year later, Nyala Insurance Company piloted "Double Trigger Multiple Peril Crop Insurance" which introduced agricultural insurance to cover major crops: *Tef*, Wheat, Haricot Bean, Chickpea, and Lentil. Their clients were farmers in Oromia's East Shewa Zone.

In 2009, Nyala Insurance Company and the International Food Policy Research Institute (IFPRI), alongside Lumme-Adama Farmers' Cooperative Group in the Oromia region, introduced weather-index crop insurance for haricot-producing farmers. Launched by Oxfam America (OA) and the World Food Programme (WFP) R4 Rural Resilience Initiative is an innovative climate change resiliency project. The Horn of Africa Risk Transfer and Adaptation Project (HARITA) helped thousands of farmers in Tigray and Amhara, Ethiopia, get insurance through the program. However, the programme has so far been shut down.

Since 2010, a couple of agricultural insurance projects and products have been introduced in some parts of Ethiopia. Almost all projects/pilots were donor-driven with technical support from research institutes, universities, or similar organisations. Although Nyala Insurance SC and Dashen Bank SC partnered with USAID and the European Commission in 2012 to pilot livestock insurance for selected animals (cattle and



sheep) in two small localities in the Amhara and Oromia regions, the first full-packaged IBLI was introduced in the Borana zone in 2012.

With technical partners from the International Livestock Research Institute (ILRI), Cornell University, USAID, and other development partners, Oromia Insurance SC pioneered the first IBLI product in Borana following successful piloting in northern Kenya. In Kenya, IBLI evolved into a social protection program by the government and was introduced as the Kenyan Livestock Insurance Program (KLIP) with support from the World Bank in 2015. Noting lessons from this program, the UN's World Food Program launched a satellite index-insurance program for pastoralists in Ethiopia, shortly referred to as SIIPE. Unlike IBLI in Borana, which is a commercial intervention, SIIPE is integrated into the Productive Safety-Net Program (PSNP) of the government and development actors.

Figure 5 shows a comprehensive list of Ethiopia's agricultural insurance pilots and programs since 2006. It provides the summary discussed above with key features of the insurance schemes in the country.

	2006 - 2009	2010 - 2012		2013 - 2016	2017 - Present
		6 7 8 9 10		11 12	13 14
#	Insurance Programs	Scope	#	Insurance Programs	Scope
1	Weather risk management: An Ethiopian pilot	<ul> <li>Commodity: Maize</li> <li>Area: Alaba Woreda</li> </ul>	11	Insurance with environmental protection	Commodity: Crop     Area: Adami Tulu and Assosa
2	Double Trigger Multiple Peril Crop Insurance	<ul> <li>Commodity: Staple crops</li> <li>Area: Modjo, Adama and Debrezeit</li> </ul>	9	Linking formal and informal	Commodity: Crop
		areas		insurance - Iddirs	Area: Dodota, Shashemene,     Baka assas
3	Micro level weather index insurance	<ul> <li>Commodity: Haricot bean</li> <li>Area: Bofa Kebele</li> </ul>		Insurance Programs	Scope
4	Weather Index Crop Insurance	Commodity: Crop     Area: SNNP Region	5	R4 Rural Resilience Initiative	<ul> <li>Commodity: Crop</li> <li>Area: Kola tembien</li> </ul>
6	Pilot Livestock Indemnity Insurance	<ul> <li>Commodity: Cattle and Sheep</li> <li>Area: Debreberhan and Debrezeit areas</li> </ul>	10	Index Based Livestock Insurance (IBLI)	<ul> <li>Commodity: Livestock</li> <li>Area: Borena and W Guji Zones</li> </ul>
7	Weather Index Insurance	<ul> <li>Commodity: Staple crops</li> <li>Area: E Shewa, W Shewa, SW</li> </ul>	13	Satellite Index Insurance for Pastoralists in Ethiopia	Commodity: Livestock     Area: Somali region
		Shewa and W Arsi		R4 Rural Resilience Initiative	Commodity: Crop     Area: Gooder zone
8	Linking Weather Index Insurance and Credit	<ul> <li>Commodity: Staple crop</li> <li>Area: 49 Kebelels in Amhara region</li> </ul>			- Area. Gonder zone
12	Vegetation Index Crop Insurance	<ul> <li>Commodity: Staple crops</li> <li>Area: Arsi, E Shewa, W Shewa and Gurage Zone</li> </ul>		*pi Lei	ograms reviewed on this case gend Completed Ongoing

Figure 5 Agricultural insurance projects in Ethiopia, from 2006 to present *Source*: Agricultural Transformation Agency, ATA, 2020



### 2.2 IBLI Delivery Situation Analysis from Borana zone (Oromia) and Somali region

This section discourses on practices of index insurance in the selected regions, Oromia and Somali. With a focus on trends of livestock insurance and delivery modalities employed by insurance companies and other stakeholders.

### i) Oromia Region – Borana Zone

Oromia region is the largest region – in terms of land mass and population size in Ethiopia. Although it takes roughly 40% of the landmass and more than a third of the population, the number of pastoral populations living in the region is less than ten percent of the regional population, which is more than 40 million. Borana is the largest pastoral zone in the Oromia region. Moreover, it is the third-largest pastoral area after the Somali and Afar regions.

Index-based livestock insurance (IBLI) is a livestock index insurance product developed by the International Livestock Research Institute (ILRI) in collaboration with Cornell University and other development actors. The product has been in place in Ethiopia's Borana region since 2012. In recent years, with ILRI as a technical lead, the IBLI product has been scaled to pastoral districts in East Hararghe (Oromia region) and South Omo zone (SNNP region), supported by ICRC (International Committee of the Red Cross) and CST Together (CAFOD, SCIAF and Trócaire)<sup>1</sup>. The product is based on NASA eMODIS NDVI satellite-based data on fodder availability, which employs historical satellite data dating back 20 years.

Oromia Insurance SC (OIC) underwrites IBLI in all three areas (Borana, East Hararghe, and South Omo). It is offered commercially in most parts of Borana (11 districts). In two districts, a local NGO (Community Initiatives Facilitation and Assistance - CIFA) provides a 35% premium subsidy to all pastoralists without disaggregating by wealth. The ICRC provides up to 70% of the premium in East Hararghe based on the TLU levels of vulnerable pastoralists. Similarly, following PSNP structures, subsidy-based support is provided to vulnerable pastoralists in the South Omo zone. The premium rates range from 5.5% to 13% of TSI. The maximum pay-outs are ETB 6,000 (USD 116.6), ETB 10,000 (USD 194.32) and ETB 800 (USD 15.54) for cattle, camels, and sheep/goats, respectively.

<sup>&</sup>lt;sup>1</sup> CAFOD – Catholic Agencies for Overseed Development, SCIAF - Scottish Catholic International Aid Fund. CST represents the Catholic Church's official development agencies in England and Wales, Scotland, and Ireland.



OIC has insured 26,553 cattle, 2,084 camels, and 30,625 shoats (sheep and goats) since 2012, for a total sum insured of ETB 113,012,200 (USD 4,643,342). There were 11 rounds of pay-outs, which is every other insurance sales window. The total amount paid for claims is ETB 12,855,632 (USD 530,796). Figure 6 highlights some relevant figures.



### Figure 6 IBLI Sales Trend Source: OIC, 2012 - 2020

When it comes to sales distribution, the framework that IBLI initially used was the Oromia Credit and Saving Share Company (OCSSCO). But the experience with OCSSCO was compounded by several challenges, which resulted in poor performance and low sales. This forced the team (OIC and ILRI), in collaboration with the community, to explore other modalities that can help overcome the challenges encountered and improve the distribution model. This process led to the developing of the current cooperative-based distribution framework (refer to Figure 8 below). Under this new distribution model, training is organised by OIC for VIPs and Sales Agents at the start of the two annual seasons, aiming to facilitate knowledge and experience sharing among participants. The sessions are also used to evaluate employees' performance.

In the delivery model, processing payments and disbursements to pastoralists is the responsibility of sales agents. Due to regulatory requirements that prohibit the recruitment of sales agents by insurance companies, all sales agents who deliver livestock insurance must be members of a local cooperative. This



makes cooperatives vital for undertaking the recruitment of sales agents as well as conducting transactions related to product distribution.

On the other hand, the village insurance promoters (VIPs) are responsible for promoting the IBLI product through various awareness-raising activities, including the use of OIC manuals and other promotional materials such as caps and t-shirts. The VIPs use these materials to sensitise potential clients about the IBLI product through community events/ meetings and door-to-door visits. When the pastoralists show interest in purchasing the product, they will be redirected to the assigned area sales agents who are responsible for selling the product to clients/beneficiaries of IBLI. Unlike the sales agents, who are sedentary in terms of movement and outreach, VIPs are more mobile and active in reaching the pastoralists at the community level and promoting the products. Despite the difference, however, sales agents receive similar training and promotional materials as VIPS, enabling them to share information and answer questions interested beneficiaries may present. They also receive further training on sales enrolment processes, which is essential for supporting and systematising their sales-related activities.

When it comes to the recruitment process, it begins with the insurance company sending a letter to the cooperative's offices regarding the plan for the recruitment of VIPs and sales agents. This is then followed by the nomination of a co-op member by an active co-op office, with the approval of the Kebele chairman.

Both VIPs and sales agents are required to meet specific criteria to be selected for their respective roles. Some requirements include an educational qualification (eighth-grade completion), gaining the community's trust, cooperative membership, and basic financial literacy. The insurance company will then approve the nominations, provided they meet the set requirements. In instances where the nominees fail to meet the requirement, a community member who fulfils the criteria will be nominated for the role.

11





Figure 7 IBLI Borana Agent Recruitment Process Source: concept taken from Banerjee *et al.*, 2020, drawn by the authors

A sales agent is an employee of the cooperative, stationed in the *kebele* the cooperative operates in. The administrative expense OIC incurs distributed between VIPs and the cooperatives (that will be distributed to the sales agents), where the former takes 8% of the premium and the latter 6%. From 2014 to 2020 (13 sales windows), OIC incurred a total cost of USD 51,000 towards incentivising sales agents and VIPs. Some operational challenges and opportunities observed while delivering IBLI in Borana are discussed under Challenges and Opportunities delivering index-based livestock insurance.

### ii) Somali Region – selected woredas

The Somali region of Ethiopia is home to over 6 million people, part of whom are approximately 250,00 refugees from neighbouring Somalia and over 500,000 internally displaced persons. The region is about



350 square kilometres, making it the second-largest region in terms of landmass after the Oromia region. There are 11 zones in the area. These are further subdivided into 93 Woredas and 1,224 Kebeles.

The main economic activity is nomadic pastoralism, although some agro/pastoralists exist along the riverine sections of the Shebelle River. The sale of livestock is the primary source of income, with most of the small stock sold across the border towns in Kenya. In contrast, the large stock, mainly camels, is usually ferried over to Mogadishu, Somalia, for export to the Middle East. Drought remains the most common and pervasive risk faced by most populations living in the Somali region. As a result, several efforts are driven by both NGOs and the Government of Ethiopia (GoE) to cushion the people living in the region from the impacts of drought shocks. Examples include the Productive Safety Net Program (PSNP), which the GoE implemented through the Somali Regional Government (SRG). On the other hand, the World Food Program (WFP) implements the Satellite Index Insurance for Pastoralists in Ethiopia (SIIPE) program, which is an insurance program covering over 28,000 pastoralists HHs.

Formal banking services are still very much confined to the urban areas of Ethiopia. Rural areas are mainly served by MFIs, which provide access to savings, loan products, and digital finance. Considering the region's vastness and poor transport infrastructure, the main MFIs operating in the Somali region are the Somali Micro Finance Institution (SMFI) and Rays Microfinance. Both MFIs have invested heavily in mobile money platforms and agency networks, which have enabled service providers to reach their clients in far-flung areas of the region. Progressive changes in laws governing the micro-finance sector have also encouraged the establishment and operation of such MFIs, thus allowing for the financial inclusion of many rural communities in the Somali region. Additional efforts by NGOs like the International Medical Corps (IMC), which have partnered with Rays to provide credit guarantee facilities to their beneficiaries through Rays MFI, have boosted the demand for loan products.

Mobile penetration and use of mobile money are considerably high in the Somali region compared to the rest of the country. The primary mobile money service providers in the Somali area are the SMFIs, which operate an affiliate mobile money platform, "Hello-cash" The other is Rays Microfinance, which operates an affiliate mobile money platform known as SAHAY. Both SAHAY and Hello-cash have close to one million subscribers each, with their primary services being cash withdrawals and deposits. This can be partly attributed to the influx of cash-based responses to frequent drought shocks by the GoE and NGOs, which has enabled a large portion of the unbanked population access to mobile banking services. For example, WFP, through its SIIPE program, has ensured that all the 28,000 registered beneficiaries of the program



have opened either bank accounts or mobile banking accounts with SMFI. SMFI also provides savings and loan facilities to the beneficiaries targeted under the SIIPE program.

Due to the unavailability of formal financial services in the Somali region, Village Economic and Savings Associations (VESAs) have long been the most common means of accessing financial services, i.e., savings and loans, among the communities in the Somali region. VESAs are groups formed by individuals with a common interest in saving and borrowing money amongst themselves. VESAs are operated under a set of agreed rules (constitution) and a defined leadership structure. Members of VESAs meet regularly to save and borrow money. This could be on a monthly, bi-weekly, or weekly basis. VESAs are common in the Somali region and provide an immediate source of savings and loan services. They are, however, not formally licensed. If the VESA needs more revolving funds, it would be required to join a licensed entity like a RuSACCO (Rural Savings and Credit Cooperative Organization), a combination of several VESAs. RuSACCOs have a higher amount of revolving funds consolidated from the different VESAs that come together to form one RuSACCO. The other alternative to limited revolving funds is for the VESA to seek support from formal financial institutions such as MFIs. VESA provides a good entry point for the delivery of financial products and services as well as financial and digital literacy. An example is the approach used by SMFI, which usually forms VESAs, provides them with financial literacy training, and offers asset loans to the group members.

Insurance penetration in Ethiopia is generally low, with statistics indicating less than 3% penetration of life, health, motor, and general products. Micro-insurance penetration is even much lower, which is reflected in the penetration of agricultural insurance, which is less than one percent. Insurance regulation is under the National Bank of Ethiopia NBE, which only recently revised the laws governing microinsurance to allow for the inclusion of independent microinsurance windows by insurance companies. Similarly, in the Somali region, microinsurance penetration is extremely low, with the only active insurance programs being the agricultural insurance programs provided by NGOs like WFP's SIIPE. While the Somali Regional Government's Bureau of Livestock Production (BoLP) and the Bureau of Agricultural and Natural Resource Development (BoANRD) have participated in implementing SIIPE under WFP's collaboration with PSNP, livestock insurance is yet to be mainstreamed within national and regional government policies. Awareness is also low among pastoral communities, with the main responsibility of creating awareness being driven by NGOs like WFP and Mercy Corps, still under the SIIPE program.



Satellite Index Insurance for Pastoralists in Ethiopia (SIIPE) is a Public-Private Partnership (PPP) between the World Food Program (WFP), the International Livestock Research Institute (ILRI), the Somali Regional Bureau of Agriculture and Natural Resource Development (BoANRD), Somali Regional Bureau of Livestock and Pastoralists Development (BoLPD), Somali Micro Finance Institution (SMFI), and a pool of insurance companies and other development partners.

WFP works alongside the Somali Regional Government's (SRG) institutional structures to implement SIIPE. Given their extensive roles in the livestock sector and the strong community reach through PSNP implementation, the Bureau of Agriculture and Natural Resource Development (BoANRD) and the Bureau of Livestock and Pastoralists Development (BoLP) are the SIIPE cooperating partners in the Somali region. The two institutions are responsible for identifying and registering the SIIPE beneficiaries. They also conduct awareness creation on index insurance in the Somali region and chair and co-chair the index insurance Technical Working Group.

SIIPE is underwritten by a pool of insurance companies (AIC, OIC, Nyala, EIC), led by AIC (Awash Insurance SC). The approach taken by SIIPE partners to have a program underwritten by a pool of insurance companies as opposed to having one company is aimed at spreading the risk (in case of a huge pay-out) and also building the local capacity of insurance companies to deliver index insurance for livestock in the region. It is also expected that participation in SIIPE will create an informed demand for livestock index insurance products. As a result, insurance companies will seize the opportunity to develop and sustain the market by creating new/innovative distribution channels, index products, marketing, training awareness creation, etc.

To ensure timely and efficient disbursement of SIIPE pay-outs, WFP works with the Somali Micro Finance Institution (SMFI) as the financial institution through which pay-outs are disbursed. SIIPE beneficiaries are encouraged to open bank/MFI/mobile accounts with SMFI to execute financial transactions efficiently and receive pay-outs when the index triggers. This also promotes access to other financial products and services. The lead insurance company underwriting SIIPE (AIC) is also required to maintain an account with SMFI for easy execution of pay-out disbursement instructions in the event of a pay-out.

Local expertise to monitor, collect and analyse data required to design index insurance products is still limited in Ethiopia. Currently, WFP coordinates a collaborative working arrangement between the National Meteorological Agency (NMA), the WFP VAM (Vulnerability Analysis and Mapping) unit, and a



team of consultants to support data collection and product design, and seasonal monitoring and index calculation. Through this arrangement, WFP has supported NMA capacity building to undertake this role through training and practical skills transfer.



### **Figure 8 SIIPE Fund Flow**

Finally, one key aspect of the situation analysis relevant to this study is the practice of using smartphones to sensitise the community. ILRI led the development and deployment of these training materials. Findings from the WFP (2020) and ILRI (Taye *et al.,* 2019) indicate that these learning materials have influenced the efficient and effective delivery of insurance concepts and applications. An FGD participant explains the importance of e-learning "*We loved the most the awareness-raising modalities that included photographs and videos; even if we did not attend modern schooling, they provided us with insight into how something works*".









Table 2 provides a summary of key issues identified for the situation analysis in the study areas

Area	Similarities	Differences
Capacity Development	Governance Structure Regional Government ↓ Zonal Government ↓ Woreda ↓ Kabele ↓ Community / Village	<ul> <li>SOMALI</li> <li>The pilot underway is at a higher level (not commercial or individual, part of social protection project by the WFP)</li> <li>NGOs are relatively more oriented toward humanitarian aid</li> <li>BORANA</li> <li>A commercial/voluntary program underway - some proven capacity</li> <li>NGOs here are relatively more oriented toward supporting livelihoods</li> </ul>
Distribution	<ul> <li>Both have CAHWs (Community Animal Health Workers)</li> <li>Cell Phone penetration/ proficiency decent</li> <li>Network issues         <ul> <li>Temporal (blackouts)</li> <li>Spatial (as yet unreached rural areas)</li> </ul> </li> </ul>	<ul> <li>SOMALI</li> <li>No indication of a CIFA (Community Initiatives Facilitation &amp; Assistance) - like organisation in Somali</li> <li>Established mobile application – HelloCash, Sahay</li> <li>No IBLI agency model in place</li> <li>BORANA</li> <li>Existing IBLI agency model in place</li> <li>Cooperatives more organised at the local level</li> </ul>
Cultural Dynamics	<ul> <li>Community involvement is paramount</li> </ul>	<ul> <li>SOMALI</li> <li>Sharia compliance is necessary</li> <li>Clan structure</li> <li>BORANA</li> <li>Structured community organisation process</li> <li>Sharia compliance is not an issue</li> </ul>
Role of Government	<ul> <li>A lot to be desired at the government level; "in principle" is not the same at all as "in practice" in terms of capacities and activities</li> </ul>	<ul> <li>SOMALI</li> <li>The government has established structures for PSNP (Productive Safety Net Program) targeting, design, &amp; distribution</li> <li>Woreda-level government head/development agent. <ul> <li>Kabele-level chair (nominated, not paid) and</li> <li>Food Security Task Force.</li> </ul> </li> <li>Community-level committees that iterate with outside experts and higher-level heads on</li> <li>Public Works activity "Community Action Plan"), targeting recipients, etc.</li> <li>The regional government is seemingly more involved in Somali in coordinating local intervention</li> </ul> BORANA <ul> <li>Zonal government; less involved in implementation / day-to-day issues</li> </ul>

### Table 2 Livestock Insurance Situation Analysis in Borana and the Somali Region: Summary



Access	<ul> <li>Limited access to formal channels of credit</li> <li>Increasing mobile phone and mobile banking penetration</li> </ul>	<ul> <li>SOMALI</li> <li>Better/advanced use of digital technologies compared to Borana</li> <li>SMFI/RAY microfinance is involved in index-insurance</li> </ul>
Digital Technology	<ul> <li>Experience with interactive digital (smartphone-based) learning platforms</li> </ul>	<b>Borana</b> – the presence of both audio and video-based learning materials and agent monitoring mechanisms (pilot-phase). <b>Somali</b> – similar to Borana but primarily intended to extension personnel than directly to pastoralists.

# iii) Challenges and Opportunities of Delivering index-based livestock insurance in Borana and Somali

The above section highlights current practices linked to delivering different goods/services in Borana and selected *woredas* in the Somali region. This section highlights critical challenges and opportunities observed in the study areas. This is also a major step to understanding what factors to consider in developing insurance delivery channels.

### **Operational Challenges**

**Financial Literacy** – Financial literacy is a key component of creating and strengthening the 'willingness to buy' an insurance product. IBLI in Borana has been in operation for a decade. However, high insurance sale (commercial) faces limited financial literacy among most relevant stakeholders. It was found that a significant segment of the community is unfamiliar with the product. This challenge appears to be primarily among pastoralists, local government officials, as well as certain VIPs and sales agents themselves. As a result, the major stakeholders have not yet fully appreciated the fundamental purpose and concepts of IBLI.

While there are already indicators of higher-level government awareness in the Somali Region, primarily due to high investment in capacity-building activities among regional stakeholders (Bureau of Agriculture, Pastoral Development, etc.) in the Somali region, the level of understanding of the insurance concept is at 'basic' levels among pastoralists.

According to the findings of impact assessment research on SIIPE in the Somali region, financial literacy is the most significant barrier to commercialising livestock insurance in intervention woredas. Financial literacy has grown among those who have benefited from SIIPE. Nonetheless, several concepts and



features of IBLI remain ambiguous, making it difficult to understand and invest in livestock insurance with confidence among pastoralists (WFP, 2019).

**Government Participation** - A general consensus emerged that government support for IBLI's awarenessbuilding efforts would encourage pastoralists to purchase insurance products. This was identified as a crucial factor in boosting the confidence of pastoralists. Particularly in Borana, where the insurance product is sold on a commercial basis in more than 80% of the districts, the participation of the local government is limited and mostly non-existent. VIPs and sales agents identified the absence of government in extension, and community sensitisation is recognised as a significant challenge.

During focus group discussions, VIPs and local insurance agents stressed that they were not accommodated in creating awareness about IBLI during community meetings and events, which was echoed by NGOs supporting such efforts in Borana. The regional government is becoming more active in coordinating local aid-related projects in the Somali region. Without continuous support from local and regional authorities, scaling IBLI in both regions will be a major challenge.

**Affordability** – for the successful scaling of index insurance, "willingness to buy" should be accompanied by "ability to buy" the product. Hence, affordability refers to the capacity of a pastoralist to buy an insurance product. Although wealth status is one vital component, the pastoralists listed cash constraints and no access to credit as the major challenges to investing in insurance. Since sales windows are during the drought season, pastoralists usually do not have enough cash to pay insurance premiums. This is exacerbated by livestock price volatility during resource scarcity periods. "*There were months that I wished I gave a goat to cover most of my livestock through insurance. The market price for livestock during windows [insurance purchasing] is the smallest, mostly*" A female-headed pastoralist, 45, from Borana.

**VIPs: Capacity, Accountability, and Incentive** - Currently, in Borana, VIPs receive 8% commission, while sales agents receive 6% commission per contract sold. Before 2017, the incentive structure was the opposite, which affected the motivation of VIPs. Although this has changed recently, there is limited coordination between VIPs and insurance agents.

OIC provides capacity development (training) before every insurance sale period. However, some complex concepts about the insurance product are not well understood by local agents. The other aspect is such efforts are very costly to the insurance company. This has compromised the level of accountability insurance agents encounter locally. Finally, insurance pay-outs are distributed through prime cooperatives, and there is no direct communication from the insurance company to the policyholder



(pastoralists). This adversely affected the confidence of some pastoralists. The insurance company establishes no clear accountability mechanism to monitor if pay-outs are distributed to pastoralists or not.

In Somali, the insurance product is part of PSNP; hence the challenges of incentive are not presented by local mobilisers. However, pastoralists indicated some incidents in which vulnerable pastoralists were not targeted.

Mobility patterns of pastoralists are another challenge VIPs and insurance agents face in ensuring continuous communication with their respective clients. Notably, as insurance is sold during dry seasons, potential clients migrate to areas where there is relatively better pasture for animals. Tracing those pastoralists is both expensive and challenging.

### **Operational Opportunities**

**Community Animal Health Workers (CAHWs)** –Community Animal Health Workers (CAHWs) play a crucial role in both Borana and Somali regions. CAHWs are trained animal care practitioners who provide animal vaccination and drugs in communities. They are also responsible for informing the city centre about any livestock disease outbreaks. The CAHWS are trained by the Pastoral Development Office (PDO) after being nominated by their community. PDO organises two rounds of training a year, which takes 25 days.

The CAHWs have a more organised structure and a wider reach, even in the remote areas, as they cover different areas/ranges moving from place to place using motorcycles. This makes them better positioned to sensitise and raise awareness within the grassroots community (village and kebele levels) about IBLI and even serve as a distribution channel. In this regard, adding a section about IBLI in ongoing PDO trainings could be one effective way of raising knowledge of the program as well as recruiting agents.

The CAHWs have a strong presence in both in Borana and Somali regions. Currently, there are over 350 CAHWs in the Borana Zone alone. This is a much higher number when compared to VIPs in terms of both number and geographic coverage. Hence, there is a high recommendation to include these actors in the existing Borana agent model as well as the development of a new model for the Somali region.

Furthermore, enhancing higher-level government engagement is also one potential opportunity raised by current agents in Borana (and supported by early work in the Somali Region) as a major contributor to breaking down some political hurdles in the intervention areas. This can go a long way toward providing IBLI agents with greater access and influence.



With regard to the Somali region, considering the region's unique social dynamics (i.e., Muslim-dominated population and linguistic difference), the regional government (particularly the pastoralist and agricultural bureaus) could be a valuable ally to IBLI with regard to implementation, awareness creation and also the regulation of the product. This can be very useful in boosting public trust. These offices are well-organised and have good working relations.

**Potential Partnership with NGOs and other International Organisations** - International organisations in both Borana and Somali regions have a strong presence. These organisations have a strong interest in collaborating with ILRI on IBLI implementation. Such institutions in these areas give opportunities for implementation of the IBLI product even outside the formal government frameworks.

In the Somali region, for instance, WFP has already collaborated with ILRI to introduce a non-commercial variant of IBLI, which helped sensitise both governmental and non-governmental institutions about livestock insurance. The non-commercial nature of the WFP-led insurance makes it difficult to promote the commercialised IBLI product. However, efforts can be made in the future to improve the system by adopting innovative measures such as the introduction of subsidies or incorporation of the product in PSNP or other social protection programs.

Non-governmental organisations can also play an important role in promoting the IBLI product by focusing on specific demographics, including women. In this regard, these actors can contribute to improving the gender disparity noted with regard to CAHWS and agents. Coordination with all of these offices is highly recommended since there is already a high degree of collaboration between regional governmental entities and these non-governmental groups.

**Cellphone Proficiency** - As was noted from the discussions conducted with VIPs and sales agents in Borana and CAHWs in the Somali region, there is a high smartphone penetration rate in both sites, and both groups indicated their ability to use feature phones. This can be a good sign for the use of mobile technology to increase awareness of IBLI products in the future. As of May 2021, there are 58.5 million mobile subscribers and 28.9 million internet users in Ethiopia in January 2022 (Kemp, 2022). Nonetheless, such data disaggregated by specific areas – Oromia or Somali regions- is unavailable. Regarding connectivity, the whole country is connected to a 3G network, whereas 4G connections are available in major towns.



This is more the case in the Somali region, where mobile device use is already widespread, despite some spatial and temporal coverage gaps. The gaps are, however, projected to close in the near future, and the increased use of mobile money transfer services like HelloCash is expected to drive even greater mobile network expansion.

Despite coverage gaps, technological systems can support the reduction of uncertainty surrounding the pay-out distribution and the collection of consistent quantitative data on contracts and payments. Such technologies can also enable the proper tracking of sales by agent, location, and time of year, allowing for improvement of the practice over time. The use of HelloCash, for instance, can enable IBLI to gain access to information on top-performing agents, allowing them to engage them as sales agents for its product.

As was seen from the WFP pilot insurance experience in the Somali region, pastoralists have demonstrated their capacity and preference to use the mobile transfer system. As such, 85% of the 17,000 households that participated in the pilot program chose to receive pay-outs through feature phones (WFP, 2022).

Microfinance and mobile banking firms like HelloCash have also stated their plans to expand into rural areas. In addition, the government has put in place a mechanism that communicates varying livestock prices using mobile information systems. Such a system can be taken advantage of to further disseminate information about IBLI, as well as training sessions for agents and advertising.

**Credit Facility** - Some cooperatives in both study areas provide credit to their members. According to these institutions, credit facilities or products will see considerable growth in the future. Pastoralists use several informal ways to raise the cash needed to obtain IBLI insurance, such as borrowing from friends, cooperatives, and, in some cases, VIPs in their respective localities. These opportunities, however, are limited because cash availability is a major constraint for most pastoralists, particularly during insurance sale windows.

**Implementing Partners' Commitment** – The collaboration with OIC seems sustainable and promising on the partnership front. This is also due to the fact that the company considers microinsurance as a corporate social responsibility. This was emphasised in the meeting with OIC representatives, who noted that members of the board, the majority of whom are Oromos, are more committed to supporting pastoral communities through their services and platform than maximising profit as an insurance firm at least in the short term. This, however, is based on the expectation that with further development of IBLI



and improved awareness among pastoralists, the investment will pay off in the long run. This demonstrates that, on the OIC's side, there is both optimism and aspiration to extend IBLI's reach across the country.

### **3.** Insurance Delivery Channels

This section sets out possible delivery channels for IBLI in Ethiopia's pastoral system. As discussed above, it starts by explaining the steps and approaches followed to develop the potential agency and delivery models. Following this, some key criteria were employed for selecting agents and community structures. This is followed by presenting the proposed agency structure and delivery channel to key stakeholders. Finally, a cost-benefit analysis will be discussed.

### 3.1 Steps and Approaches used in developing insurance delivery channel

As discussed earlier, this report focuses on providing alternative insurance delivery channels in the pastoral areas of Ethiopia. Moreover, costs associated with each delivery system will be set out. To do so, there are vital steps and approaches employed. This section summarises these steps.

There are five steps used to develop the delivery model.

Step 1 – **Mapping Community Structures** – understanding existing community structures is a vital entry point for rural financial service provisions. As a result, by reviewing the literature, the first step is understanding these community structures and the relevant goods and services delivered to the target community. This also enables to development of data collection instruments that are important for step 2.

Step 2 – **Situation Analysis** – this is critical to lay out what community structures exist using primary data sources. It starts by collecting information from pastoralists, local government, NGOs, and local businesses. Although different data collection tools can be employed, group discussions (FGDs) and expert/elite interviews are vital. The second part focuses on collecting data from financial service providers – MFIs, banks, insurers, etc.

Step 3 – **Delivery Channel/Model** – following data analysis, the third step is to develop an insurance delivery model. This step has both qualitative and quantitative works. The qualitative aspect focuses on



understanding community structures – interactions, opportunities, and gaps. The quantitative element focuses on a cost-benefit analysis of the proposed delivery channel and agents. Multiple criteria are also implemented to select whether a given agency structure fits or not. Agent identification matrix is a crucial matrix analysis that focuses on factors such as trust, literacy, mobility, etc., to rank all available agents in a community. This whole set of work brings an 'Insurance Delivery Model/Channel'

Step 4 – **Validation** – this is the last process in the chain. Validation is the process where key stakeholders reflect on the proposed delivery channel and agents within. It also provides the applicability of all the issues in piloting the channel. Validation can take different forms. It can take a group discussion through a validation workshop. Experts will be communicated to reflect on the proposed model in other cases. This study employed both methods of validating the proposed insurance delivery channel.

Step 5 – **Communicating and Piloting Delivery Model** – this step requires piloting the model in selected areas. This is also part of evaluating and finetuning the model before going to scale.





Figure 13 Steps of Developing Insurance Delivery Channel/Model



### 3.2 Selection Criteria

In the delivery model, agents play a key role. Data was collected from different stakeholders in the insurance delivery chain. After identifying potential agents, the variables most relevant in selecting an agent model were assessed. There are two aspects to the selection criteria: suppliers of the insurance product and clientele (pastoralists). For pastoralists, trust and the capacity of an agent to sell insurance (mainly collecting and disbursing cash as insurance premiums and pay-outs, respectively). For livestock insurance suppliers, particularly insurers, financial literacy levels and the mobility of agents are crucial. This section provides the aggregated selection criteria from the interviews and group discussions.

However, prior to that, the study identified key stakeholders from the private sector, community, government, and development actors. This was done by looking at the people who are already involved in or have been chosen by pastoralists to be in the value chain for delivering livestock insurance, as highlighted in Table 3.

Private	Government	Community	NGO/aid based
<ul> <li>Hello-cash, CBE Birr, and other mobile money agents</li> <li>Vet drug distributors</li> <li>Livestock Traders</li> <li>Telecom agents</li> <li>Butchers</li> <li>Feedlot agents</li> </ul>	<ul> <li>Pastoral Development Office (PDO)</li> <li>CAHWs</li> <li>Union reps</li> </ul>	<ul> <li>Abba Gada (Borana leaders)</li> <li>Imams</li> <li>Teachers</li> <li>Co-op reps</li> </ul>	<ul> <li>WFP</li> <li>Oxfam</li> <li>Save the Children</li> <li>CFIA</li> </ul>

Table 3 Livestock Insurance Situation Analysis in Borana and Somali Region: Summary

Index-based livestock insurance is a new idea to pastoralists; hence, their confidence in the agent's words and honesty is critical to the success of any expansion effort in this sector. There is a level of minimum capacity necessary for agents to be able to promote and sell IBLI products (such as handling registration paperwork, understanding of and ability to explain IBLI to pastoralists, and handling mobile cash transfers such as collecting premiums and distributing pay-out to pastoralists on feature phones). The reach of agents, or the frequency with which they visit livestock herders in person, is particularly important since we want agents to be available to pastoralists at all times. The importance of this is highlighted by the experience in Borana, where some pastoralists had difficulties acquiring IBLI insurance. However, they



understood the product, desired it, and could afford it, due to an inability to find an agent nearby from whom to purchase it.

Table 4 provides a breakdown of matrixes that are generated as informed/guided by the suppliers and pastoralists.

		Capacity				
		High	Medium	Low		
		School teachers	CAHWs	Social and Cultural		
		<ul> <li>Government</li> </ul>	PDO officers (Bureaus)	Councilors		
Trust	High	extension/experts	MFI/Co-op representatives	Union reps		
		NGOs	HelloCash agents (ID-ed high	Religious leaders		
			performers)	(Imams, Qalus, etc.)		
			Veterinary drug reps			
			<ul> <li>Traders</li> </ul>			
			Input suppliers			
	Low		<ul> <li>Telecom top-up agents</li> </ul>	Butchers		
				Feedlot agents		
				Livestock Brokers		

Table 4 Agent	Selection	Criteria –	Trust and	l Canacity
TUDIC 4 Agent	Sciection	Critcria	in ase and	capacity

### **Trust and Capacity**

In this matrix, many stakeholders qualify as trusted by the community. There is a general lack of trust toward brokers and livestock feed suppliers. This is attributable to the large profit margin they collect on the goods/services. Although several options are available due to high trust - within the community structures and 'formal' institutions operating in the pastoral areas, their capacity to deliver livestock insurance is characterised as having different levels. The highest perceived ability to provide IBLI is attributable to schoolteachers, government extension officers, and NGOs. Pastoralists also perceive religious and socio-cultural leaders and union representatives as having limited capacity to deliver the insurance product, despite their high trust.

### **Mobility and Financial Literacy**

High levels of mobility characterise the pastoral system to secure resources – particularly water and pasture. Hence, mobility is essential in considering delivering and sensitisation on IBLI. However, the mobility of agents depicts two features. First, those who are highly mobile might invoke lower trust levels. For example, giving cash as a form of insurance premiums to livestock brokers is risky as they are mobile and might not come back during insurance pay-outs. Therefore, mobility is associated with accountability



for the money paid to an insurance agent. Second, for insurance companies, those who move from location to location can promote the insurance product, thereby bringing large sales volumes.

An essential criterion is a knowledge about insurance (financial literacy) and digital technology, issuing payment receipts/invoices and providing detailed information about insurance and related issues. Some, like vet drug representatives, and sales agents, have basic knowledge about financial and digital features. Except for teachers, those with an advanced understanding of financial issues and mobile technology are mobile. This mobility has both opportunities and challenges. First, they can move around to sensitise the community about the insurance product. Nonetheless, unless the organisation they are working for is known/trusted by the community, purchasing insurance from them will be a challenge see Table 5.

		Literacy (Financial and Digital)				
		Basic	Intermediate	Advanced		
Mobility	Mobile	<ul> <li>Vet Drug reps</li> </ul>	<ul> <li>Extension/outreach experts</li> <li>CAHWS</li> </ul>	<ul> <li>Development Organisations such as CIFA, WFP, Oxfam, etc.</li> </ul>		
	Fixed	<ul> <li>Sales Agent</li> <li>Telecom</li> <li>Feedlot</li> </ul>	<ul> <li>Kebele/local admin</li> <li>Hello-Cash, Mobile-money banking agents</li> <li>PDOs</li> <li>Co-op representatives</li> <li>Input suppliers/Shops</li> </ul>	<ul><li>Teachers</li><li>MFI</li></ul>		

Table 5 Agent Selection Criteria – M	obility and Financial Literacy
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Finally, taking the matrices to select potential agents, MFI/Cooperatives, input suppliers/shops, and development agents (DA) gov't and sometimes NGOs) are the primary agency model that can be considered for HoA DRIVE's project. CAHWS are supervised and trained by development agents (especially livestock health/productivity extension agents) and hence play an important role in community sensitisation. This is comparable to the role of VIPs in Borana. However, there is a need to invest in financial literacy, digital technology, and other investments set out later in this report.



### 3.3 Proposed Insurance Delivery Model/Channel

During a community discussion in Borana, participants mentioned three critical aspects of investing in livestock insurance: the efficiency of the system, the means of delivering the product, and value for money. The first is the quality of an insurance product – linked to how the insurance model is built and the community's expectations (the mismatch between the insurance model and actual event on the ground). The second aspect is affordability. The premiums set for similar responses are affordable for small ruminants, a little high for cattle, and expensive for a camel. In their own words, 'means of delivering the product' is the key aspect that is relevant to this study. This encompasses agents and insurance providers – trust, capacity, accountability, and timely response they provide.

There are two ways of delivering livestock insurance to pastoralists: using the 'end use' model, which is directly selling to the pastoralist, and using agents, referred to here as 'agent-base' sales.

**End-User Based Insurance Sale:** Although limited financial literacy has been identified as the major challenge for scaling livestock insurance in Ethiopia's pastoral system, several pastoralists – particularly



Figure 15 Proposed Livestock Insurance Delivery Channel

Figure 16 Microinsurance (MI) Product Development, Management, and Administration PlatformFigure 17 Proposed Livestock Insurance Delivery Channel



younger (20 -35 years old) - proposed this modality. During group discussions in Borana and Somali, pastoralists with a better understanding of the insurance product offered this type of insurance purchase. An end-user purchase is recognised as a new yet acceptable form of purchase by employing minimal training – using USSD (Unstructured Supplementary Service Data) or Smartphone to process purchases. Gaayo, 36, from Did Yabello in Borana, explains, "*I don't see the point of paying to a sales agent and receiving insurance pay-outs while I have a bank account and a mobile banking system*".

**Agent-Based Insurance Sale**: one of the major reasons for proposing an agent-based approach to selling insurance is those pastoral areas are found in geographically dispersed locations where infrastructural amenities are found to be limited or very sparse at best and low literacy levels to allow for direct onboarding. As a result, insurance companies will incur high costs for operational (insurance marketing and administration). IBLI in Borana is – more or less- a voluntary insurance business. However, in Somali, it is part of social protection that will grow into a commercial pathway in the near future. In Borana, MFIs (and Prime cooperatives) are the primary delivery channels of livestock insurance. Development agents from the Bureau of Agriculture in the Somali region are agents responsible for identifying and registering beneficiaries. They are also responsible for sensitising the community. During the fieldwork, these two modalities were proposed by pastoralists to be integrated into the insurance delivery channel; below we unpack the preferred agent-based models for delivery in DRIVE

**MFI/Prime Co-ops**: Microfinance Institutes play a vital role in sensitising the community on various aspects of financial services, more specifically savings and, to some extent, credit. There is a large presence of such financial service providers in both study areas. A heavy presence characterises some at local (*kebele*) levels, while others operate at *woreda* levels.

The advantages of using these financial intuitions are –familiarity with the local context, high reputation, and employees who have good knowledge about insurance and digital technology. The disadvantage of using MFI/Prime co-ops is the high investment cost, particularly in the Somali region. In Borana, there is an existing practice of using these institutes for insurance sales. Hence, a small investment is needed. Generally leveraging on MFI builds a strong case for DRIVE component 1 objectives on deepening financial resilience among pastoralists by de-risking them with insurance for severe drought and building savings to address moderate weather-related risks



**Input Suppliers/Shops** – these business firms are fixed in the pastoral system. Guyo, who owns a vet drug store, states, "*I know about livestock insurance, and after insurance pay-outs, pastoralists come to buy medicines for their weak animals. I always feel it can be bundled with such inputs easily*" The community trusts livestock input providers, and they provide credit sales during liquidity constraints. They have a better understanding of livestock production and hence can be reliable agents of delivering IBLI. In both study sites, these input suppliers use mobile money transfer and other platforms to communicate with wholesalers and traders within their network. "*To facilitate ordering and buying products within a short period of time with minimum cost, we use mobile calls and mobile banking system for the payment. Telegram, IMO, and email for product orders. The main purpose of digital media here is to avoid transportation costs and save time*" Yusuf, livestock feed and medicine supplier.

The main disadvantage of using input suppliers as agents is managing their profit motives. If the per premium commission is lower than most of the products (goods and services) they supply, they will opt out of delivering the insurance product. From the interviews conducted, the average profit margin for veterinary services is 35% per birr or dollar.

Finally, these firms have listed some critical criteria for selling insurance.

**Development/Extension Agents (DAs)**: Although Borana encountered challenges during the piloting phase of IBLI, recent experiences in the Somali region give the confidence to consider development experts (livestock extension) as livestock insurance agents. As discussed earlier, they are trusted by the community, and most have a better understanding of financial services. The main disadvantage of employing DAs is that they are linked to state-led administrative structures. During the early years of IBLI in Borana, the challenge encountered was that DAs were overwhelmed by several responsibilities. As a result, they might not provide sufficient attention to insurance during sales. This can be solved by giving incentive mechanisms for the insurance sales they make. Furthermore, through advocacy (although regional and federal governments can incorporate index-insurance in pastoral areas), local and regional governments can incorporate index-insurance and incentivises DAs to devote more time to boosting insurance knowledge among pastoralists and sales.



CAHWS, as previously discussed, play an important role in both study areas. They can be used in combination with DAs to increase community awareness and sales. A comparable incentive (refer to section 2.2) that exists in Borana between VIPs and Prime Co-operatives can be used for DAs and CAHWS. This will also include the bundling of animal health-related services with livestock insurance. Finally, this is where the active role of the government materialised.

### Activities to consider in the agency model

- Financial literacy although some agency models, particularly MFI/Co-ops, are positioned better in regard to financial literacy, insurance is a new concept. Hence, innovative and continuous training in the concepts and features of IBLI is essential.
- Digital Technology in most cases, digital technology is attributable to financial transactions concerning livestock insurance. However, practices from both study sites and interactive learning materials are found to be efficient in delivering the message to pastoralists. Hence, digital technologies should be emphasised in learning and insurance sales. As shown in figure 11, digital technology (both for financial literacy/advocacy programs and insurance sales) bridges agents/end users and the microinsurance (MI) cloud platform. Finally, digital technologies should be developed for KYC (Know Your Client), also presented in Figure 11 above.
- Accountability and Transparency There are no clear transparency and accountability platforms/rules in place in both study sites. For example, there were incidents in Borana where VIPs misrepresented the insurance product to increase insurance sales. Although such incidents were managed using community-based interventions, the absence of clear accountability measures affects the trust the community has in the product and partners across the chain. Transparency is particularly related to the amount of premium collected and pay-outs distributed. In both areas, pastoralists have limited knowledge of the Extent of the insurance-index trigger determining the amount of pay-outs. In Borana, sales agents and VIPs inform that there will be an insurance pay-out, and they are not necessarily informed of the index details and associated issues.
- Monitoring Activities the National Bank of Ethiopia (NBE), as the regulator of all financial activities in the country, attempts to control index-insurance activities by all financial institutes. However, insurance companies and partners do not have clear and periodic monitoring of activities. These activities include community sensitisation, insurance marketing, cash collection, and distribution.



Finally, although the above paragraphs listed some vital issues in considering the proposed delivery channel, digital technology is the system's backbone. It has various benefits, among others: reducing transaction costs, boosting the confidence of clients, scaling the programme and managing the ecosystem efficiently and effectively. As a result, experts in the industry were asked to list some key enabling factors for employing the above delivery channels; below are the responses and rankings averaged.

Enabling factors	Ranking, 1 lowest and 5 the highest.				
	1	2	3	4	5
Internet connectivity					
Penetration and use of mobile phones					
Affordability of digital services					
Use of mobile money for transactions					
Community literacy – financial and use					
of technology					

### Table 6 Enabling Factors for Delivering Livestock Insurance – Rankings by Stakeholders

As depicted in Table 6, penetration and use of mobile phones, affordability of digital services and mobile money take the highest rankings in the success of the above delivery channel. Community literacy level (financial and use of technology) is the second highest-ranking. Internet connectivity is an essential element but ranked at a medium level.

This report focuses on outlining what possible delivery channels can be considered for selling IBLI in Ethiopia. Although all the above sections focus on achieving this, this report also goes beyond providing options for delivering the insurance product. Another perspective is establishing and managing a cloud platform for a Microinsurance (MI) ecosystem.

The MI ecosystem is a proposed function to be played by a dedicated organisation to act as a catalyst in the microinsurance business in Ethiopia. As discussed in sections one and two in this report, the current trend is that there are no private insurers that manage index insurance (livestock or crop) from product development to reach out to the final clientele. OIC underwrites IBLI in Borana; however, ILRI is leading in developing the insurance product, designing learning materials, and announcing seasonal index results. Similarly, the UN's WFP is managing almost the entire chain in the Somali region. Private insurers have a minimal role in issuing insurance policies at a given rate determined by WFP to a given number of pastoralists. Similarly, pay-outs are announced by the VAM unit at FAO in Rome. Therefore, it is recommended to engage an organisation (implementing firm) that can serve as a catalyst in this



ecosystem, which is a critical step to scaling the index-insurance business in Ethiopia. This will also help commercialise the whole microinsurance sector in the country sustainably.

The ecosystem is a continuation of the delivery channel proposal discussed above. As shown in the diagram below, Figure 12, the ecosystem has two categories: MI administration and MI product development and management.

**Microinsurance Administration Platform:** this category has three sub-groups. The *Government* is where regulator (National Bank of Ethiopia) and key actors (Ministry of Agriculture at the Federal level and Bureau of Agriculture and Pastoral Development Offices at regional levels). Policy and regulatory issues are the focus of this section. *Development Actors* are those who are either directly engaged in technical support (such as ILRI and WFP) or provide financial support (for example, The WB). This block can include universities and other institutions that provide knowledge products. The other block is *Insurance Companies*. These are the underwriters of the product. As discussed above, they have limited capacity – to develop index-insurance products and manage the whole ecosystem. Nonetheless, they can take more role in the ecosystem, depending on the business case they have.

**Microinsurance Product Development and Management Platform**: this is the other vital component of the MI ecosystem. This is where livestock insurance products are managed (new products developed or existing ones are rebranded). The data acquisition for IBLI is from NASA (Borana) and from VAM unit of FAO (SIIPE – Somali). Going to scale requires a standard data acquisition platform, which the owner will



Figure 18 Microinsurance (MI) Product Development, Management, and Administration Platform



manage such. Although insurance companies underwrite policies, managing the entire set of insurance policies, subsidies, and claims management requires an entity that administers the whole ecosystem.

### Cost-Benefit Analysis of the Proposed Delivery Model/Channel

Following the proposed delivery model, key stakeholders were asked to provide their reflections on the cost-benefit analysis. Below are the costs associated with the proposed model. Section 3.2 talks about the first steps to understanding the benefits and drawbacks of choosing one or more channels.

Before looking into the cost-benefit of the new delivery method, this study looked into how much index insurance delivery costs in the country.

Organization	Type of Index-	Type of agency	Expense details	Cost/premium
Name	insurance			
Insurance Co. 1	Livestock	Through local gov't	Training, subsidy (100%)	114.9%
Insurance Co. 2	Livestock	Through agents	Training, cash collection,	56.7%
			marketing	
Insurance Co. 3	Crop	Direct	Training, cash collection,	46%
			marketing	
Insurance Co. 4	Both	Agents	Training, premium and pay-out,	65%
			marketing, digital platform	

 Table 7 Index-Insurance Delivery Cost in Ethiopia

As depicted in Table 7, the current cost of delivering index insurance in Ethiopia takes more than half of the premium. This is attributable to the costs of training and sensitisation work. For example, OIC incurs close to a third of a premium (33%) to train VIPs and sales agents in each sales window. From 2012 to 2021, the total delivery cost and claims paid by OIC in Borana surpassed the total premium collected by 35%. Put simply, for every dollar collected as an insurance premium; OIC incurs 35 cents.

A digital solution provider incurs close to USD 20 per agent for fixed digital technology gadgets for agricultural index insurance. This is close to 80% of the premium. To break even, an agent has to sell more than ten TLUs. This is, of course, considering there will be no pay-out during that season. OIC collaborates with nearly 80 prime cooperatives and 240 agents in our case. Therefore, the distribution of digital solutions costs USD 4,800. Below are some of the cost-benefit analyses for the proposed distribution channels.



Delivery Type	Expense Type	Cost/premium
End-user	Refresher (USSD or digital), marketing and index	10%
	announcement	
MFI/Co-op	Training, digital platform, commission, cash transaction, sales	40%
	mobilisation	
Input suppliers	Training, digital platform, commission, cash transaction	25%
Dev't/Extension Ager	t Training, digital platform, commission (8% of premium	30%
(with CAHWS)	collected), cash transaction, sales mobilisation	

### Table 8 Expected Expense Type and Amount for Proposed Insurance Delivery Channels

Fixed cost items for different agency models include smartphones, offices, and marketing materials ((banners, brochures, etc.). Due to limited literacy levels, pictorials, video-based sensitisation, and insurance sales mobilisation are regarded as the most compelling of the lessons from Borana. Details of these materials are found here (<u>https://www.drylandinnovations.com/blog/categories/extension-learning</u>). Below are major fixed cost items for each proposed agency structure:

- End user not needed
- MFI/Co-op close to USD 300 per office –costs are office materials, communication, marketing
- Input suppliers on average USD 50 per shop costs on marketing materials
- Development Agent USD 20 per DA –costs include communication and brochures

Finally, the overall expense structure indicates that the end-user platform is the least costly for index insurance. Nevertheless, lessons from the Borana zone and the Somali region suggest that this is the least strategy to achieve commercial sustainability in the coming few years. Despite the initial high costs, MFI/Co-op is the most effective agency structure for the coming few years. Once economies of scale are achieved, investments in other agency models can be considered. The recommendation section below provides insights on the HoA DRIVE's project.

Based on the discussion held with several MFI/Co-op employees, a commission structure of 8% of the premium to the sales agent and 6% to the financial institution is a realistic and practical commission structure. Finally, interviewed MFI/co-op employees in Borana have a good understanding of the delivery channel and have been operating since 2014. Therefore, there is both readiness and technical capacity to



serve as a delivery channel for micro (household) level and meso (group/community) level indexinsurance in Borana.

### 4. Recommendations

This section focuses on key areas worth considering going forward for the HoA-DRIVE program in pastoral areas of Ethiopia.

In the use of digital platforms – as presented above, digital technology plays a vital role in two areas. First, it plays a crucial role in various aspects of training and sensitising the community across the chain. m-Learning and e-Learning customised for pastoralists, agents, insurers, government officials, and stakeholders are compelling cases. The second aspect is the premium collection and pay-out distribution modalities. Such modalities, however, should encompass both USSD and smartphone users. Moreover, payment modalities for end-user insurance sales should be designed to accommodate pastoralists' technology literacy levels. Finally, capacity building initiatives with insurers, aggregators, and regulators on the importance of leveraging digital platforms in premium and claim management are crucial to help debunk traditional practices of high commercial loadings on pure premium, this is through leveraging digital platforms that guarantee a reduction of the cost of delivering the insurance product.

**The proposed channel for HoA- DRIVE** – although the diagram and discussions around that detail the options for delivering livestock insurance in several pastoral areas of Ethiopia, using MFI/Co-ops is linked to the group-based approach the HoA-DRIVE project envisions. DAs (with CAHWS as mobilisers) and input suppliers can be introduced as a supplement to the model. This proposition is vital following advocacy efforts with regional and federal agriculture decision-makers.

**Role of Ethiopian Government**: The government has two key roles (at federal and regional levels). The first is serving as a key catalyst in the regulatory framework. The National Bank of Ethiopia strives to synergise all index-based insurance products in the country. However, as indicated in the earlier sections, capacity is a crucial challenge to coining a pragmatic regulatory framework for the industry. Therefore, the Bank should recognise such challenges for the smooth functioning of DRIVE and intervene in this area. The second role is synergising DAs (livestock extension workers) as key delivery channels. This requires lobbying with regional and federal governments to incorporate IBLI in the broader activities and strategies/programs. Finally an overarching role of the government is to promote public trust in the



product and uptake by sensitization at a national level, this in turn reduces the need for adhoc food/cash aid from public coffers in the face of a disaster.

**Subsidy, Premium collection modalities, and Credit Facility** – Mobile money and using financial institutions at different levels facilitate premium collection. However, subsidies can be linked to banks or MFIs. Liquidity is one crucial problem in the pastoral system. As discussed earlier, a couple of MFIs and prime cooperatives provide credit to their members so that they can purchase livestock insurance. If group based IBLI coverage is considered, credit facilities can be directly supplied to the MFIs or prime cooperatives through their transacting banks.

**Immediate Step:** The first step in working with the proposed delivery channels is identifying active MFI/coops in Borana and conducting a need (capacity) assessment to pilot group-based IBLI in Borana. Then, discussions with insurance companies (if the WB/ZEP-RE envisions working with private insurers) to start underwriting IBLI in Borana. Although OIC has been operating in the region, five insurance companies participating in the elite interview and validation workshop confirmed their willingness to underwrite the product.

**Proposed uptake using Group-based Insurance Cover**: For three reasons, the proposed group-based uptake using MFIs/Co-ops as a key entry point might face possible challenges in the Somali region. First, the whole region has not conducted a detailed feasibility study on index insurance. As a result, in addition to districts where WFP operates, there is a need to identify areas that are suitable for introducing IBLI in the region. Second, despite the high potential of SMFI and Ray financial institute in the region, their capacity to handle commercial IBLI is not clearly known. Therefore, there is a need to conduct a capacity assessment. Finally, those MFIs working alongside WFP are employing a subsidised index-insurance product. Transitioning to a commercial pathway requires building a business case, particularly group-based insurance. However, it is possible to start piloting using MFIs/co-ops in Borana. Below are initial indications

	Total # of MFIs/Prime	Number of Members			
Woreda	Co-ops	Male	Female	Total	
Mooyyalee (Moyale)	31	246	1619	1865	
Dilloo (Dilo)	18	344	732	1076	
Waacillee (Wachile)	14	282	516	798	
Dhaas (Dhas)	11	337	567	904	
Yaaballoo (Yabello)	57	828	2022	2850	

Table 9 Distribution of MFIs/Prime Co-ops in Borana



El-woyyee (El-Woye)	15	235	523	758
Guchii	10	155	579	734
Taltallee (Taltale)	16	531	678	1209
Goomolee (Gomole)	11	141	534	675
Areeroo (Arero)	18	204	655	859
Miyoo (Miyo)	24	957	2008	2965
Dirree (Dire)	35	907	1541	2448
Dubluq	19	447	917	1364
Total	279	5614	12891	18,505

Source: Borana Zone Cooperative Promotion Office

The average annual cash flow per financial institute is USD 17,000. All MFIs and prime cooperatives are established based on mutual interest, similar economic activity, and comparable wealth status. Hence, there is a business case to link MFIs/Prime Co-ops with insurance. If half of them purchase IBLI for their members worth 5 TLUs, the total annual TLUs will be 46,262. Taking OIC's average premium rate per TLU in Borana - USD 25, the total premium collected will be approximately USD 1,156,560. The average TSI will be USD 12,062,816.5. This calculation only takes half of the existing financial institutions. The total members within these are less than ten percent of the total households in Borana. Finally, several group-based community organisations can be linked to insurance.



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