

The Feasibility of Microinsurance for Maize and Rice Smallholder Farmers in Tanzania



Submitted to: **AGRA Tanzania**
By: *MicroSave*

Study conducted in July 2018

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Table 1 List of Abbreviations

| | |
|---------------|-----------------------------------------|
| NHIF | National Health Insurance Fund |
| CHF | Community Health Fund |
| SRI | Systems for Rice Intensification |
| FGD | Focus Group Discussion |
| AGRA | Alliance for Green Revolution in Africa |
| FIs | Financial Institutions |
| VICOBA | Village Community Banks |
| TADB | Tanzania Agricultural Development Bank |
| PAM | Partner Agent Model |
| CBO | Community Based Organizations |
| MNOs | Mobile Network Operators |
| SHFs | Smallholder Farmers |
| KYC | Know Your Customer |

1. BACKGROUND

1.1 Agriculture contribution to the GDP

Agriculture is an important economic activity in most developing countries. In Africa, agricultural activities contribute between 25 and 40 per cent to National Gross Domestic Product (GDP). The sector employs up to 60 percent of the working population. As much as 80 per cent of production is however, undertaken by smallholder farmers.

Transitioning agricultural production is critical to making significant changes in Africa. China managed to make progress by investing in agriculture. As observed by Montalvo, “Agriculture, rather than the manufacturing or tertiary sectors was the real driving force in China’s spectacular success against absolute poverty (Montalvo & Ravallion, 2009). And that agriculture has four times multiplier effect to the economic growth of a country than the manufacturing and service sectors (Ravallion & Chen, 2007).

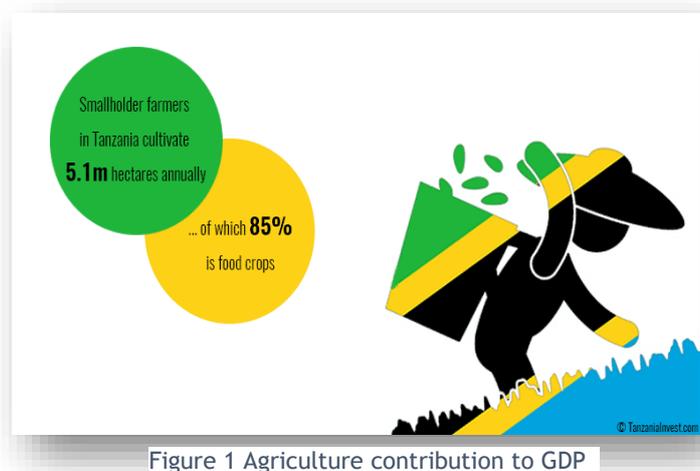


Figure 1 Agriculture contribution to GDP

In Tanzania, the agricultural sector accounts for about 70 percent of economic activities and mainly undertaken by smallholder farmers who cultivate 5.1 million hectares of land annually in rural and peri-urban. In 2016 and 2015, the sector accounted for 29% of the gross domestic product GDP¹ and employs 65 percent of adult population.

Maize, rice, sorghum and beans are the main staple foods in Tanzania. Maize is produced in ten regions including Mbeya, Iringa, Rukwa, Tanga, Manyara, Shinyanga, Ruvuma, Tabora, Katavi and Njombe. While rice is highly produced in Geita, Mwanza, Tabora, Mbeya, Katavi, Coast, Kilimanjaro, Morogoro and Shinyanga especially during the long rainy seasons.

According to the World Bank’s crop production index, agriculture product in Tanzania improved by 44% between 2008 and 2013 period. This is more than double of the average performance of sub-Saharan African countries at 18 per cent. Farmers harvested 7.7 million tons of maize and 2.4 million tons of paddy in 2014/5 (National Bureau of Statistics, 2017).

In terms of farming systems, the sector is characterised by smallholder farming with the households providing farm labour and using simple farm implements and heavily relying on traditional technologies e.g. own seeds and shallow land tillage. Majority of the smallholder farmers are not able to sustain their livelihoods through farming only. Low production and related agriculture risks such as drought, pests and diseases force many smallholder farmers to remain in poverty. While there have been many efforts and programs aimed at improving the agriculture sector. Specifically, the government provides farm extension services and promotes use of seeds and fertilizer. However, there remains much to be done to ensure that agricultural production sufficiently support the livelihoods of smallholder farmers. For example, innovative insurance products have the potential to mitigate agricultural related risks and by smallholder farmers’ livelihoods in cases of shocks e.g. sickness, large ticket payments such as school fees.

¹ See, World Bank National Accounts Data and OECD national accounts data files

Agricultural micro-insurance can impact rural communities in various ways:

- Provide protection against setbacks due to crop losses and assist farmers to get back on their feet after external shocks.
- Access to agricultural insurance could enable farmers to engage in riskier, but, on average, more lucrative farm activities: e.g. alternative or new crops, extended surface cultivation, or increased use of fertilizer and pesticides.

1.2 Study Approach and Methods

AGRA is implementing financial inclusion for smallholder farmers (FISFAP) project in Kenya, Ghana and Tanzania. The project works with a broad range of partners to support smallholder farmers to manage livelihoods shocks and improve their resilience through facilitating access to financial services including savings (lay away), loans, payments and insurance. AGRA contracted *MicroSave* to conduct a baseline study to assess availability (supply) and perception and use (demand) of microinsurance products among smallholder farmers in Tanzania. The overall goal of the study is to identify the needs of smallholder maize and rice farmers in Southern Highlands of Tanzania and how to leverage on microinsurance to better support smallholder farmers. *MicroSave* conducted the study among a selected group of maize and rice farmers in Tanzania and also interviewed selected insurance companies between the months of May and June 2018.

The study objectives included:

- i. Present the state of agriculture microinsurance in Tanzania,
- ii. Determine priority risk areas of smallholder rice and maize farmers,
- iii. Make recommendations to guide the design and structure of an appropriate and affordable micro-insurance product for smallholder rice and maize farmers.

MicroSave used a multi-skilled team of local and international consultants. The team, used a mixed methods research approach to collect and analyze both qualitative and quantitative data. We reviewed sector reports, data, business models and user experiences and identified viable product options to meet the needs of smallholder maize and rice farmers in Tanzania. The findings of this study will inform future engagement with insurance companies and product refinement or new development to serve smallholder farmers. AGRA facilitated a stakeholder workshop in July 2018 that brought together Tanzania insurance regulatory Authority (TIRA), insurance companies serving the mass market including UAP, Sanlam and MGen. Some insurance companies expressed interest to continue the engagement and it is likely that with appropriate partnerships, FISFAP will be able to test some innovative products with selected insurance companies to support maize and rice farmers in Tanzania.

1.3 Area of Study

We conducted the study in three locations including Morogoro, Njombe and Sumbawanga, as shown in the map below. Here is a brief of the study locations.

(i) Morogoro

Morogoro region is situated on the Eastern side of the country. It has a population of 2.2 people (according to 2012 national census). The specific areas our team visited and engaged with farmers were Kilombero, Mngeta, Itangoa.

(ii) Njombe

This a new region, recently curved out of the larger Mbeya region. The region has a population of about 3 million people. Our team interviewed farmers in Chimala, Ikuna Ninga and Mahongola.

(iii) Sumbawanga

Sumbawanga municipality is the capital town of Rukwa region. The area has a population is 1 million people. The study was focused on the municipality and two villages on the outskirts of the town namely, Kaoze, Tatumbila. The study locations are summarised in the table below:

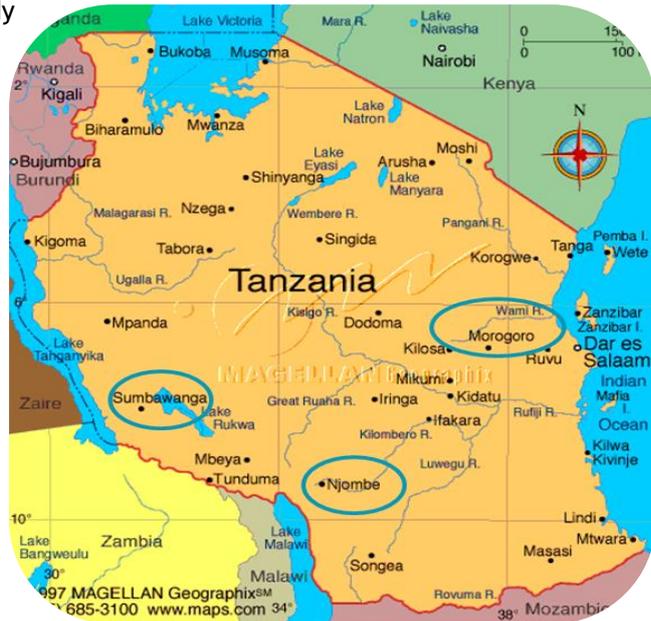


Figure 2 Area of study

Table 2 Study Locations

| | Region | Villages | Municipality | Total |
|---|-------------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-------|
| 1 | Morogoro | <ul style="list-style-type: none"> Kilombero, Mngeta, Itangoa | N/A | 3 |
| 2 | Njombe | <ul style="list-style-type: none"> Chimala, Ikuna Ninga Mahongola | N/A | 3 |
| 3 | Submbawanga | <ul style="list-style-type: none"> Kaoze Tatumbila | <ul style="list-style-type: none"> Sumbawanga | 3 |
| | Total | 8 | 1 | 9 |

The three study regions are largely dependent on agriculture production and agribusinesses as the main sources of income. In the municipality area, people engage in small trades and businesses.

1.4 Study Methodology

The study covered both demand side (stakeholders in the maize and rice value chains) and supply side (insurance service providers).

On the supply side, we interviewed managers of selected insurance service providers in Tanzania to understand their microinsurance products, challenges faced, distribution models used in rural areas. This information was then analyzed together with the industry secondary information gathered through desk research.

On the demand side, we carried out a mixed methods research that included both qualitative and quantitative data collection through group discussions and questionnaire administration with maize and rice farmers. We purposively selected the study locations (with guidance of AGRA staff) and interviewed maize and rice farmers and key informants in the study locations.

Respondents were carefully selected to ensure we got accurate information and data on their experience with insurance services and how these services supported their farming activities. The four regions, Morogoro, Njombe, Sumbawanga and Mbeya were identified as leading maize and rice growing regions in the country. The maize and rice farmers were identified on the basis of their experience with AGRA programs and experience with insurance services.

1.5 Data Collection and Analysis

The study team undertook both group discussion and individual interviews with farmers, Agro-dealers and local government officials. We also conducted a short survey with maize and rice farmers and collected households level data. The table below shows the sample size for the study.

Table 3 Respondents by Location

| | Data collection Tool | Sumbawanga | Morogoro | Njombe | Total |
|---|-----------------------------------|------------|----------|--------|-------|
| 1 | Key informants | 3 | 5 | 5 | 13 |
| 2 | Questionnaire survey (198 female) | 64 | 150 | 111 | 325 |
| | Total | 67 | 155 | 116 | 338 |

The team analyzed the data and information during the field study to inform the next rounds of interviews and farmer surveys. The interview and discussion notes were transcribed and collated into emergent themes and product ideas. The survey data was analysis using statistical software and results used to corroborate the views from interviews and discussion sessions. The table below presents that data analysis framework. The overall findings have been presented in the next section.

1.6 Issues for future analysis

The team identified some issues that would require further analysis as outlined below:

- The severity of the risks and perils faced by smallholder maize and rice farmers
- Microinsurance market analysis and size estimation to inform financiers including insurance companies
- Optimal distribution business models for microinsurance services. This requires detailed data and close engagement with insurance companies to conclusively develop appropriate models to serve smallholder farmers in villages.

The project can consider further and detailed analysis of these issues in the next phase as the partners develop appropriate services to meet the needs of smallholder maize and rice farmers.



Figure 4: Enumerator Isaya with household in Sumbawanga



Figure 3: Enumerator in Njombe interviewing

2. STATE OF MICROINSURANCE IN TANZANIA

2.1 Insurance sector overview

2.1.1 Regulation and performance

Tanzania Insurance Regulatory Authority (TIRA) oversees the functions and operations of the insurance sector (See <https://www.tira.go.tz/>). The Insurance Act No. 10 of 2009 - Cap 394 and the Microinsurance Regulations, (2013) provides the legal framework and requirements for insurance service providers. It is noted that licensed insurers do not require separate license or permits to provide microinsurance products since microinsurance is treated by law as a type of insurance product. However, microinsurance regulations are currently under review and some stakeholders have proposed microinsurance should be treated as a separate insurance portfolio. If passed, then microinsurance business may require a separate business license in future.

As at end of 2016, the sector was valued at TZS 660 Billion (\$290 million) worth of premiums - life and general insurance. A study by CENFRI and FSDT (2012) found that insurance sector in Tanzania has a fragile growth prospect due to the dominance of life embedded products. The study called positive experience by beneficiaries to ensure sustained insurance service penetration. They called for the creation of a platform for engagement between relevant public and private stakeholders to design a roadmap that would develop an inclusive insurance market.

Insurance market in Tanzania comprises one Re-insurance company and 31 insurance companies. Agents and brokers are the main distribution channel of insurance services in the country. These are growing at an average rate of 7.7% per year. See Table 4 below for the number of brokers and agents.

Table 4 Tanzania Insurance Market Landscape

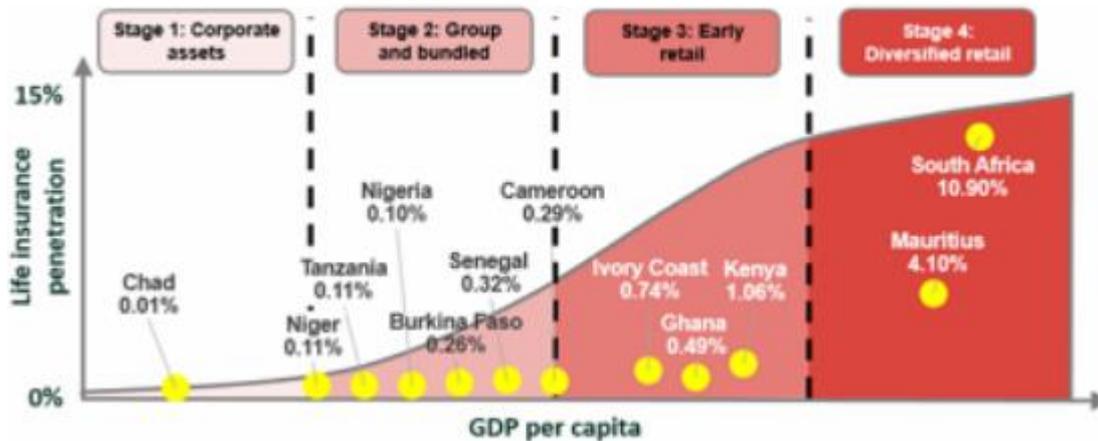
| | Type of Providers | Number |
|---|------------------------|--------|
| 1 | Re-Insurance companies | 1 |
| 2 | Insurance companies | 31 |
| 3 | Brokers | 153 |
| 4 | Agents | 500 |

Source: Insurance Market Performance Report (2017)

There were about 153 Brokers and 500 Agents by the end of 2017. More than one half (57%) of insurance business in 2016 was transacted through these brokers and agents. There were about 104 brokers in 2015, up by from 96 in 2014.

Life insurance value as a proportion of the GDP for Tanzania is estimated at 0.11%. This level of penetration indicates that Tanzania is a nascent insurance market. On the basis of the conference for insurance markets (CIMA), market development curve, Tanzania can be characterized as being at the second stage of insurance products development and insurance penetration. In stage two markets, insurance products are offered as group products or bundled with other financial products/services.

Figure 5: CIMA Insurance market development curve



Source: Adapted from Chamberlain et al. (2016)

As shown Tanzania's insurance market appears to be making progress but still behind in progressing towards the retail stages. At the retail stage, the insurance market is characterized by many people taking up insurance services but as individuals for a diverse needs and preferences. Insurance market in Tanzania therefore requires concerted efforts and innovations to develop further to reach the mass market including services smallholder farmers especially in rural areas.

2.1.2 Insurance business models

Markets categorized as being at the second stage of insurance market development cycle are characterized by limited range of products and many services providers use traditional principal-agent business model and offer limited services such as corporate assets cover, bundled products and targeting clients in groups. According to CIMA-a2ii, the traditional retail insurance business models are not feasible for the mass markets. Premiums from the mass market are typically too low to recoup the cost of investing in infrastructure required for retail insurance business models (CIMA-a2ii, 2016). The Mass markets require tailored microinsurance services. As defined by Churchill Craig (2006), microinsurance is the protection of low-income people against specific perils in exchange for regular premium payments proportionate to the likelihood and cost of the risk involved. While microinsurance is typically insurance service, it is distinct due to the target market determination. Therefore, insurance companies that offer insurance products targeted to the low-income market segments develop specific products for this market and design appropriate distribution models. As such, many regulators provide incentives for such targeting. For example, in Tanzania the regulator has reduced the licensing fees for microinsurance services.

In many markets, the growth of microinsurance services relies largely on the initiatives of the conventional insurance companies, there has been limited innovation around business and distribution models and product to reach the mass market at scale, let alone targeting smallholder farmers. Insurance companies therefore continue to rely on their traditional business and distribution models.

We have identified and briefly described nine distribution models that are typical in emerging markets. The project may consider any or a combination of these models when designing new insurance products and services targeting smallholder farmers.

1. **Direct model:** In this model, the insurance company deals directly with the insured clients. The insurer provides a complete set of services that includes awareness creation, enrollment, premium collection, renewals and claims settlement. The structure of this model is lean and may translate to cost effective business and lower pricing to clients.

2. **Broker-agent model:** This is the traditional insurance business model practiced in many emerging markets. The insurance brokers and associated agents conduct marketing and sales activities. But the broker and/or agents can be associated with multiple insurers and therefore offers a broad range of products and services. However, often the brokers and agents may actively promote products from some insurers with favorable terms. Insurance brokers and agents become very active in developing insurance concepts which the insurer may develop into full products. Therefore, this model can promote innovations and there have been examples of new products developed on the basis of ideas generated by the brokers/agents. For example, Zurich Insurance Brokers launched a micro health product while Acclavia Insurance Products launched a church-based life microinsurance product.

In some few cases, new agriculture insurance products have also emerged. For example, Afriguard Insurance Brokers, Outtasurance Agriculture Insurance Advisors and Acre Africa have developed agriculture insurance products in partnerships with difference insurance companies. In the health sector, Microinsurance Health Initiatives (MHI) developed health microinsurance product. It has been noted that brokers and agents transact most (96%) of the microinsurance business.

According to the Insurance Act No. 10 of 2009, there are multiple business arrangements under the agent/broker insurance business models. We have outlined some of the arrangements practiced in Tanzania as below:

- i. **Tied agents:** These are agents working with the insurer as their principal. Agents are allowed to work with up to three principal insurers. Those that work with multiple principal insurers are referred to as multi-agents. Tied agents transact 6% of the microinsurance business in Tanzania.
- ii. **Brokers only:** These are intermediaries open to work with any insurance companies. In Tanzania, brokers transact about 60% of the insurance business but Brokers only transact 4% of the microinsurance business.
- iii. **Broker-MNO:** Mobile Network Operators and Brokers have formed a new structure where they are working together to develop and provide digitally enabled products. The MNOs are largely aggregators of the premium and claims payment while the brokers have deal with product development and underwriting the insured. This model transacts 50% of microinsurance business in Tanzania. Further, MNOs providing these services have also launched microinsurance loyalty programs.
- iv. **Bancassurance:** In Tanzania, the law requires any bank interested in the insurance business to register with the insurance regulatory body as insurance agents or tied to a brokerage firm. Nonetheless, many banks are offering these services and are currently playing a significant role. For example, banks offer customers embedded credit life and funeral insurance products. It is estimated that banks transact about 36% of the microinsurance portfolios.
- v. **Partner - agent model:** This is an arrangement where the insurer works with a partner such as a Microfinance Institution (MFI) or a Savings and Credit Cooperative Organizations (SACCOS) that acts as an agent. It is estimated that MFIs and SACCOs transact about 4% of the microinsurance value. But this is mainly dominated by micro credit life and funeral insurance covers.
- vi. **Aggregator model:** This model overlaps significantly with others; however, strictly where the partner performs only aggregation function particularly for MFIs and SACCOs which do not perform any insurance function.
- vii. **Technical service provider model:** Here an entity that is not registered as an insurer, provides a specific technical service aimed at promoting microinsurance services e.g. product concept development, actuarial data analysis, provision of technological solutions etc. These services are provided to the insurance providers but the entity may also interface with clients. In many cases these are insurance technology companies. For example, Milvik which provides mobile platform and a call Centre for health insurance.

Edge point provides digital enabled (commonly referred to as paperless) health microinsurance solution while *Mybima* provides a mobile application to enable users to purchase insurance. Finally, in partnership with an insurance company, Acre Africa provides a call center and marketing support for a seed insurance product.

Table 5 Proportion of insurance distribution channels

| | Model | Type of Provider | Proportion |
|---|--------------------------|-------------------|------------|
| 1 | Direct | Insurance company | 10% |
| 2 | Broker-Agent | MNO and Brokers | 50% |
| | | Bancassurance | 36% |
| | | Tied Agents | 6% |
| | | Brokers only | 4% |
| 3 | Partner-Agent/Aggregator | SACCOs | 2% |
| | | MFIs | 2% |
| | Total | | 100% |

Source: Insurance Market Performance Report (2017)

To effectively serve the low-income market segment, insurance companies will need to re-engineer their traditional business and distribution models and refine appropriate products to reach scale. Such re-thinking may involve seeking partnerships with other financial institutions to link, not only loans, but also savings services and/or payment services to insurance services. And also to leverage on community organizations already working with the low income households and populations to enhance outreach.

2.2 Microinsurance services

Tanzania’s Microinsurance Regulations (see The Insurance Act 2013 - Cap 394, (2013)) define microinsurance as:

“insurance service that is accessed by low-income population by which risk is insured under a policy managed based on insurance principles and funded by premiums”

The insurance sector is regulated by Tanzania Insurance Regulatory Authority (TIRA). Annual reports by TIRA consistently not that while growing, there is a low-level penetration of insurance services in Tanzania. About one in five (19%) adult population have insurance policies in Tanzania and the total value of the insurance policies is about 1 per cent of gross domestic product (GDP). Insurance coverage is limited to employed, high-income, urban adults. A landscape survey on microinsurance in Tanzania conducted in 2015, revealed that only six insurance companies provided microinsurance products reaching only 4.5 million people.

But a majority of these microinsurance policy holders were all the same based in the capital city - Dar es salaam and other urban centres. Therefore, the majority of the population especially in rural areas are excluded from microinsurance services. See below an indication of level of outreach of microinsurance services in 2014 and 2015:

Table 6: Microinsurance performance in Tanzania

| Indicator | 2014 | 2015 |
|----------------------------------------|-------|-------------|
| Active service providers | 7 | 6 |
| Coverage ratio (% of Total population) | 3.92% | 8.70% |
| Microinsurance coverage (Mn) | 1.98 | 4.5 million |

2.2.1 Microinsurance products

Microinsurance products uptake has been slow in Tanzania. However, there are indications that the uptake is starting to rise as the microinsurance products start to diversify the product offerings. For example, the products include the following:

- i. Funeral credit life
- ii. Crop insurance
- iii. Life cover
- iv. Personal accident
- v. Hospitalization

Figure 6 alongside shows the most common types of insurance products are life and hospitalization (47 per cent) followed by embedded funeral (40 per cent). Apparently, the low market segment has pressing needs around health and funeral coverage.

Our interviews and group discussions showed that banks and MFIs provide these products as part of the loans i.e. product bundling. In most case, clients did not have full information about the insurance products thereby limiting the extent to which clients maximized on the products or perhaps sought additional and more relevant services such as seed, crop or livestock insurance. As shown by the landscape survey, only 0.02% of the respondents had used crop insurance. Awareness creation and product knowledge enhancements are important factors in ensuring wide adoption and usage of insurance products.

However, about seven insurance companies are providing microinsurance products. This is an indication that with the right intervention and partnerships, there is scope to scale uptake of insurance among the low market segment. Specific companies named as providing microinsurance products included:

- ✓ Jubilee General - Health, Agriculture
- ✓ Sanlam life - Life (credit/funeral)
- ✓ UAP- Agriculture
- ✓ Bumaco - Personal accident
- ✓ Mo Assurance - Personal accident
- ✓ Resolution - Health
- ✓ Mgen - Agriculture

2.2.2 Agricultural insurance products and models

There are agricultural insurance products in Tanzania. Three companies provide agriculture insurance. These are,

- Mgen Tanzania Insurance Company Limited
- UAP Insurance Tanzania Limited
- The Jubilee Insurance Company of Tanzania Ltd

Available data show that UAP is leading by providing about 80 per cent of all agriculture insurance. The other two, Mgen and Jubilee only provide one in five (20 per cent) of the policies.

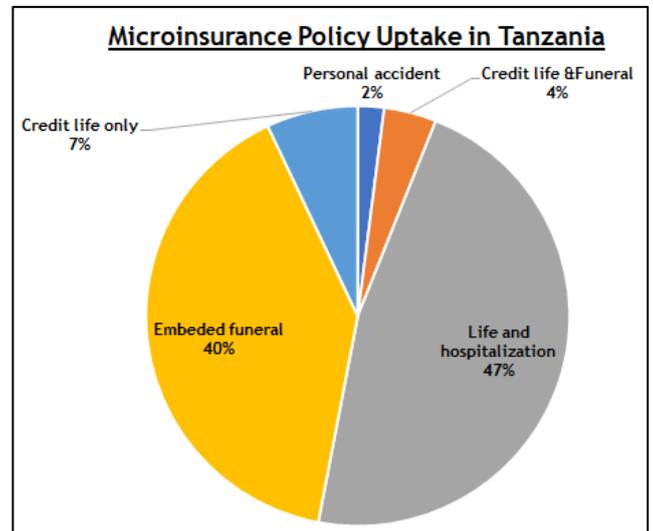
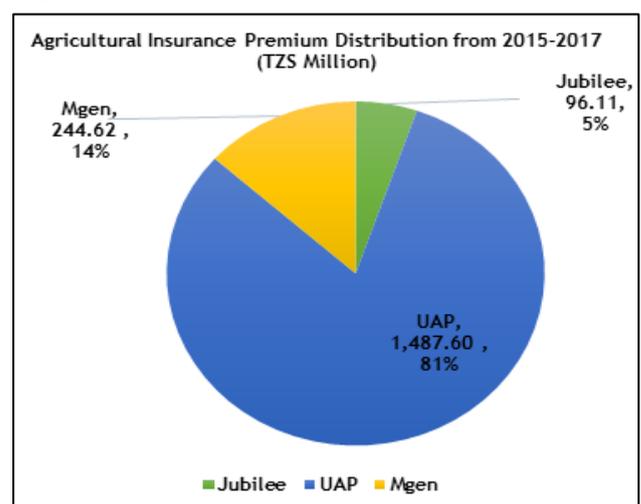


Figure 6: Proportion of policy holding in Tanzania

Figure 7: Agricultural Insurance Market Share



According to a study by the Swiss capacity building facility in 2014, there are some efforts to develop agricultural insurance products in Tanzania. The table below shows the focus of agriculture insurance, type of farmers targeted and basis of the coverage.

Table 7 Agriculture insurance products types and risk covered

| Product Type | Type of Farmer | Risks Covered | Value Chains | Data Needed |
|--------------------------|----------------|-----------------------------------------------------------|-------------------------------------------------------|--------------------------------------------|
| Multi-peril, visit based | Large & Small | Named risks | All crops, livestock | Yield data from individual farms |
| Weather index | Small & Large | Drought, Excess rain, Weather-related & disease | Maize, sorghum, coffee, tobacco sunflower, cotton | Weather data (min 15 years daily rainfall) |
| Satellite index | Small & Large | Drought, Excess rain Weather-related disease, flooding | All above + Horticulture and other irrigated crops | Satellite data minimum (15 years) |
| Area yield index | Small & Large | All catastrophic risks, excluding hail | All above | Yield data minimum (5 years) |

Source: Tanzania Agricultural Insurance Feasibility Study (Swiss Capacity Building Facility, 2014)

The market has experienced some level of product innovations. For example, provision of health cards, bundling of credit and personal accident/funeral covers and adoption of digital enabled channels. Besides insurance companies, some Non-Governmental Organizations (NGO) and Community Based Organizations have also tested health insurance schemes targeting farmers e.g. Community Based Health Insurance schemes (CBHS).

Going forward, it appears that innovations will be required around developing agriculture insurance concepts and products to effectively get such a nascent market to benefit from insurance services. Given universality of health-related needs and challenges among smallholder farmers, access to health services is a leading factor leverage on when developing agriculture insurance products in Tanzania.

Discussions with insurance companies that are providing both agriculture and general microinsurance products showed that partnerships are important to reach smallholder farmers. For example, MGen partners with aggregators while Sanlam partners with banks to reach low income market segments. See the cases below.

Case 1: Crop insurance by MGen

MGEN offers crop micro insurance covering various perils including hail, fire and lightning, explosion, riot and strike and malicious damage to agricultural assets. In the year 2013 MGEN started providing a crop insurance cover for sunflower farmers in Kibaigwa district in Dodoma region. They were in partnership with a sunflower seed aggregator.



The aggregator's role is to,

- (i) supply of farm inputs, (ii) build farmers capacity, (iii) purchase the harvests*

About 71 sunflower farmers paid the premium for the crop insurance cover. The cover was against the loss of sunflower yields. The product made losses to the insurer, having paid Tsh. 20 million against gross revenue of Tsh. 5 million in premiums. The main challenges were, (i) expensive awareness creation and capacity building of farmers, (ii) high administrative costs.

MGEN manager suggested that we should consider developing embedded products. For example, combining medical and life insurance covers. But emphasized that this should be done in partnership with financial institutions and also include the government.

Source: Interview with Ernest Kilombi; Manager agricultural insurance Mgen



Case 2: Life cover by Sanlam

Sanlam provides life and funeral insurance products through established financial institutions e.g. NMB and Stanbic. Most of the time they don't create awareness for these products. Some of the challenges were; Creating awareness and knowledge on the products. He felt materials used for marketing don't communicate clearly what they are selling to their clients. Apart from that they lack

good communication channels. He suggested that the product marketing and communication should be reinforced with appropriate collaterals that educate the farmers on key product features and functionality. Secondly, the product uptake may also be enhanced by gamification e.g. lottery, success stories, interactive digital information platform etc. In terms of the business case, the product needs to reach at least 30, 000 policy holders for it to make any solid business case.

On the way forward, there is need to create data base for the potential policy holders. This will aid in enhancing efficiency in delivery of micro insurance services. A reliable data will enhance outreach, customer engagement and claim payment efficiency.

Source: Interview with Suleiman Khamisi; CEO Sanlam Tanzania

The promotion of microinsurance among smallholder farmers requires careful choice of business model and partnerships. The targeted smallholder farmers are in rural locations and may only be well reached by non-insurance companies such as community banks, MFIs, Banks and a few brokers. There is need to forge appropriate partnerships to reach these smallholder farmers.

An appropriate products distribution model is vital to the success, scale and sustainability of any Microinsurance services. The following seven factors should inform the design of an appropriate distribution model for microinsurance products targeting smallholder farmers:

1. *Client understanding* - Does the distribution channel have the ability to improve clients' understanding of the product?
2. *Product diversity* - Is the channel open to offering a wider range of products?
3. *Scale* - Does the channel have access to a large number of potential clients?
4. *Brand and trust* - Do the channel have a popular brand? Is it trusted within a community?
5. *Priority* - Does microinsurance matter to the channel? Is it willing to prioritize it?
6. *Cost* - Does the channel offer low cost distribution for the insurer?
7. *Partnership risk* - Does the channel offer a long-term partnership?

Most of the insurance companies in Tanzania use brokers and sales agents to reach their clients. This sales-driven distribution model usually fails to meet the criteria set above and may not meet the needs of smallholder farmers. Many smallholder farmers need much more engagement and adequate but simplified information to make purchase decisions. Traditional sales agents may not be appropriate to engage and on-board farmers. Therefore, there is need to develop more innovative distribution models and channels to reach many smallholder farmers with microinsurance solutions. It is important to consider alternative partnerships including local NGOs, community-based organizations and community banks.

3. MAIZE AND RICE FARMERS PRIORITY RISK AREAS

3.1 Smallholder farmers socio-economic profile

This section discusses the socio-economic profiles of the farmers interviewed during this study. The study was based on a total of 300 smallholder farmers, 58 per cent male and 42 per cent female famers. We have analysed data on the respondents age range, marital status, level of education and economic activities in the study areas. These factors are important to inform us of this market segment and will be useful during product concepts development and design.

3.1.1 Age profile

The average age of the farmers interviewed for this study was 43 years with an age range of 40 - 50 years. Age is an important factor when underwriting insurance services. We found that the famers are middle age and therefore may not pose high risks to the insurers.

3.1.2 Marital Status

Marital status is an important factor to consider when providing insurance services since it indicates the potential demand for additional products targeting the household e.g. education. Secondly, it indicates the potential of diverse sources of income of the household. Our study found that the majority (88%) of the respondent were married and an average of 9% as single as shown on the table below.

Table 8 Marital status

| Respondents Marital status | | | |
|----------------------------|----------|--------|------------|
| | Morogoro | Njombe | Sumbawanga |
| Single | 11.3 | 9.0 | 7.0 |
| Married | 84.7 | 88.0 | 93.0 |
| Separated | 2.0 | 0.0 | 0.0 |
| Widow | 2.0 | 3.0 | 0.0 |
| Total | 100% | 100% | 100% |

3.1.3 Level of education

While a majority (88%) of the farmers had formal education, on average, the many of the smallholder farmers have low levels of formal education. About three quarters (75 per cent) of the respondents had attained primary education. On average, about 15% had attained secondary school education with a slightly large proportion being in Njombe (18%) compared to Morogoro (13%). There were very few farmers in Sumbawanga that had attained secondary school education. None of those interviewed had attained vocational or university education.

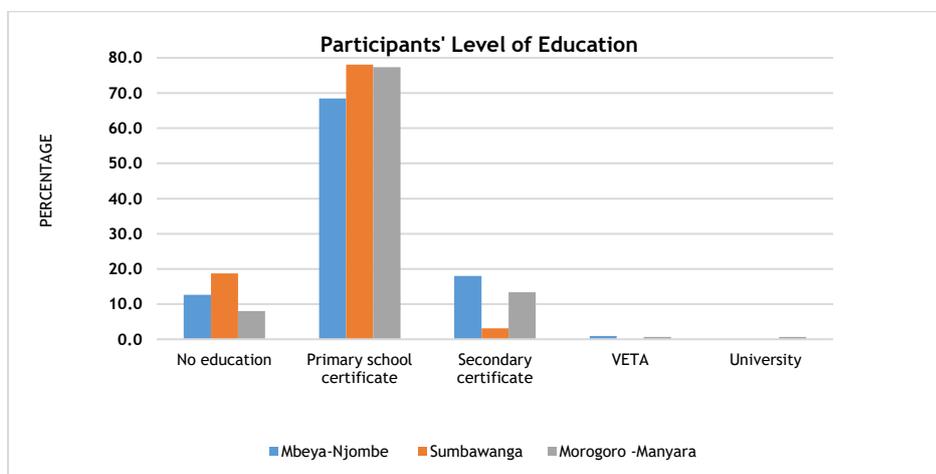


Figure 8: Level of education of respondents in the selected regions

The level of education is an important factor in adoption of new technology and new services. Those who have a relatively high level of education are more likely to know about, quickly learn and use new products and services. Effective adoption of new agriculture insurance depends on the extent to which the farmers understand the product features and benefits. We found that a large majority of smallholder maize and rice farmers had primary school education and expect that they will be able to understand insurance products features and benefits. However, more efforts are product education may be needed for areas with a high proportion of farmers with no formal education for example, Sumbawanga.

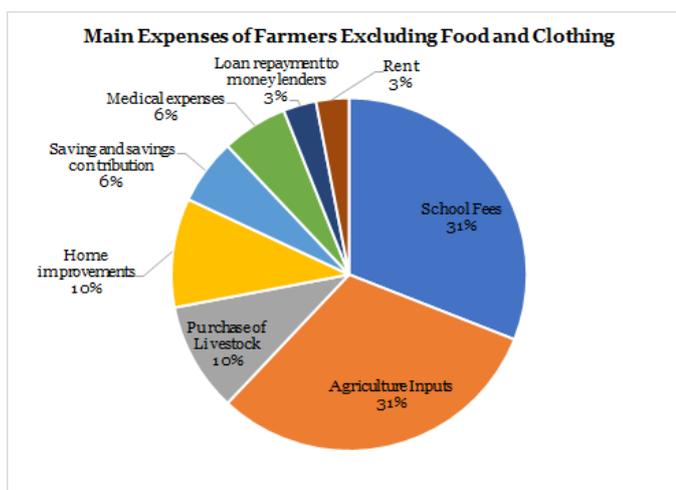
3.1.4 Economic activities, household income and expenditure

Most of the respondents for this study depend on agriculture and farming but they complement their livelihoods with income from trades and remittances from family members away in the city or towns. The target farmers have diverse sources of income. They would therefore not only depend on farming to finance new financial products e.g. insurance.

Land ownership and sizes: A majority (86.96%) of those interviewed said they owned the land they were farming. Land sizes varied across the study locations with a significant proportion of farmers in Morogoro reporting relatively large land sizes - between one and five acres of land. However, about one third of those in Sumbawanga and Mbeya-Njombe areas owned much less farmers - range of 0.5 - 1 acre of land. During discussions, farmers noted that some of them kept livestock and sold farm produce including milk as a source of household income. The land ownership and size found in the study areas confirmed that the locations are smallholder farmers and therefore appropriate for a project aimed at developing innovative financing for the low market segment.

Households expense: The main non-food household expense items among the smallholder farmers were agricultural inputs (31%), purchase of livestock (10%), school fees (31%), housing and home improvements (10%) and medical expenses (6%).

Figure 9: Household Expenses



Emergency expenses: Medical expenditure was the main emergency expenditure reported by the farmers. Sickness among household members creates considerable financial pressure on the smallholder farmers' household budget. School fees and medical expenses are extremely time sensitive and difficult to postpone and thus end up being a significant emergency expenses smallholder household. These expenses have a negative effect on farming when farmers divert the funds rather than investing on agricultural production.

Food insecurity: There were indications that farmers are vulnerable to food insecurity. For example, one half (50 per cent) of the respondents had instances during the past year that they could not satisfy household food needs. This finding indicated that the farmers met were vulnerable to income variability and therefore would benefit to income smoothing and risk mitigating products and services including access to financial services and insurance solutions.

Savings contribution: However, we also found that a few (6%) of the respondents reported savings contribution as an important household expense. In spite of the level of poverty, people do save part of their incomes as a way of mitigating risks and smoothing incomes during slack times. Therefore, there was potential to promote savings services among smallholder maize and rice farmers as a means of mitigating risks.

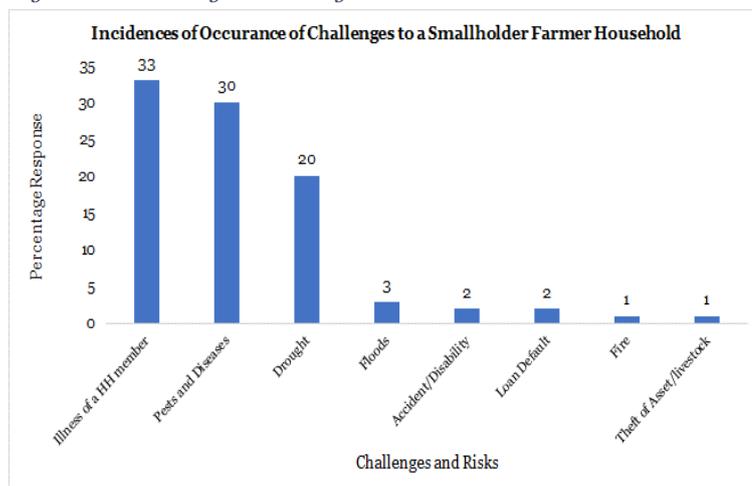
3.2 Risks and Coping Mechanisms

3.2.1 Challenges and risk factors

We sought to understand the types of risks experienced by the smallholder maize and rice farmers in the study locations. We asked farmers to discuss and enlist the challenges they faced in the previous twelve months as a proxy for risks and vulnerability.

There were high incidences of “serious illness of a household member”, followed by pests and diseases and drought. Other challenges were floods, accidents and repayment of loans.

Figure 10: Challenges Faced by Households in Past 12 months



School fees and meeting other educational expenses was also noted as a major challenge to many farming households. Many smallholder farmers aspire to have their children attain high levels of education and therefore invest time and money in education. Inability to pay for these fees and levies creates significant pressure on the households since they risk losing opportunity to access education and related future benefits e.g. employment. Therefore, insurance products that have some links to access to education would meet an important need and aspiration among smallholder farmers.

A participant in a group session noted:

“Many people here sell land and trees at very low prices in January to be able to meet school related expenses to take their children back to school after the December break. You cannot think of cultivating crops or any other thing before the school fees is paid and your children have gone to school, especially secondary and higher levels.”

3.2.2 Risk prioritization by smallholder farmers

The following five risks were identified from the challenges and problems experienced by smallholder farmers.

- (i) Loss of time spent attending to sick household head or household member
- (ii) Loss of income due to absence from the weekly markets
- (iii) Loss of crops and/or livestock due to pests and diseases
- (iv) Loss of social standing due to failure to pay for school fees and related levies (leading to a child dropping out of school.
- (v) Loss of means of livelihoods due to drought and/or floods

Floods are important risk factors especially for rice farming often practices in low lands and valleys. A few farmers mentioned floods as a risk factor. However, it was not a frequent problem experienced in the study locations. Repayment of loans also was noted to create high pressure on the farmers and their households. When loans fall due, many households either have to mobilize the family funds or at times borrow to repay other loans.

Overall, the following four risk factors were identified as priority (serious and causes much pressure to the household) to farmers were (i) sickness of household members (37.8% of respondents ranked as first priority), death of a household member (27%), pests and diseases (5.6%), drought and flood (9.4%). The project should therefore consider solutions that mitigate these risks to improve farmers livelihoods.

3.2.3 Risk coping mechanisms

Farmers have developed a variety of mechanisms to cope with these challenges, problems and mitigate the risks. Some of the coping mechanisms mentioned include:

- (i) Seek in-kind support from relatives and friends
- (ii) Liquidating some household assets e.g. farm produce (maize, rice, beans etc.), livestock (especially small animals) and land (occasionally though)
- (iii) Take loans from friends, community banks and MFIs

In a discussion group session at Kaoze village in Sumbawanga region, a farmer reported that they had a funeral fund scheme that enabled members to meet the funeral related expenses. The association also provided members some cash in case of emergencies. However, it was noted that due to village expansion and high demand from members, the scheme was experiencing management and liquidity challenges.

“Four years back if a member lost a household member, the scheme provided such a member with Tsh 100,000 to carter for the funeral expenses. Not anymore! Our members are now scattered across six villages. In case of serious illnesses or death, the group now experiences challenges mobilizing other members across all the villages. So each village is now trying to focus on the challenges at the village level.” FGD conducted on 9th May, 2018 in Kaoze village of Sumbawanga region.

3.3 Risks in maize and rice farming in Tanzania

We discussed with the farmers the specific risks related to maize and rice farming in the study locations. Farmers identified three broad risk categories as shown below:

- i. Weather risks
- ii. Non-weather risks
- iii. Field to floor risks

Amongst the three categories of risks, ranks were allocated to according to the magnitude that affect the rice and maize smallholder farmers in the study location. The ranks were from 5-1 where 5 meant high impact while one meant least impact on the farming activities.

Table 9 Risks for Maize and Rice farmers

| Weather risks | Rank | Stage of crop cycle when risk is high and severe |
|-----------------------------|------|--------------------------------------------------|
| Drought | 5 | All stages of the crop cycle |
| Flood | 5 | All stages of the crop cycle |
| Pest and diseases | 5 | All stages of the crop cycle |
| Frost | 3 | Leafy part of the crops |
| Hailstorm | 2 | All stages of the crop cycle |
| Wind storm | 2 | Maturity stage |
| Non- Weather risks | Rank | Stage of the crop cycle |
| Price fluctuations /markets | 5 | Post-Harvest |
| Diseases and pests | 5 | Any stages, severe at vegetative stage |
| Destruction by wildlife | 4 | All stages, most severe at maturity |
| Fire | 3 | High and severe at maturity stage |
| Earth quake | 1 | Any stages of the crop cycle |
| Field to floor risks | Rank | Stage of the crop cycle |
| Storage | 5 | Harvest |
| Theft | 5 | Harvest |
| Fire | 4 | Harvest |
| Accidents | 2 | Harvest |

3.4 Smallholder farmers experience with insurance services

To assess the extent to which smallholder maize and rice farmers used insurance services, we discussed with the farmers their understanding of insurance services, knowledge of types of insurance products, insurance companies, premium payments and claim processes.

3.4.1 Awareness of insurance services among smallholder farmers

Many of the small-scale farmers were not aware of insurance companies that operate in their communities or nearby towns. In Njombe region, very few farmers could correctly mention names of insurance companies operating in the region. Some of the respondents received trainings in groups about health and crop insurance from a community-based organization. One group of farmers raised some funds to pay for the insurance premium, but there was not follow up from the trainers hence the initiative could not proceed.

One participant noted, *“You come here and promise us so many good things. Thereafter, we don’t hear of you anymore!”* Another participant wondered *why most of the insurance documents were labelled, Zanzibar. Are they from Zanzibar?*

“My child dislocated his arm, when I went to the hospital, I was told that the CHF/TIKA card was not valid. I was asked to pay Tsh. 60,000. Since I didn’t have such amount at that time, my child wasn’t treated and I go back with him...” FGD session conducted on 10th May, 2018

We found that majority of the farmers had low level of awareness about insurance services and service providers. In spite of efforts to introduce insurance services to the farmers, the service providers or their agents did not follow up adequately to get the farmers fully understand the service and purchase the covers. Farmers therefore were disenfranchised and have low understanding and trust on insurance services. Insurance services providers and their agents need to create awareness and engage farmers to understand and adopt insurance solutions.

3.4.2 Insurance usage among smallholder farmers

We found that few farmers use insurance services. Some of the farmers in the study locations had health cover provided by Community Health Fund (CHF/TIKA). From the survey findings, one third (29.3%) of the farmers had health insurance product promoted by the CHF/TIKA program. A few others (13.5%) had used the national health insurance fund (NHIF) cover. As a result, very few farmers could adequately explain how insurance products and services function.

Some farmers noted that the services were explained in English language. Secondly, for those who used the cover to seek health services, the medical facilities had poor service. For example, a participant noted, *“documents are written in English. The documents are too wordy, too long and the fonts are small. Therefore, many people here cannot read and understand”* FGD interviewee in Ikuna Njombe region. For those using the CHF services, the claim process had challenges. Some of the health centers lacked medicines. In some cases, allowed claims were lower than the incurred expenses.

We learnt that TASAF officers provide awareness and education on health insurance to people in these communities. However, many of the people lack functional knowledge on the health insurance product, an indication of the need to create sustained engagement to ensure knowledgeable and use of insurance products and services.

Those who have purchased motorcycle insurance products were not any better. Most of them did not have adequate knowledge of the insurance policy. They noted that agents selling such insurance covers did not give clear explanations to users e.g. risks covered, compensation and claims processes. A farmer in a group session noted that they purchase motorcycle insurance since it is a legal requirement and the police would arrest motorcycle riders without insurance.

Insurance premiums are typically paid upfront and therefore, farmers would be required to pay the premiums upfront. e.g. health insurance upfront. For example we learnt that the NHIF Kikoa insurance

plan premiums ranged between Tzs. 10,000 and Tzs. 79,500 per person. Many smallholder farmers have irregular incomes and therefore are not able to raise the required premium upfront. Innovative financial service providers opted to bundle insurance products with financial facilities e.g. credit life products common with banks and MFIs. Insurance companies are also bundling some microinsurance products e.g. MGen's crop insurance cover being offered in partnership with Tanzania Agricultural Development Bank (TADB).

The study concludes that it is feasible to provide insurance products to smallholder farmers or the mass market in general. However, there is need to be very innovative through appropriate product development, flexible premium payments approach and accessible distribution channels. In the next section of this report we have discussed some recommendations and suggestions ways of implementing microinsurance services as part of the broader access to financial services to smallholder farmers in Tanzania. We expect that these recommendations will be useful in the next phase of this project to develop feasible services targeting smallholder farmers.

4. RECOMMENDATIONS FOR PRODUCT DESIGN

4.1 Product ideas

We identified the certain key issues and concerns among maize and rice smallholder farmers that will be important when developing appropriate insurance products and services. The table below presents a synthesis of ideas to guide new insurance products or services for smallholder farmers and more specifically to enhance financial inclusion of the smallholder maize and rice farmers in Tanzania.

Partner insurance companies and/or banks/MFIs can consider developing these ideas further in view of their business model, partnership arrangements and distribution channels to scale up access to insurance services by smallholder farmers in Tanzania.

Table 10 Suggested Micro Insurance products

| | Challenge | Risk | Mitigation measures/product ideas |
|---|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Illness of household member | <ul style="list-style-type: none"> ○ Loss of income ○ Loss of assets ○ Loss of productive time | <ul style="list-style-type: none"> ○ Medical expense savings scheme ○ Medical insurance policy |
| 2 | Agricultural perils e.g. pest, diseases, drought, fire and floods | <ul style="list-style-type: none"> ○ Loss of farm produce e.g. crops, trees, livestock ○ Loss of household assets ○ Loss of income | <ul style="list-style-type: none"> ○ Crop/livestock insurance ○ Asset finance ○ Insurance cover against perils such as fire and floods |
| 3 | School fees and education related levies | <ul style="list-style-type: none"> ○ High opportunity cost ○ Loss of social standing ○ Loss of investment already made | <ul style="list-style-type: none"> ○ Education savings ○ Education loans ○ Education insurance plans |

We explored farmers willingness to pay insurance premiums. As indicated earlier, many of the participants were skeptical about insurance schemes and had low trust in claims settlement. However, they indicated that with adequate information and understanding, they were willing to pay for schemes that can “benefit us”. With regards to the seasonality of income flows among these farmers, many farmers have relatively high incomes during the harvesting season usually between May and August in Southern highlights of Tanzania (vary in other regions).

There was also need to explore alternative premium payment arrangements. For example, some farmers suggested that the insurance companies should consider alternative payment arrangements e.g. group payments, payments by farm product buyers (off-takers/aggregators). That with proper agreement, farmers could set aside some bags of maize or paddy for the insurance cost. The buyer would then remit the funds to the insurance company to cover farmers. Secondly, a few others suggested that farmers should be allowed to pay the premium in installments.

When asked how much they could afford, some farmers suggested that they could pay as much as Tsh 50,000 for a health insurance, “but only if there are better health care services with good facilities”. Others were willing to liquidate small animals to purchase health covers. For example, a farmer said, *“I can sell two chickens and get good insurance for the whole year, the one offered is not helping during need. We usually use out of pocket money.”* [FGD session conducted at Mngeta in Morogoro region - on 12th May 2018]

From the foregoing, we identified the following product ideas and features for future consideration as the project explores potential products and services to better serve smallholder farmers:

- (i) Community based schemes that would benefit from mass enrolment rather than products targeting individuals
- (ii) Bundled services that addresses multiple challenges faced by smallholder farmers including health, education and last respect rites (death and funeral)

- (iii) Innovative scheme/product pricing and payment approaches e.g. a savings scheme aimed to save up for a future insurance product
- (iv) Awareness and product knowledge creation to enhance adoption

4.2 Product Concepts

4.2.1 Potential products for further refinement

In view of the findings of this study, we recommend that:

1. AGRA should partner with a few selected insurance companies and develop an appropriate bundled insurance product for smallholder farmers. Bundling of products ensures that the service provider responds to multiple needs of the customers. The product concepts should aim to address critical needs e.g. education, health and funeral expenses among smallholder farmers in Tanzania, but in a manner that farmers are incentivized to pay for the premiums and realize benefits.
2. Partners should develop innovative distribution and delivery models to address the three leading risks i.e. agricultural perils, illness and school fees faced by smallholder maize and rice farmers in Tanzania. Community based agents could help in promoting these products through concerted and sustained awareness creation and product knowledge dissemination.

Bundled insurance products: We propose that the service providers should consider developing and offering bundled products to address multiple challenges and risks faced by farmers. Tanzania is still a nascent insurance market and therefore would still require products that address a range of risks. The products need to address both household and farming risks. For example, a service provider can provide a product that covers both life and crops cover; education and crops cover or medical card and crops among other possible combinations. However, the service provide will require further information, data and analysis to determine the most appropriate combination and product offering.

The table below presents examples of potential bundled insurance product ideas that providers may consider.

| | Product concept | Core Feature | Potential Benefits |
|---|--------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Agro-production Life Cover | <ul style="list-style-type: none"> - Leverage on lay-a- way savings schemes - Policy payments to be in-line with harvesting and marketing of main crops | <ul style="list-style-type: none"> - Recover from seasonal shocks - Security of farm assets - Income smoothening - Access to funds in case of emergencies e.g. death, funeral of household head or members |
| 2 | Health cover with an education policy as a rider | <ul style="list-style-type: none"> - Direct payment of premium for a medical cover - Optional riders/add-ons e.g. education, school equipment benefit etc. - Selected health facilities with better services | <ul style="list-style-type: none"> - Access to medical services - Savings up for children’s education especially post primary level - Health household members to engage in Agro-production effectively. - High social standing in the community when the farmers are able to send children to school |

4.2.2 Augmented services

The study also found that many of the farmers do not have adequate knowledge of insurance services. Secondly, to achieve scale, there will be need to leverage on digital financial technology in partnership with financial services provider and mobile money service providers. However, farmers will need some level of education on how to use the new platforms.

AGRA and partners will therefore need to provide supporting and complementary services including:

- (i) Awareness creation among farmers and related stakeholders,
- (ii) Product knowledge through appropriate product marketing suited for smallholder farmers (distinguishing this from the traditional insurance sales approaches),
- (iii) Personal financial literacy to enhance financial management skills among the farmers
- (iv) Usage and mastery of digital financial services to enable self-registration among farmers
- (v) In partnership with the district level agriculture and extension service department, farmers will need additional support with weather and agronomic practices information

4.2 Product design and development approach

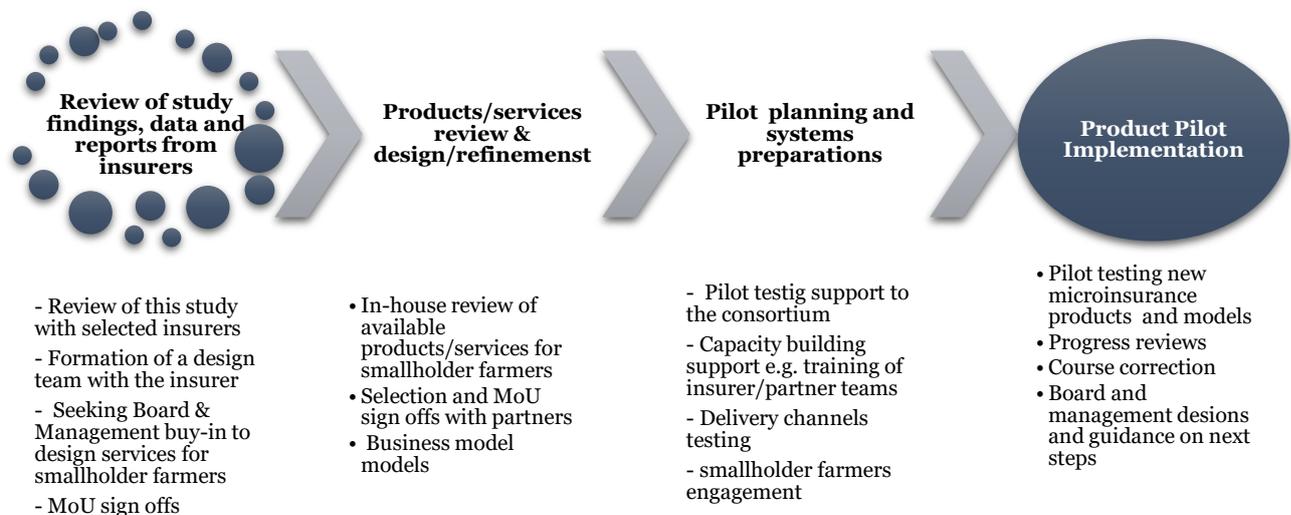
The next phase will require the development of appropriate and affordable microinsurance products and delivery approaches. The products need to be relevant to smallholder farmers. The framework below can guide product design.

Figure 11: Product Design Structuring Guide



We note that selected service providers may need some support to review and refine products to suit the needs of smallholder farmers. More importantly, there will be need to innovatively bundle products to address multiple needs among farmers. While we can support this process, we recommend product development/refinement framework below to guide service providers with product design and structuring.

Figure 12: Sample Products Development Framework



While the study ToR for this study presumes that the insurance partners may use these recommendations on their own to design, structure and promote microinsurance products, it is instructive that the selected partners are likely to require some handholding and facilitation to fast track the products design, structuring, promotion and distribution.

4.3 Microinsurance Product Distribution Model

There are different insurance products distribution models e.g. Partner-Agent model, mutual/cooperatives, franchise, supplier, All-in-one model. ILO also identified seven models including financial institution, CBO, retailers chains, MNOs, Employers, Direct Sales and other channels like Health Care Providers Utility companies etc. In a recent study, Accenture identified five models in their recent study as shown below.

Table 11: Products Distribution Models

| Models | Description | Benefits and relevance |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 Virtual insurance advisor | <ul style="list-style-type: none"> ○ Leverage on online, telephony and consumer data to make decisions | <ul style="list-style-type: none"> ○ Personalized products and services, delivered virtually e.g. digital platforms ○ There is limited online/digital data for smallholder farmers |
| 2 Everyday risk advisor | <ul style="list-style-type: none"> ○ Insights are used to provide a range of financial services including personal finance to risk management | <ul style="list-style-type: none"> ○ Personalized product and service ○ Customer centric and is likely to focus on the smallholder farmers' livelihoods challenges and risks |
| 3 Plug and play | <ul style="list-style-type: none"> ○ Based on partnerships along a value chain ○ Partner provides insurance as an after-sale service e.g. Input dealer | <ul style="list-style-type: none"> ○ Insurance is conveniently distributed along the agriculture value chain ○ More convenient for farmers to access products and related information from known suppliers of Agro-inputs. |

| | | | |
|---|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4 | Ecosystem coordinator | <ul style="list-style-type: none"> ○ Mix of risk and non-risk insurance products ○ Address consumer needs across sectors e.g. agriculture, education, health etc ○ Requires sectoral based partnerships | <ul style="list-style-type: none"> ○ Services are designed to address multiple risks and needs. ○ Farmers are likely to access bundled products and services. |
| 5 | P2P network operator | <ul style="list-style-type: none"> ○ Products are distributed to customers with close affinity and in some network e.g. social media platform | <ul style="list-style-type: none"> ○ Peer-to-peer marketing models as customers share their experience with one another. ○ Distribution costs are reduced |

It is noted that none of the models would success in isolation. It is therefore recommended that the insurance company designs a combination of the models to achieve optimum effects.

On the basis of the discussions and past experience, our team recommend an agro-ecosystem insurance service distribution model to effectively reach smallholder farmers with appropriate insurance services. The model seeks to mobilize chain and ecosystem actors to play some role to promote agricultural micro-insurance. We however note that developing such a multi-partnership model will require coordination capacity and resources to ensure each partner plays their roles well. This is one of the areas, FISFAP may invest resources in such coordination function to catalyze the market.

Below are some of the agriculture value chain actors that are in touch with smallholder farmers that may be considered when designing the distribution model:

1. Commodity buyers e.g. aggregators, primary processors
2. Fertilizer supplier
3. Seeds supplier
4. Herbicides and pesticides supplier
5. Financier e.g. banks, community banks, MFIs etc.
6. Agronomy and research institutions
7. Development institution supporting a particular project
8. Government e.g. extension service providers, local government officials
9. Farmer groups/cooperatives (AMCOs)

The figure below shows the likely roles by the different actors in the ecosystem to deliver microinsurance to smallholder farmers. This framework may inform the roles definition of potential partners.

Figure 13: Partners and role in proposed micro insurance delivery model

| | Promotion | Enrolment | Premium collection | Education | Value added services | Claims reporting | Claims assessment | Claims payment |
|-------------------------------|-----------|-----------|--------------------|-----------|----------------------|------------------|-------------------|----------------|
| Harvest buyers | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ |
| Fertilizer supplier | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| Seed supplier | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| Chemical suppliers | ✓ | ✓ | ✓ | ✓ | | ✓ | | |
| Financial institutions | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ |
| Agronomy research Institution | ✓ | | | ✓ | ✓ | ✓ | ✓ | |
| Development Partner | ✓ | | | ✓ | ✓ | | | |
| AMCOs | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ |
| Government | ✓ | ✓ | ✓ | ✓ | | | | ✓ |
| MNOs | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ |
| Broker/s | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Insurers | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

It is important to work with multiple partners to deliver microinsurance services to smallholder farmers. A combination of the actors identified above promises the following value addition:

1. *Scale through aggregation*: The model above creates ability to achieve scale by targeting large SHFs concentrations such as farmer groups served by financial institutions like TADB, NMB, CRDB, Equity Bank, Access Bank and TPB Bank, farm produce buyers such as processors, input suppliers such as fertilizer and seed companies.
2. *Infrastructure footprint*: This Agro-ecosystem distribution model typically relies on the presence of an infrastructure e.g. harvest warehouse) or virtual (e.g. a cell phone network, organized groups, financial guidelines) that is larger than what could be achieved by an insurance company in isolation. The infrastructure could be physical.
3. *Transaction platform*: The sales channel will also act as a premium collection platform and also will be used for claims settlement. In this regard, where premiums are collected by the harvest

buyer/processor, claims may use the same channel unless there are extenuating circumstances that renders this dual function redundant or uneconomical. The mobile money platform must be highly considered so as to reduce the cost of transactions and enhance accuracy of records (automation of financial transactions).

4. *Combined mandatory product:* While the partners will strive to distribute voluntary insurance products sold on an “opt-in” rather than “opt-out” basis; given the infancy level of microinsurance development and penetration in Tanzania, it is advised that enrollment be mandatory for groups which choose to purchase insurance cover, and that products be combined to increase chances for insurance consumption (claims settlement) so as to heighten insurance experience amongst SHFs which will serve as testimonial in ensuring renewals = scaling + sustainability.
5. *Trusted brand:* This model relies on a distribution partnership with institutions that are well trusted by the SHFs, i.e. they have been engaging with the farmers in other levels, and thus carrying insurance as an additional service.

4.4 Suggested agriculture microinsurance business model

It is clear that the service providers will need to develop innovative business models to design, structure and deliver agricultural micro-insurance products and services to smallholder farmers. Partners need to use an agro-ecosystems approach and ensure that a range of agriculture institutions are brought together to ensure the success of the financial service.

The figure below provides an example, of a potential business model that may be deployed to provide microinsurance services to smallholder maize and rice farmers.

Figure 14: Sample Agricultural microinsurance business model

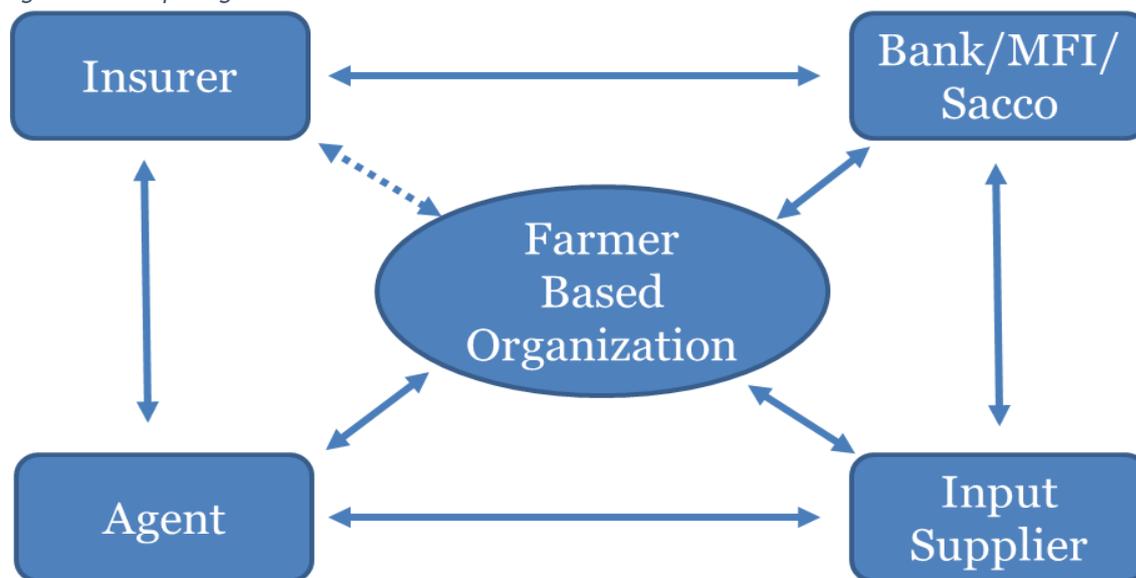


Figure 15: Sample Agricultural microinsurance business model

This model is a guide to developing the agricultural microinsurance services targeting farmers in Tanzania. The insurer and partners need to define key roles, business model, investments and returns structure, and products and services. As shall be guided by FISFAP project, *MicroSave* team can be on hand to support the partnership to design and execute a pilot project aimed at testing the feasibility of providing microinsurance services to smallholder farmers.

5. REFERENCE

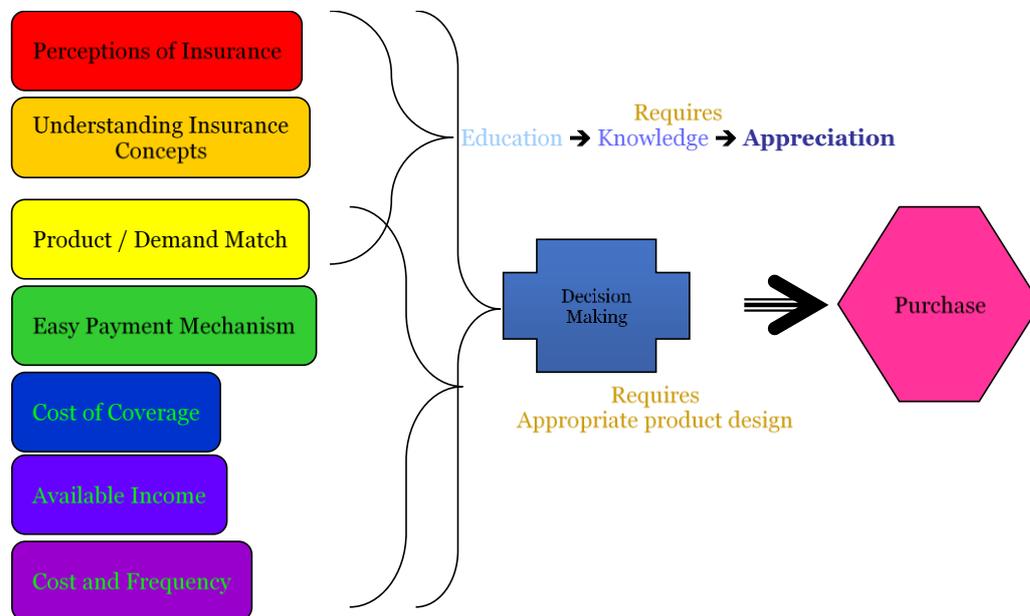
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6. ANNEX

Study regions and estimated Population

| No | Region | District | Ward | Site | Population |
|----|----------|------------|----------------------|--------------------------------|------------|
| 1 | Morogoro | Kilombero | Mngeta | Mngeta Itongoa | 2,218,492 |
| 2 | Manyara | Babati | Nangala | Nangala Singe | 1,425,131 |
| 3 | Mbeya | Mbarali | Chimala Mahongola | Isitu, Mengele, Mwale, Kibaoni | 2,707,410 |
| 4 | Njombe | Njombe | Ikuna Ninga | Ikuna Isulima | 702,097 |
| 5 | Rukwa | Sumbawanga | Kaoze Tatumbila | Kaoze Tatumbila Nkundu | 1,004,539 |

Figure 16: Sample Microinsurance Marketing Framework



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