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Validation of Potential Channels for Sustainable Distribution of Livestock Insurance in Ethiopia

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Cover photo: © WFP/Michael Tewelde: *People trying help a cow with a very a poor body condition due to the drought situation in the Adadle district, Biyolow Kebele in Somali region of Ethiopia.*

Abbreviations

AIC	Africa Insurance Company
ATM	Automated Teller Machine
BoANRD	Bureau of Agriculture and Natural Resource Development
BoLP	Bureau of Livestock Production
CAHWS	Community Animal Health Workers
CBPP	Community-Based Participatory Planning
DRIVE	De-Risking, Inclusion, and Value Enhancement for Rural Economies
DRFIP	Disaster Risk Financing and Insurance Program
EIC	Ethiopian Insurance Corporation
FAO	Food Agriculture Organization
FGD	Focused Group Discussion
IFAD	International Fund Agriculture Development
GDP	Gross Domestic Product
IDP	Internally Displaced Person
ILRI	International Livestock Research Institute
IFB	Interest-Free Banking
IMF	International Monetary Fund
IMC	International Medical Corps
KII	Key Informant Interview
LTA	Long Term Agreement
MC	Mercy Corps
MFI	Microfinance Institution
MSME	Medium Small and Micro Enterprises
NBE	National Bank of Ethiopia
NRC	Norwegian Refugee Council
PIN	Personal Identification Number
PSNP	Productive Safety Nets Program

PVPs	Private Veterinary Pharmacies
SACCO	Savings and Credit Cooperative Organization
SIIPE	Satellite Index Insurance for Pastoralists in Ethiopia program
SMFI	Somali Micro Finance Institute
TLU	Tropical Livestock Unit
OIC	Oromia Insurance Company
RUSACCO	Rural Saving and Credit Cooperative
VSLA	Village Saving and Loan Associations
WB	World Bank
WVK	World Vision Kenya
ZEP-RE	PTA Reinsurance (Compagnie de Reassurance de la Zone Préférentielle')

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I. Chapter One: Introduction

The World Bank Disaster Risk Financing and Insurance Program (DRFIP) supports governments in improving financial preparedness through a combination of technical support and analytics. Under the Horn of Africa (HoA) Initiative, DRFIP is supporting the preparation of the regional De-Risking, Inclusion and Value Enhancement of Pastoral Economies (DRIVE) project. The HoA DRIVE project aims to build the resilience of pastoralist communities against drought shocks by increasing access to financial service packages under project **component one**; and to improve their connection to markets by upgrading the livestock value chains and facilitating regional livestock trade under project **component two**.

Under **component one**, the project aims to improve pastoralists' adaptive capacity by de-risking livestock production through scaling up access to index-based livestock insurance in the HoA region i.e., Ethiopia, Kenya, and Somalia. Through the DRIVE project, premium finance will be made available for pastoralists who are members of groups that engage in productive activities within or along the livestock value-chain. Members who benefit from the premium financing will be expected to partially contribute a percentage of their insurance premiums as a pre-condition to receiving the DRIVE premium subsidy. Along with insurance, the members of the productive groups will be supported to engage in drought responsive savings, to address moderate droughts, digital payment, and savings accounts to enhance financial inclusion, and financial literacy. It is envisioned that this combination of financial tools will not only strengthen pastoralists resilience to drought but also accelerate their investments in livestock production for their subsistence as well as the market.

Component two of the DRIVE project support pastoralists better in connecting to markets by upgrading livestock value chains and facilitating trade. The targeted beneficiaries are pastoralists who already have connections to markets but derive limited value from their livestock-rearing activities. It is expected that the production groups targeted for **component one** will also benefit from investment opportunities generated under **component two** (although this is not a firm requirement). This component is intentionally focused on complementing existing interventions on pastoral production systems, facilitating livestock trade and mobilization of private investment into the livestock value chains. Three types of intervention are contemplated, which will be tailored to the needs of each country; (I) upgrading quality infrastructure; (ii) trade facilitation and trade infrastructure, and (iii) seed capital to attract private investment in the value chains.

To support a more cost-efficient implementation, a single regional entity ZEP-RE has been selected as the regional implementer of component one. ZEP-RE will fulfil the World Bank's fiduciary, environmental and social and procurement responsibilities as well as providing a package of wholesale services required by institutions implementing index-based livestock insurance. Some of ZEP-RE's services that could be leveraged by participating institutions include access to satellite data, product design, training, calculation agent, reinsurance, among others. This approach will also provide sustainability through cost sharing of risk related services across the DRIVE participating countries.

The World Bank commissioned WFP to undertake a study to validate potential channels for the distribution of livestock insurance in Ethiopia and enhancement of access to financial products and services among pastoralists productive groups in the country. The findings of this study as well as lessons captured from the implementation of the ongoing WFP-coordinated Satellite Index Insurance for Pastoralists in Ethiopia (SIIPE) program, have been used to inform this report which shall further be used in designing a similar project in Kenya and Somalia.

1.1 Assessing potential distribution channels for livestock insurance in Ethiopia

This section provides an overview on the purpose of the assessment. The combination of different methodologies utilized in exploring potential distribution channels for the delivery of livestock insurance and possibly other financial services to pastoralists in the Somali region of Ethiopia.

1.2 Objectives and scope of the study

The overall objective of the assessment was to ascertain the feasibility of scaling up the distribution of index-based livestock insurance in Ethiopia, through a commercially driven, private sector-led approach. Most notably the assessment sought to understand *(i) how to build on existing community structures and, (ii) quantify the cost of the proposed distribution options*.

The specific objectives of the assessment were:

i. To validate options for efficient, cost effective and sustainable group-based channels for the distribution of livestock insurance in Ethiopia.
ii. Explore means of leveraging the regional implementer (ZEP-RE), to overcome some of the operational, technical, and regulatory challenges faced in Ethiopia and with the aim of lowering operational and premium costs.
iii. Define a rationale for setting the premium subsidy as well as the graduation pathway for the DRIVE project beneficiaries.
iv. Identify approaches for mainstreaming gender in the implementation of HoA DRIVE project.
v. Determine number of beneficiaries to be covered and the full costs associated with the delivery of livestock insurance through each of the proposed distribution channels.
vi. Initiate mobilization and formation of productive groups to be targeted for livestock insurance under the DRIVE project.

1.3 Methodology

The assessment applied a combination of desk research, Key Informant Interviews (KII) and Focus Group Discussions (FGDs), which were administered to current and potential livestock insurance stakeholders as well as pastoral groups in the Somali region.

1.4 Data collection

Desk research was used to review existing literature on index-based livestock insurance implementation in the region, as well as examining the existing offer of micro-finance products and services and the presence of public and private institutions that are operational in the Somali and Oromia regions of Ethiopia.

Key Informant Interviews (KII) were conducted in Jigjiga, Somali region, with four Somali Regional Government (SRG) officials. The objective of the KIIs was to understand the role of the SRG in the livestock value chain, as well as the implementation of SIIPE and PSNP.

Focus Group Discussions (FGDs) were conducted in Dolo-Ado (Woreda) in the Somali region with three Village Economic and Savings Associations (VESAs) and one RUSACCO. One interview was also conducted with ten members of a livestock marketing association. FGDs allowed to gain a better understanding of the potential demand for livestock microinsurance and about the socio-economic characteristics of pastoralists productive groups. Likewise, these data are key to have a wider view of the risks faced by these groups and the mechanisms they most usually resort to when facing those challenges, as well as the likelihood of their occurrence.

Individual interviews with one Private Veterinary Pharmacy (PVP), one agro-dealer, two Micro-Finance Institutions (MFI), two Banks and one NGO were also conducted in Jigjiga and Dolo-Ado.

Validation workshop: after completion of field data collection in the Somali region, a validation workshop with 19 national level agricultural insurance stakeholders was held in Addis Ababa. The aim of the validation workshop was to present some of the findings gathered from the field as well as sharing ideas around the proposed distribution channels with the stakeholders for their critique and validation.

Interviews		**Summary reference**	**Number & Gender**
Location	**Description**		
Jigjiga	1. Livestock Bureau - Jigjiga	• Livestock and Livestock Products Marketing Directorate • Animal Health Service Director	2 Male
	2. Food Security Directorate	• PSNP staff/SIIPE focal point • PSNP coordinator	2 Male 2 Male
	3. MFI 1	• RAYS Micro-Finance • SAHAY mobile banking	1 Male 2 Male
	4. MFI 2	• Somali Micro Finance Institution • HELLO-Cash	2 Male 2 Male
	5. Banks (Awash Bank, Shebelle Bank)	• Branch Manager Jigjiga	2 Male 2 Male
Dolo-Ado	6. Agro-dealer 1	• Agricultural Input Supplier	1 Male 1 Male
	7. Veterinary products and service supplier 1	• Private Veterinary Pharmacy	1 Male 1 Male
Melkadida	8. Informal Financial Groups	• VSLAs (combined representatives from 3 groups)	3 Male 7 Female
	9. Formal Financial Groups	• 1 RUSACCO	3 Female
Dolo-Ado	10. Implementing NGO	• Mercy Corps	1 Male

	11. Livestock marketers	• Dolo-Ado Livestock Marketing Association Members	10 Male
Addis Ababa	12. **Workshop:** National level stakeholders	• National Agricultural Insurance stakeholders	18 Male 1 Female

Table 1: Research activity summary
Source: Authors' own elaboration

1.5 Situational analysis of financial and micro-insurance sector

1.5.1 Insurance sector

The insurance sector in Ethiopia remains small and dependent on banking sector, with only one percent contribution to the GDP. The insurance sector in Ethiopia is regulated by the National Bank of Ethiopia (NBE), while international experience recommends a separate insurance regulator. There are 18 private and public insurance companies in the market since 2013, with the largest operator being Ethiopian Insurance Corporation (EIC), (National Bank of Ethiopia, 2017). Most insurance companies are formed as sister companies of banks, with the common trend being the establishment of a bank initiating the creation of an insurance company in its name (Smith & Chamberlain, 2010). This affiliation is strengthened by cross shareholding among banks and insurance companies.

The insurance companies have strong associations with matched banks for credit referral purpose, which is a beneficial relationship. Besides, the insurance companies rely on the business investment of banks. The insurance sector has a very low penetration, with general insurance being the main product, majorly targeting the urban population. In general, insurance products have constrained reach to retail insurance clients, the rural areas, and low-income populations.

1.5.2 Microinsurance sector

Microinsurance is a new concept in Ethiopia and with very low penetration rates. Only 7.8 percent of the population has a formal insurance coverage while more than 50 percent has an informal insurance coverage, like a "Iddir[1]" membership. The rural community is still less exposed than the urban community (Central Statistics Agency of Ethiopia, 2020). There is, however, potential, for growth of the sector, especially in the rural settings where most smallholders and pastoralists rely on rainfall for agricultural and livestock production. (Carter & Chiu, 2020). As much as insurance has not been fully commercialized, it happens to be a domestic concept and not a foreign one to the rural community in Ethiopia (Smith & Chamberlain, 2010). According to the 2021 Landscape of Microinsurance, the number of people covered globally by microinsurance (all types of products) in 2020 represented between six percent and 14 percent of the target population (that is the number of people earning between two and 20 dollars per day on a purchasing-power-parity basis). Between 17 million and 37 million people were covered by microinsurance in the 13 African countries[2] included in the Landscape report, and it is estimated that between four and nine percent of the target population is covered by a microinsurance product (Merry, 2021).

[1] Iddir can be conceived as a ubiquitous indigenous insurance institution (found in Ethiopia) that covers different risks such as funeral ceremonies, death of major productive asset (such as draft oxen), medical expenses, food shortages and so on. (Aredo, 2010) (Mauri, 1987) defined Iddir as "Association made up by a group of persons united by ties of family and friendship, by living in the same district, by jobs, or by belonging to the same ethnic group, and has an object of providing mutual aid and financial assistance in certain circumstances… In practice, the iddir is a sort of insurance program run by a community or group to meet emergency situations".
[2] African countries contributing to the 2020 Landscape study (no respondents from Ethiopia): Côte d'Ivoire, Egypt, Ghana, Kenya, Morocco, Nigeria, Rwanda, Senegal, South Africa, Tanzania, Uganda, Zambia, and Zimbabwe

Ethiopia's microinsurance sector policy and legal framework has been under development over the last decade, with the NBE holding the mandate to regulate the sector, as amended under Proclamation No. 591/2008. This proclamation gave NBE the purpose to foster a healthy financial system, and the power and duty of licensing and regulating or supervising insurance and other financial institutions. The main legal document specific to insurance sector was the proclamation number 86/1994 referred as "Licensing and Supervision of Insurance Business Proclamation". This was later replaced by proclamation 746/2012, that was also amended by an insurance business (amendment) proclamation-1163/2019 (currently effective). This proclamation reserved the insurance sector only to Ethiopian national and of Ethiopian origin. The NBE also applies various directives that help to regulate and supervise the insurance sector.

The NBE introduced the "Licensing, license renewal and product approval for microinsurance providers directives SMIB/1/2015". This directive empowers existing insurance and new microinsurance institutions to offer microinsurance products. Existing insurance companies are required to establish a separate unit that exclusively serve this purpose. For new and exclusively established microinsurance companies, they are required to have at least ETB 7 million (US $136,000) and ETB 3 million (US $ 58,508) paid-up capitals for general and life insurance product respectively or ETB 10 million (US $ 195,000) for both products. The main category of microinsurance are life insurance and general insurance. The later includes weather index or livestock insurance products or any other product which shall be approved by the NBE. The directive allows microfinance insurers to offer all products, nevertheless, weather index products should be based on prior reinsurance treaty.

1.5.3 Financial sector

Financial access, which is highly dependent on the infrastructural distribution, is concentrated in urban areas in Ethiopia. Most bank branches (also including ATMs and access to other financial services) are concentrated in urban areas and cities, leaving rural and small towns underserved or unserved. Statistically, the distance from the closest financial institution is 1 km for an urban dweller, while it is 15 km for a rural dweller (figures can vary across regions) (Amha, Peck, Berhane, Aseffa, & Kidanu, 2013). As a result, there are significant disparities between urban and rural areas with financial inclusion remaining extremely low in rural areas. A resident of urban areas and cities has a higher probability of opening a bank account than a resident of rural areas (Amha, Peck, Berhane, Aseffa, & Kidanu, 2013). Regarding financial inclusion, women are disproportionately and negatively impacted by existing inequalities and gender roles are intensified. Women are still less likely to open bank accounts, and this disparity is even more prominent in rural areas.

Access to formal financial services for the rural poor is therefore severely limited. People in rural areas are benefiting increasingly from alternative financial services, thanks to microfinance institutions and saving and credit cooperatives (SACCO). The banking sector penetration in Ethiopia is higher compared to the insurance sector. Formal insurance is less favoured by the population in comparison to the informal modality.

1.5.4 Microfinance sector

Primarily, financial infrastructures are limited in Ethiopia. Branches of financial institutions, mobile network for digital finance, ATMs, and bank agents are rarely present in rural areas. In addition to this, access to quality and inclusive financial products is still limited in rural Ethiopia (National Bank of Ethiopia, 2017). Microfinance institutions have the largest outreach in rural areas of Ethiopia, with more than 40 microfinance institutions, licensed to operate by National Bank of Ethiopia (NBE). Most of the MFIs provide only credit and saving products to low-income clientele, who are mainly in the rural areas. MFIs lend mainly group loans, individual loans, and cooperative loans. Their major credit products include agricultural loans, micro-business loans, small enterprise loans, employee loans, package loans and housing loans. The savings products are designed to be mandatory. Every borrower is supposed to save a minimum 10 percent of the loan requested. Moreover, there are passbook saving, time deposit and loan insurance funds. In general, the MFIs are serving in the remittance market as agents of operational banks as part of their strategy to diversify their products.

1.5.5 Mobile penetration

Mobile connections in Ethiopia have risen to over 50 percent of the total population as of January 2022 (GSMA, digital report 2022). Major regional cities in Ethiopia have recently received access to 4G mobile data connection. Despite the expansion of mobile connectivity, penetration and use of digital finance is still low. Some of the barriers to access and use of digital finance include low literacy levels, especially among the rural populations, nascent regulatory environment and restrictions, insufficient coverage of agent network, limited capacity among potential service providers and lack of interoperability across banks and mobile money services.

There is growing evidence that higher mobile penetration in the African context contributed positively to the increase of the value added to agricultural products (Tadesse & Bahiigwa, 2015). Yet, in Ethiopia the access to telecommunication services is expanding, but not the access to digital money. There were only 2.3 registered mobile money accounts per 1,000 adults with only 3.29 registered mobile money agent outlets per 1,000 km2 in 2019. In the same year, the value of mobile money transactions was only 0.17 percent of GDP, which was a backsliding growth from preceding 3 years (IMF, 2022). Comparatively, there is an increase of telecom access, especially 3G networks, for large rural parts of Ethiopia, following expansion or rural electrifications (Adame, 2021). However, the mobile money users remain low in rural areas in comparison to urban.

II. Chapter Two: Findings

This section presents the findings in terms of what was observed and gathered from the data collection conducted in the Somali region. It further elaborates the existing channels for the delivery of agricultural and financial products and services including index insurance in the Somali region.

2.1 Distribution of financial products and services

The assessment established the existence of robust distribution channels in the microfinance and agricultural sectors. Two microfinance institutions were interviewed to gain an in-depth understanding of how their distribution channels operate. The Somali Micro Finance Institution (SMFI) and Rays Micro Finance were interviewed. The two MFIs have a wide coverage in the Somali region, both reaching at least 1 million clients over the last 5 years of operations. The main products/services provided by the institutions are loans, savings, mobile money, and financial literacy.

The institutions use the group guarantee mechanism, as a form of collateral. Village Savings and Loans Associations (VSLA) are the main entry point for the MFIs. The institutions also target productive groups or associations (e.g., fodder production associations, livestock feeding and fattening cooperatives), with Medium Small and Micro Enterprise (MSME) loans. Since some of the groups/cooperatives engage in informal (un-registered or undocumented) trade, the MFIs usually require them to be guaranteed by a proxy also known as a "patron", who in most cases could be a wealthier clan member, willing to provide an asset or any other agreeable form of collateral to allow for the group/cooperative to access the MSME loan.

Apart from MFIs, the assessment established the existence of non-Governmental Organization (NGO) led initiatives in provision of loan guarantee facilities. For instance, the International Medical Corps (IMC), which provides a loan guarantee facility to Rays micro-finance, to ensure access to loans for some VSLAs under the NGO's economic empowerment program. Most loan products are provided in kind, which ensures that the assets are put to the intended use, income is generated, and loans are repaid. Examples of the products provided through the loans include agricultural equipment, seeds, livestock feeds, among others. Loan operations are mainly managed at the Woreda[3] level, where loan officers are employed to undertake group mobilization, financial literacy trainings as well as appraisal and recommendation for loan issuance.

Both Rays and SMFI have subsidiary mobile money companies which sprung from the MFIs but have since spiralled out into fully fledged companies. The mobile money companies Sahay and Hello-cash are affiliated to Rays and SMFI respectively. The main mobile money services include cash deposits and withdrawals, customer registration, PIN reset, Complaints and Feedback Management, Utility payments (e.g., electricity, airtime, and water bills, etc.). Sahay and Hello-cash, both use an agency network approach in the distribution of their products and services. The main criteria for agent recruitment include, i) having a business license, ii) Identification number as well as iii) being in a strategic location.

There are two types of agents: company agents and independent agents. Company agents are essentially staff members who are maintained on a monthly salary, while independent agents are private business entities, appointed based on the criteria above to provide services on a commission basis. Most of the agents (over 90 percent) are independent. Hello-cash and Sahay provide their agents with digital platforms through which the mobile transactions are executed and monitored. The companies also train their agents, supervise, and brand their kiosks. Similarly, through these agency networks, the companies provide basic digital literacy trainings to pastoralists to help them understand how to use their mobile phones to access their financial products and services. There are also financial literacy trainings funded by NGOs i.e., ACT Alliance, that are currently being undertaken by Rays.

[3] Woreda: districts, third level of the administrative division of Ethiopia – after zones and the regional states

2.2 Agro-dealer distribution channels

Smallholder farmers and pastoralists in the Somali region have limited access and low use of agricultural and veterinary inputs. This is due to the huge logistics required to enable suppliers respond to their demand for these products. Meeting such requirements at an affordable price is beyond the capacity of key actors including the GoE, Unions and Cooperatives. In most cases, the government-cooperative system only manages to distribute few types of fertilizer and major seeds. To bridge this gap, business entities (agro-dealers), have emerged, especially in major towns, managing to provide access to a wider variety of inputs to the pastoralists and agro-pastoralists.

An example of an agro-dealer who was interviewed during the assessment is "**Mohamed Isaack, Agricultural Equipment, Seed Sales**" located in Dolo-Ado town. The agro-dealer is a medium scale agro-input supplier servicing around 4,000 pastoralists and agro-pastoralists (both refugees and host community) within a radius of approximately 200 kilometers, through two branches in Helowein and Dolo-Ado towns. The products and services provided by this agro-dealer are agro-inputs, such as seeds, pesticides, fertilizers, etc. The agro-dealer also improves local farmers' access to mechanization by offering tractor-for-hire services. The agro-dealer is registered and licensed by the agriculture offices at Woreda level.

The same agro-dealer is usually contracted by NGOs such as Norwegian Refugee Council (NRC), WFP, World Vision International (WVI) and Mercy Corps (MC) to supply agricultural inputs to participants of their different programs. For instance, in the case of Mercy Corps, the agro-dealer supplied sesame, maize, beans, and Sudan grass seeds to 245 farmers in 2020 using a voucher system. In 2021, the same agro-dealer distributed hermetic bags for post-harvest loss management to 4,000 households in 16 sites within the Somali region.

> Mercy Corps conducted mobilization and awareness creation campaigns with the participants and informed them that a 10 percent contribution was needed, towards the cost of the hermetic bags (total price of 6 bags was 50 Birr [approximately US $ 1]). Participating farmers received vouchers specifying their identification details, amount to be contributed and location. They were also informed of the date when the distributions would take place in their locations. The agro-dealer would then go around the target locations distributing the bags while collecting the cash contribution along with the vouchers. Once the exercise was complete, the agro-dealer would claim 90 percent of the payments from MC based on the number of vouchers collected. After the initial distribution, the demand for hermetic bags rose among the program beneficiaries as well as non-beneficiaries, resulting in increased sales for the agro-dealer.

2.3 Private veterinary pharmacies products and service delivery

Private Veterinary Pharmacies (PVPs) provide access to veterinary services among pastoralists in the Somali region. Through partnerships and collaborations with the Somali Regional Government and NGOs, PVPs conduct sales and distribution of veterinary drugs, vaccination drives, disease surveillance and reporting among others. According to the Mercy Corps' PRIME project's impact and results report (Craft, 2019), the increased use of veterinary vouchers helped maintain greater herd health thus reducing the risk of drought-induced diseases, by establishing a sustainable supply chain between PVPs, CAHWs and veterinary drug wholesalers.

One PVP was interviewed in Melkadida shopping centre in Bokolmayo woreda. The operator of the PVP was originally trained as a Community Animal Health Worker (CAHW). He was later supported by Mercy Corps to set up a veterinary drugs store (PVP), on a 50-50 capital financing grant from the NGO. PVPs are required to register and be licensed under the SRG Livestock Bureau. As a CAHW, the PVP operator is supervised by the

woreda and Zonal livestock bureau. As part of the SIIPE program, Mercy Corps and WFP have been conducting vaccination drives among pastoralists in the Somali region, using the redeemable voucher system.

Information collected during the assessment suggests that agro-dealers and PVPs have potential to become insurance distribution channels. They are also trusted actors within the agricultural and livestock value chain and can conduct promotion and sale of insurance (or premium collection) on a commission basis. For instance, agro-dealers not only play the important role of supplying inputs, but also act as the main purchasers of produce. (e.g.: fodder and seeds which is produced by the clients who purchase Sudan grass seeds). The agro-dealers also represent a great platform for bundling of livestock insurance with Agri-inputs as well as veterinary products and services. The case of hermetic bags provides evidence of that there is willingness to cost share among the target population, but awareness creation and mobilization are an important aspect to achieve this.

2.4 VSLAs, RUSACCOs, and cooperatives

Due to the limited access to formal financial institutions in the rural parts of Ethiopia, there is a higher dependency on non-formal financial organizations to access financial products and services. VSLAs/VESAs are informal, self-managing groups of people, who usually come together to support each other in their economic and social endeavours. VSLAs typically carry a membership of 15-25 people, who are mostly self-selected, peers or friends or neighbours willing to pool resources (finances) through savings and re-distributing amongst themselves as credit for the sake of asset building. VSLAs are low cost, simple to manage and an essential first step to reach a wider array and more formal financial services. They are also an important platform for skills development and financial literacy training. Apart from this, they act as vital entry points for women empowerment as well auxiliary programming (e.g.: economic empowerment, nutrition, sexual reproductive health among others).

While VSLAs are considered informal in Ethiopia, a combination of matured VSLAs (having been in operations for 2-3 years) can join up to form a Rural Saving and Credit Cooperative (RUSACCO). RUSACCOs emerge when VSLAs grow their savings and experience increased demand for internal borrowing, raising the need for more funds. RUSACCOs are recognized by law and are licensed/registered under the ministry of cooperatives. RUSACCOs maintain larger membership, as they are constituted by members of various groups. They also maintain higher financial flow since savings collected from the member VSLAs are sent to a central account owned by the RUSACCO and co-signed by representatives of member VSLAs. RUSACCOs have access to formal financial institutions including cooperatives and banks, where they maintain accounts and can access higher loans.

The assessment recognized a strong savings and borrowing culture among pastoral communities in the Somali and Oromia regions, through organized groups such as VESA/VSLAs. Most of the savings group members are women, as figures reported by both SMFI, and Rays indicated over 80 percent female membership in the VSLAs. While savings are done at group level, borrowing is at individual level, whether the source of credit is the group itself or a micro-finance institution. The groups have a clear leadership structure, consisting of the chairperson, vice-chair, secretary, and treasurer. The group maintains a savings book, safe box, where member contributions as well as savings are recorded and kept. The savings are categorized into normal savings and a social fund. There is no interest charged on loans as all the financial products are sharia compliant. Once the member contributions have been collected, a portion of it is shared among the members as loans, part of it goes towards repayment of loans acquired from MFIs (e.g., SMFI), while a portion of the contribution is used to pay for membership to the RUSACCO. In case a member suffers an individual shock (e.g., illness, or death of a close family member), then the social fund can be drawn upon to support them. Group members engage in income generation activities together but also as individuals. Livelihood diversification activities such as small enterprises; like groceries, milk shops, livestock fattening vegetable gardening are examples of income generation activities that group members engage in.

2.5 Islamic Sharia compliance

Takaful products are risk management products that are compliant with Sharia principles. Instead of paying premiums as for traditional insurance, participants contribute money into a pool system to protect each other against loss or damage (Merry, 2021). Sharia does not forbid the management of potential risks inherent in the day-to-day life in general and in the business world. However, risk management should be within the boundaries of the Islamic religious teachings. Accordingly, the operation of conventional insurance is not sharia compliant mainly due to the involvement of Gharar (contractual uncertainty) and Riba (interest).

The provision of Interest Free Banking (IFB) service is a recent phenomenon in the banking history of Ethiopia. Following the stipulation indicated on the banking proclamation of 2008 the National Bank of Ethiopia (NBE) has issued a directive in September 2011 allowing the provision of interest free banking services through dedicated windows in branches of conventional banks. Since then, the banks operating in the country have been taking some steps to introduce the service for the target market (NBE,2011). Based on the information collected from the FGDs and KIIs, Sharia compliance is a key consideration when developing any financial products or services. Examples cited from KIIs with financial institutions like Rays and SMFI as well as Shebelle Bank and Awash bank, all pointed towards the need of developing a Sharia compliant livestock. This was also cited by the respondent in the FGDs.

2.6 Livestock marketing

According to (ILRI,2020) (World Bank, 2017) the livestock sector in Ethiopia contributes to an estimated 12 percent of the total and 33 percent of the agricultural sector-related Gross Domestic Product (GDP) and provides livelihoods for 65 percent of the population with roughly 12 to 15 percent of the total attributed to export earnings. However, in recent years, the official export numbers have been declining while illegal export has been increasing. Increasing stringent health and quality control regulation in the Middle East has been identified by exporters as the main cause of the decline in demand. To address this barrier, the HOA DRIVE programme under component two will focus on trade facilitation which will only be possible with the enhancement of basis export requirements that will lead to an increase in official exports.

2.7 Awareness of livestock insurance

Index insurance is still a new concept in Ethiopia. Access to and understanding of insurance is even much lower, in the pastoral zones of Oromia and Somali. Awareness on micro insurance and especially agricultural insurance penetration is extremely low among smallholder farmers/pastoralists. There is limited focus on awareness raising within the government extension services, mainly due to low understanding of the concept amongst government officials. The few organizations that implement index insurance programs in the country are also budget constrained and are not capable of extending comprehensive awareness creation initiatives within their target areas. Findings from the scoping exercise indicate that most of the community members have never heard of livestock insurance. There are however a few community members who have heard about it before – from SIIPE in the Somali region or from the ILRI project in Oromia. Even among these, there is a low level of understanding of how index insurance works.

2.8 Willingness and ability to pay for insurance

Despite some positive success due to the concerted efforts, continued adoption of index-based livestock insurance by pastoralists and agro-pastoralists has been limited. Findings from the assessment revealed the need to have a productive value chain which will support the development of a viable link to a productive asset, allowing for increased capacity to pay for insurance.

III.Chapter Three: Proposed distribution channels

3.1 VSLA Model

To reach the intended DRIVE beneficiaries appropriately, VSLAs are considered a formidable entry point in the implementation of **component one** of the DRIVE project. As established in the findings of the assessment, there are already existing group-based models, i.e., VSLAs, Cooperatives, RuSACCOs, through which savings, insurance, credit, and financial literacy can be delivered. Through these groups, community members are already practicing saving and borrowing amongst themselves as a means of building their resilience against household and climate shocks. The groups also act as collateral, thus enabling them to access in-kind loans from the MFIs. Loan repayments are easier to collect, as they are deposited along with the members' savings every time the groups meet. Group members also receive financial literacy trainings and are usually linked to financial institutions by opening accounts with them.

The DRIVE project proposes to avail performance-based saving bonuses to group members as a means of incentivizing them to save more. This will be made possible by encouraging individual pastoralists to open accounts with formal financial institutions, as a pre-requisite to being an insurance client. Additionally, WFP proposes to link savings to insurance triggers, as a risk layering mechanism customized to provide payouts for drought instances that are considered bad but not severe enough to trigger insurance payouts. Finally, group members shall accumulate their premium contributions through "savings for insurance" approach, with insurance premiums being part of the savings collected every time the group members meet. When the insurance registration window opens, the premium contribution will be withdrawn and remitted to the insurance company which shall then match these to the ZEP-RE premium subsidy amount.

Like other financial products/services, that are currently delivered by MFIs to the VSLA members, the index-based livestock insurance product shall leverage on the already existing channels for last mile delivery. WFP proposes to work in collaboration with local financial institutions, which will act as the delivery channels for the insurance products. WFP already has an existing working relationship with SMFI which supports the SIIPE project. In order to diversify and reach a wider scale, other MFIs, e.g., RAYS micro-finance shall be identified to support the distribution. We propose that MFIs be identified and selected based on a specific criterion, after which they can be trained and provided with technical and operational support to conduct last mile delivery role. The MFI is assigned with the responsibility of training their staff, creating awareness, and collecting premiums from the households enrolled under SIIPE and delivering pay outs when they are triggered.

WFP is already working with the SMFI as an implementing partner under SIIPE. SMFI supports with opening of bank and mobile accounts for SIIPE beneficiaries as well as disbursement of pay outs. WFP, however, proposes to increase the responsibility of the MFIs to include training on insurance targeting the group members. The training on insurance, shall be conducted by the MFIs as part of their financial literacy trainings, which they are already doing now, as part of their promotion of loans and savings products. Once trained on insurance, the group members will start saving for their premium contributions, so that, by the time the registration window is due, the amount will simply be deducted from their savings accounts and directed to the insurance company to make up for the remainder of the DRIVE premium subsidy.

The MFIs, especially Rays and SMFI, have mobile money agents, across the Somali region, where their groups usually deposit their savings to reflect in their bank accounts. It should be noted that while savings are collected at the group level, account holdings are on an individual basis, meaning that insurance premium deductions shall be deducted based on records submitted at the group level. In a similar fashion saving-bonuses proposed under DRIVE project, shall be earned on individual basis as members' saving capacity varies. What will be accessible on a group basis however is the loans, as the group guarantee approach is still needed.

The main responsibility of WFP along with NGO partners shall be to support with formation of the productive groups, support establishment of the group structures including the leadership and the constitutions as well as facilitate trainings and awareness creation on the concept of insurance, savings, access to credit and livelihood diversification.

The diagram below illustrates the VSLA based distribution model. It elaborates the flow of premium contributions from the group level to the re-insurer, and a back flow of pay outs (when triggered), on the same channel. It also shows the implementation structure of the DRIVE project and where each institution is positioned to ensure smooth implementation.

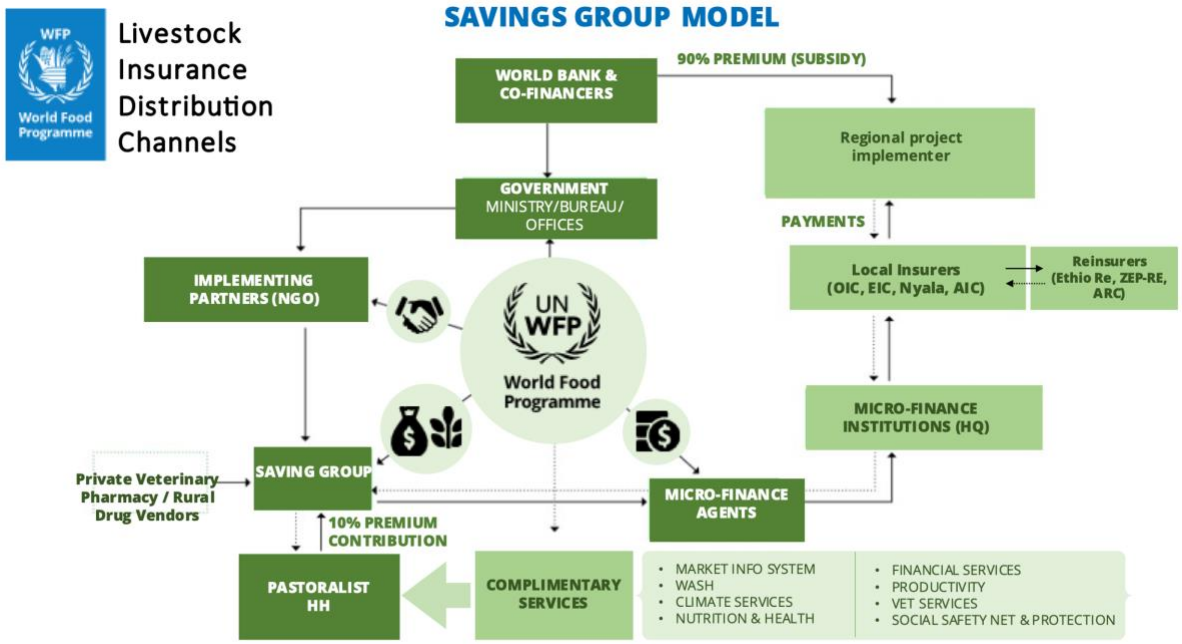


Figure 1: Savings Group Model
Source: Authors' own elaboration

3.2 The agro-dealer model

The agro-dealer is like the VSLA model in all aspects, only that it places the agro-dealer as the main contact point with the pastoralists, and not the groups. We assume that not all the productive pastoralists can be accessed through the VSLA model, especially during the inception days of the project. As an alternative, we propose the use of voucher system, where the MFIs will identify and appoint agro-dealers within the locality of the target communities to act as IBLI agents, on a commission basis, based on sales.

The agro-dealers will be trained and issued with unique insurance vouchers which they can distribute to their clients (who are predominantly pastoralists/agro-pastoralists). The agro-dealer will also be provided with awareness creation and promotional material, which he/she will use to raise awareness, before issuing the voucher. Along with the voucher, the agro-dealer is expected to provide clear instructions to the clients on how the voucher can be redeemed, so that the owner can access the 90% premium subsidy and the subsequent insurance policy.

In this case, the voucher is redeemed when it is presented along with the cash contribution (e.g., 10% of the premium cost) to the mobile money agent that belongs to either of the participating MFIs (e.g., Rays or SMFI). The mobile money agent will receive the voucher together with the money and issue a receipt to the pastoralist. The agent will also register the client using the insurance registration platform provided by the

MFI or Insurance company. The client's details will be uploaded and stored as well as the voucher number. The client will receive registration confirmation on his phone together with his/her auto-generated policy number. This information and the premium contribution will be stored until the insurance window begins.

As an incentive, the agro-dealer will earn a commission based on the value of vouchers redeemed. At the same time, the mobile money agent will receive a service fee through the parent MFI. When pay outs are triggered, the registered pastoralist will receive the money directly through their mobile phones.

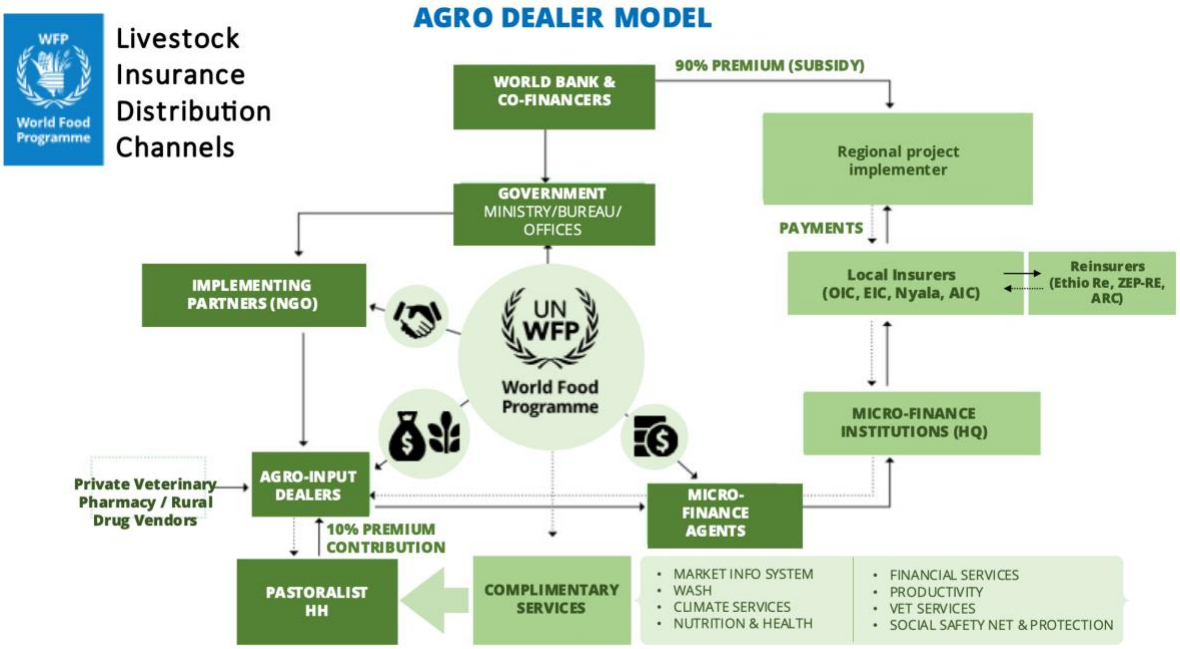
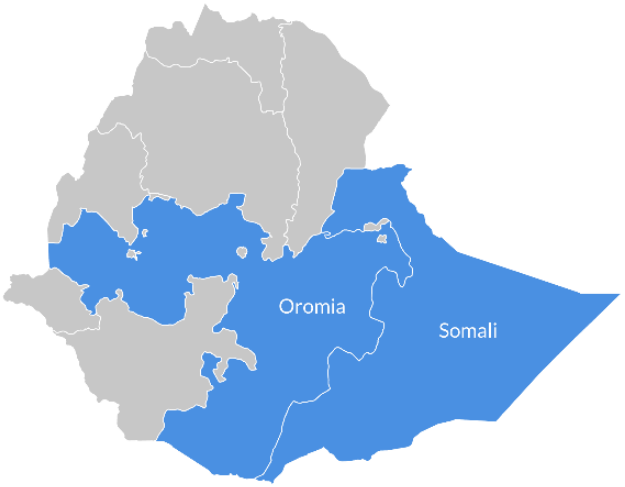


Figure 2:Agro-dealer model
Source: Authors' own elaboration

IV. Chapter Four: Beneficiary targeting and premium financing

4.1 Geographical location

Based on their vulnerability to drought shocks, and the existing infrastructure, two regions of Ethiopia, Oromia and Somali, are proposed for the implementation of livestock insurance under the DRIVE project.



The Somali Regional State occupies the East and South-eastern part of Ethiopia. It is approximately 350,000 square kilometers, and the second largest region in Ethiopia in terms of land mass after the Oromia region. Administratively, the region is divided into 11 zones containing 93 woredas (districts), six town administrations and 1,224 kebeles. In terms of population, the region is home to about 6 million people, representing approximately 6 percent of the Ethiopian population. Majority of the population is Muslim. The region hosts 260,000 refugees and more than a million Internally Displaced Persons (IDPs), which puts additional pressure on natural and financial resources and government capacity to provide essential services.

Oromia region occupies 34 percent of the Ethiopian land mass, at 359,690 square kilometers. In terms of population, Oromia is home to 37 percent of the country's population, or approximately 37 million people. The region is divided into 20 administrative zones, 30 town administrations, 287 rural and 46 town woredas (districts). Most of the rural Oromo, 80 percent of Oromo's population, retain Animist Oromo beliefs, while the rest of the Oromo population are either Muslim or Christians.

Nomadic pastoralism is the main source of livelihood, for rural communities in both the Somali and Oromia regions. However, the Somali region also has agropastoralism and farming by sedentary riverine occupants.

4.2 Target groups differentiation

Most communities in the Somali and Oromia regions depend on pastoralism and agropastoralism. Host communities live of subsistence farming and their own livestock. For most refugees and host community members, the economy is based mainly on two inter-related elements: humanitarian aid and the cross-border economy with easy access to Kenya and Somali markets.

In terms of proportions, an estimated 30 percent of the population in the Somali region are pure pastoralists while 50 percent are agro-pastoralists, remainder engages mainly in non-agricultural small-scale trade. On the other hand, Oromia region is abundant in livestock more than any other region of Ethiopia, with close to 65% of the population being pastoralists, while 20% engage in agricultural production, mainly coffee. The remainder is involved in non-agricultural trade.

It was noted from the FGDs and KIIs that camel ownership is considered a status symbol, mainly associated with households that are better off. Cattle and shoat ownership is mainly linked with average families while below average households might own a few sheep and goats. Extremely poor households have less than 10 goats or some cases no livestock at all.

Table 2 below specifies the different groups of the pastoralist population in the target regions: Productive food secure households (Better off), Transitory households (middle), Vulnerable & non-labour constrained (Poor), and chronically vulnerable, labour-constrained (poorest of the poor/destitute).

Group	Definition in wealth group in Pastoralist
Productive Food secure Households (Better off)	• Specialist in livestock-keeping larger herds of camels and cattle • Petty trade and animal fatting
Transitory households (Middle)	• Focus on livestock-keeping smaller herds of cattle and camels and also largely agro-pastoralists in additional to engage in irrigated agricultural along the riverbanks • Sales of small grain • Petty trade and animal fatting
Vulnerable & Non labour Constrained (Poor)	• Livestock keeping but focusing on small stock (goats and sheep). • Engage in farming, mainly irrigated • Sometime the engage cash, including casual labour, selling charcoal and fuelwood, and petty trade.
Chronically Vulnerable labour (Poorest of the poor/destitute)	• The poorest of the poor, the 'destitute', have few physical or financial assets. Depend on assistance provided by the government and NGOs. • Livestock keeping and the cultivation of small irrigation plots is at a very small scale

Figure 3: Beneficiary socio-economic categorisation
Source: Authors' own elaboration

4.3 DRIVE component one beneficiaries

The target beneficiaries under the HoA DRIVE project have been defined as pastoralists groups that are constituted around economic activities within the livestock value chain. In the context of the Somali and Oromia regions, productive pastoralists/agro-pastoralists shall be targeted from the categories described below.

i. **Vulnerable and non-labour constrained households**
Currently, WFP's SIIPE program targets the vulnerable and non-labour constrained households, with livestock insurance along with livelihood diversification, financial literacy, and veterinary support. SIIPE beneficiaries are considered vulnerable as they own just a little more than 5 TLUs and have very few or no alternative sources of income, thus justifying their enrolment to the GoE's PSNP program. The situation of this category of households can be worsened at the occurrence of the slightest shock. Their limited asset ownership, and low access to insurance and savings, leaves them with limited options to cope with climate shocks other than adopting negative coping mechanisms, which can push them further into poverty. It is envisioned that a combination of insurance along

with the other interventions, could enhance this category's resilience to climate shocks and help them shift upwards to the transitory category.

ii. **Transitory households**

These households can be defined as those that are just emerging out of poverty. They might own livestock assets that are slightly above the poor and vulnerable households (5 TLU and above). Transitory households could also be engaged in small scale livestock production (e.g., meat and milk or periodic sale of live animals). Apart from this, they might also be engaged in some livelihood activities to supplement their livestock production. These might be along the livestock value chain or farming or even petty trade. Transitory households remain at risk of falling back to poverty if there happens to be extended shock, even if it is not considered severe. Without access to savings, credit and financial literacy, this category might be incapable of coping with most of the shocks they face, or even spurring their productive or business activities into meaningful income. This means, in case of shocks, that they may have to revert to negative coping mechanisms, which might include selling the few assets they own to sustain themselves, with no clear promise of recovery.

iii. **Food secure households**

These engage in livestock production at a higher scale. They keep more of the large stock (i.e., camels and cattle) to produce meat and milk for sale, as well as selling live animals. They not only own a higher number of livestock assets, but also produce enough for their household consumption and remain with surplus which can be sold. Such households might also be engaged in the livestock value chain as medium/large scale producers. While they can effectively absorb climate shocks, these households are also at risk of suffering higher losses, if their big herds die in case of a catastrophe. Participation in meaningful markets is an important aspect for this category.

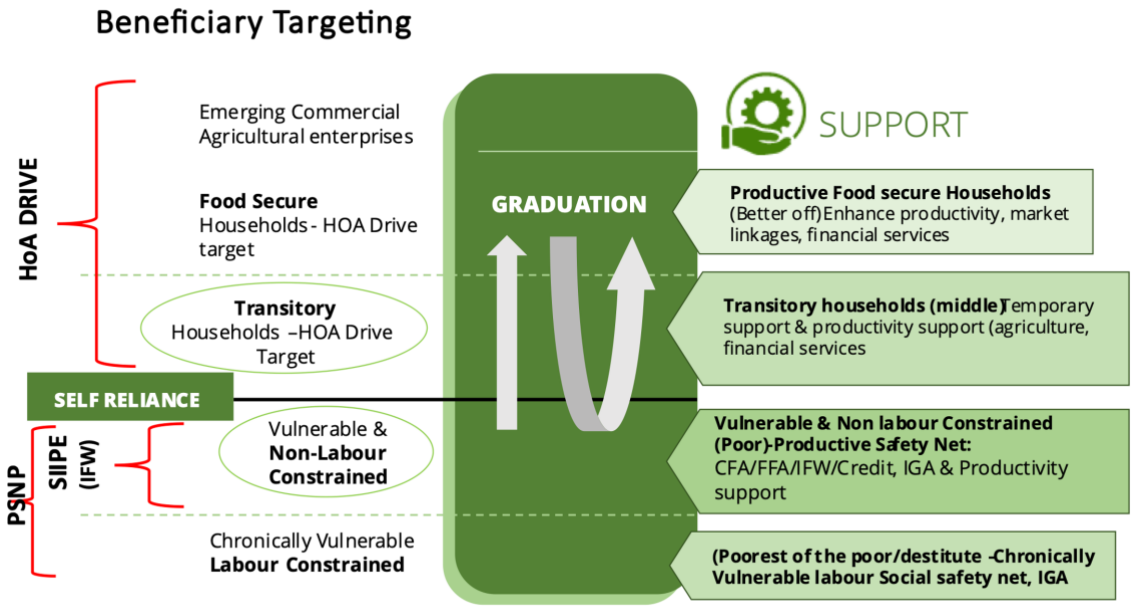


Figure 4: Beneficiary targeting
Source: Authors' own elaboration

4.4 Premium financing and subsidy levels

Information collected from the KIIs and FGDs indicated willingness to pay for livestock insurance for as long as awareness creation is conducted to generate informed demand among the target population. Further studies on the households' socio-economic status are required to inform on the farmer's willingness and ability to pay for insurance.

Secondly, the respondents highlighted Sharia compliance as a key issue, determining pastoralists willingness to pay for insurance. While Sharia compliance was not a big issue in the Oromia region, it was mentioned as a "deal breaker" in the Somali region, where most financial products in the market are Sharia compliant. Stakeholder furthermore emphasised the role of the DRIVE project as an important private sector driven initiative, which should incorporate self-contribution by beneficiaries from the onset to ensure sustainability.

Minimum premium contribution proposed by pastoralist stakeholders at project inception was 10 percent of the premium costs. Further recommendations from key stakeholders should be sought before settling on the final contribution. Along with this, livelihood support for income generation is a key determinant for gradual increments to the premium contribution. Otherwise, most pastoralists will not prioritize premium payments when faced with liquidity constraints or climate shocks. When presented with the idea of **"savings for premium"**, most respondents were agreeable to the suggestion to contribute small amounts of money over time (say 6-9 months) towards their premium contribution. This approach shall be reinforced/complimented by DRIVE's proposal to offer **"Saving bonuses"** to beneficiaries, based on the amount they save through their accounts. Group/Individual savings shall also be linked to a trigger mechanism that covers severe but non-catastrophic drought shocks. The savings could be drawn to cushion pastoralists where insurance trigger points haven't been reached, but the drought situation is deteriorating.

The table below illustrated WFP's proposed premium financing and subsidy levels under DRIVE.

The diagram below represents a sample breakdown of WFP DRIVE premium requests from ZEP-RE, matched against the premium contribution from the DRIVE beneficiaries. It assumes the premium contribution by the beneficiaries shall begin at 10%, then increase by 15% for the five years, meaning beneficiaries shall be transitioned to full premium payment at 65 percent premium subsidy.

Year	2023	2024	2025	2026	2027
Pastoralist contribution in USD	10%	25%	40%	55%	65%
ZEP-RE Subsidy (percentage)	90%	75%	60%	45%	35%
Premium Value (based on SIIPE) in USD	74	74	74	74	74
Number of target clients (HHs)	15,000	30,000	60,000	60,000	60,000
	2023	2024	2025	2026	2027
Client contribution (percentage)	10%	25%	40%	55%	65%

Premium contribution by client in (USD)	7.4	18.5	29.6	40.7	48.1	
ZEP-RE subsidy contribution (USD)	66.6	55.5	44.4	33.3	25.9	**TOTAL PREMIUMS**
Total of Premium Value from ZEP-RE (USD)	999,000	1,665,000	2,664,000	1,998,000	1,554,000	8,880,000
Total client contribution (USD)	111,000	555,000	1,776,000	2,442,000	2,886,000	7,770,000
Total of Premium (USD)	**1,110,000**	**2,220,000**	**4,440,000**	**4,440,000**	**4,440,000**	**16,650,000**

Table 2: Sample calculation of annual insurance premium subsidies
Source: Authors' own elaboration

4.5 SIIPE/DRIVE graduation pathway

DRIVE aims to complement ongoing social protection/insurance programs in Ethiopia, by providing an exit pathway for the graduation of beneficiaries from PSNP or SIIPE into a commercially driven livestock insurance under DRIVE. Currently, SIIPE beneficiaries who are targeted through PSNP, receive full premium support from WFP. It is envisioned that with their exposure to livestock insurance over the years, SIIPE beneficiaries would transition much more easily into premium contribution under the DRIVE project.

While DRIVE project's focus is mainly on the productive groups, which is represented by the transitory households in the figure 7 above, it is expected that beneficiaries who will be graduating from SIIPE shall be transitioned to DRIVE, where they can co-contribute towards the insurance premium as well as benefit from the saving bonus, access to credit and financial literacy trainings. Currently, DRIVE beneficiaries are linked to MFIs as they are required to open bank accounts upon registration, to enable the disbursement of payouts. However, beyond this, there is need for enhanced financial inclusion which includes access to credit, saving bonuses, financial literacy, and market linkages.

The figure below, illustrates the relationship between PSNP-SIIPE and the DRIVE project.

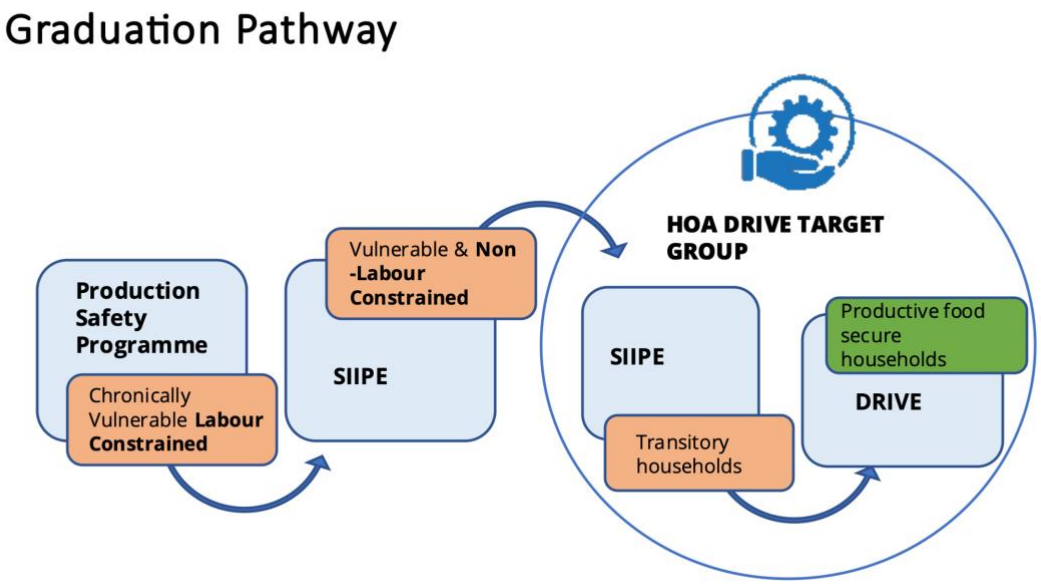


Figure 5: Graduation pathway
Source: Authors' own elaboration

4.6 Awareness creation and financial education approach

The scoping study identified the following issues as some of the important factors to determine the development of an awareness creation strategy under the DRIVE project:

i. Pastoralist communities in the targeted areas still rely strongly on word of mouth as a means of communication.
ii. Agricultural / livestock insurance has not yet been institutionalised at national or regional levels.
iii. Thus far, communication and outreach by the private sector to raise beneficiary awareness on livestock index insurance has been very limited.

A comprehensive capacity development and policy advocacy strategy targeting the beneficiaries, key implementing partners and policy actors is required as part of DRIVE, to ensure availability of informed demand for livestock insurance.

The overall goal of this strategy is to enhance sustainability of index insurance in Ethiopia through creation of informed demand among the target beneficiaries, enhancing technical know-how among the implementing partners and advocacy for policy frameworks to mainstream insurance at regional and federal government levels.

The diagram below illustrates the key pillars of the awareness creation strategy.

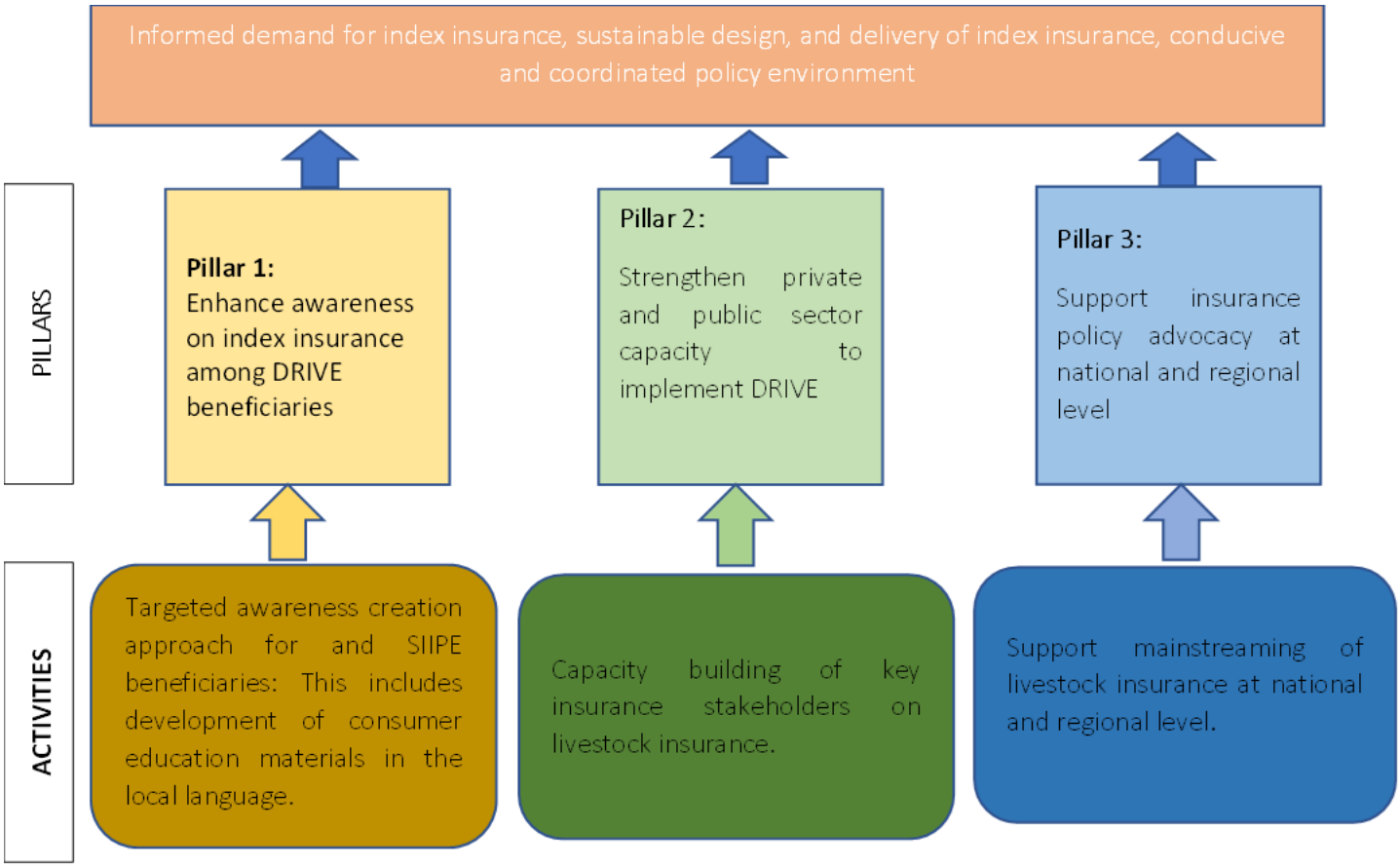


Figure 6: R4 and SIIPE capacity strengthening and awareness creation approach
Source: Authors' own elaboration

V. Chapter Five: SIIPE product design

The section below describes the current Satellite Index Insurance for Pastoralists in Ethiopia (SIIPE) product, as currently implemented by WFP.

The SIIPE product is a parametric coverage based on NDVI, designed to protect small producers against pasture shortfall due to drought in Somali Region. Figure 6 shows, in green, the geographical scope of SIIPE, which includes 28 woredas[4].

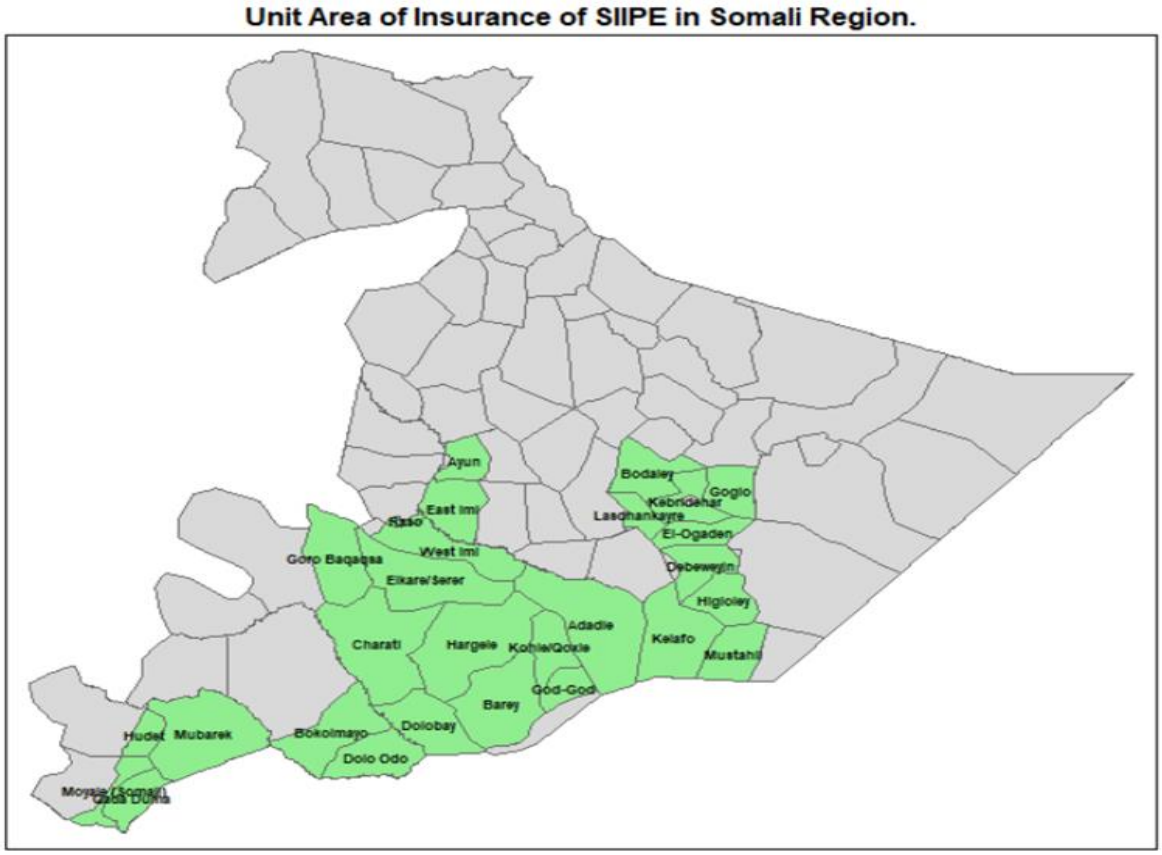


Figure 7: Unit area of insurance of SIIPE in Somali region
Source: Authors' own elaboration

SIIPE covers two seasons, namely: (1) **Gu season**, from March to June and (2) **Deyr season,** from October to December. Annual Sum Insured per woreda is divided evenly in the seasons. Potential early payouts could be activated in each season, in April and October, of up to 10% of the Limit per woreda, respectively. End-of-season payouts would be calculated from cumulative NDVI values reported in June (Gu season) and December (Deyr season) and could amount up to 50% of Annual Sum Insured per woreda (40% allocated to end-of-season plus unused sum insured allocated for potential early payouts).

[4] Woreda is the administrative unit used for SIIPE, and the shape of this division was provided by Ethiopia CO of the WFP.

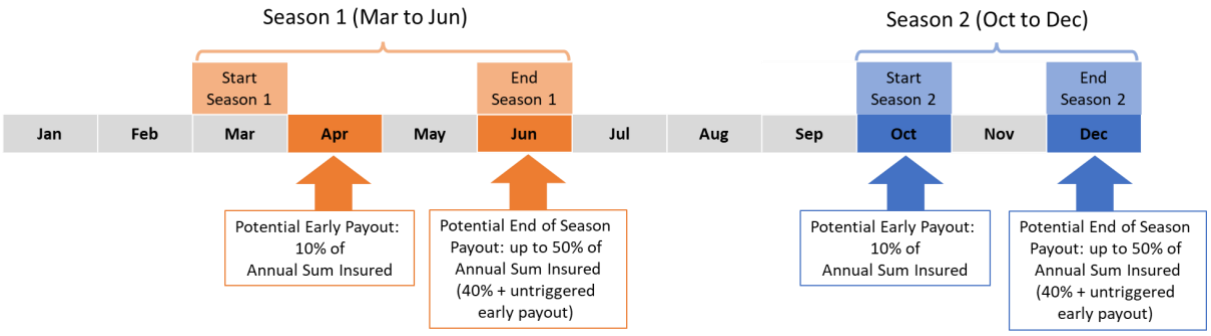


Figure 8: Temporal coverage per Woreda
Source: Authors' own elaboration

The Total Sum Insured would be ETB 700 million assuming that SIIPE reaches 50,000 households (HHs) distributed evenly among the 28 woredas (i.e., roughly 1,786 HHs per woreda). It is assumed that 5 Tropical Livestock Units (TLU) would be insured per HH, and that the monthly insured value per TLU is ETB 400 to keep animals alive. Given that seven months are covered (four in the first season and three in the second season), the Annual Sum Insured per HH is 14,000 Ethiopian Birr (or ETB 2,800 per TLU). The underlying index of SIIPE, Z, is calculated as a standardized cumulative NDVI. Monthly NDVI data at woreda level (i.e., average of all pixels in each woreda)[5] are provided by WFP-VAM Unit, based on data from MODIS-Aqua sensor, since July 2002 up to date. These values are then accumulated from the start to the end of each season on a monthly basis (see Figure 7). Finally, for each month during the growing season, the Average and the Standard Deviation of the cumulative NDVI are calculated and used to standardize the observations in the sample: Z(m,y)=[CumNDVI(m,y)-AverageCumNDVI(m)]/StdDevCumNDVI(m).

The payouts are calculated from a linear payout function, with a minimum payout in case the index reaches the attachment point (see Figure 8)[6]. For each woreda and for each month with potential payouts, attachment points (AP) and exhaustion point (EP) are calculated as percentiles of the historical observations of the index Z. Currently, AP is calculated as the 14th percentile (i.e., 1-in-7) and EP is the 5th percentile (i.e., 1-in-20). If the actual observed index Z in one of the woredas and in one of the months with potential payouts is at or below AP, then a payout is triggered for all HHs beneficiaries in that UAI, with a minimum of 10% of the annual sum insured. If the index is below EP, the maximum sum insured is paid out (i.e., 100% of the seasonal sum insured, or 50% of the annual sum insured). The rating is based on a historical burning cost analysis, which calculate the risk premium of SIIPE as the simple average of the "as if" payouts in the historical sample, since July-2002 up to December-2021. The index Z is calculated in all months with potential payouts in the sample, and then compared with the AP and EP to calculate "as if" payouts in each woreda. Then, the pure premium is the simple average of these payouts.

The risk premium of SIIPE for 50,000 HHs evenly distributed in the 28 woredas considered is around 9.52% or ETB 66.6 million[7]. This is the estimative pure cost value for the program at portfolio-level, but the per-woreda pure premium vary widely from 7.69% in Qada Duma to 11.61% in Bodaley.

[5] Only NDVI monthly values during the seasons are used for the design, and no-growth-periods (normally dry) are not used at all.
[6] See Figure 2: April and June are month with potential payouts during Gu season, while October and December could trigger payments during Dry season.
[7] This is the baseline for calculating the actual cost of the program, which would include loadings from the (re)insurers that take the risk.

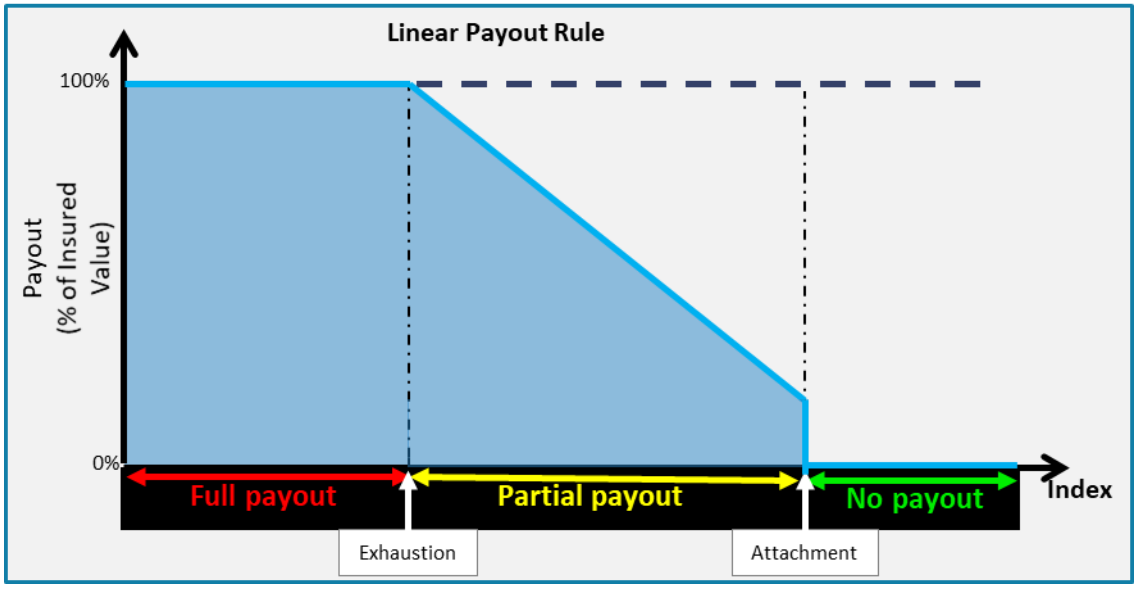


Figure 9: Payout rule per season
Source: WFP

VI. Chapter Six: ZEP-RE support to DRIVE implementation

This section describes the type and level of support expected from ZEP-RE, with regards to project implementation and technical assistance. While premium financing has been earmarked under the HoA DRIVE project, further consideration needs to be made regarding how the project will be operationalized and run effectively. DRIVE implementation approach will be a shift from what SIIPE currently is, that is a fully subsidized livestock insurance programme. In the case of SIIPE, WFP oversees program implementation and funds all the activities including end-to-end cost of product delivery, trainings and awareness creation costs, materials and equipment, and personnel costs, among others.

Under the HoA DRIVE project, it is envisioned that private sector partners will perform their roles in a commercial approach, meaning their operations and profit margins shall be covered under the premium costs. The premium cost therefore should include commissions and service charges to be paid to MFIs and their affiliate mobile money agents who are responsible for the delivery of the insurance product.

Since WFP will be the implementing partner, the organization is expected to coordinate the initial set up of the project and ensure proper implementation as per the project goals. As such, WFP shall be responsible the following:

i. Insurance and Re-Insurance Services:

In the case of SIIPE, WFP works with a pool of four local insurance companies through a Long-Term Agreement, that defines the terms of engagement with the insurers. Based on this example we propose to continue working with the current co-insurance pool structure in the first year of the DRIVE project, as we explore modalities for competitive bidding process in the subsequent years. Through a consultative process with ZEP-RE and the pool members, WFP shall review and restructure the LTA to include clauses that will accelerate the strengthening of the insurance companies' capacity and engage in a competitive bidding process in the following year.

We propose that ZEP-RE provides technical and financial support for training and capacity development of the co-insurance pool members, over the first year of the project on issues around livestock product design and actuarial pricing, re-insurance, digitization, marketing, and distribution. At the end of the first year, WFP will request for competitive bidding from insurance service providers interested in participating in the project. The insurance companies shall be encouraged to identify, pursue, and form collaborations with other insurance partners or service providers, whom they deem relevant in boosting their chances of being awarded this contract.

ii. Product design:

WFP proposes to continue using the current SIIPE product in the initial year of the DRIVE project. This is in a bid to avoid an abrupt change in the type of product offered, since some of the clients proposed in the first year would be transitioned from SIIPE. Secondly, adopting the current SIIPE product will allow, for further examination and iterations by WFP, ZEP-RE and other stakeholders to improve on the product design and refine it before introducing it from the second year onwards. Currently, WFP employs the services of GIS and Remote sensing/Actuarial consultants in the design of SIIPE product. We propose to pass the cost of these consultants to ZEP-RE within year 1 of the project. We also propose joint appraisal and approval of the proposed products before rolling out.

iii. Calculating agent services & data repository

Currently, WFP coordinates a collaborative working arrangement between the National Meteorological Agency (NMA) and the WFP's VAM unit to undertake the calculating agent services. WFP VAM unit conducts seasonal monitoring and avails NDVI data to the NMA. NMA is the SIIPE

calculating agent and is therefore tasked with provision of the seasonal index results. NMA is also responsible for payout declaration by way of writing to the insurance companies, copying WFP. Through this arrangement, WFP supported NMA's capacity building to undertake this role through training and practical skills transfer, as well as purchase of the necessary equipment and software.

To transition from the WFP VAM unit data provision role, ZEP-RE should consider setting up an NDVI data repository for all the target regions in Ethiopia. This will allow for affordable access to data by the stakeholders and possible generation of innovative insurance products. It will also ensure timely and efficient calculation of the seasonal index.

iv. Digital portfolio management platform

Insurance portfolio management which includes collection of client data, is a critical part of the project. Efficient and cost-effective data collection and management can impact positively on the timeliness and efficiency of client registration, premium collection, communication and pay out disbursement. As per the proposed distribution models i.e., VSLA model and the Agro-dealer model, it is pertinent that there be established a digital platform that allows for effective and efficient data collection and management. The platform should enable seamless communication between the registration application availed to the agents and the MFIs plus the insurance companies. WFP should also have access to the platform to monitor and compile data for purposes of budgeting and project coordination.

It is therefore proposed that ZEP-RE avails a digital platform that can perform the functions above, while at the same time enhancing business development i.e., automated premium summation, policy tracking/monitoring automation, claims notification automation, claims payment automation. ZEP-RE can partner with WFP to support on the delivery of this component.

v. Project implementation costs

Based on the proposed implementation structure, WFP shall be at the centre of the project implementation and coordination. WFP shall be responsible for the linkage and interoperability of component 1 and 2 of DRIVE project. WFP's coordination role shall involve identification of NGO and Government partners to support complimentary activities around the delivery of the livestock insurance component. These activities shall be assigned to NGO and government partners as follows:

- Regional government bureaus (Livestock and Agriculture) role: Community sensitization and awareness creation through government extension services. WFP and NGO partners shall sign a tripartite MoU with the regional government to mainstream these functions within their service delivery charter.

- NGO roles: group formation and training, selection and training of village agents, identification and selection of agro-dealers, training groups on insurance, savings and livelihood diversification, distribution of vouchers etc..

- WFP shall require additional staffing and equipment to support the project implementation.

For these reasons, a budget to cater for staffing, travel, equipment, and supplies, should be developed and mechanisms of financing it explored jointly between WFP and ZEP-RE.

VII. Chapter Seven: Partnership structure

The table shows proposed partnership structures between the various institutions involved in the delivery of the insurance component under DRIVE project. This project is expected to be a multi-partner, multi-level project, and therefore, partnership management and engagement is defined based on the expected role of each partner as per the table below.

Function	Proposed	Relationship management
Insurance service providers	SIIPE co-insurance pool (during the 1st year).	• It is proposed that in the first year of implementation, WFP continues to work with the co-insurance pool through the existing Long-Term Agreements (LTAs), as per SIIPE model.
Re-insurance	Re-insurer Ethiopia Re (along with preferred international Re-Insurers)	• ZEP-RE shall support co-insurance pool in brokerage and placement of risk with the local and international Re-Insurers.
Delivery Channels	Delivery of insurance through the two proposed models shall require coordination of the public sector, private sector, and NGO actors.	• The co-insurance pool shall identify and sign MoUs with MFIs e.g., SMFI and RAYs to undertake insurance distribution (sales, premium collection and pay out distribution). This will be compensated on commission basis. • MFIs, MNOs, Banks, and other financial institutions shall be identified jointly by WFP and ZEP-RE to support the delivery of other financial services e.g., savings for insurance, saving bonuses, credit, digital finance among other.
Regulatory and strategic oversight	Capacity strengthening is required to ensure the Ethiopian insurance sector develops. While the private sector requires technical and operational capacity strengthening, the regulatory bodies e.g., NBE and Ministries of Agriculture and Livestock require Technical Assistance in Policy, Regulatory and Sharia compliance areas.	WFP shall sign a tripartite agreement with ZEP-RE and NBE for provision of TA support in the areas of Policy, Regulatory and Sharia compliance. ZEP-RE can offer its expertise in all the above areas, while WFP can support in coordination and TA implementation.

Technical Expertise	Technical design and monitoring of index-insurance shall be led by ZEP-RE in consultation with WFP VAM.	WFP shall procure the consultants for index design and payment for the services to be funded by ZEP-RE. Local skills transfer can be shared with the current WFP calculating agent the National Meteorological Agency.
Calculating agent services	(TBD) – ZEP-RE can recommend a calculating agent or WFP can seek the services of an independent calculating agent.	In either case, it is expected that ZEP-RE shall bear the costs associated with index calculation.
Programming	World Food Programme (Supporting the Government of Republic of Ethiopia)	Key implementer and facilitator of HOA Drive - acts the key link between each of the stakeholders, and is responsible for the overall programming and facilitating of the HOA Drive project

Table 3: Proposed key private and government players and their roles

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