



## REPORT

# ASSESSMENT ON THE AVAILABLE AGRI-INSURANCE PRODUCTS AND HOW TO ADDRESS CHALLENGES UNDERMINING THEIR ADOPTION

Submitted by:

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## Table of Contents

LIST OF TABLES .....	III
LIST OF FIGURES.....	IV
ACRONYMS AND ABBREVIATIONS .....	V
EXECUTIVE SUMMAR.....	VI
1. INTRODUCTION.....	1
1.1. Definition of Key Concepts under this Assessment.....	1
1.2. Objectives.....	4
1.3. Scope of Work.....	4
1.4. Geographical Coverage .....	5
1.5. Deliverables.....	5
2. APPROACH AND METHODOLOGY .....	5
2.0 Inception phase.....	5
2.1 Proposed approach and action points. ....	6
2.1.1 Action Point I. Kick-Off Meeting with AMIR Management and Staff.....	6
2.1.2 Action Point 2: Desk Review .....	6
2.1.3 Action Point 3: Consultative meetings .....	6
2.1.4 Action Point 4: Consultations with Farmers .....	7
2.1.5 Action Point 5: Data Analysis.....	8
2.1.6 Data Quality Control Measures.....	9
3. OVERVIEW OF AGRICULTURE INSURANCE.....	9
3.1 Why do farmers need insurance?.....	10
3.2. Agriculture Insurance in Rwanda .....	11
3.2.1. National Agriculture Insurance Scheme- Tekana Urishingiwe “Muhinzi Mworozi....	12
3.3. Private Insurance Companies.....	14
4. STUDY FINDINGS AND ANALYSIS.....	18
4.1 Overview .....	18
4.2 Demand Side Analysis.....	18
4.2.1 Demographic Characteristics.....	18
4.2.2. Age, Gender and Value Chain.....	20
4.2.3 Value Chain Participation and Business Characteristics .....	21
4.2.3 General Knowledge on Agri-Insurance: Accessibility, Affordability and Coverage ....	23
4.2.4: Training on Agri-Insurance .....	26
4.2.5 Claims Process and Satisfaction .....	27
4.2.6. Main barriers in accessing agri-insurance products .....	28
4.2 Supply side Analysis.....	30
4.2.1 Progress Made .....	30

4.2.3 Challenges Highlighted.....	30
5. CONCLUSION AND RECOMMENDATIONS.....	31
5.1 Conclusion .....	31
5.2 Recommendations.....	31
5.2.1 General Recommendations.....	31
5.2.2. Policy-Makers.....	32
5.2.3. Insurance Providers .....	32
5.2.4. Farmers .....	33
5.2.5. Service Providers .....	33
ANNEX 1: List of People/Organizations Contacted for Key Informant Interviews .....	41
ANNEX 2 : QUESTIONNAIRE AND INTERVEIW GUIDE .....	42
ANNEX 3: SPECIFIC CHALLENGES RELATED TO AFFORDABILITY AND MANAGEMENT OF AGRI-INSURANCE PRODUCTS .....	51
ANNEX 4: SUGGESTIONS/RECOMMENDATIONS FROM FARMERS TO IMPROVE AGRI-INSURANCE PRODUCTS OR SERVICES .....	55

## LIST OF TABLES

Table 1: Data collection methods and tools .....	6
Table 2: Target Population .....	7
Table 3: Sample size by District, Value chain and Gender.....	8
Table 4: Nature and coverage scope of Insurance Companies that partner with NAIS.....	15
Table 5: Age vs gender of the respondents.....	19
Table 6: Gender VS disabilities status.....	19
Table 7: Respondents with a refugee status .....	19
Table 8: Age, gender and value chain .....	20
Table 9: Age Category vs. Value chain .....	21
Table 10: Distribution of respondents according to districts and value chains.....	21
Table 11: Value Chain Participation and Business Characteristics .....	22
Table 12: Knowledge on agri-insurance products available in Rwanda.....	23
Table 13: Ways of getting insurance information .....	24
Table 14: Agri-insurance products available .....	24
Table 15: Training received on agri-insurance and areas .....	26
Table 16: Claims made .....	27
Table 17: Value Chain and claims for insurance .....	27
Table 18: Claims process satisfaction.....	28
Table 19: Recommendations Implementation roadmap.....	34

## LIST OF FIGURES

Figure 1: The period of involvement in the value chain .....	23
Figure 2: Rate of understanding of agri-insurance products .....	23
Figure 3: Choice influence for adopting agri-insurance .....	25
Figure 4: Rate the affordability of the agri-insurance products .....	25
Figure 5: Areas of training acquired .....	26
Figure 6: Main barriers in accessing agri-insurance products .....	28

## ACRONYMS AND ABBREVIATIONS

<b>Abbreviations and acronyms</b>	<b>Naming in full</b>
<b>AFR</b>	Access to Finance Rwanda
<b>BKGI</b>	Bank Of Kigali General Insurance
<b>BNR</b>	National Bank of Rwanda
<b>BDF</b>	Business Development Fund
<b>IFAD</b>	International Fund for Agriculture Development
<b>FAGACE</b>	Fonds Africain de Garantie et de Coopération Économique
<b>FAO</b>	Food and Agriculture Organisation
<b>KWA</b>	Kungahara Wagura Amasoko
<b>MINICOM</b>	Ministry of Trade and Industry
<b>MINAGRI</b>	Ministry of Agriculture and Animal Resources
<b>MFI</b>	Microfinance Institution
<b>MSEs</b>	Micro and Small Enterprises
<b>NAEB</b>	National Agriculture Export Board
<b>NISR</b>	National Institute of Statistics of Rwanda
<b>NGO</b>	Non-Governmental Organisation
<b>NST</b>	National Strategy for Transformation 1
<b>PPP</b>	Public Private Partnership
<b>PSTA4</b>	Strategic Plan for Agricultural Transformation
<b>PFY</b>	Pre-dominantly female youth
<b>RAB</b>	Rwanda Agriculture Board
<b>SACCO</b>	Saving and Credit Cooperative
<b>SERVE</b>	supporting and Enhancing Resilient and Viable Employment
<b>ToR</b>	Terms of Reference
<b>USAID</b>	United States

## EXECUTIVE SUMMARY

Agriculture is a cornerstone of Rwanda's economy, as it contributes 25% to Rwanda's GDP and remains crucial as a key economic sector, particularly for rural livelihoods and food security.

Agricultural insurance is increasingly recognized as a critical tool for safeguarding smallholder farmers in Rwanda against the adverse effects of climate change. With projected impacts including rising temperatures, heightened droughts, increased flooding, and landslides, the need for effective insurance solutions is paramount.

Launched in April 2019, NAIS aims to de-risk the agricultural sector through public-private partnerships. It offers indemnity-based livestock products and area-yield index insurance for crops. The government covers 40% of the premium, with the remaining 60% paid by farmers. Four private companies (RADIANT, SONARWA, BK General Insurance, Old Mutual) are currently active under NAIS.

This report was commissioned by the Association of Microfinance Institutions in Rwanda (AMIR) under the SERVE Project, to assess the current landscape of agricultural insurance and its effectiveness in meeting the needs of farmers engaged in chili pepper, green beans, tomato, and poultry value chains.

This report provides a comprehensive assessment of agricultural insurance in Rwanda, focusing on its effectiveness and accessibility for youth engaged in chili pepper, green beans, tomato, and poultry value chains. Commissioned by offerings of Microfinance Institutions in Rwanda (AMIR) under the SERVE Project, the study aims to identify gaps, evaluate current offerings and related challenges and propose actionable recommendations.

Approach and Methodology involved desk review, multi-stakeholder consultations and consultations with farmers. The study focused on youth aged 18 to 35 involved in specified value chains across 10 districts,

### Key Findings:

On the demand side, the assessment identified significant gaps in insurance coverage and affordability for smallholder farmers, particularly youth. Existing insurance products often do not fully address as expected the risks associated with weather events, pests, and diseases.

- The understanding of agricultural insurance products, among farmers varies from poor to fair. This indicates a significant gap in awareness and education, which hampers adoption.
- Issues cited include lack of information, high costs, limited availability of agents, and inadequate coverage options.
- On affordability accessibility, many respondents (farmers) perceive agri-insurance as expensive, with a significant portion finding it inaccessible in rural areas.
- A substantial gap in training on insurance products exists
- Claims processes are also problematic, with very low claim rates and significant dissatisfaction among those who have made claims.

Therefore, recommendations for improvement include increasing insurance accessibility and affordability, enhancing awareness campaigns, expanding local mobilization efforts, and updating insurance policies to include all relevant crops (tomato) and livestock.

On the supply side, progress has been made concerning agri-insurance provision, in raising awareness and tailoring insurance products to specific value chains. A high transactional (management and monitoring) cost was highlighted as a big challenge to insurance companies, especially dealing with individual farmers.

In recommendations, insurance companies and stakeholders need to enhance communication, provide targeted information dissemination, and address high management and monitoring costs by encouraging farmers to form and operate within cooperatives/associations, to increase the effectiveness of agricultural insurance in Rwanda.

In conclusion, SERVE Project and its implementers, are urged to provide support through technical and financial assistance to make insurance products more affordable and accessible, expanding coverage, and improving farmers' understanding of how agri-insurance works. While enhancing the cohesive collaboration between the government, insurers, and farmers; the drive to address all the challenges within the 4 value chains, will strengthen the resilience of the agriculture sector, motivate the youth to join agriculture in big numbers, provide greater financial protection to farmers and mitigate the risks posed by climate change and other agricultural uncertainties.



## 1. INTRODUCTION

Agricultural insurance is increasingly seen as a vital tool for buffering smallholder farmers from impacts associated with climate change. Projected impacts from climate change in Rwanda (Austin K.G et al. 2020) include warming temperatures, increased drought in some areas, more frequent flooding in others, and landslides in regions with steep topography. Agricultural insurance being a central concern in this assessment is vital for mitigating risks faced by farmers that are engaged specifically in chili pepper, green beans, tomato and poultry value chains, with a focus on weather-related events, pests and diseases.

Persistently low levels of insurance uptake in agriculture and livestock in the developing world; combined with lean economic margins for private sector viability and has meant public sector involvement through subsidies and other forms of government support.

In Rwanda, the National Agricultural Insurance Scheme (NAIS) in this esteem and reflects both the national awareness of rural vulnerability and an ambition to empower farmers to better withstand climate-related and other shocks that affect their working and production (crops and livestock).

This report which was commissioned by AMIR under the Project, provides detailed findings from the conducted assessment on the available agricultural Insurance products, their accessibility, affordability and coverage; and identified gaps and limitations in the current offerings versus the needs of the youth (female and male) engaged in the production of chili pepper, green beans, tomato and poultry value chains in 10 selected Districts under SERVE Project scope. It provides recommendations for actionable strategies to overcome identified challenges; suggestions for policy and regulatory improvements to support agricultural insurance adoption and a roadmap for stakeholder collaboration and implementation.

### 1.1. Definition of Key Concepts under this Assessment

#### **AMIR**

The Association of Microfinance Institutions in Rwanda (AMIR) serves as the national body representing microfinance institutions (MFIs) in Rwanda. The association was created in 2007 with 32 founding members and today, it has 454 MFIs; including Microfinance Banks, Microfinance Limited Companies, Non-Umurenge SACCOs and Umurenge SACCOs. Its membership represents more than 90% of the microfinance sector in Rwanda with an aim of integrating all MFIs/SACCOs operating in Rwanda so that to serve them under one umbrella.

The Vision of AMIR is to become a strong and efficient organization that contributes to the development of the microfinance industry through the promotion of transparent management systems in MFIs, innovative and market led financial services and products. Its mission<sup>1</sup> of is to offer diversified services to microfinance institutions to enable them to work professionally and contribute to poverty reduction in a sustainable manner.

With regard to its operational scope, AMIR focuses on advocacy, research and development, Capacity building, responsible and inclusive finance (product, consumer protection and education) financial sector coordination, and organizing financial sector learning events. It has experience in facilitating financial institutions to develop products that are tailored to the needs of the different segments of the population (women, youth, people with disabilities, saving groups, and

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<sup>1</sup> <https://www.amir.org.rw/about-amir/overview/>

cooperatives), and conducting financial literacy and education to agricultural Micro and Small Enterprises (MSEs) and cooperatives.

## **SERVE Project**

In 2023, CARE International Rwanda and four consortium members including AMIR secured a 5- year grant from the MasterCard Foundation entitled supporting and Enhancing Resilient and Viable Employment (SERVE) (2023- 2027) Project, with an objective of building a resilient, sustainable, gender equitable and inclusive entrepreneurial environment that increases dignified and fulfilling work opportunities for the predominantly female youth in agricultural value chains.

The project is implemented in 10 Districts across Rwanda, namely: Rulindo and Gakenke in Northern Province; Kayonza, Rwamagana, Ngoma, and Kirehe in Eastern Province; Nyamagabe, and Huye in Southern Province; and Nyabihu and Rubavu in Western Province. These districts have been selected based on two factors: 1) Complementarity with CARE and DUHAMIC-ADRI's recent Promoting Financial Inclusion of Smallholder Farmers (PROFIFA) project, which were included in the project because the priority value chains were present there.2) Relevance to the chili beans, tomato, and poultry value chains. Moreover, based on an analysis of the prominence of value chains in the target districts and as determined by the central level in cooperation with districts and district agricultural plans (MINAGRI), the project is addressing green beans, tomatoes, chili peppers, and poultry.

The project is implemented by a consortium of CARE International, Duharanire Amajyambere Y'Icyaro (DUHAMIC-ADRI), Pro-femme Twese Hamwe (PFTH), Association of Micro Finance Institutions Rwanda (AMIR), and URWEGO Finance. SERVE seeks to unlock the untapped potential of the participation of PFY in agriculture as a means of income, career, economic equality, and as a driving force for growth in the agriculture sector. The two envisaged project' outcomes are: (i) an inclusive sustainable growth for youth-led agricultural Micro and Small Enterprises (MSEs) and (ii) an enhanced policy and social norms environment that encourages and enables key stakeholders to deliver a more equitable, inclusive and responsive agricultural sector; thus reducing key policy and social barriers to entry for youth.

To achieve these two outcomes, several different types of strategic alliances will be harnessed in the project mainly the fore-said consortium for the implementation and well as establishment of a key partnerships that includes national government ministries namely; the Ministry of Agriculture and Animal Resources (MINAGRI), the Ministry of Trade and Industry (MINICOM), and the Ministry of Finance and Economic Planning (MINECOFIN). Chamber of Youth and Associations, and the Rwandan Youth in Agriculture Forum (RYAF).

Furthermore, collaborating with the private sector is a central aspect of SERVE. Financial service providers (FSPs), including microfinance institutions, banks and insurance providers will work in close collaboration with CARE to develop tailor-made formal financial products/services for participants. This work will also focus on accessible digital solutions in order to accelerate reach and systematically address the gendered digital divide, which blocks female, especially rural, youth from accessing formal financial services. Furthermore, CARE International will collaborate with the private sector for the entrepreneurship components, including linking female youth with mentors, potential buyers and regulators.

The project does target to directly support dignified and fulfilling employment opportunities for 80,000 predominantly female youth (PFY) (at least 70% female) engaged in or with the potential to engage in agricultural businesses and smallholder farming, also known as MSEs. PFY in this project are those aged 18 to 35. Of these, the project expects to strengthen existing work opportunities for 30,000 PFY and generate new work opportunities for 35,000 PFY, through growth in our target MSEs.

## **Agriculture Insurance**

Agriculture insurance is a type of insurance designed to protect farmers and agricultural businesses from financial losses due to unforeseen events that can affect their crops, livestock, or farm operations. These events can include natural disasters (ILO, 2017) like floods, droughts, and hurricanes, as well as other risks such as pest infestations, disease outbreaks, and market fluctuations (FAO, 2011). The primary goal of agriculture insurance is to provide a safety net for farmers, helping them to recover and continue their operations after a loss. There are various types of agriculture insurance, including losses related to crop yield, quality, or revenue due to adverse weather conditions or other risks; losses due to death, disease, or other risks affecting livestock; damages to farm buildings, equipment, and other physical assets; and coverage based on a loss of revenue rather than just physical damage or yield losses (NAIC, 2020).

Agriculture is a cornerstone of Rwanda's economy and currently contributing 25% to Rwanda's GDP<sup>2</sup> and remains crucial as a key economic sector, particularly for rural livelihoods and food security. However, it remains highly vulnerable to climate-related risks and other challenges. However, the sector still faces numerous challenges, including vulnerability to climate change, pests, and market fluctuations.

Rwanda's Vision 2050, titled "The Rwanda we want," serves as the country's long-term Development Plan, aiming to elevate the economy to an upper-middle-income status by 2035 and a high-income status by 2050 and the overarching goal is to modernize the lives of all Rwandans.

Rwanda's agriculture sector will achieve over 6% annual growth under NST2<sup>3</sup>, becoming more market-oriented and sustainable. Productivity will increase by more than 50%, driven by an 85% expansion in irrigated land (from 71,000 ha to 131,000 ha), increased access to fertilizers and seeds, improved animal breeds, and a boost in domestic production of animal feeds. These efforts will ensure food security, create jobs, and support rural development.

Agriculture insurance has been identified as a crucial tool to mitigate these risks and enhance resilience among farmers; thereby playing a vital role in mitigating risks faced by farmers and helps to reduce the vulnerability of households (men and women) and enterprises that work in agriculture, by providing protection against crop losses due to natural disasters, such as drought, floods, hailstorms, pest attacks, disease outbreaks and other events that can damage crops or infect livestock.

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<sup>2</sup> NISR, 2024

<sup>3</sup> NST2 2024 -2029. Available at <https://www.gov.rw/blog-detail/rwanda-announces-2nd-national-transformation-strategy>

In 2019, the government of Rwanda introduced a subsidized agriculture insurance scheme. The Agriculture insurance scheme was designed to alleviate risks and losses incurred by farmers due to unpredictable natural disasters, diseases, and pests that affect their crops and livestock (MINAGRI, 2021).

Some Insurers<sup>4</sup> cover the shortfall of the yield in the unit area of insurance of the insured Crop caused by the insured Perils. The Perils Insured include drought, excessive rainfall, pests and diseases, earthquake, volcanic eruption, fire, animals, insects, floods and any other peril not specifically excluded that may cause reduction in yield / quantity of the Insured crop.

While there have been efforts to promote insurance coverage, significant barriers remain and its adoption remains limited due to various challenges like High Premiums, limited awareness and education, Complexity of Products (difficult to understand), inadequate infrastructure for data collection and risk assessments, etc. Addressing these challenges through targeted interventions, partnerships, and innovations can help increase the uptake of agriculture insurance and support the sustainable development of Rwanda's agriculture sector.

Based on the above situation on the status of agricultural insurance in Rwanda and the related challenges, AMIR as mandated; through the Project; intends to among other things; assess the current agricultural insurance products available in the market with a focus on their coverage, terms, and effectiveness; analyze the challenges faced by stakeholders in adopting these insurance products ; and inform Stakeholders the recommended strategies to address identified challenges that undermine their adoption.

## **1.2. Objectives**

The objectives of the assessment<sup>5</sup> are the following:

- a. To assess the available agricultural insurance products through a review of existing agricultural insurance products and services; evaluation of the accessibility, affordability, and coverage of these products and identification of gaps and limitations in current offerings
- b. To conduct stakeholder analysis and engagement by identifying key stakeholders in the agricultural insurance ecosystem (farmers, insurers, government agencies, NGOs, etc.); conducting consultations to understand stakeholder perspectives and challenges and facilitating stakeholder workshops to discuss findings and gather feedback; and
- c. Provide recommendations for development such as actionable strategies to overcome identified challenges; suggestions for policy and regulatory improvements to support agricultural insurance adoption and development of a roadmap for stakeholder collaboration and implementation.

## **1.3. Scope of Work**

The scope of work for the consultant will include major strategic areas but not be limited to:

1. Conduct a comprehensive review of existing literature on agriculture insurance
2. Collect and analyse data from relevant sources, including insurance providers, agricultural departments and farmer associations

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<sup>4</sup> Mayfair Insurance Company, Integrated Annual report 2022, P.20

<sup>5</sup> Sourced from the ToRs

3. Design and implement field survey targeting different farmer groups and insurance companies to understand their perspectives and challenges
4. Conduct in-depth interviews with key stakeholders
5. Analyse collected data and identified trends, patterns and key insights
6. Prepare a draft detailed report summarizing findings, challenges, and recommendations
7. Organise and facilitate Stakeholders' workshops to present findings and engage stakeholders in discussions
8. Gather feedback and incorporate them into the final recommendations
9. Submit the final report on the available Agri-Insurance

#### **1.4. Geographical Coverage**

The assessment was conducted within 10 Districts of SERVE (Supporting and Enhancing Resilient and Viable Employment Opportunities) Project Interventions:

- ❖ Eastern Province: Kayonza, Kirehe, Ngoma and Rwamagana
- ❖ Northern Province: Gakenke and Rulindo
- ❖ Southern Province: Huye and Nyamagabe
- ❖ Western Province: Nyabihu and Rubavu

#### **1.5. Deliverables**

Based on the Terms of reference, the Consultant is expected to prepare and submit the following deliverables:

- a. An extensive inception report with data collection tools;
- b. Draft report for validation summarizing findings, challenges and recommendations; and
- c. Final Report (with feedback/inputs from the validation session incorporated) of the assessment on available Agric Insurance product(s) in Rwanda

## **2. APPROACH AND METHODOLOGY**

### **2.0 Inception phase**

Under this assignment, the inception phase was characterized by the aligning the assignment with the terms of reference, carry out some basic consultations and desk review especially on documents/reports related SERVE project scope and activities and agri-insurance, determine the appropriate tools and techniques based on the targeted group of respondents, establish and link activities/deliverables with the time frame.

The designed procedures and techniques of data collection and information gathering varied and were purposively applied depending on the types of data being collected and interlocutors present.

Focus Group discussions, given their qualitative nature, were organized to facilitate the process of obtaining in depth information on the existing initiatives and good practices, opportunities, lessons learned, underlying challenges and recommendations on how to effectively and efficiently address them.

In order to gather as much information as possible, the instruments and techniques used are summarized below:

**Table 1: Data collection methods and tools**

Target Respondents	Methods	Tools for Data Collection
Farmers and leaders in the 4 value chains	Sampled Respondents 418	Structured Questionnaire
	Focus group Discussions	Interview guide
Stakeholders	Purposive interviews	interview guide

## 2.1 Proposed approach and action points.

### 2.1.1 Action Point I. Kick-Off Meeting with AMIR Management and Staff

An orientation / kick off meeting with the team from AMIR/SERVE Project and the consultant; was held on 14<sup>th</sup> August 2024, at AMIR Office Board Room. The meeting was an opportunity to get insights on the background, working modalities and their expectations from the assignment.

During the kick-off meeting, the methodology for stakeholder consultation was established. This included consensus on conducting consultations with the Executive Committee of PSF-Agriculture and Livestock Cluster and PSF Management. Additionally, there was agreement on engaging in interviews and consultations with various stakeholders from the public, private, and civil society sectors closely associated with the Agriculture and Livestock cluster. The consultation process extends to different cluster leaders in provinces and the City of Kigali through Focus Group Discussions. Furthermore, there is a planned consultation with development partners to present the identified priorities from the process and to mobilize their support for funding the strategic plan.

### 2.1.2 Action Point 2: Desk Review

In line with the scope, the consultant undertook an extensive desk review of key relevant documents. Data collection will involve reviewing a range of available data sources, including official reports and publications.

The key documents to be reviewed include the following:

- a. The National vision document (Vision 2050) ;
- b. National Strategy for Transformation (NST1 to be replaced by NST2 soon)
- c. National Agriculture Policy and other strategic National documents
- d. Review of documents and reports from AMIR/SERVE Project
- e. National Policies and Sectoral Strategies related to Agriculture and Livestock sector
- f. Administrative data, reports and publications on agriculture and livestock in Rwanda
- g. Reports on Agriculture insurance in Rwanda
- h. Studies and reports on crop and livestock insurance in Rwanda, from various sources
- i. Any other relevant document.

### 2.1.3 Action Point 3: Consultative meetings

The consultant conducted multi-stakeholders' consultations with members and stakeholders. Consultations were guided by a set of specific questions. An interview/Questionnaire were used in data collection. Consultations were conducted with AMIR leadership and members using an interview guide. Stakeholders Consultation were purposively carried out with key stakeholders and Insurance Companies that are engaged in agri-business in Rwanda.

### 2.1.4 Action Point 4: Consultations with Farmers

The target population<sup>6</sup> encompass all youth (people aged between from 18 to 35 years old that are involved in chili, tomatoes, green beans and poultry values chains in selected 10 Districts. The defined target population<sup>7</sup> in this assessment is 16663.

**Table 2: Target Population**

Value chain District	Chili pepper		Green Beans		Poultry		Tomatoes		G.Total
	Male	Female	Male	Female	Male	Female	Male	Female	
Huye	50	75	100	354	252	618	422	538	2409
Gakenke	59	123	105	428	128	228	114	231	1416
Kayonza	54	100	96	172	139	290	411	519	1781
Nyabihu	11	20	7	85	169	480	72	189	1033
Kirehe	52	130	6	46	197	711	370	840	2352
Rubavu	32	57	29	123	255	699	59	199	1453
Ngoma	67	178	28	89	85	308	264	611	1630
Rulindo	33	47	55	266	202	488	206	421	1718
Nyamagabe	24	36	28	111	214	431	80	137	1061
Rwamagana	29	64	135	342	103	358	357	422	1810
Total Gender	<b>411</b>	<b>830</b>	<b>589</b>	<b>2016</b>	<b>1744</b>	<b>4611</b>	<b>2355</b>	<b>4107</b>	<b>16663</b>
<b>Total</b>									<b>16663</b>

### Sample size

To determine an appropriate sample size for the whole target population, we used the formula for a finite population.

The formula is given as:  $n = \frac{N \times (Z)^2 \times p(1-p)}{(N-1) \times (e)^2 + (Z)^2 \times (1-p)}$ , where:

n=required sample size

N= Total population size (in this case 16,663 male and female youth belonging to various value chains operating individually, Limited company, cooperatives and youth Associations)

Z= Z-Score corresponding to the desired confidence level (here it is 1.96 for 95%confidence level ).

p=Estimated proportion of the population, which will be 0.5 (in case there is no prior estimate available), and

e= margin of error or desired level of precision (in our case is 0.05).

Subject to the above, the initial sample size was 396 respondents but was adjusted up to be 418. With reference to the available population and considering the fact that, the targeted respondents are unequally distributed within the targeted 10 Districts and 4 value chains.

<sup>6</sup> Sourced from AMIR/SERVE Project reports.

<sup>7</sup> Sourced from the Initial SERVE Project Consortium Report

- The proportioned number in each District was obtained by multiplying the required sample size in each value chain by the gender proportion within that value chain in a given District.
- The determined sample size was proportionally allocated in ten districts
- The geographical variability was taken into consideration to determine the number of respondents from each District among 10 selected Districts
- All the categories of interest (individuals, Companies, Cooperatives, Associations, refugees and people with disabilities) in our population, across the targeted districts and value chains shall be represented
- Special categories: people with disabilities and refugees were taken into consideration.

Therefore, the above considerations resulted into respondents as depicted in the table below:

**Table 3: Sample size by District, Value chain and Gender**

Value chain \ District	Chili pepper		Green Beans		Poultry		Tomatoes		General Total		
	Male	Female	Male	Female	Male	Female	Male	Female		Female	Male
Huye	1	2	3	9	6	15	10	13	<b>59</b>	<b>39</b>	<b>20</b>
Gakenke	2	3	3	11	3	6	3	6	<b>37</b>	<b>26</b>	<b>11</b>
Kayonza	1	3	2	4	3	7	10	13	<b>43</b>	<b>27</b>	<b>16</b>
Nyabihu	1	1	1	2	4	12	2	5	<b>28</b>	<b>20</b>	<b>18</b>
Kirehe	1	3	1	1	5	18	9	21	<b>59</b>	<b>43</b>	<b>16</b>
Rubavu	1	2	1	3	6	17	2	5	<b>37</b>	<b>27</b>	<b>10</b>
Ngoma	2	4	1	2	2	8	7	15	<b>41</b>	<b>29</b>	<b>12</b>
Rulindo	1	1	1	7	5	12	5	10	<b>42</b>	<b>30</b>	<b>12</b>
Nyamagabe	1	1	1	3	5	11	2	3	<b>27</b>	<b>18</b>	<b>9</b>
Rwamagana	1	2	3	8	3	9	9	10	<b>45</b>	<b>29</b>	<b>16</b>
Total Gender	<b>12</b>	<b>22</b>	<b>17</b>	<b>50</b>	<b>42</b>	<b>115</b>	<b>59</b>	<b>101</b>	<b>418</b>	<b>288</b>	<b>130</b>
Total Value Chain	<b>34</b>		<b>67</b>		<b>157</b>		<b>160</b>		<b>418</b>	<b>68.9%</b>	<b>31.1%</b>

An individually administered questionnaire was used to the selected respondents from the SERVE Project target beneficiaries. The questionnaire was designed and administered using Kobo collect. The consultant collected both quantitative and qualitative data and processed them for analysis and report elaboration.

### 2.1.5 Action Point 5: Data Analysis

After data collection, we followed a structured process of data preparation before diving into the analysis. This process consists of several essential stages, including data validation, data cleaning, and data editing.

To conduct the analysis, we imported the survey data collected from SERVE beneficiaries; data was imported from CSV ((Comma-Separated Values) file into SPSS (Statistical Package for Social Sciences) for comprehensive analysis. This process supports informed decision-making regarding agricultural insurance products, by providing detailed insights into the data collected, attitudes of respondents, aspirations, and practices in relation to their needs.



Furthermore, the analysis of Key Informant Interviews (KIIs) centered on a structured process that began with converting interview notes into a digital, word-based format, enhancing the organization and ease of access to the gathered data. Through the synthesis of these recurring elements, we constructed comprehensive and cohesive themes that provided valuable insights, from the supply side, into the agri-insurance needs for the youth engaged in selected 4 agriculture value chains.

### 2.1.6 Data Quality Control Measures

To ensure the quality and integrity of the data collection process for this sensitive and crucial assessment, a comprehensive set of measures and activities have been implemented. These steps were designed to guarantee the reliability of the data and information gathered. They include the following activities:

- **Validation of Research Protocol and Instruments:** The research protocol and data collection instruments underwent a rigorous validation process, to ensure that the research tools were well designed and appropriate for the assessment's objectives.
- **Interviewer-Assisted Approach:** During Key Informant (KI) interviews, an interviewer was always accompanied by a note taker. This approach helped to minimize the chances of misinterpretation by data collectors and allow the effective and accurate recording the responses.
- **Use of Pretested Research Instruments:** To maintain the quality of data collection, pretested research instruments were employed. These instruments had been carefully tested and refined to ensure that they effectively captured the required data. Any issues or challenges identified during the pretesting phase were addressed to enhance the quality of the data collection process.
- **Pretested Research Instruments and recruitment of Enumerators:** A critical factor in data collection is the enumerators responsible for gathering information. To maintain the integrity of the process, a diligent effort was made to pre-test the research instruments and recruit able and professional enumerators. This ensured that data collection was carried out with precision and in accordance with the established protocols.

In so doing, the entire process adhered to research ethical standards during data collection, respecting each respondent's right to choose whether or not, to provide answers. We equally ensured the absolute confidentiality of any shared information and committed to using it exclusively for the purpose of this assignment

## 3. OVERVIEW OF AGRICULTURE INSURANCE

Farm coverage may be traced back to farmers and animal growers in Europe who formed cooperative health insurers in the 17th and 18th centuries. They banded together to protect their high-value fruit and vine crops from hail damage and their livestock from accidents and illness (Batamuriza, R. et al. 2023) Ex-post to ex-ante risk management strategies are becoming more popular with authorities. Desire for insurance products and risk management services has risen as a result. Certainly, it is always associated that farm production, income and savings level increases extremely after farmers insured their crops and animals; since farmers can be compensated once crops or livestock are attacked by disasters, diseases or insects.

In addition, agriculture is susceptible to adverse climate hazards, pests, and diseases outbreak (Ntukamazina et al., 2017). Indeed, effects of climate shocks such as droughts and rainfall variability, natural disasters like floods, and biological hazards such as pests and diseases result in crop failure and food insecurity.

Advocates of agriculture insurance believe that:

- Agriculture insurance supports in the expansion of my farm
- There has been no loss from the day farmer joined this insurance
- Insurance benefits contributed in market competition
- Because to this insurance, farmers are able to practice modern agriculture
- Insured farmers are able to meet personal needs as well as those of family

According to Jisang Yu, et al. (2017), crop insurance premium subsidies affect patterns of crop acreage for two reasons. First, holding insurance coverage constant, premium subsidies directly increase expected profit, which encourages more acreage of insured crops (direct profit effect). Second, premium subsidies encourage farms to increase crop insurance coverage. With more insurance coverage, farms obtain more subsidies, and farm revenue becomes less variable as indemnities offset revenue shortfalls, so acreage of insured crops likely increases (indirect coverage effect).

By and large, agricultural insurance schemes have been identified as potential agricultural risk management strategies (Ngango J. et al, 2022) to address possible losses against adverse natural and climate hazards such as floods, droughts, pests, and diseases. Crop insurance provides rewards because farmers can be indemnified when they encountered climate shocks. This implies that crop producers will not have to sell assets or depend on emergency food aid to survive. Crop insurance also improves the ability of farmers to adapt to various risks and allows them to make a large investment in agriculture.

### **3.1 Why do farmers need insurance?**

Farmers need insurance for several critical reasons, all of which contribute to managing risk and ensuring financial stability in the face of various uncertainties associated with agriculture. Insurance provides a crucial safety net for farmers, helping them manage risks, maintain financial stability, and recover from losses. It enables farmers to invest in their operations, plan for the future and contribute to the overall resilience and sustainability of the agricultural sector.

Agricultural micro-insurance is widely accredited for its effective reduction on the impact of severe weather and support increased investment in farm productivity. Insured farmers are able to buy certified seeds and invest in fertilizer instead of planting kept seed and forgoing investing in soil nutrients.

Different practitioners have affirmed that farmers need insurance for several crucial reasons related to managing risks, ensuring financial stability, and promoting investment in agriculture; as generally summarized that:

- Agriculture is highly vulnerable to weather extremes, such as droughts and floods, which can drastically affect yields. In the context of risk mitigation and management, insurance helps mitigate these risks by providing financial protection against weather-related losses.
- Crops and livestock are susceptible to diseases and pests that can lead to substantial losses. Insurance helps cover these losses and supports quicker recovery.

- Insurance provides financial support when agricultural losses occur, helping farmers maintain their income and cover essential expenses.
- Insurance helps farmers manage debt obligations by providing funds to cover losses, which is crucial for maintaining financial health.
- Insurance encourages investments in agriculture, as it reduces the financial risk associated with investing in new technologies and practices, thereby bringing confidence and encouraging farmers to improve their productivity.
- Insurance helps farmers recover quickly from losses by providing financial resources necessary for replanting, purchasing new livestock, or repairing damaged infrastructure.
- Insurance allows farmers to transfer the financial burden of risks to insurance providers, helping to manage significant losses.
- Insurance has always been used as collateral for securing loans, enabling farmers to access additional financial resources.
- Insurance provides a peace of mind by reducing the stress and anxiety related to potential losses, allowing farmers to focus more effectively on their agricultural activities.
- Economically, insurance helps stabilize rural communities by reducing the economic impact of agricultural losses and supporting livelihoods thereby improving their quality of life.

Agriculture is the backbone of many developing economies (ILO, 2023), but it is exposed to various risks and highly dependent on the weather. Agriculture insurance can help reduce this vulnerability of agriculture-based households and enterprises. Agriculture insurance can help reduce the vulnerability of both women and men, households and enterprises that work in agriculture, by providing protection against crop losses due to natural disasters, such as drought, floods, hailstorms, pest attacks, disease outbreaks and other events that can damage crops or livestock. Agriculture insurance is a relevant mechanism to manage risks to help farmers to avoid financial losses and keep their businesses running.

Governments always play an important role in agriculture insurance, as it helps to promote the availability and affordability of insurance products for farmers. By working effectively with the private sector. Through public-private partnerships (PPP), providing subsidies, developing risk-sharing programs and supportive regulatory frameworks – governments can support agricultural productivity while reducing the financial risks faced by farmers and agriculture-based enterprises.

### **3.2. Agriculture Insurance in Rwanda**

Like in many other developing countries, Agriculture plays a significant role in Rwanda's economic growth but is still highly rain-fed with risks and losses caused by adverse natural and climate shocks. Agricultural insurance schemes are widely recognized as potential risk management strategies.

The agriculture sector plays an important role in Rwanda's economic development and the achievement of sustainable development goals, particularly the one that seeks to eradicate extreme poverty and hunger (Ngango & Hong, 2021b).

Rwanda has made remarkable progress as highlighted by the rapid economic growth and sharp reductions in poverty. The agriculture sector has remained pivotal in improving livelihoods of

Rwandans and sustaining the country's economy. 25%<sup>8</sup> of the national Gross domestic product (GDP) Rwanda's agriculture sector has enjoyed an annual average growth of 5% over the last fifteen years, while the country's GDP per capita per year increased from US\$ 441 in 2007 to US\$1,004 in 2022 and agriculture is one of the key drivers.

The World Bank (2024) affirms that Agriculture is crucial for Rwanda's growth as the backbone of the economy; it accounts for 39 percent of gross domestic product (GDP), 80 percent of employment, 63 percent of foreign exchange earnings, and 90 percent of the country's food needs. The sector is challenged by land constraints due to population pressure, poor water management, small average land holdings, lack of public and private capacity, and limited commercialization constrained by poor access to output and financial markets. The country's average annual income of \$550 per capita reflects a rural poverty rate of 49 percent, a figure that soars to 76 percent for families whose main source of income is agriculture.

Therefore, Agricultural insurance in Rwanda is needed for several reasons, given the country's specific agricultural context and challenges. Indeed, it remains inevitable for Rwanda due to its role in managing weather-related risks, protecting income, facilitating financial access, supporting investment, and promoting resilience and sustainability in the agricultural sector.

### **3.2.1. National Agriculture Insurance Scheme- Tekana Urishingiwe "Muhinzi Mworozi**

Rwandan agriculture is largely rain-fed, and therefore it is exposed to weather-related risks, especially to severe, frequent and prolonged dry spells (droughts) occurring during cropping seasons. Many farmers in Rwanda are highly vulnerable to droughts, floods, pests and diseases that threaten their crops and livestock. This poses a significant social and economic problem.

Observations and analysis from existing satellite and local weather station data shows that over the last 30 years, some parts of Rwanda have experienced unusual irregularities in climate patterns including variability in rainfall frequency and intensity, persistence of extreme events such as heavy rains in North and West and drought in the East and South of country.

Climate change projections indicate more extreme climate events, which may damage farms, infrastructures and reduce water availability in dry seasons. In addition, Rwanda has witnessed outbreaks such as Fall Army Worm for crops and Rift Valley Fever, Foot and Mouth Disease and Contagious Bovine Pleuropneumonia as well as Tick borne diseases in cattle. The spread of these pests and diseases is associated with climate change.

Together, these calamities pose a threat to the modernization of agriculture, achievement of food security and poverty reduction.

To crowd-in investment to agriculture and as part of a broader engagement on de-risking the sector as a whole, the Government of Rwanda launched the National Agricultural Insurance Scheme (NAIS) on 23<sup>rd</sup> April 2019 – also known as “Tekana Urishingiwe Muhinzi Mworozi”.

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<sup>8</sup>Sourced from <https://www.minagri.gov.rw/updates/news-details/rwandas-agriculture-sector-transformation-journey-over-the-last-29-years>

The National Agriculture Insurance Scheme (NAIS) is being implemented under a Public-Private arrangement with the Ministry of Agriculture and Animal Resources (MINAGRI) playing a leading role in scheme design and implementation.

NAIS aims at supporting sustainable production in agriculture sector by way of:

- Providing financial support to farmers suffering crop loss/ damage arising out of unforeseen events;
- stabilizing the income of farmers to ensure their continuance in farming;
- Encouraging farmers to adopt innovative and modern agricultural practices;
- Ensuring flow of credit to the agriculture sector; which will contribute to food security, crop diversification and enhancing growth and competitiveness of agriculture sector.

NAIS consists of two product types, an indemnity-based livestock product and an area-yield index for crops. Payouts for the crop product are based on crop cut experiments, which is a transparent way where farmers to observe and participate in the loss assessment.

These products are designed to target both subsistence and commercial farmers.

During the conceptualization and design stage, extensive consultations were undertaken with key government and non-government stakeholders, farmer-based organizations, development partners, insurance companies and smallholder farmers. All these stakeholders' views on the relevance and potential challenges of implementing agriculture insurance schemes were factored into the design of NAIS.

NAIS is helping to soften the inevitable economic blow of disaster. In implementing the scheme, it is expected that the economy will move from a culture of providing ad hoc support to farmers in the aftermath of large production shocks ('ex-post') towards a system of pre-planned and budgeted agriculture insurance ('ex-ante').

Agricultural insurance is one of the de-risking tools of agriculture sector. Its purpose is to reduce the risk profiles of agricultural value chain actors and thereby increase the appetite of lenders and investors to the sector. The Scheme is supporting a range of Government policy objectives such as increased access to agricultural inputs, credit, improved agriculture productivity and reduced vulnerability and expenditure on social protection programs. The scheme is designed to insure crop and livestock farmers against natural calamities in a sustainable manner and to incentivize farmers to embrace commercial agriculture. In addition, NAIS shall increase productivity and boost agriculture financing, which is low due to the risks associated with agriculture as perceived by financial institutions.

Crops that are catered for under NAIS include Rice, Maize for consumption, Maize for seed multipliers, Irish potatoes, Irish for consumption, Chili, Cassava, Soya bean, Beans, French beans. Under livestock: Cattle both dairy cows and bulls, Piggery, Poultry and Aquaculture. Under the scheme, farmers pay 60 per cent of the insurance premium, while the Government of Rwanda covers the remaining 40 percent in subsidy.

The premium rates vary as per the categories. For instance, in livestock, premium rate for cows is 4.5% eligible after 3 of birth, poultry (5.5%) after 14 days, for at least 100 chickens and piggery (6%) after 3 months.

An illustration example below in livestock subsector (Poultry and piggery) on the calculation of insurance premiums.

Product	Premium rate	Sum insured	Farmers Contribution 60%	Government Subsidy 40%
Poultry (14 days at most 100)	5.50%	Price 5,000 5,000*5.5% =275FRW	275/100*60% =165 frw	275/100*40% =110 frw
Piggery (3 Months)	6%	Price 100,000 100,000*6% = 6,000FRW	6,000/100*60% =3,600 frw	6,000/100*40% =2,400frw

**Source: Primary data**

NAIS is operating under a PPP model. To implement the Scheme, MINAGRI signed service-level agreement with five insurance companies (RADIANT Yacu, PRIME, SONARWA, BKGI & Old Mutual former UAP) through a transparent public tendering process. These insurance companies are operating in all districts through an open market approach.

With regard to the value chains covered by the Project, NAIS does not cover tomato value chain.

### 3.3. Private Insurance Companies

Private insurance companies play a vital role in Rwanda's agricultural sector by providing essential insurance products that help farmers manage and mitigate risks. These companies offer a range of products, including crop and livestock insurance, to protect against various risks and support agricultural sustainability

They provide insurance products that cover financial protection to farmers and boosting agricultural productivity, losses due to adverse weather conditions, pests, and diseases and protect against the death of animals due to disease or accidents.

In total, there are 18<sup>9</sup> licenced and registered Insurance Companies in Rwanda; split into public, private, micro, captive, health medical organisations and mutual insurers respectively. They offer different insurance products including agriculture related.

Conversely, under NAIS and Project scope, only 4 (RADIANT, SONARWA, BK General Insurance & Old Mutual former UAP) signed a service-level agreement and are active.

These insurers offer a range of crop and livestock insurance products as part of the NAIS program, supported by the Rwandan government through a 40% subsidy to make the premiums more affordable for farmers. This public-private partnership aims to mitigate risks associated with agriculture and enhance financial inclusion for rural communities. Still, none of them that provides any insurance products to farmers in the tomato value chain.

The nature, working and scope of coverage if the 4 indicated insurance companies that offer agriculture and livestock insurance under NAIS are presented in the table below:

<sup>9</sup> Sourced from <https://www.bnr.rw/financial-stability/insurance-pension/list-of-licensed-insurers/>

**Table 4: Nature and coverage scope of Insurance Companies that partner with NAIS**

Insurance Company	Youth/women / target Value chain-based products	Product descriptions and Digitization level	Possible of collaboration/synergy on this product for benefit of SERVE Project beneficiaries
<b>BK GENERAL INSURANCE</b>	<p><b>Agriculture insurance coverage<sup>10</sup></b></p> <ul style="list-style-type: none"> <li>• Production capital insurance</li> <li>• Post-harvest insurance</li> <li>• Market price insurance</li> <li>• Green house insurance</li> </ul>	<ul style="list-style-type: none"> <li>• BK does currently lead crop insurance market with 95% and cover production cost insurance under NAIS<sup>11</sup></li> <li>• Only Chili pepper, green beans and Poultry, of the SERVE Project’s target value chains, are insured under NAIS framework</li> <li>• Claims can now be filed or processed at any location where there is a BK group branch. It does not exceed 30 days for processing a farmer’s claim</li> <li>• On line services are being developed to facilitate our clients to make claim declarations on line</li> <li>• For a claim to be processed, the following information is required: Notification letter, insurance policy, police report and estimated value of the damages</li> <li>• Plan to have agent distributors up to village level by 2030</li> </ul>	<p>The SERVE PROJECT aims to enhance synergy with the Insurance companies by:</p> <ul style="list-style-type: none"> <li>• Increasing awareness among project beneficiaries in the chili, green beans, and poultry value chains about crop and livestock insurance products, which are included under the National Agriculture Insurance Scheme (NAIS).</li> <li>• Establish connections between these beneficiaries and BK Insurance Company.</li> </ul>

<sup>10</sup> Source: <https://www.bkinsurance.rw/products/agriculture-insurance>

<sup>11</sup> National Agriculture Insurance Scheme

		<ul style="list-style-type: none"> <li>• Farmers still lack awareness regarding the process of filing and settling claims</li> </ul>	
<b>RADIANT YACU</b>	<b>Agriculture insurance products<sup>12</sup>:</b> <ul style="list-style-type: none"> <li>• Production insurance</li> <li>• Post harvest insurance</li> <li>• Market price insurance</li> </ul>	<ul style="list-style-type: none"> <li>• The SERVE Project's target value chains include Chili pepper, green beans, and Poultry, but currently, only a small number of clients are insured within the NAIS framework for these products.</li> <li>• Provided under Radiant Yacu Micro insurance Company.</li> <li>• For some farmers, a 60% own contribution is beyond their financial means.</li> <li>• The use of paper-based processes causes significant delays in handling claims, while digitizing the claim process comes with a substantial cost.</li> <li>• The limited experience and basic risk management skills of farmers have a negative impact on the company's loss ratio.</li> <li>• Farmers still lack awareness about the procedures for filing and settling claims.</li> </ul>	<ul style="list-style-type: none"> <li>• Allocate funds for equipping project facilities with the necessary knowledge and skills for filing and submitting insurance claims, as well as providing training in contingency planning and risk assessment.</li> <li>• Supporting project beneficiaries in tomato value chain to obtain insurance for that crop</li> <li>• Possibly support the project beneficiaries to acquire post-harvest insurance</li> <li>• Support on covering cost for conducting a feasibility study for</li> </ul>

<sup>12</sup> Source: <https://www.radiantyacu.rw/>



<b>SONARWA</b>	<p><b>Agriculture insurance coverage<sup>13</sup>:</b></p> <ul style="list-style-type: none"> <li>• Area Yield Index Insurance (covering multiple perils)</li> <li>• Hybrid Insurance cover (Weather and Area yield index)</li> </ul>	<ul style="list-style-type: none"> <li>• Crops include rice, potatoes, pepper, cassava, maize, beans, and soybeans.</li> <li>• Livestock coverage includes cows, pigs, and chickens. All diseases; Lightning, internal and external injury, Fire, Windstorm, Snake bites, flooding; Emergency slaughter on a Vets advice; Calving complications; Electrocutation; Malicious harm of animals; Objects falling from aircraft.</li> </ul>	<p>digitizing the claim process</p> <ul style="list-style-type: none"> <li>• Providing assistance in funding a feasibility study aimed at digitizing the claims processing procedure.</li> <li>• Assisting project beneficiaries in meeting a portion of their own financial commitment within the framework of NAIS.</li> </ul>
<b>Old Mutual Limited</b>	<p>The insurance<sup>14</sup> is part of their agricultural risk management services, which are designed to protect farmers against a range of perils like adverse weather conditions, pests, and diseases.</p>	<ul style="list-style-type: none"> <li>• Offers crop insurance covering mainly commercial crops, including maize, rice, tea, coffee, and other field crops. Offers livestock insurance that covers various animals, including cattle, goats, and poultry. The coverage is designed to protect farmers from risks such as diseases, accidents, and loss due to theft.</li> <li>• settle general insurance claims within 5 working days after receiving full claims documentation</li> <li>• pay general insurance claims below Rwf 1,000,000 within 72 hours after receipt of full claims documentation</li> <li>• Also covers some of NAIS and SERVE Project's scope on a small scale</li> </ul>	

<sup>13</sup> Source: <https://sonarwa.co.rw/livestock-insurance/>

<sup>14</sup> <https://www.oldmutual.rw/about/>

## **4. STUDY FINDINGS AND ANALYSIS**

### **4.1 Overview**

Agriculture is a cornerstone of Rwanda's economy, contributed 25% to Rwanda's GDP and remains crucial as a key economic sector, particularly for rural livelihoods and food security. Youth involvement in agriculture has been low due to perceptions of farming as low-income work.

Youth engagement in agriculture is vital for the sustainable development of Rwanda's economy and society. It harnesses the energy, creativity, and adaptability of young people to transform agriculture into a more productive, innovative, and attractive sector. By involving youth, Rwanda can achieve greater food security, reduce poverty, and ensure long-term economic growth while fostering a new generation of agricultural leaders. Therefore, engaging the youth, which is the focus of the Project, in a safer and insured agriculture will even significantly reduce unemployment and underemployment among young people and turn the sector into a more viable and vibrant venture in future.

This section presents a comprehensive analysis of our research findings. We conducted a thorough desk review of research reports and articles related to agricultural insurance and the related needs of youth involved in agriculture in Rwanda. Importantly, our analysis incorporates data collected from surveys aimed at youth (beneficiaries) participants and insights gathered from key informant interviews with various stakeholders, including insurance service providers, government entities, relevant stakeholders and development partners.

Our analysis takes into account the contextual framework of agricultural insurance in Rwanda. However, the primary focus of this assessment is on the demand and supply analysis of agricultural insurance products and services, specifically tailored to the youth engaged in the chili pepper, green beans, tomato, and poultry value chains under SERVE scope of coverage.

### **4.2 Demand Side Analysis**

This demand analysis primarily relies on the collection of primary information and feedback through the survey conduct on sampled individual youth engaged in chili pepper, green beans, tomatoes and poultry value chains, especially in production stage. Where relevant, the findings from the original research are integrated with results from other assessments and studies.

#### **4.2.1 Demographic Characteristics**

The report covers a sample of 418 respondents across various districts, with the majority involved in value chains such as poultry, tomatoes, green beans, and chili peppers.

**Table 5: Age vs gender of the respondents**

Age range	Male	%	Female	%	Total	%
18-22	28	36	49	64	77	18.4
22-27	30	29	72	71	102	24.4
27-31	37	33	74	67	111	26.6
31-35	36	28	92	72	128	30.6
<b>Total</b>	<b>131</b>	<b>31</b>	<b>287</b>	<b>69</b>	<b>418</b>	<b>100.0</b>

The majority of respondents are female (69%), male (31%) and age distribution shows that most respondents fall between the ages of 22-35. This implies that women play a dominant role in agriculture, especially in smallholder farming. They are often responsible for tasks such as crop cultivation, livestock management, and food processing, making them more likely to engage in agriculture-related activities and be surveyed in such contexts.

Equally, the age range of 22-35 is significant because this group supposedly includes young adults who are starting families, establishing livelihoods, and are more likely to be involved in agriculture as a source of income, since agriculture often provides a stable income source in rural areas where formal employment opportunities are limited.

Therefore, a combination of gender roles and youth engagement in agriculture and not withstanding other categories; calls for a more focus in in supporting them through training and financial support programs

**Table 6: Gender VS disabilities status**

Gender		People with disabilities		Total
		Yes	No	
Male	Count	4	126	130
	% within Sex of respondent	3.1%	96.9%	100.0%
Female	Count	11	277	288
	% within Sex of respondent	3.8%	96.2%	100.0%
Total	Count	15	403	418
	% within Sex of respondent	3.6%	96.4%	100.0%

Figures above indicate that 3.6% of the total respondents were people with disabilities. Despite physical difficulties, people with disabilities are also taking part in their own development through agriculture. This call s for an encouragement to them, such that no one should be left behind in the trajectory to being active and improve the quality of life for all.

**Table 7: Respondents with a refugee status**

Refugee status	Frequency	Percent
Refugee/displace	35	8.4
Not refugee/displaced	383	91.6
<b>Total</b>	<b>418</b>	<b>100.0</b>

According to SEERVE project definition, refugees include those who fled from the neighboring countries and came to Rwanda, but also includes those who were internally displaced by disasters. Whereas it was difficult to refugees in refugees' camps, the figure of respondents in the above table7 (8.4%), represents the two categories.

Consequently, there is a need to specifically support technically and financially through SERVE Project or other channels, to ensure that both refugee groups are better integrated into agricultural initiatives, contributing to their improved livelihood.

#### 4.2.2. Age, Gender and Value Chain

The table 8 below shows the participation of different age groups and genders across four key agricultural value chains: chili pepper, green beans, poultry, and tomatoes. Each value chain has unique participation patterns based on age and gender.

**Table 8: Age, gender and value chain**

Age/ Gender	Chili pepper	%	Green Beans	%	Poultry	%	Tomatoes	%	Total	%
<b>18-22</b>	<b>6</b>	18	<b>12</b>	18	<b>26</b>	17	<b>33</b>	21	<b>77</b>	18
Female	3	8.8	8	12	20	13	18	11	49	12
Male	3	8.8	4	5.9	6	3.8	15	9.4	28	7
<b>22-27</b>	<b>9</b>	26	<b>12</b>	18	<b>44</b>	28	<b>37</b>	23	<b>102</b>	24
Female	8	24	8	12	31	20	25	16	72	17
Male	1	2.9	4	5.9	13	8.3	12	7.5	30	7
<b>27-31</b>	<b>6</b>	18	<b>19</b>	28	<b>41</b>	26	<b>45</b>	28	<b>111</b>	27
Female	2	5.9	15	22	30	19	27	17	74	18
Male	4	12	4	5.9	11	7	18	11	37	9
<b>31-35</b>	<b>13</b>	38	<b>25</b>	37	<b>46</b>	29	<b>44</b>	28	<b>128</b>	31
Female	9	26	18	26	35	22	30	19	92	22
Male	4	12	7	10	11	7	14	8.8	36	8
<b>Total</b>	<b>34</b>	100	<b>68</b>	100	<b>157</b>	100	<b>159</b>	100	<b>418</b>	100

As indicated and supplementing the previous analyses from the tables above, the female participation takes a big share (69%), particularly in high-value crops like chili pepper (26%) and green beans (26%). Male participation portion (31%) has a stronger representation in poultry (29%) and tomatoes (21%).

The most active age bracket (31-35), contributing 31% of the total participation across all value chains, with the highest involvement in chili pepper (38%) and green beans (37%). The 27-31 age bracket is the second most active (27%), with significant involvement in tomatoes (28%) and poultry (26%). The 22-27 age group represents 24% of total participation, with a stronger presence in poultry (28%) and tomatoes (23%).

The age bracket of 18-22, seems to be the least active group (18%), with more focus on tomatoes (21%) and poultry (17%). Their lower participation, particularly in value chains like poultry and tomatoes, tends to be interpreted that they may not yet have the financial capacity, experience, or access to land needed for, more intensive farming.

**Table 9: Age Category vs. Value chain**

Age category		Value chain				Total
		French Beans	Chilli pepper	Poultry	Tomatoes	
18-22	Count	12	6	26	33	77
	%	17.6%	17.6%	16.6%	20.8%	18.4%
22-27	Count	12	9	44	37	102
	%	17.6%	26.5%	28.0%	23.3%	24.4%
27-31	Count	19	6	41	45	111
	%	27.9%	17.6%	26.1%	28.3%	26.6%
31-35	Count	25	13	46	44	128
	%	36.8%	38.2%	29.3%	27.7%	30.6%
Total	Count	68	34	157	159	418
	%	100.0%	100.0%	100.0%	100.0%	100.0%

Based on the above situation, there is a need to strengthen women participation across the value chains, while boosting the number and active participation of men. There is a need to tailor agricultural policies and programs to cater to different age groups. For example, 31-35-year-olds could benefit from programs that focus on scaling operations and expanding market access, while 18-22 years of age might benefit from entry-level support in less capital-intensive value chains like poultry or short-cycle crops like tomatoes. More awareness campaigns are equally needed.

**Table 10: Distribution of respondents according to districts and value chains**

District	Green Beans	Chilli pepper	Poultry	Tomatoes	Total	Percent
Gakenke	14	5	9	9	37	9%
Huye	12	3	21	23	59	14%
Kayonza	6	4	10	23	43	10%
Kirehe	2	4	23	30	59	14%
Ngoma	3	6	10	22	41	10%
Nyabihu	3	2	16	7	28	7%
Nyamagabe	4	2	16	5	27	6%
Rubavu	4	3	23	7	37	9%
Rulindo	9	2	17	14	42	10%
Rwamagana	11	3	12	19	45	11%
<b>Total</b>	<b>68</b>	<b>34</b>	<b>157</b>	<b>159</b>	<b>418</b>	<b>100%</b>

Table 9, portrays the distribution of respondents with regard to their location and value chains, as emanated from the existed population and the correlated sample size.

#### 4.2.3 Value Chain Participation and Business Characteristics

The data provided in the table 10 sketches the distribution of business characteristics across different agricultural value chains: green beans, chili pepper, poultry, and tomatoes.

**Table 11: Value Chain Participation and Business Characteristics**

Business Characteristics	Value chain				Total
	Green Beans	Chilli pepper	Poultry	Tomatoes	
Individual farmer	41.2%	44.1%	54.8%	42.1%	46.9%
Cooperative	8.8%	14.7%	5.1%	6.9%	7.2%
Company			0.6%		0.2%
VSLA	48.5%	41.2%	38.9%	50.9%	45.2%
Other	1.5%		0.6%		0.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

The interpretation of the above tables depicts the following

The majority of the respondents seem to operate individually (46.9%) of all businesses across the value chains, are individual farmers. The highest percentage of individual farmers is in poultry (54.8%), followed by chili pepper (44.1%) and tomatoes (42.1%). Respondents that operate in Cooperatives account for 7.2% only, with more prominence in chili pepper (14.7%) compared to other crops. Companies are almost non-existent across these value chains, with negligible representation (0.6% for poultry).

Interestingly, 45.2% of businesses expressed their association with VSLAs. This simply means that they operate within associations that are not formally known. Other farmer respondents who operate under other groups account for 1.5% in green beans and 0.6% in poultry.

Therefore, under the above depiction, one can mirror the following:

- The dominance of individual farmers across all value chains highlights a strong challenge of lack of benefiting from the economies of scale and scope and therefore, this becomes hard for these smallholder young farmers.
- The reliance on VSLAs also denotes that these respondents/farmers in these value chains might have limited access to formal financial institutions or credit.
- The relatively low presence of cooperatives suggests that their potential benefits are not being fully realized. Government and development agencies should encourage the formation and strengthening of cooperatives, to take advantage of collective bargaining and economies of scale.
- There is an urgent to provide support to the farmers who are affiliated to VSLAs and other informal structures to graduate and be formally recognized to avoid the related risks and benefit from the existing capacity-building programs to help in the management of manage finances, improve productivity and access to markets.

**Figure 1: The period of involvement in the value chain**

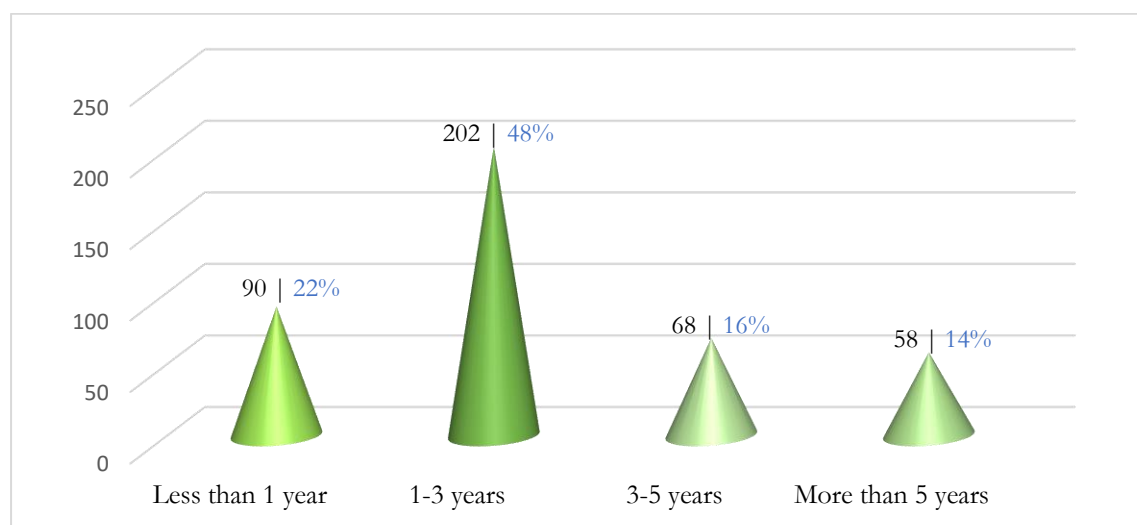


Fig1 depicts that nearly half of the participants (48%) are relatively new (1-3 years) to the value chains, with a significant portion (22%) being very new, having less than 1 year of experience. 16% have 3-5years of stay in the value chains. Only 14% have long-term experience of over 5 years, indicating a predominance of recent entrants in these agricultural activities. Need-based and tailor-made capacity building is needed in general.

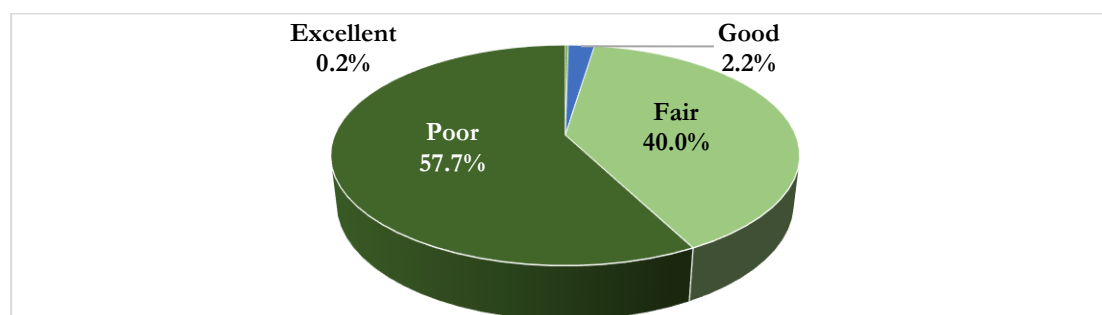
#### 4.2.3 General Knowledge on Agri-Insurance: Accessibility, Affordability and Coverage

**Table 12: Knowledge on agri-insurance products available in Rwanda**

Aware of agri-insurance products	Frequency	Percent
Yes	63	15.1
No	355	84.9
<b>Total</b>	<b>418</b>	<b>100.0</b>

Table11 indicates that only 15.1% have knowledge on agri-insurance products while 84.9% claim not know. This is self-evident that there is critical gap in awareness, which can significantly hinder the adoption of agricultural insurance. Similarly, fig 2 depicts that even those who seem to have some knowledge on existing agri-insurance products, only 0.2% have excellent knowledge, Good (2,2%), fair (40% ( and poor takes the big share of 57%.

**Figure 2: Rate of understanding of agri-insurance products**



Therefore, more effective awareness on agri-insurance is much needed through the combined efforts of related stakeholders. Encouraging satisfied customers to share their experiences and creating referral programs can help increase uptake.

**Table 13: Ways of getting insurance information**

Ways of getting insurance information	Responses		Percent of Cases
	N	Percent	
Farmer promoters	48	34.8%	76.2%
Staff of insurance companies	23	16.7%	36.5%
Government program	40	29.0%	63.5%
Farmers	24	17.4%	38.1%
Others	3	2.2%	4.8%
Total	138	100.0%	219.0%

Sources of information indicated from table 12 include Farmer Promoters (34.8%), Government Programs (29%), Staff of Insurance Companies (16.7%), Farmers through Peer-to-peer communication (17.4%), and other Sources (2.2%) which includes different service providers.

There is a need to stream effective communication channels, regular demonstration sessions, and awareness campaigns like community level meetings to increase outreach. This increase awareness and adoption of agricultural insurance, helping farmers manage risks and improve their financial resilience.

**Table 14: Agri-insurance products available**

Type of agriculture insurance	Responses	
	N	Percent
Crop Insurance	30	34.5%
Livestock Insurance	41	47.1%
Multi-peril Insurance	8	9.2%
Weather Index Insurance	8	9.2%
Total	87	100.0%

The table 13 shows the types of agricultural insurance products farmers are and indicates that livestock(poultry) Insurance (47.1%) takes a big portion as the most common type of insurance used, Crop Insurance (34.5%), multi-peril and weather index Insurance (9.2%) each respectively. There still a need to increase awareness, simplifying products, and expanding access, such that agri-insurance adoption can be improved, leading to more resilient farming.

Conversely, those in tomato value chain are out of this context under discussion, as their value chain is not covered by NAIS and Insurance companies' respondents interviewed, stressed that they do not have any separate insurance product for tomatoes.



**Figure 3: Choice influence for adopting agri-insurance**

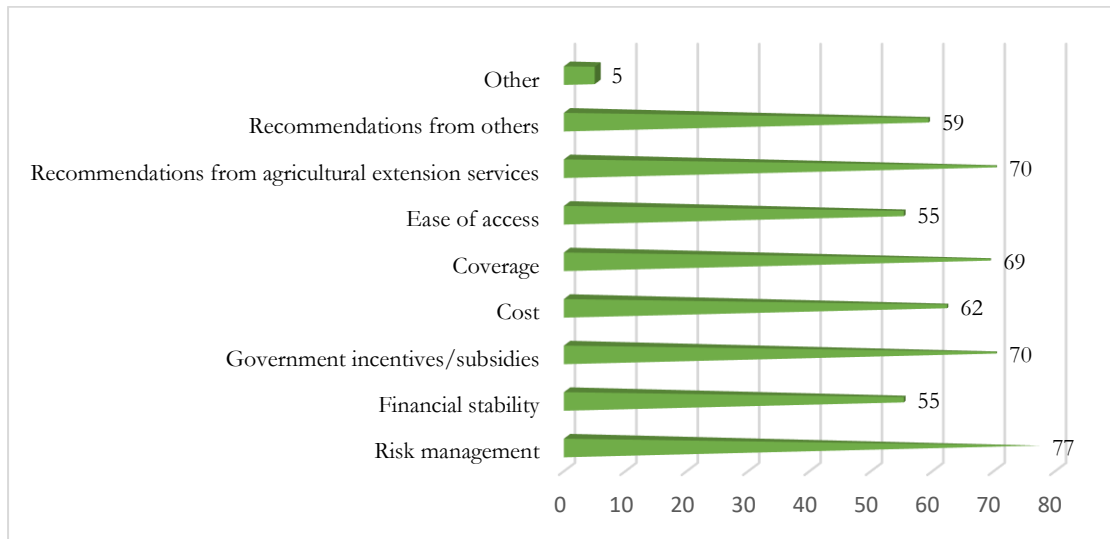


Fig3 provides reasons as to why the respondents adopted the agri-insurance products available. It reveals that respondents' choices were by risk management (77), government incentives/subsidies (70), extension workers (70), coverage (69) cost(62) peer-to-peer recommendations(59), ease of access and financial stability(55), others(5).

Since the extension workers have a strong influence on adoption, increasing training and resources for these workers will help them better communicate the benefits of agri-insurance to farmers. Peer-to-peer recommendations are influential. Again, increasing on awareness, financial literacy and collaborating with government to expand subsidy programs or to improve awareness of existing incentives, will likely boost adoption rates further.

**Figure 4: Rate the affordability of the agri-insurance products**

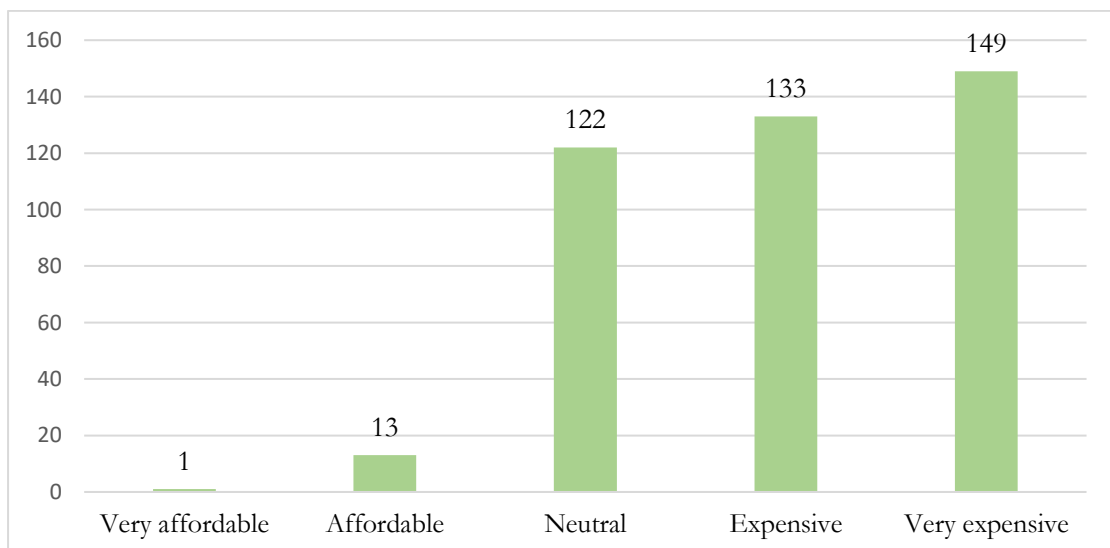


Fig 4 stipulates that agri-insurance products are not affordable, respondents alleging them to be very expensive (149) and expensive (133). Only one respondents affirmed that agri-insurance products are very affordable and 13(affordable). The number that remained neutral (122) is big and seems skeptical.

During the focus group discussion, participants expressed that insurance products are not even accessible.” *Despite the high cost of affordability, they are not even accessible in this area. We need insurance companies to bring their agents here. Advocate for us so that the government increases its subsidy on the premium rate up to 50% or above*”. Expressed a French Beans farmer in Nyabihu District. However, some participants in a FGD in Gakenke Districts affirmed that the affordability cost is high, but they can easily access Insurance company agents in their areas.

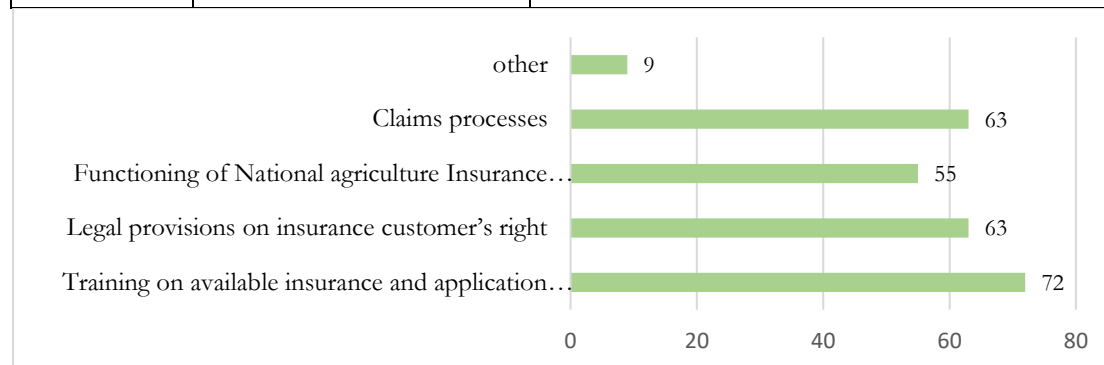
The devastating perception of agri-insurance as expensive or very expensive signals a missing link as it suggests that the cost is a major obstacle to widespread adoption. This could hinder farmers from protecting their crops, livestock, and livelihoods, thereby increasing their vulnerability to risks such as extreme weather events, pests, and diseases.

#### 4.2.4: Training on Agri-Insurance

This section tackles on the trainings received by respondents on agri-insurance, as it increases farmer’s awareness, improves risk management skills and financial literacy, builds trust in insurance products and provides appropriate feedback to suppliers and service providers, and increases adoption.

**Table 15: Training received on agri-insurance and areas**

Training	Frequency	Percent
Yes	83	19.9
No	335	80.1
<b>Total</b>	<b>418</b>	<b>100.0</b>



**Figure 5: Areas of training acquired**

As indicated table above, only 83(19.9%) confirmed to have received training and 335(80.1%) did not receive any training. Fig 5 indicates those who received the training in available insurance products (72), legal provision on insurance customer’s rights (63), claims processes (63), functioning of NAIS (55). This indicates a significant knowledge and skills gap on agricultural insurance, which in return contributes to low adoption rates of agri-insurance and limited understanding of its benefits. During the focus group discussion, they expressed the need to be trained; *“we highly need trainings on different topics related to our activities in order to cope up with a better protection of our activities and boost our productivity, get markets and develop ourselves economically. We hereby request AMIR and other stakeholders to sincerely help us,”* Explained a poultry farmer.

#### 4.2.5 Claims Process and Satisfaction

In this context, it anticipated that, in all value chains, farmers are aware of their rights when it comes to insurance claims, can dispute to claim rejections, understand their policy coverage, and are familiar with the legal frameworks protecting them.

**Table 16: Claims made**

Claim	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	6	1.4	1.4	1.4
Valid No	412	98.6	98.6	100.0
Total	418	100.0	100.0	

Respondents were asked whether they ever made a claim. Table 16 indicates that only six respondents (1.4%) had ever made an insurance claim, while 412 (98.6%) respondents did not make any claim.

**Table 17: Value Chain and claims for insurance**

Value Chain	Insurance claims
French Beans	25.7%
Chilli	35.3%
Poultry	39.0%
Tomatoes	0%
<b>Total</b>	<b>100.0%</b>

As indicated in the above table, 39% of people who claimed for insurance reimbursement are in poultry, 35.3% in chilli, 39.0% and 25.7% of them in French Beans value chain. No claim made from tomato value chain, as is out of NAIS scope. A tomato farmer narrated in Ngoma Disitrct screamed during the FGD that “our tomatoes are in trouble suffering from ‘Akanyugungugu (disease), yet they were banned from accessing the subsidized insurance scheme and the Government is not helping us to find the proper treatment for out tomatoes. We are bound to loose all. We must to be treated equally like others”. Indeed, tomatoes are sick as shown in the picture below.



**Photo: Primary data**

**Table 18: Claims process satisfaction**

Satisfaction characteristics		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Satisfied	1	.2	16.7	16.7
	Dissatisfied	2	.5	33.3	50.0
	Very dissatisfied	3	.7	50.0	100.0
	Total	6	1.4	100.0	
Missing	System	412	98.6		
Total		418	100.0		

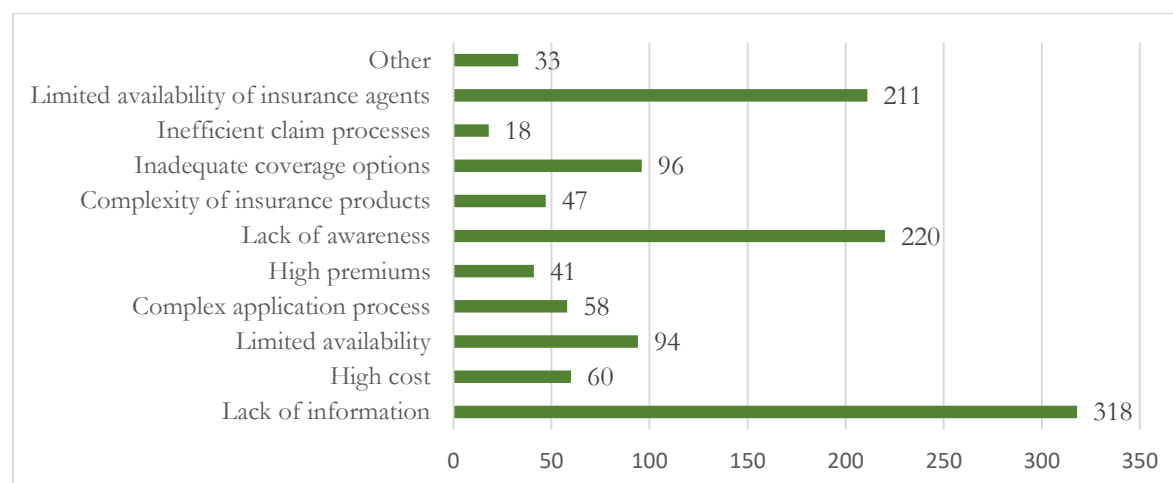
Asked about how the farmers were satisfied with the claims process, the table18 provides responses. It indicates that only 1 respondent (16.7%) from French Beans value chain, expressed his satisfaction with the claims process. The rest expressed their dissatisfaction (33.3%). 50% indicated that they were very dissatisfied.

Among the said category, includes a chilli farmer in Nyamagabe District, who alleges that plantation accidentally caught fire and burnt down into ashes, filed a claim and yet he was not compensated. Another complain submitted to us, are that insurance companies do not accept claim forms, signed by the designated agronomist and veterinary<sup>15</sup> officers in southern Province, hence, affecting the poultry value chain.

The extremely low rate of insurance claims and dissatisfaction from the demand side as indicated in the above tables, indicate a combination of barriers, including a lack of awareness, complicated claims processes, rejected claims, slow payouts, or insufficient compensation. This situation can be dealt with, through increasing of awareness, simplifying claims processes, ensuring transparency in rejections, speeding up payouts, and maintaining effective communication between farmers and Insurers.

#### 4.2.6. Main barriers in accessing agri-insurance products

**Figure 6: Main barriers in accessing agri-insurance products**



<sup>15</sup> This complain was equally shared with DUHAMIC ADRI team in Southern Province.

Lack of Information (318 respondents) & Lack of Awareness (220 respondents). These two factors account for the majority of the barriers, showing that uninformed or unaware farmers are less likely to engage with insurance products. This indicates significant gaps in communication between insurance providers and farmers.

Limited Availability of Insurance Agents (211 respondents) simply translates that there is lack of insurance agents on the ground and consequently, farmers have limited access to expert guidance when deciding on or purchasing insurance products.

Other portrayals from fig 6 include inadequate Coverage Options (96 respondents), high Cost (60 respondents), High Premiums (41 respondents), limited availability (58 respondents), inefficient Claims Process (18 respondents).

As a remedy to the highlighted challenges, an extensive awareness Campaigns are encouraged, using local media (radio, mobile phone messaging, social media) to widespread information about the benefits of agri-insurance. Definitely, enhancing education, expanding the presence of agents, offering more tailored and affordable products, and simplifying the processes, among other many measures deemed crucial; would mitigate or eliminate the highlighted barriers.

#### **4.2.7. Specific challenges related to affordability and management of agri-insurance products**

The challenges highlighted by respondents across all the 4 value chains, both during individual interviews from the insurance demand side, indicated that affordability and accessibility in rural zones and lack of information about insurance services scored high (63%). They were repeated during focus group discussions. By order of severity and revealed by respondents, they are followed by limitations in insurance services (Small-scale land), limitations in insurance services (e.g below required chicken numbers for poultry), No insurance for tomatoes and difficulties in indemnity payment (proving damage or loss). More details are in Annex 3.

#### **4.2.8. Recommendations to improve agri-insurance products or services**

The summary of the recommendations to enhance the uptake and effectiveness of agricultural insurance for farmers include the following (details are in Annex 4):

- Make insurance products more accessible and affordable
- Adequate mobilization on insurance coverage
- Frequent training about insurance and modern agriculture
- Enabling market access
- Offer subsidies in insurance sector for increasing insurance coverage
- Adequate mobilization
- Increase number of local mobilisers (ABAFASHAMYUMVIRE)
- Update insurance companies' policies (e.g: minimum number of chicken).
- Provide subsidized insurance for Tomatoes
- Maximum Cooperation and effective communication with farmers.

## 4.2 Supply side Analysis

Agricultural insurance companies, microfinance institutions (MFIs), SACCOs, NAIS and selected stakeholders related to the Project scope and consortium; revealed several attention-grabbing insights about agriculture insurance, particularly in relation to the four key value chains (chili, tomato, French beans and poultry) under this assessment. There is consensus on the significant improvement in agriculture insurance with regard to its understanding and usage. Agricultural insurance is seen as essential for mitigating risks associated with farming activities.

The findings from interviews conducted with selected respondents from the supply and support sides emanating from the categories cited above; highlighted the following:

### 4.2.1 Progress Made

1. The Government has put in commendable efforts in carrying out awareness about agriculture insurance and its essence.
2. Agriculture insurance related awareness and mobilization and enforcement has been decentralized to the Districts level and shall be featuring in their annual performance (Imihigo) contracts. This gives more weight on how agriculture insurance is taken decisively, perceived and carried forward.
3. Insurance companies emphasize that these products can help farmers access credit more easily,
4. MFIs and SACCOS are more willing to lend to farmers whose crops or livestock are insured
5. Insurance companies, as well as stakeholders in the SERVE project, are working to tailor products to specific agricultural value chains (e.g., maize, beans, horticulture, and livestock). This involves developing insurance that covers the particular risks associated with each type of farming activity. Stakeholders stress the importance of this customization to ensure relevance and uptake by farmers
6. It is believed that Agricultural insurance provides financial protection for farmers, ensuring that they can recover quickly after natural disasters, and helps them access credit by reducing the risks for lenders.

### 4.2.3. Challenges Highlighted

1. While the government provides a 40% subsidy through the NAIS, many smallholder farmers still find the premiums high relative to their income levels, leading to low participation.
2. Insurance companies are constrained by Management and monitoring costs are extremely high especially when applicable to an individual smallholder farmer. They suggest that farmers need to operate in cooperatives or other formal groups
3. There is no insurance provided to tomato growers, be it under NAIS or otherwise. This possess a great threat to tomatoes growers.
4. MFIs and SACCOs alluded to the barriers to the adoption of agri-insurance among farmers. 66.7% of the respondents attributed it to lack of awareness, inefficient claim processes and 11.1% attributed it to limited availability of insurance agents.
5. There is a need for Crop and Livestock Insurance's Information Dissemination, which calls for the involvement of all partners that include MINAGRI and

- insurance service providers for the development of mobile apps/USSD and creating channels that deliver relevant crop and livestock-related information
6. Insurance companies are worried to small breeders who are not able to take care of their farms.

## **5. CONCLUSION AND RECOMMENDATIONS**

### **5.1 Conclusion**

Agriculture plays a significant role in Rwanda's economic growth but is still highly rain-fed with risks and losses caused by adverse natural and climate shocks. Agricultural insurance schemes are widely recognized as potential risk management strategies. It is useful for transferring risk and is important for enhancing the robustness of agricultural output, minimizing the losses brought on by natural disasters to agricultural production, and safeguarding farmers' overall income and improve their quality of life. Affordable and sufficient agriculture insurance is a crucial catalyst pushing investors to make agriculture a viable and vibrant business

The assessment findings revealed that while Rwanda has made reasonable progress, looking at the policies in place, collaborative efforts and goodwill from farmers, government, private sector and service providers compared to the past, in offering agri-insurance products. Looking at the current situation there are significant barriers to widespread adoption, mainly in chilli, French Beans, tomato and poultry value chains. The key challenges include lack of awareness, limited coverage options, high premium costs, complex application processes, and inefficient claims handling. Most farmers, particularly smallholders, are either unaware of these products or perceive them as unaffordable or difficult to access.

To SERVE Project and its implementers, it is always provide support through technical and financial assistance to make insurance products more affordable and accessible; expanding coverage, and improving farmers' understanding of how agri-insurance works. While enhancing the cohesive collaboration between the government, insurers, and farmers; the drive to address all the challenges within the 4 value chains, will strengthen the resilience of the agriculture sector, motivate the youth to join agriculture in big numbers, provide greater financial protection to farmers and mitigate the risks posed by climate change and other agricultural uncertainties.

### **5.2 Recommendations**

#### ***5.2.1 General Recommendations***

1. With regard to crop and livestock insurance, efforts should be made to increase awareness/access to information and access to insurance services among youth in agriculture. Innovative approaches, such as bundled insurance products, should be explored to address coverage gaps and high premium costs.
2. Ensure that insurance products in the chili, tomatoes, green beans and poultry values chains are well designed, accessible, affordable, and wide in the coverage and effectively meet the needs of farmers, ultimately enhancing the resilience and sustainability of agricultural practices.

3. Intensify on the capacity building, education, and training of farmers, mainly in risk mitigation, risk sharing and risk transfer, and improve on the quality, reach, coverage and value for money.
4. In collaboration with all stakeholders, insurance companies need to study and endeavors to introduce the “Group-Based agric-insurance” as it can reduce individual costs and increase participation, especially among younger and female farmers who may have less individual capital and meager land.

### **5.2.2. Policy-Makers**

5. As the Government of Rwanda through the MINAGRI and affiliated Agencies, continues to expand and implement the NAIS, there is a suggestion to deeply explore the role of crop and livestock insurance in boosting agriculture sector and climate adaptation efforts. The feedback will allow policymakers to build reforms that are responsive to prevailing implementation challenges/limitations.
6. In addition to an adequate legal and regulatory framework, the development of agricultural insurance requires the facilitation of access to technical and financial assistance for the development of products and the integration of agricultural insurance with other financial products and technical services received by the farmers.
7. Government to always carry out assessments on agri-insurance products accessibility to farmers, affordability, responsive to the farmers’ needs. There is a need to periodically secure valid feedback from farmers
8. Government to reduce the requirements for a farmer to benefit from NAIS scheme, For instance, in poultry value chain; reduce the requirement of 100 chicken to at least 50 chicken. Over 80% of farmers in poultry have between 50 -80 chickens. This would serve two purposes
  - The youth who are newly mobilized to join poultry won’t get discouraged any more
  - The scheme can cover many farmers and as a result boost their production and economic growth
9. Expand the partnership and interest more private Insurance Companies, if possible, endeavor to partner with all the accredited private Insurance Companies under NAIS framework, in order increase on a bigger farmers coverage in different value chains

### **5.2.3. Insurance Providers**

10. The range of insured perils should be carefully reviewed for each crop and livestock. For instance, insurance products would be developed based on the existing risk in relation to weather changes, pests and diseases, postharvest losses, maturity period and available/potential markets, within each value chain.
11. Crop and Livestock Insurance’s information dissemination needs to be boosted. This could involve partnerships with MINAGRI and insurance service providers for development of mobile apps/USSD and creating channels that deliver relevant crop and livestock-related information
12. Insurance companies to design and harmonize their products, as they target the same group, instead of providing diverse and confusing messages on similar products to the same target group.
13. Insurance Companies need to train, equip and accredit Sector Veterinaries and Agronomists, who could be able to approve claims that are be easily accepted by Insurance Companies during claim and compensation, without hesitation or rejection. Evidently, this is two-fold as farmers’ neatness and vigilance is called for.



14. Endeavor to decentralize their operations and have branches in districts, if possible at Sector and Cell levels to collaborate/interact with farmers within the nearest proximity.
15. Endeavor to digitize insurance related services which could reduce the high transactional (management and monitoring) costs.

#### **5.2.4. Farmers**

16. As underlined by Insurance providers (Companies), the management and monitoring costs incurred by Insurance Companies on the offered insurances products offered to individuals are very high and culminates into non-response of Insurance providers over farmers' needs. Therefore, farmers are advised to consolidate their activities and group themselves into cooperatives and associations, for them to benefit from the economies of scale and scope.
17. Farmers need increase their professionalism in agri-business and collaborate with insurance companies
18. Carry out peer-to-peer learning and experience sharing between farmers. This will improve their understanding about agri-insurance and its working processes.
19. Need to have more ownership and commitment and ensure that they benefit from the financial protection that insurance offers, securing their farms against potential risks and losses.
20. Endeavor to familiarize themselves with the claims process and knowledge to file claims in cases of loss. This includes knowing the required documents, how they are completed and deadlines.

#### **5.2.5. Service Providers(Consortium)**

21. Continue to mobilize more youth to be engaged in agriculture specifically in the 4 targeted value chains and possibly expand the scope. This has proven to be important venture for the youth.
22. Advocate for Tomatoes to be included in the NAIS subsidy support, as the framers are highly exposed to a lot of risks and attacks in this value chain.
23. Provide Capacity building an boost the adoption of insurance products to the farmers
24. Raise the voice and encourage other Insurance companies to offer agri-insurance products to SERVE targeted beneficiaries and collaborate with NAIS.
25. Intensify the awareness campaigns to the targeted farmers (youth) on the importance of agriculture insurance, in relation to risk mitigation, risk management and risk sharing-certified seeds, nkunganire scheme, etc) and risk transfer(insurance).
26. Intensify partnership and collaboration with Insurance providers, in order develop value chain specific insurance products, and come up with an insurance de-risking model that fully responds to the related needs of the beneficiaries under SERVE Project scope.
27. Continue to Strengthen Gender Mainstreaming within the 4 value chains - Gender Responsive Planning, budgeting, implementation and reporting.

### **5.3 ROADMAP for Recommendations implementation and stakeholder collaboration**

This roadmap aims to improve the accessibility, affordability, effectiveness and adoption of agricultural insurance in Rwanda. Regular monitoring and evaluation will be crucial to ensure the successful execution of these actions and to make adjustments as needed.

**Table 19: Recommendations Implementation roadmap.**

<b>Pillar</b>	<b>Objective</b>	<b>Interventions</b>	<b>Responsible partners</b>	<b>Timeframe(tentative)</b>
Increasing Awareness and Access	Enhance awareness and accessibility of agricultural insurance	<ol style="list-style-type: none"> <li>1. Facilitate the formation and strengthening of cooperatives and associations.</li> <li>2. Offer training and support to improve farming practices and collaboration with insurers.</li> <li>3. Encourage peer-to-peer learning and experience sharing among farmers</li> </ol>	<p>AMIR</p> <p>DUHAMIC ADRI</p>	6-12 months
Policy and Regulatory Framework	Put in place supportive policies and regulations for agricultural insurance	<ol style="list-style-type: none"> <li>1. Carry out assessments on agri-insurance products accessibility to farmers, affordability, responsive to the farmers' needs.</li> <li>2. Conform or update existing policies and regulations with farmers' needs.</li> </ol>	<p>MINAGRI</p> <p>Insurance Providers</p>	1 – 2 years
Advocacy	Raise the voice of the farmers on agri-insurance related issues	<ol style="list-style-type: none"> <li>1. Advocate for: <ul style="list-style-type: none"> <li>• A favourable legal/regulatory framework that suits interests of farmers on agri-insurance</li> <li>• Advocate for the inclusion of all value chains(tomatoes) in insurance schemes</li> <li>• All issues in the 4 value chains related to agri-insurance</li> </ul> </li> <li>2. Train farmers(cooperatives) on advocacy tools and techniques</li> <li>3. Advocate for supportive policies and regulations that facilitate the development and growth of group-based insurance.</li> </ol>	<p>CARE International</p> <p>Consortium members</p>	Continuous

Capacity Building and Training	Equip farmers with know-how, tools and technical skills	<ol style="list-style-type: none"> <li>1. Provide training in modern agricultural techniques, technology, and best practices.</li> <li>2. Equip young farmers with knowledge about different insurance products and how to choose the right one for their needs.</li> <li>3. Create opportunities for internships or apprenticeships on farms that use agricultural insurance, allowing youth to gain practical experience.</li> <li>4. Carry out training on understanding Agricultural Insurance, Financial literacy, financial planning; risk identification, risk assessment and Management; claims process and documentation, application of appropriate technology and tools, etc</li> <li>5. Encourage and facilitate Peer-to-Peer education for young farmers to share their experiences and knowledge with their peers to increase adoption.</li> <li>6. Organize field visits to farms that successfully use agricultural insurance to share the practical benefits.</li> </ol>	AMIR	Continuous
Adoption of Insurance Products	boost the adoption of insurance products	<ol style="list-style-type: none"> <li>1. Develop and carry out targeted education and awareness programs/interventions</li> <li>2. Monitor the progress and achievement</li> </ol>		
Enhancing Collaboration	To smoothen working relations	<ol style="list-style-type: none"> <li>1. Foster strong partnerships and collaboration between stakeholders –e.g joint planning &amp; implementation</li> </ol>	CARE International	Periodical and continuous

	and effective communication	<ol style="list-style-type: none"> <li>2. Establish a Multi-Stakeholder Platform and working groups</li> <li>3. Networking and information sharing</li> <li>4. Conduct regular assessments of collaborative efforts to identify successes, challenges, and areas for improvement.</li> </ol>		
Develop Group-Based Insurance Policies	To reduce agri-insurance transactional costs and benefit from economies of scale from framers	<ol style="list-style-type: none"> <li>1. Identify and map existing groups, such as farmer cooperatives and youth groups in agriculture.</li> <li>2. Carry out mobilisation campaign for individual farmers to join cooperatives</li> <li>3. Carry out awareness campaigns to inform groups about the benefits of group-based insurance and encourage enrolment.</li> <li>4. Map and profile the risks associated with each group,</li> <li>5. Develop insurance products that offer coverage for the specific risks identified</li> <li>6. Establish management structures within groups to oversee the insurance process and ensure smooth implementation.</li> </ol>	Insurance Companies	6 moths – 1 years
Digital solutions	Use digital platforms to ease communication	<ol style="list-style-type: none"> <li>1. Develop online platforms or apps that provide information about agricultural insurance, tailored to the interests and needs of young farmers.</li> <li>2. Assess and expand the agri-insurance coverage scope to have a wider reach</li> </ol>	Insurance Companies	6 – 12 months

Youth engagement	Mobilise the youth to join agriculture and use agri-insurance	<ol style="list-style-type: none"> <li>1. Develop programs to attract and support youth in agriculture</li> <li>2. Design and offer insurance products that suit their economic capacity</li> <li>3. Mainstream Gender Responsive Planning, budgeting, implementation and reporting</li> </ol>	PROFEMME TWESE HAMWE  DUHAMIC ADRI Youth Organizations	6 months – 2 years
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### ANNEX 1: List of People/Organizations Contacted for Key Informant Interviews

No	Name	Post	Institution
1	Maniragaba Alex	Manager	Muyumbu SACCO
2	Ngendahayo Iacide	Manager	RIM PLC
3	Mukamana Beata	Manager	Vision fund Rwanda
4	Masengesho	Manager	UMUTANGUHA FINANCE COMPANY PLC
6	Ndayambaje Innocent	Manager	SACCO KATAZA
7	Ntwari V.	Manager	MUYONGWE SAGER GANZA MICROFINANCE PLC
8	Mupenda Selemani	Manager	IMPORE MWULIRE SACCO
9	Irahari Patrick	Manager	SACCO INGOBOKA
10	Jacques Kiruhura	Manager	Terimbere Cyungo
11	Ganishuri Innocent	MANAGER	PTFWS (PFUNDA SACCO)
12	Munyana Gertrude	Business Development and partnership Manager	Goshen Finance PLC
13	Gakwandi Godfrey	SERVE Project Coordinator	CARE International
14	Minani Ernest	SERVE Project Coordinator	DUHMIC ADRI
15	Annet Kakibibi	SERVE Project Coordinator	PROFEMME TWESE HAMWE
16	Silas Mbonigaba	Manager, Agriculture/Crop Insurance	SONARWA
17	Benjamin Rusizanibakwe	Manager agriculture insurance	BK insurance
18	Bernard Rugambage	Program Manager	BDF Kigali
19	Letitia Mahoro	Agriculture Insurance Manager	RADIANT Yacu
20	Museruka Joseph	NAIS Coordinator	MINAGRI
21	Nkusi B. Eric	Country Representative	FAGACE

## ANNEX 2 : QUESTIONNAIRE AND INTERVIEW GUIDE

### 1. FARMERS

#### Individual Questionnaire: Assessing the available Agri-insurance products in Rwanda in 4 (Green Beans, Chili, Poultry, and Tomatoes) Value Chains

##### Introduction:

Thank you for participating in this assessment. Your insights will help us understand the agriculture-insurance products available in various value chains, including green beans, chili, poultry, and tomatoes; and the related best practices and challenges. Your responses will contribute to the development of more effective and efficient agri-insurance products that respond to the needs of farmers.

Your responses to this questionnaire will remain confidential and will only be used for research purposes. Your personal information will not be shared without your consent.

##### Section 1: General Information

1. Name (optional): \_\_\_\_\_
2. Location: Sector.....District.....
3. Gender: ( ) Male ( ) Female ( )
4. *Are you a refugee? ( ) Yes ( ) No*
5. *Do you have a disability? ( ) Yes ( ) No*
6. Please provide your age:
  - 18-22
  - 22-27
  - 27-31
  - 31-35
  - Other (please specify \_\_\_\_\_)
7. Which of the following agriculture value chains are you primarily engaged in ? (Select all that apply)
  - ( ) Green Beans
  - ( ) Chili
  - ( ) Poultry
  - ( ) Tomatoes
8. Please describe your nature within the value chain
  - ( ) Individual farmer,
  - ( ) Cooperative leader or member
  - ( ) Company leader or shareholder
  - ( ) Association leader or member
  - ( ) Other (please specify)
9. What motivated you to become a farmer in this value chain?  
.....  
.....  
.....

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10. How long have you been involved in this value chain?

- <1 year
- 1-3 years
- 3-5 years
- More than 5 years

**Section 2: General Knowledge on agri-insurance: accessibility, affordability, and coverage of these products**

1. Are you aware of agri-insurance products available in Rwanda?

- Yes
- No

2. If yes, how did you learn about these products?

- Extension services
- Insurance agents
- Government programs
- Fellow farmers
- Other (Please specify): \_\_\_\_\_

If no, why?

3. Which types of agri-insurance products are available in your region? (Select all that apply)

- Crop Insurance
- Livestock Insurance
- Multi-peril Insurance
- Weather Index Insurance
- Others (please specify): \_\_\_\_\_

4. Which organizations/providers offer agri-insurance products in your area? (List all that apply)

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

3. How would you rate your understanding of agri-insurance products?

- Excellent
- Good
- Fair
- Poor

4. a. Which type(s) of agri-insurance product(s) have you used or are currently using?

- Crop insurance
- Livestock insurance
- Weather index insurance
- Other (Please specify): \_\_\_\_\_

4. b. Who provided those agri-insurance product(s) have you used or are currently using? Name them

5. Which reasons that influenced your choice for adopting agri-insurance? (Select all that apply)

- Risk management
- Financial stability
- Government incentives/subsidies
- Cost
- Coverage
- Ease of access
- Recommendations from agricultural extension services
- Recommendations from others
- Other (Please specify): \_\_\_\_\_

6. How would you rate the affordability of the agri-insurance products in your value chain?

- Very affordable
- Affordable
- Neutral
- Expensive
- Very expensive

**7. How accessible are these insurance products in your area?**

- Very accessible
- Accessible
- Neutral
- Inaccessible
- Very inaccessible

**8. Have you ever had any training on agri-insurance?**

**If yes, by who and about what?**

If no, which one do you want?

8. Claims Process and Satisfaction

- Have you ever made a claim?

- Yes
- No

If yes, how satisfied were you with the claims process?

- Very satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very dissatisfied

**9. What are the main barriers to accessing agri-insurance products in your area?(Select all that apply)**

- Lack of information
- High cost
- Limited availability
- Complex application process
- High premiums
- Lack of awareness
- Complexity of insurance products
- Inadequate coverage options
- Inefficient claim processes
- Limited availability of insurance agents
- Others (please specify): \_\_\_\_\_

10 Do you face any specific challenges related to affordability and management of agri-insurance products in your value chain? Please elaborate)

.....

.....

.....

.....

11. What improvements would you suggest/recommend for the agri-insurance products or services?

- a. Government
- b. Insurance Companies
- c. Service Providers
- d. Other stakeholders

12. Is there any additional information or recommendations you would like to share regarding the availability, affordability and usage of agri-insurance products in your value chain?

Thank you very much for taking the time to complete this questionnaire. Your valuable insights will contribute to improving the provision and affordability of agri-insurance products in your value chain.

## **2. INTERVIEW QUESTIONS:**

### **INSURANCE COMPANIES**

1. Company/Insurance Provider:
2. Title of the respondent:
3. Gender: ( ) Male ( ) Female ( )
4. Do you have a disability? ( ) Yes ( ) No
5. Contact Information:
  - o Email: \_\_\_\_\_
  - o Phone: \_\_\_\_\_
6. Which types of agri-insurance products available and provided by your Company
7. Which types of agri-insurance products do you offer to farmers in Green Beans, Chili, Poultry, and Tomatoes Value Chains
8. Can you describe the key features of agri-insurance products you offer?
9. What is the adoption rate of agri-insurance products among farmers in your region?
10. What are the primary reasons for farmers adopting agri-insurance? (Select all that apply)
11. What are the main barriers to the adoption of agri-insurance among farmers?
12. How accessible are agri-insurance products to farmers in Green Beans, Chili, Poultry, and Tomatoes Value Chains
13. In your analysis, how effective have agri-insurance products been, in mitigating risks for farmers?
14. What feedback have farmers provided about their experience with agri-insurance products you offered?
15. How do you rate the overall satisfaction of farmers with your agri-insurance products available?
16. What feedback have you received from farmers regarding their experiences with agri-insurance?

#### Section 4: Challenges and Recommendations

15. What are the challenges faced by Insurers that hinder the provision of agri-insurance products
16. What improvements would you suggest/recommend for the agri-insurance products or services?
  - o Government
  - o Insurance Companies
  - o Service Providers/farmers in 4 value chains
  - o Other stakeholders
17. What policy changes do you envisage that would improve the adoption and effectiveness of agri-insurance products?
18. How can stakeholders collaborate to support the growth and effectiveness of agri-insurance in Rwanda?

19. Please provide any additional comments or insights regarding agri-insurance products and their adoption in Rwanda:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**A. AMIR MEMBERS – SACCOs and MFIs**

1. Identification

- Name of SACCO/MFI:
- Title of the respondent:
- Gender: ( ) Male ( ) Female ( )
- Are you a refugee? ( ) Yes ( ) No
- Do you have a disability? ( ) Yes ( ) No
- Contact Information:
  - Email: \_\_\_\_\_
  - Phone: \_\_\_\_\_

2. What have you known about agri-insurance?

3. Do you provide agri-insurance products to farmers? Yes/No

If yes, which ones/List them

If no, why?

4. Are there any activities you perform to support agriculture insurance? If yes, list them

5. How accessible are agri-insurance products to farmers in your area?

- *Very Accessible*
- *Accessible*
- *Somewhat Accessible*
- *Not Very Accessible*
- *Not Accessible at All*

6. How effective have agri-insurance products been in mitigating risks for farmers.

- *Very Effective*
- *Effective*
- *Somewhat Effective*
- *Not Effective*
- *Not Sure*

7. How do you rate the overall satisfaction of farmers with the agri-insurance products available?

- *Very Satisfied*
- *Satisfied*

- *Neutral*
- *Dissatisfied*
- *Very Dissatisfied*

8. What do you see as barriers to the adoption of agri-insurance among farmers in your area of operation? (Select all that apply)

- *High premiums*
- *Lack of awareness*
- *Complexity of insurance products*
- *Inadequate coverage options*
- *Inefficient claim processes*
- *Limited availability of insurance agents*
- *Others (please specify):* \_\_\_\_\_

9. What policy changes would you suggest to improve the adoption and effectiveness of agri-insurance products?

10. What recommendations would you make to insurance providers to enhance their products? (Select all that apply)

- *Adjust premium rates to be more affordable*
- *Provide clearer information and education about products*
- *Improve customer service and support*
- *Increase outreach and marketing efforts*
- *Enhance product coverage and features*
- *Others (please specify):* \_\_\_\_\_

11. In your view, how can stakeholders (government, insurance companies, farmers, NGOs, etc) collaborate to support the growth and effectiveness of agri-insurance in Rwanda?

12. Please provide any additional comments or insights regarding agri-insurance products and their adoption in Rwanda:

Thank you very much for your time and valuable insights. Your responses will contribute significantly to improving agri-insurance products and their adoption in Rwanda

## **B. GOVERNMENT INSTITUTIONS/AGENCIES**

1. *Identification*

- Name of the Institution:
- Title of the respondent:
- Gender: ( ) Male ( ) Female ( )
- Are you a refugee? ( ) Yes ( ) No
- Do you have a disability? ( ) Yes ( ) No



- Contact Information:
    - Email:
    - Phone:
2. How do you observe the status of agriculture insurance products in general and Green Beans, Chili, Poultry, and Tomatoes) Value Chains in particular?
  3. Are there any successful examples or case studies of agri-insurance programs that you think are worth highlighting?
  4. Is there any policy on agriculture insurance in Rwanda?
  5. List all the available public agriculture insurance support policies, strategies, programs, projects, etc
  6. Are there any positive impressions that resulted from the existing project/NAIS? If yes, List them
  7. Who (names) are the providers of insurances services in Agriculture and how do you collaborate with them?
  8. What are your thoughts on the future of agri-insurance in Rwanda
  9. Are there any extra activities/interventions you intend to put in place in order to support the affordability and accessibility of agriculture insurance products in Rwanda? If yes, mention them
  10. In your view, what are the challenges that hinder the provision of agri-insurance products in general and Green Beans, Chili, Poultry, and Tomatoes) Value Chains in particular?
  11. What improvements would you suggest/recommend for the agri-insurance products or services to?
    - a. Government Institutions/Agencies
    - b. Insurance Companies/Insurers
    - c. Farmers in 4 value chains
    - d. Other stakeholders
  12. Do you have any additional comments or insights on agri-insurance products and their impact on agriculture in Rwanda? Any Special focus on Green Beans, Chili, Poultry, and Tomatoes) Value Chains?

### **C. AMIR AND SERVE PROJECT CONSORTIUM**

1. Identification
  - Name of the Institution:
  - Title of the respondent:
  - Gender: ( ) Male ( ) Female ( )
  - Are you a refugee? ( ) Yes ( ) No
  - Do you have a disability? ( ) Yes ( ) No
  - Contact Information:
    - Email:
    - Phone:
2. How do you observe the status of agriculture insurance products in general and Green Beans, Chili, Poultry, and Tomatoes) Value Chains in particular?

3. Are there any successful examples or case studies of agri-insurance programs that you think are worth highlighting?
4. What are your thoughts on the future of agri-insurance in Rwanda
5. In your view, what are the challenges that hinder the provision of agri-insurance products in general and Green Beans, Chili, Poultry, and Tomatoes) Value Chains in particular?
6. What improvements would you suggest/recommend for the agri-insurance products or services to?
  - a. Government Institutions/Agencies
  - b. Insurance Companies/Insurers
  - c. Farmers in 4 value chains
  - d. Other stakeholders
7. Do you have any additional comments or insights on agri-insurance products and their impact on agriculture in Rwanda? Any Special focus on Green Beans, Chili, Poultry, and Tomatoes) Value Chains?

Thank you very much for your time and valuable insights. Your responses will contribute significantly to improving agri-insurance products and their adoption in Rwanda

**ANNEX 3: SPECIFIC CHALLENGES RELATED TO AFFORDABILITY AND MANAGEMENT OF AGRI-INSURANCE PRODUCTS**

District	Green Beans	Chili pepper	Poultry	Tomatoes
GAKENKE	<ul style="list-style-type: none"> <li>➤ Affordability</li> <li>➤ Small scale land</li> <li>➤ Accessibility of insurance services</li> <li>➤ Lack of mobilization</li> <li>➤ Lack of information about insurance service.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Affordability</li> <li>➤ Small scale land</li> <li>➤ Lack of information about insurance service</li> <li>➤ Accessibility of insurance services</li> <li>➤ Lack of mobilization.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Limitations in insurance services (below required chicken numbers)</li> <li>➤ Lack of mobilization</li> <li>➤ Affordability</li> <li>➤ Lack of information about insurance service</li> <li>➤ Accessibility of insurance services.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Limitations in insurance services (Small scale land)</li> <li>➤ Affordability</li> <li>➤ Lack of information about insurance service</li> <li>➤ No insurance for tomatoes</li> <li>➤ Accessibility of insurance services</li> <li>➤ Lack of mobilization.</li> </ul>
HUYE	<ul style="list-style-type: none"> <li>➤ Lack of knowledge about insurance service</li> <li>➤ Accessibility of insurance services</li> <li>➤ Low capital</li> </ul>	<ul style="list-style-type: none"> <li>➤ Limitations in insurance services (Small scale land)</li> <li>➤ Lack of knowledge about insurance services</li> <li>➤ Accessibility of insurance services</li> </ul>	<ul style="list-style-type: none"> <li>➤ Difficulties in indemnity payment (proving damage or loss)</li> <li>➤ Limitations in insurance services (below required chicken numbers)</li> <li>➤ Lack of knowledge about insurance service.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Accessibility of insurance services</li> <li>➤ Lack of knowledge about insurance service</li> <li>➤ Inadequate mobilization</li> <li>➤ Affordability</li> <li>➤ Low capital</li> <li>➤ No insurance for tomatoes</li> </ul>
KAYONZA	<ul style="list-style-type: none"> <li>➤ Limited affordability of insurance;</li> <li>➤ Low-income enterprise</li> <li>➤ Lack of knowledge about insurance service</li> </ul>	<ul style="list-style-type: none"> <li>➤ Lack of knowledge about insurance service</li> <li>➤ Affordability</li> <li>➤ Low-income enterprise</li> </ul>	<ul style="list-style-type: none"> <li>➤ Low-income enterprise</li> <li>➤ Affordability of insurance for people having less than 100 chicken</li> </ul>	<ul style="list-style-type: none"> <li>➤ Accessibility of insurance services</li> <li>➤ Affordability</li> <li>➤ Lack of knowledge about insurance service</li> </ul>

	<ul style="list-style-type: none"> <li>➤ Accessibility of insurance services</li> </ul> <p>Problems noted;</p> <ul style="list-style-type: none"> <li>➤ Lack of best seeds and fertilizers.</li> <li>➤ Market</li> </ul>	<ul style="list-style-type: none"> <li>➤ Accessibility of insurance services</li> </ul> <p>Problems noted;</p> <ul style="list-style-type: none"> <li>➤ Farmers at CYABITANA swamp, asked for water pumping machine (there is river it could be effective/</li> </ul>	<ul style="list-style-type: none"> <li>➤ Lack of knowledge about insurance service</li> <li>➤ Accessibility of insurance services</li> </ul> <p>Problems noted;</p> <ul style="list-style-type: none"> <li>➤ There are no vaccines in KAYONZA District.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Low-income enterprise</li> </ul> <p>Problems noted;</p> <ul style="list-style-type: none"> <li>➤ There is no insurance for Tomatoes</li> <li>➤ Lack of best seed and fertilizers.</li> </ul>
KIREHE	<ul style="list-style-type: none"> <li>➤ Inadequate mobilization</li> <li>➤ Inaccessibility of insurance services</li> </ul>	<ul style="list-style-type: none"> <li>➤ Lack of knowledge about insurance service</li> <li>➤ Affordability</li> <li>➤ Inadequate mobilization</li> <li>➤ Inaccessibility of insurance services</li> </ul>	<ul style="list-style-type: none"> <li>➤ Difficulties in application process for insurance</li> <li>➤ Affordability</li> <li>➤ Lack of information about insurance service</li> <li>➤ Low-income enterprise</li> <li>➤ Accessibility of insurance services.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Accessibility of insurance services</li> <li>➤ Affordability</li> <li>➤ Inadequate mobilization</li> <li>➤ No insurance for tomatoes</li> <li>➤ Inadequate mobilization</li> <li>➤ Lack of information about insurance service.</li> </ul>
NGOMA	<ul style="list-style-type: none"> <li>➤ Accessibility of insurance services</li> </ul>	<ul style="list-style-type: none"> <li>➤ Inadequate mobilization</li> <li>➤ Lack of knowledge about insurance service</li> <li>➤ Limitations in insurance services</li> </ul>	<ul style="list-style-type: none"> <li>➤ Limitations in insurance services</li> <li>➤ Affordability</li> <li>➤ Lack of information about insurance service</li> <li>➤ Low-income enterprise</li> <li>➤ Accessibility of insurance services.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Accessibility of insurance services</li> <li>➤ Inadequate mobilization</li> <li>➤ Limitations in insurance services</li> <li>➤ Affordability</li> <li>➤ No insurance for tomatoes</li> </ul>

NYABIHU	<ul style="list-style-type: none"> <li>➤ Lack of knowledge about insurance service</li> </ul>	<ul style="list-style-type: none"> <li>➤ Accessibility of insurance services</li> <li>➤ Inadequate mobilization</li> </ul>	<ul style="list-style-type: none"> <li>➤ Limitations in insurance services</li> <li>➤ Lack of knowledge about insurance service</li> <li>➤ Accessibility of insurance services.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Lack of knowledge about insurance service</li> <li>➤ Accessibility of insurance services</li> <li>➤ No insurance for tomatoes</li> </ul>
NYAMAGABE	<ul style="list-style-type: none"> <li>➤ Lack of knowledge about insurance service</li> </ul>	<ul style="list-style-type: none"> <li>➤ Lack of knowledge about insurance service</li> </ul>	<ul style="list-style-type: none"> <li>➤ Lack of land</li> <li>➤ Inadequate mobilization</li> <li>➤ Lack of knowledge about insurance service</li> <li>➤ Accessibility of insurance services</li> <li>➤ No insurance for chicken</li> </ul>	<ul style="list-style-type: none"> <li>➤ Affordability</li> <li>➤ Lack of information about insurance service</li> <li>➤ Accessibility of insurance services</li> <li>➤ No insurance for tomatoes</li> </ul>
RUBAVU	<ul style="list-style-type: none"> <li>➤ Lack of knowledge about insurance service</li> <li>➤ Accessibility of insurance services</li> </ul>	<ul style="list-style-type: none"> <li>➤ Lack of knowledge about insurance service</li> </ul>	<ul style="list-style-type: none"> <li>➤ Difficulties in indemnity payment</li> <li>➤ Affordability</li> <li>➤ Lack of information about insurance service</li> <li>➤ Accessibility of insurance services</li> <li>➤ No insurance for chickens.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Lack of knowledge about insurance service</li> <li>➤ Inadequate mobilization</li> <li>➤ No insurance in tomatoes</li> </ul>
RULINDO	<ul style="list-style-type: none"> <li>➤ Accessibility of insurance services</li> </ul>	<ul style="list-style-type: none"> <li>➤ Lack of information about insurance service</li> <li>➤ Accessibility of insurance services</li> </ul>	<ul style="list-style-type: none"> <li>➤ Accessibility of insurance services</li> <li>➤ Limitations in insurance services (below required chicken numbers)</li> </ul>	<ul style="list-style-type: none"> <li>➤ Difficulties in indemnity payment</li> <li>➤ Inadequate mobilization</li> <li>➤ Lack of information about insurance service</li> </ul>

			➤ Inadequate mobilization.	➤ Accessibility of insurance services.
RWAMAGANA	<ul style="list-style-type: none"> <li>➤ Affordability</li> <li>➤ Lack of information about insurance service</li> <li>➤ Low-income enterprise</li> </ul>	<ul style="list-style-type: none"> <li>➤ Affordability</li> <li>➤ Lack of information about insurance service</li> <li>➤ Low-income enterprise</li> </ul>	<ul style="list-style-type: none"> <li>➤ Affordability</li> <li>➤ Lack of information about insurance service</li> <li>➤ Low-income enterprise</li> </ul>	<ul style="list-style-type: none"> <li>➤ Affordability</li> <li>➤ Lack of information about insurance service</li> <li>➤ Low-income enterprise</li> </ul> <p>Problems noted;</p> <ul style="list-style-type: none"> <li>➤ Mysterious tomato pest disease (urunyo), claimed to be no effective medicine.</li> <li>➤ One crop limitation on tomato insurance.</li> </ul>

**ANNEX 4: SUGGESTIONS/RECOMMENDATIONS FROM FARMERS TO IMPROVE AGRI-INSURANCE PRODUCTS OR SERVICES**

<b>Value chain</b>	<b>Government</b>	<b>Insurance companies</b>	<b>Service providers</b>	<b>Other stakeholders</b>
Chili peppers	<ul style="list-style-type: none"> <li>➤ Make insurance products more accessible and affordable</li> <li>➤ Adequate mobilization on insurance coverage</li> <li>➤ Frequent training about insurance and modern agriculture</li> <li>➤ Enabling market access</li> <li>➤ Offer subsidies in insurance sector for increasing insurance coverage in chili.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Make insurance service more accessible and affordable especially in rural area.</li> <li>➤ Frequent training and awareness about insurance products.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Adequate mobilization</li> <li>➤ Frequent training about insurance product</li> <li>➤ Finding market</li> </ul>	<ul style="list-style-type: none"> <li>➤ Adequate mobilization</li> <li>➤ Frequent training about insurance</li> <li>➤ Finding market</li> </ul>
Green beans	<ul style="list-style-type: none"> <li>➤ Adequate mobilization</li> <li>➤ Frequent training about insurance and modern agriculture</li> <li>➤ Finding market</li> <li>➤ Offer allowance in insurance sector</li> <li>➤ Make insurance service more affordable</li> <li>➤ Make insurance services more accessible.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Update policies (e.g; minimum land scale)</li> <li>➤ Make insurance service more affordable</li> <li>➤ Make insurance services more accessible</li> </ul>	<ul style="list-style-type: none"> <li>➤ Frequent training about insurance</li> <li>➤ Finding market</li> </ul>	<ul style="list-style-type: none"> <li>➤ Frequent training about insurance and modern agriculture</li> <li>➤ Finding market</li> <li>➤ Offer allowance in insurance sector</li> </ul>
Poultry	<ul style="list-style-type: none"> <li>➤ Increase number of local leaders (ABAFASHAMYUMVIRE)</li> <li>➤ Make insurance service more affordable</li> <li>➤ Make insurance services more accessible</li> <li>➤ Adequate mobilization</li> <li>➤ Frequent training about insurance and modern agriculture</li> <li>➤ Finding market</li> </ul>	<ul style="list-style-type: none"> <li>➤ Update insurance companies' policies (e.g: minimum number of chicken)</li> <li>➤ Make insurance service more affordable</li> <li>➤ Make insurance services more accessible</li> <li>➤ Frequent training about insurance</li> </ul>	<ul style="list-style-type: none"> <li>➤ Offer allowance in insurance sector</li> <li>➤ Frequent training about insurance</li> <li>➤ Finding market</li> </ul>	<ul style="list-style-type: none"> <li>➤ Frequent training about insurance</li> <li>➤ Finding market</li> </ul>

Value chain	Government	Insurance companies	Service providers	Other stakeholders
	<ul style="list-style-type: none"> <li>➤ Offer allowance in insurance sector</li> <li>➤ Update insurance companies' policies (e.g: minimum number of chicken).</li> </ul>			
Tomatoes	<ul style="list-style-type: none"> <li>➤ Frequent training about insurance and modern agriculture</li> <li>➤ Make insurance service more affordable</li> <li>➤ Make insurance services more accessible</li> <li>➤ Adequate mobilization</li> <li>➤ Increase number of local leaders (ABAFASHAMYUMVIRE)</li> <li>➤ Finding market</li> <li>➤ Offer allowance in insurance sector</li> <li>➤ Insurance for Tomatoes</li> <li>➤ Cooperating farmers.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Adequate mobilization</li> <li>➤ Make insurance service more affordable</li> <li>➤ Make insurance services more accessible</li> <li>➤ Frequent training about insurance</li> </ul>	<ul style="list-style-type: none"> <li>➤ Adequate mobilization</li> <li>➤ Frequent training about insurance</li> <li>➤ Finding market</li> <li>➤ Offer allowance in insurance sector.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Adequate mobilization</li> <li>➤ Frequent training about insurance</li> <li>➤ Finding market</li> <li>➤ Offer allowance in insurance sector.</li> </ul>

Consider sharing primary dataset