AgFiMS Tanzania 2011 Technical Demand Side Report











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Sponsors







Prepared by

Yakini Development Consulting

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AgFiMS Tanzania 2011

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AgFiMS Tanzania 2011 Demand Side Technical Report

Executive Summary

Rationale

Development of the agricultural sector is fundamental for poverty alleviation; 75% of poor people in developing countries live in rural areas, 85% of which depend on agriculture for their livelihood.

One of the key constraints faced by both smallholder farmers and agribusinesses is lack of finance for production and growth but both smallholder and agribusiness finance continue to be considered high risk by the financial community. This has hampered the development of financial services and products that are suited to agriculture, and has limited the penetration of microand bank finance for agricultural production into rural and agricultural areas. The lack of quality information to guide intervention strategies significantly contributes to this situation. In response to this, the Agricultural Financial Markets Scoping (AgFiMS) tool was developed.

AgFiMS is a country-by-country diagnostic developed primarily to enable the collection of data on the demand for, and supply of, financial services in the agricultural sector. In recognising that addressing the issue of access to financial services or finance for agribusinesses in isolation will not have the intended developmental impact, it aims to provide a holistic understanding of agricultural development needs. AgFiMS includes two complementary research components; a demand side and a supply side component. The AgFiMS demand side component is a comprehensive, nationally representative survey tool focussing on potentially commercially viable agricultural enterprises, including producers, processors and service providers; the supply side component focuses on sources of finance to the agricultural sector.

AgFiMS Tanzania 2011

The implementation of the first AgFiMS survey (AgFiMS Tanzania 2011) was commissioned by the Financial Sector Deepening Trust Tanzania (FSDT). Funding for the survey was provided by the Gatsby Charitable Foundation and the FSDT, with co-funding from the Rockefeller Foundation. Data was collected from 4094 agribusinesses by means of face-to-face interviews with business owners; 3 734 producers, 104 processors and 256 service providers.

AgFiMS Tanzania 2011 Objectives

The demand side component of AgFiMS Tanzania 2011 had the following objectives:

To identify and describe the size and scope of the market comprising agribusinesses with

the highest potential of being commercially viable; and

- To segment the identified agribusinesses into homogeneous market segments, with the intention of identifying the development needs of the different segments in order to stimulate segment-related development.
 - Specifically, AgFiMS Tanzania 2011 aimed to facilitate the development of financial services for agribusinesses and to stimulate the flow of finance into the agricultural sector. It therefore aimed to provide a better understanding of the financial needs of agribusinesses, and the factors influencing the uptake of financial services

The supply side component aimed to quantify the extent and type of finance provision to the agricultural sector, as well as to identify the various channels through which it was deployed.

Key Findings: AgFiMS Tanzania 2011

- 1. AgFiMS Tanzania 2011 had, at its core, the objective of identifying potentially commercially viable agribusinesses in Tanzania. Assessing the profile of business owners in the market segment selected (identified through specific selection criteria), and the manner in which they managed their business operations indicated that AgFiMS was successful in doing so.
- 2. A market segment of 25% of the universe of approximately two million agribusinesses met the AgFiMS selection criteria i.e. approximately 520 000 agribusinesses.
- 3. Agribusiness owners in the AgFiMS market segment illustrated entrepreneurial characteristics, and an ability to manage their businesses wisely in spite of a significant lack of access to business, financial and agricultural information.
- 4. They saved for the purpose of the business, and were willing to re-invest profits into the business; savings behaviour was significantly growth-orientated.
- 5. They were not risk averse and were willing to borrow for the purpose of the business.
- 6. Although business owners were, in general, entrepreneurial and had extensive agricultural experience, some business operations illustrated a lack of key skills/capacities needed to achieve higher levels of commercial success.
 - Business owners did not consciously manage business risks although they did have coping mechanisms in place to mitigate risk – income diversification being the most significant of these.
 - Business owners operated in isolation rather than to harness the advantages that networking or the establishment of associations/groups could bring.
- 7. The business environment in Tanzania was not conducive for agribusiness successaccess to infrastructure, markets, and financial services (including credit) were not favourable for agribusiness owners in the AgFiMS market segment.
- 8. In terms of access to infrastructure, the only evident strength or advantage for agribusiness owners in the AgFiMS market segment lay in connectivity specifically access to mobile phones.
- 9. A geographical misalignment of compatible links in the value chain and the consequential distance to market and transport-related obstacles resulted in a large proportion of agribusinesses, across the value chain, being kept in the trap of engaging in distressed sales as they could not access their preferred markets.
- 10. Formal financial service provision to agribusiness owners was not effective. This resulted in

- business owners having to turn to the informal sector and to friends and family for credit, and keeping their savings at home rather than placing them with a financial institution.
- 11. Services provided by commercial banks did not seem to offer much benefit to a large proportion of business owners.
- 12. The characteristics of the AgFiMS market segment left doubt as to whether this market was ideal for being served by commercial banks in a sustainable manner. MFIs and SACCOs, despite being better geographically located, were not serving these businesses either. The AgFiMS supply side findings illustrated large amounts of finance channelled through these institutions to significant numbers of rural clients. This indicated that these services were indeed effectively provided to rural areas. The fact that this was not used by agricultural businesses in the AgFiMS market segment led to the conclusion that MFI and SACCO credit was most likely used for consumption-based financial needs in rural areas.
- 13. Although access to land did not seem to be a major obstacle, most producers in the AgFiMS market segment did not have title deeds to prove land ownership. This situation would significantly affect their access to, or eligibility for, secured lending facilities.
- 14. A key constraint for producers in the AgFiMS market segment in Tanzania was access to water. The lack of access to irrigation systems meant that agricultural production had to be timed to the seasons. Year-round production was therefore not possible for most producers.
- 15. Agribusiness owners lacked access to the business, financial and agricultural information vital for commercial success.
- 16. In terms of the capacities needed for commercial viability, the AgFiMS market segment was divided into three sub-segments with varying potential for commercial viability. Development needs for each segment were identified. This segmentation led to the conclusion that, with varying degrees of intervention efforts, 79% of producers had significant potential to achieve greater commercial success.
- 17. In exploring the potential for formal financial institutions, the AgFiMS market segment was divided into four sub-segments with different opportunities for financial service providers. This segmentation led to the conclusion that 27% of producers in the AgFiMS market segment did not have the potential to be served by the formal financial sector.

Key Recommendations: AgFiMS Tanzania 2011

The following key recommendations are put forward as a result of the assessment of the demand side findings of AgFiMS Tanzania 2011:

- 1. The development approach should be holistic in nature; financial sector development for agriculture needs to be seen in perspective.
- 2. Key to agribusiness success is a conducive business environment. Apart from the rural infrastructural limitations to achieve this, it is recommended that interventions aimed at agricultural development in Tanzania should also take cognisance of:
 - Value chain composition and distribution
 - The establishment of an enabling regulatory environment
- 3. A skilled, well-informed business owner is crucial for commercial success. Enhancing the skills of agribusiness owners provides an opportunity for the development intervention strategies that could yield results in the short to medium term, irrespective of market and infrastructural constraints. In this regard it is recommended that the focus should be on:
 - Better organised and structured agribusiness groups
 - Enhanced access to information
- 4. AgFiMS identified a capable and responsive financial sector as a key driver of agribusiness success. In terms of appropriate interventions to achieve this, the following is recommended:
 - Assessment of the access frontier i.e. determining the extent to which the boundaries of formal financial service provision could be stretched
 - Formal financial institutions finding a specific niche market in the agricultural sector to focus on
 - Re-assessment of the channels used by commercial banks for the distribution of finance for the purpose of agricultural production



Introduction

1.1 Background and Rationale

To develop effective interventions – financial or otherwise – aimed at the development of any sector, it is important to have a comprehensive understanding of the sector. It is also important to understand the specific challenges faced by the sector, and the capacity that exists within the sector to deal with these challenges. A "one size fits all" approach will seldom be effective. Intervention strategies should be targeted at specific needs and should be evidence-based. Availability of reliable and accurate information regarding the specific needs of specific segments of the sector is therefore key in guiding the development of any intervention strategy. In most developing countries, this kind of information is not available.

Development of the agricultural sector is fundamental for poverty alleviation; 75% of poor people in developing countries live in rural areas, 85% of which depend on agriculture for their livelihood.

One of the key constraints in developing countries in Africa faced by both smallholder farmers and agribusinesses is lack of finance for production and growth but, in spite of the increased emphasis on the need for agricultural finance in recent years, both smallholder farmers and agribusinesses continue to be considered high risk by the financial community. This has hampered the development of innovative financial services and products that are suited to agriculture, and has limited the penetration of micro and bank finance into rural and agricultural areas. Many financial sector providers and government departments/agencies are however engaged in defining strategies, sometimes collaboratively, to support development of the agricultural sector but the reach of many well-intentioned support interventions is often perceived to be low. The lack of quality information to guide intervention strategies significantly contributes to this situation.

In response to this lack of quality information, the Agricultural Financial Markets Scoping (AgFiMS) tool was developed by the Gatsby Charitable Foundation1 and the Financial Sector Deepening Trust Tanzania2 (FSDT), with co-funding from the Rockefeller Foundation3 and technical support from FinMark Trust4.

The Gatsby Charitable Foundation was established in 1967 by Lord Sainsbury of Turville, from whom all of Gatsby's funds have come. Gatsby acts as an "enabler" for projects across a small number of selected fields, including the agricultural sector in Africa

AgFiMS is a country-by-country diagnostic developed primarily to enable the collection of data on the demand for, and supply of, finance and financial services for the agricultural sector. It does however show that addressing the issue of access to financial services or finance for agribusinesses in isolation might not have the intended developmental impact. A holistic understanding is provided, showing not only the need for financial services and finance, but also the underlying non-finance-related issues (such as access to infrastructure and markets, for example) which are crucial for the effective uptake of financial solutions, and more importantly for the development of the sector as a whole.

1.2 AgFiMS Objectives

AgFiMS is a comprehensive, nationally representative survey tool. It includes two complementary research components: a demand side component focussing on potentially commercially viable agricultural enterprises (comprising agricultural producers, processors and service providers), as well as a supply side component focussing on sources of finance to the agricultural sector.

The demand side component has the following objectives:

- to identify and describe the size and scope of the market comprising agribusinesses with the highest potential of being commercially viable;
- to segment the identified agribusinesses into homogeneous market segments, with the intention of identifying the development needs of the different segments in order to stimulate segment-related development; and
- to assess the impact of interventions through conducting repeat surveys over time.

At its core AgFiMS aims to facilitate the development of financial services for agribusinesses and to stimulate the flow of finance into the agricultural sector. It therefore aims to provide a better understanding of the financial needs of agribusinesses and the factors influencing the uptake of financial services, by:

- determining the levels of financial services usage by potentially commercially viable agribusinesses;
- describing the landscape of access i.e. describing the financial products, services and/or mechanisms used by agribusinesses; as well as
- identifying and describing the drivers of, and the barriers to, the usage of the financial services and products available for the agricultural sector.

The supply side component aims to quantify the extent and type of finance provision to the agricultural sector, as well as to identify the various channels through which it is deployed.

² FSDT was established in 2006 by five government donors (Canada, the UK, Sweden, the Netherlands and Denmark), in close collaboration with the Bank of Tanzania and the government of Tanzania. It aims to provide greater financial access throughout Tanzania.

The Rockefeller Foundation was chartered in 1913 to "promote the wellbeing of humanity". It supports work that expands opportunity and strengthens resilience to social, economic, health and environmental challenges.

⁴ FinMark Trust, based in Johannesburg, South Africa, was established in 2002 as a non-profit trust funded primarily by UK aid. Its purpose is to make financial markets work for the poor across Africa, by promoting financial inclusion and regional financial integration.

1.3 AgFiMS Targeted Audience

AgFiMS aims to provide information about agricultural market segments to both public and private sectors, including (but not limited to):

Government ministries and agencies – AgFiMS enables the identification of areas of possible intervention for Government departments and agencies, and supports the design and prioritisation of interventions which will facilitate agricultural sector growth.

Formal and informal financial service providers – analysis of the AgFiMS data will help to identify new market opportunities, specific financial services/products needs for these market segments and show the potential for "new" providers to enter the market.

Bilateral donors, foundations and civil society organisations – AgFiMS is not only of value in identifying and describing financing gaps and guiding the design of appropriate instruments to support or catalyse a private sector response, but it also offers information with regard to the need for unblocking non-finance-related constraints in agricultural development.

Telecommunication networks and service providers – AgFiMS data will help identify new market opportunities in terms of the development of products and/or services for agribusinesses; also identifying the potential for the utilisation of telecommunication platforms for other purposes such as information sharing and money transfers in agriculture.

1.4 The AgFiMS Approach

AgFiMS provides a snapshot of the status quo at a given point in time. Rather than focussing on the agricultural sector as a whole, AgFiMS attempts to identify agribusinesses with the highest potential to be commercially viable and therefore might have the potential to attract some form of formal financing (Diagram 1).

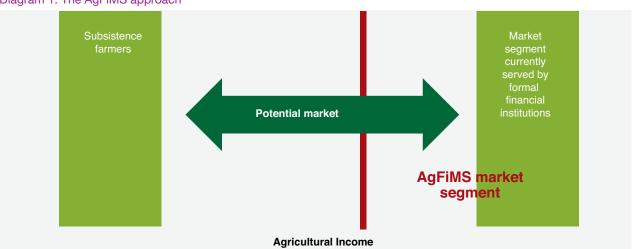


Diagram 1: The AgFiMS approach

Given that the agricultural sector is regarded as "high risk", and the realisation that the solution to effective development and growth within the agricultural sector does not lie in access to

finance and financial services alone, convincing financial institutions, such as commercial banks, that there are viable market opportunities in the agricultural sector (apart from large commercial producers and agro-processors), has been a longstanding challenge.

In developing the demand side component of the AgFiMS tool, the challenges were therefore linked to two core questions:

- How to illustrate sustainable market opportunities for financial institutions in a market dominated by small-scale farmers; and
- How to put financial interventions into perspective by identifying financial as well as non-finance-related interventions needed to strengthen rural infrastructure and markets.

In short, the challenge for AgFiMS lay in the development of an approach that would enable the segmentation of agricultural markets – identifying the spectrum of commercial viability and, at the same time identifying the development needs of each market segment and thereby providing development agents and service providers with an understanding of where they could play a role as well as what role they could play.

Firstly, AgFiMS defines agribusinesses as:

- Agricultural producers who sell more than they consume (and therefore not including subsistence farmers).
- Processors of agricultural produce i.e. individuals or businesses who buy or get agricultural products from farmers and change it to another form.
- Agricultural service providers i.e. individuals or businesses who provide a service
 mainly to agricultural producers or processors including, for example, input providers,
 information services, agricultural manufacturers, providers of agricultural equipment,
 professional service providers such as veterinarians, as well as traders such as
 wholesalers, retailers and middlemen.

Secondly, in order to increase the likelihood of focussing on agribusinesses with the potential to be commercially viable, specific threshold criteria are applied for the selection of agribusinesses to be included in the AgFiMS demand side sample. While acknowledging that commercial viability is dependent on numerous factors, two criteria are used:

For producers – the application of either a land size OR a turnover threshold – for land size, the threshold would represent a piece of land (used by the producer for the purpose of the business) larger than the average size of a farm in a country; whilst the turnover threshold would be based on the estimated annual turnover needed to comfortably service an average size microfinance loan.

For processors and service providers – the application of a turnover threshold – the threshold applied would represent a turnover higher than the estimated average turnover for these types of businesses in a country.

1.5 AgFiMS Tanzania 2011

The implementation of the first AgFiMS survey (AgFiMS Tanzania 2011) was commissioned by the Financial Sector Deepening Trust Tanzania (FSDT). Funding for the survey was provided by the Gatsby Charitable Foundation and the FSDT with co-funding from the Rockefeller Foundation. The National Bureau of Statistics (NBS) of Tanzania provided technical support and supervision throughout survey implementation, drew the sample, assisted with enumerator training and was responsible for data weighting and validation.

After a competitive tender process, Synovate Tanzania (Synovate) was selected to conduct the AgFiMS Tanzania 2011 demand side survey under the supervision of the National Bureau of Statistics (NBS), whilst AYANI Inclusive Financial Sector Consultants (AYANI) was selected to conduct the supply-side survey. For the survey coordination, data analysis and dissemination of the findings, a consortium comprising a team of consultants from Development Pioneer Consultants (DPC) and Yakini Development Consulting (Yakini) was selected.

This report (compiled by Yakini) presents the key findings and insights from the demand side component of AgFiMS Tanzania 2011.

A report on the supply side findings, compiled by AYANI, can be obtained from FSDT.



Survey Methodology

2.1 Implementation Stages

The AgFiMS Tanzania 2011 demand side survey was implemented in the following phases:

2.1.1 Survey and instrument design

The survey and instrument design phase was facilitated by the Gatsby Charitable Foundation and the Financial Sector Deepening Trust Tanzania (FSDT) with technical support from FinMark Trust. This phase involved extensive consultation with public and private sector stakeholders and experts in Tanzania from the agricultural sector, as well as the financial sector. The NBS provided statistical and technical guidance.

The survey instrument was a structured questionnaire with mainly closed questions aligned with the survey objectives. The final questionnaire was translated to Kiswahili by Synovate. The translated questionnaire, question concepts and constructs were tested by means of focus group discussions conducted by Synovate prior to commencement of the training of enumerators to administer the questionnaire.

2.1.2 Sampling and listing

The validity of any survey depends on the statistical reliability of the sampling framework. The challenge with AgFiMS is that this framework i.e. a list of agribusinesses meeting the AgFiMS selection criteria – does not exist.

In order to ensure that a representative and reliable sample of agribusinesses meeting the AgFiMS selection criteria can be drawn, the establishment of the sampling framework is therefore an integral part of the AgFiMS design and presents a unique challenge in conducting the demand side survey.

The AgFiMS demand side methodology entails:

- Identifying the geographical areas of the country where the survey will be conducted –
 i.e. drawing a sample of enumerator areas (EAs) representative at national, urban-rural
 and regional level (the level of representativeness being determined by the required
 reporting levels).
- Creating the universe of agribusinesses per geographical area –this process entails
 visiting every household in the sampled EAs, screening for agribusiness owners (as per
 the AgFiMS agribusiness definition) and listing identified business owners distinguishing
 between those meeting the threshold criteria and those who do not meet the criteria.
 Listing both qualifying businesses (i.e. those that meet the threshold criteria) as well
 as non-qualifying businesses enables the determination of the size of the agribusiness
 sector in a country as well as the determination of the size of the market that meets the
 threshold criteria.
- Drawing a random sample of agribusiness owners for the purpose of interviewing per sampled EA using the list of those businesses that meet the threshold criteria as the sampling frame.

For the purpose of AgFiMS Tanzania 2011:

- i. A sample of 626 EAs, representative at national, urban-rural and agro-ecological zone levels, was drawn by the NBS.
- ii. The listing exercise entailed visiting 108 530 households in the 626 sampled EAs screening for agribusinesses.
- iii. A sample of eight qualifying agribusinesses to be interviewed was drawn at random per sampled EA.
- iv. Where an interview could not be secured with a sampled agribusiness owner, a substitute agribusiness was selected at random from the list of remaining qualifiers in the EA.
- v. It was not possible to achieve eight interviews in each of the sampled EAs. This was due to the fact that the listing exercise illustrated that in some EAs there were less than eight qualifying agribusinesses whilst in some EAs there were no qualifying businesses.
 - If less than eight interviews were secured for a specific EA, the validity of the listing exercise was evaluated before a field team was allowed to move on to another EA.
 - If a specific EA yielded no interviews, an additional EA was sampled by the NBS at random and added to the original sample of 626 EAs to ensure that this reality did not affect the planned sample size of approximately 5000 interviews too significantly
- vi. At the end of the survey, data was collected from 63 EAs, yielding 4094 interviews; 3 734 of which were with producers, 104 with processors and 256 interviews with service providers.

2.1.3 Fieldwork

AgFiMS Tanzania 2011 was the first study with the potential to provide a credible sense of the size and dynamics of the agribusiness sector in Tanzania. The quality of the data provided by the survey therefore needed to be exceptionally reliable.

To ensure reliability of the data, Synovate, as the research partner, put in place extensive and comprehensive quality control measures. These measures were aimed at not only ensuring the

quality and accuracy of the data collected during interviews, but also ensuring that the survey methodology was effectively implemented so that the validity and accuracy of extrapolation of the survey data could not be questioned.

Quality control measures implemented by Synovate included:

- Two weeks of extensive enumerator training to ensure that field teams fully understood the requirements of the study, the survey methodology and the questionnaire.
- A pilot survey to test the survey methodology, questionnaire effectiveness and the readiness of enumerators to go to field was conducted before fieldwork commenced.
- The first batch of completed questionnaires from the field teams were checked and the teams debriefed by field managers before fieldwork continued.
- Field managers conducted spot-checks by attending a number of interviews of each enumerator. This approach helped to ensure that enumerators followed correct procedures and that corrective action could be taken timeously where enumerators experienced any problems regarding any aspect of survey implementation or questionnaire administration.
- Each field manager conducted back-checks on at least 10% of each enumerator's completed work to verify data validity.

To complement and verify these quality control measures FinMark Trust, as the technical design partner, carried out additional independent quality checks which included:

- Independent field visits to verify field teams' implementation of the survey methodology and the interviewing process.
- Questionnaire spot checks to assess completeness and logical consistency of interview data.
- Independent back-checks of a number of Enumerator Areas (EAs)where field teams had already completed interviews and had left the EA. This validated the effectiveness of EA identification and adherence to EA boundaries whilst listing and sampling; as well as to validate listing information.

Once satisfied that the data was collected using the correct survey methodology and could be regarded as representative, FinMark Trust signed off on the dataset provided by Synovate.

2.1.4 Data processing

Synovate, as the research partner, was responsible for the capturing of the listing, and the interview data.

Questionnaires were checked by an independent data team before the data was captured. If any data discrepancies were identified, questionnaires were referred back to field teams to resolve. Completed, checked questionnaires were captured by means of a scanning process whilst listing data was captured manually.

Once the entire dataset was available, extensive checks were carried out to ensure that the data was clean and without capturing errors. Any anomalies were reviewed and checked against the

original questionnaires to establish validity.

NBS carried out the final validation of the data and signed off the final dataset before data analysis commenced.

2.1.5 Weighting of the data

To ensure that the weighted data was a true reflection of the Tanzanian agribusiness sector, the data weighting process took into account:

- The inclusion probability of an EA in the AgFiMS sample;
- The inclusion probability of a household in an EA; as well as
- The inclusion probability of a qualifying agribusiness in a household.

The weighting process produced a clean weighted dataset in SPSS format. The weighting of the data was conducted by FinMark Trust and was validated and signed off by NBS.

2.1.6 Data analysis and reporting

The AgFiMS Tanzania 2011 data was analysed by Yakini Development Consulting and the initial headline findings were disseminated through a series of workshops and discussions with a wide range of stakeholders from both the public and private sectors in Tanzania. This process was coordinated and managed by DPC.

2.1.7 Analysis framework

In order to assess the commercial potential of the AgFiMS agribusiness market segment, the AgFiMS demand side survey instrument, and the analysis framework, sought to provide a better contextual understanding of agribusinesses and the environment within which they operate. The premise upon which the AgFiMS framework of analysis was based is best described by Diagram 2 which can be summarised as follows:

The commercial potential of an agribusiness is a function of the attributes of

- the business owner:
- the business itself; as well as
- the environment within which the business operates.

The commercial potential of the business further depends on the strategies applied in terms of business operations.

In exploring the drivers of, and barriers to, the commercial potential of agribusinesses in Tanzania, the structure of this report aims to facilitate a better understanding of each of these dimensions.

Diagram 2: Analysis framework

Agribusiness context

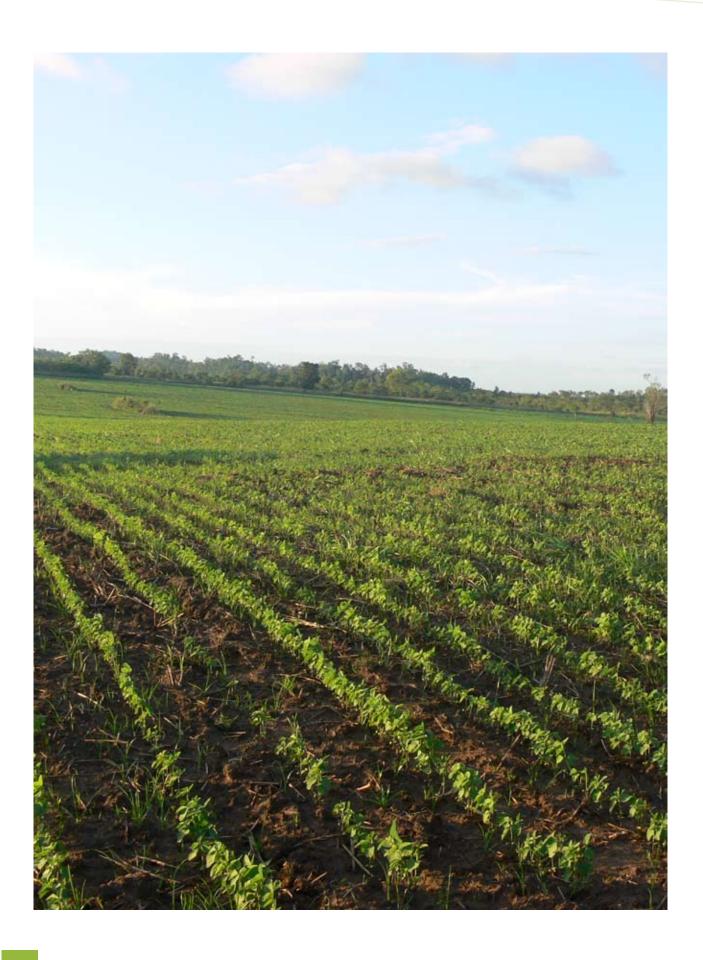


What agribusiness have/don't have?

Business Strategies

- Income generating activities
- Financial activities/tasks
- Coping strategies

What agribusiness do with what they have, and how they cope with what the don't have?



Size and Scope of the Agribusiness Sector in Tanzania

3.1 Size of the Agribusiness Sector

According to the findings of the FinScope Tanzania 2009 survey, 5.5 million households in Tanzania generate an income through farming-related activities.

As was previously mentioned, AgFiMS defined agribusinesses as follows:

- Agricultural producers who sell more than they consume (and therefore excluded subsistence farmers).
- Processors of agricultural produce i.e. individuals or businesses who buy or get agricultural products from farmers and change it to another form.
- Agricultural service providers i.e. individuals or businesses who provide a service mainly to agricultural producers or processors.

Based on these definitions and the findings of AgFiMS Tanzania 2011, the agribusiness sector in Tanzania comprised:

- 2 036 474 agribusinesses
 - 1 921 121 (94.3%) producers,
 - 27 758 (1.4%) processors, and
 - 87 595 (4.3%) service providers.

3.2 Size of the AgFiMS Market Segment

In line with the aim of AgFiMS Tanzania 2011 to identify agribusinesses with the highest likelihood of being commercially viable, the following thresholds were introduced during the AgFiMS screening and sampling process:

Producers – a turnover of USD\$600 or more per annum from agricultural activities OR usage of five acres or more for agricultural activities.

Processors and service providers – a turnover of USD\$1 500 or more per annum.

Table 1 gives an overview of the size of the AgFiMS market in Tanzania, indicating that 519 450 (25.5%) agribusinesses qualified in terms of the selection criteria introduced.

Table 1: Size of the AgFiMS qualifying market segment

Agribusinesses	Total in Tanzania	AgFiMS qualifiers	% Agribusinesses qualifying
Producers – crop and livestock farmers selling more than they consume	1 921 150	489 850 earned at least USD \$600 per annum OR used at least 5 acres for agricultural production	25.5%
Processors	27 750	9 500 earned at least USD \$1 500 per annum	33.9%
Service providers	87 600	20 100 earned at least USD \$1 500 per annum	22.9%
Total	2 036 500	519 450	25.5%

^{*}Note: Numbers rounded to nearest 50

3.3 The Nature of Agribusinesses in the AgFiMS Market Segment

As shown in the findings summarised in Table 1 and Figure 1, 94.3% of the agribusinesses identified by means of AgFiMS were producers, 1.8% processors and 3.9% service providers. Most producers however engage in a combination of agricultural activities. Classifying qualifying producers according to the agricultural activities from which they earn most of their agricultural income, indicated that most qualifying producers were crop farmers (91.2% - approximately 251 900 food crop and 194 800 cash crop farmers) with 8.8% (approximately 43 100) of qualifying producers getting most of their income from livestock (Figure 1).

Figure 1. Main income generating activities of AgFiMS qualifying businesses

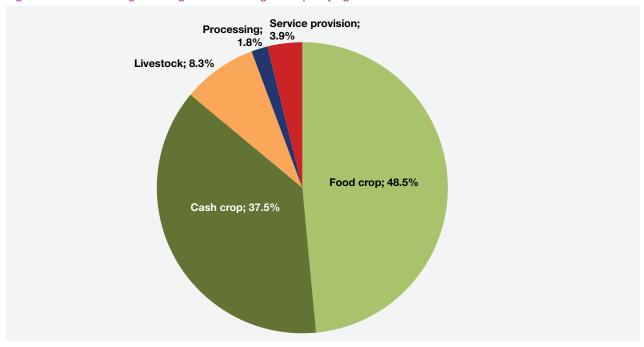


Figure 2 gives an overview of the main income generating activities of AgFiMS qualifying businesses per type of agribusiness.

Figure 2. Main income generating activities of AgFiMS qualifying businesses per type of agribusiness

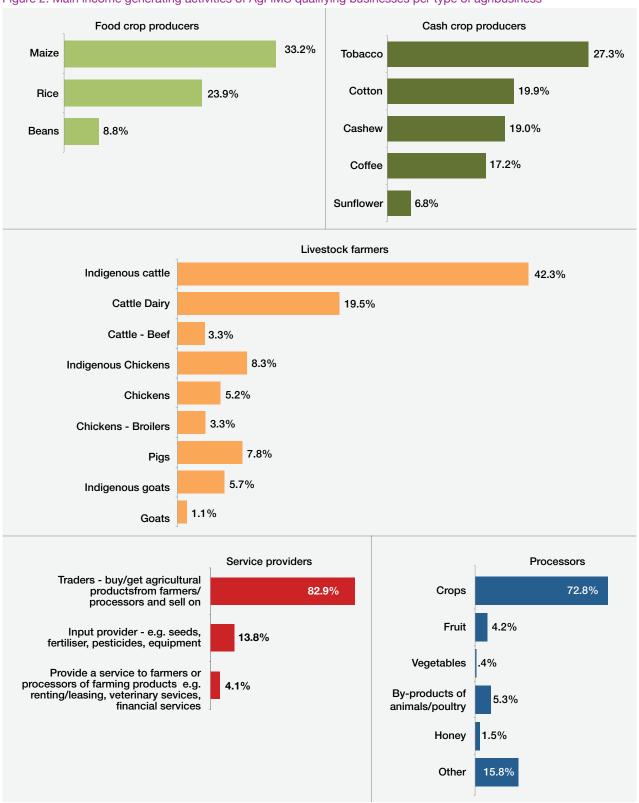


Table 2 provides a more detailed description of the diverse nature of the type of services provided by service provider businesses.

Table 2. Services provided by service providers in the AgFiMS market segment

Input providers	% of Input providers*
Fertiliser/pesticides	70.8%
Seeds/animal feeds/medicine	52.1%
Machinery/vehicles	45.8%
Irrigation equipment	38.9%
Other agricultural equipment (tools, fencing, etc.)	33.4%
Processing equipment	10.5%
Animals/fish/poultry	4.8%
Service providers	% of Service providers*
Leasing (equipment, buildings, vehicles, etc.)	44.9%
Rent out land	31.2%
Transport services	10.7%
Professional services – accountant, auctioneer, vet, lawyer, extension services, inspection services	7.0%
Repair services – e.g. vehicles, agricultural equipment etc.	6.1%
Traders	% of Traders
Middlemen	80.7%
Retailers	19.3%

*Note: Multiple responses per service provider possible

Table 3 provides an overview of the distribution of producer businesses per zone. (Note: This could not be done for processing and service providing businesses as these samples were not representative at zonal level).

Table 3: Distribution of producer businesses per agricultural zone

Agricultural zones	Soil tyapes ¹ , ²	Estimated number of producer businesses
	Lake Northern Western Central Easte Southern Highlands	
Western zone comprising the T Shinyanga, and Kigoma region		•
Northern zone comprising the Kilimanjaro, Tanga, Arusha and Manyara regions	Soils vary from volcanic ash to fertile classification from volcanic sediments and lavas. Mo are fertile.	
Central zone comprising the Do and Singida regions	odoma Soils mainly sandy and loamy of low fer seasonally waterlogged or flooded.	rtility - 142 750 7.4%
Southern Highlands zone comp the Mbeya, Iringa and Rukwa r		oderate fertility 365,750
Lake zone comprising the Kage Mwanza and Mara regions		
Eastern zone comprising the D Salaam, Pwani, and Morogoro		clay. Fertility 207 450 10.8%
Southern zone comprising the Mtwara and Ruvuma regions	Lindi, Soils of variable texture from predominal along the coast, friable clays to heavy cand valleys. Soil fertility levels are low to	clays in lowlands
Zanzibar zone comprising the U North, Unguja South, Town We Pemba North and Pemba Sout egions	Jnguja st, Good soils and rainfalls to support crop	production as 17 150
Total: Tanzania		1 921 150
iorar, tauzania		100%

*Note: Numbers rounded to nearest 50

The United Republic Of Tanzania. Ministry of Agriculture Food Security and Cooperatives. Investment Potential and Opportunities in Agriculture (Crop Sub-Sector). January 2009

⁷ Zanzibar Agricultural Transformation for Sustainable Development, 2010-2020. For Agricultural Productivity, Food Security and Sustainable Livelihood

In order to provide some benchmark for the profile of agribusiness owners in the AgFiMS market segment, it was compared to:

- The profile of the adult population5; as well as
- The profile of the top 25% of non-agricultural MSME owners6 as determined by average monthly turnover (based on the AgFiMS market segment representing the top 25% of agribusinesses).

Note: All references to, and comparisons against, MSME owners in this report refer to the top 25% MSME owners by revenue

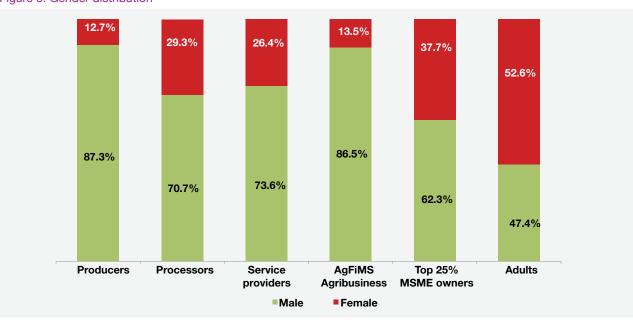
Profile of the Business Owner

4.1 Demographics

4.1.1 Gender distribution

In contrast to the gender distribution of the total adult population of Tanzania which was not significantly skewed, the gender distribution of business owners in the AgFiMS market segment, as well as the gender distribution of owners of the top 25% of non-agricultural MSME's, were skewed towards males. Agribusiness owners in the AgFiMS market segment were significantly less likely to be female-owned than MSME's in the upper-end of the income curve. This phenomenon was largely due to producer businesses being less likely to be reported as "female owned". In this context, it should be taken into account that producer businesses were often run by the household and not necessarily regarded as being "owned" by a single individual. It was often found that male heads of the household were more likely to claim "ownership" of crop production activities whilst more likely to regard livestock-related income generating activities as "owned" by a spouse or other female household member.





⁸ FinScope Tanzania 2009 survey,

⁹ FinScope Tanzania MSME 2010 survey

4.1.2 Age distribution

Findings summarised in Figure 4 indicated that agribusiness owners in the AgFiMS market segment were significantly older than their MSME counterparts. Once again this was driven by the age distribution of producers; processors and service providers tended to be younger than producers.

In comparison to the age distribution of the total adult population, MSME owners were more likely to be younger than 45 years whilst agribusiness owners were more likely to be older than 45 years. A significantly larger proportion (one in three) of the top 25% of MSME owners were in the 16-29 year age category compared to only one in ten of the AgFiMS market.

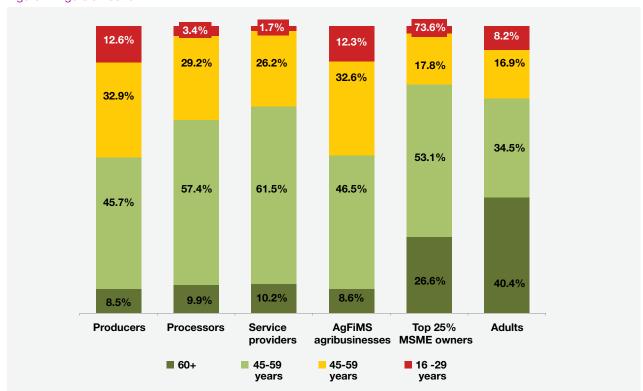


Figure 4. Age distribution

4.1.3 Education profile

In general, agribusiness owners in the AgFiMS market segment illustrated lower levels of education than their MSME counterparts, with only 12.5% having achieved more than primary school levels of education (compared to 17.5% of their MSME counterparts). However, this trend was once again driven by the education profile of producers. Both processing as well as service providing agribusiness owners in the AgFiMS market segment illustrated higher levels of education than their MSME counterparts and adults in general.

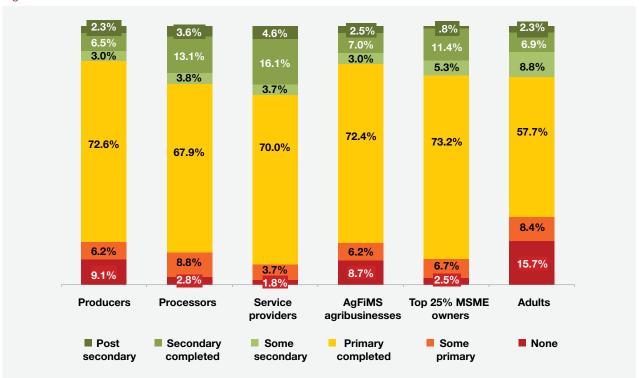


Figure 5. Education distribution

4.2 Business Experience

Findings summarised in Figure 6 indicated that:

- Three in four agribusiness owners in the AgFiMS market segment had more than ten years of agricultural experience.
- New entrants into the market were more likely to be found amongst processing and service providing agribusinesses.

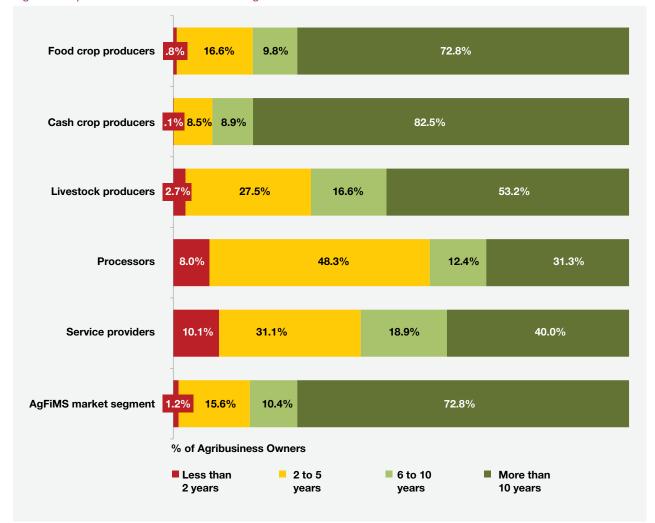


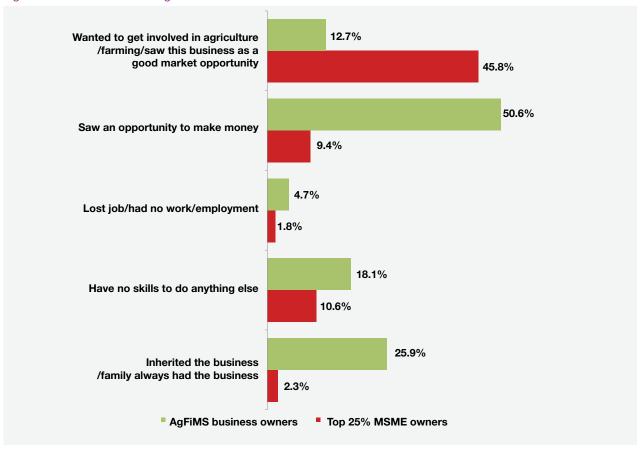
Figure 6. Experience of business owners in agricultural activities

4.3 Business Orientation

Integrating the findings summarised in Figures 7 and 8 indicated that:

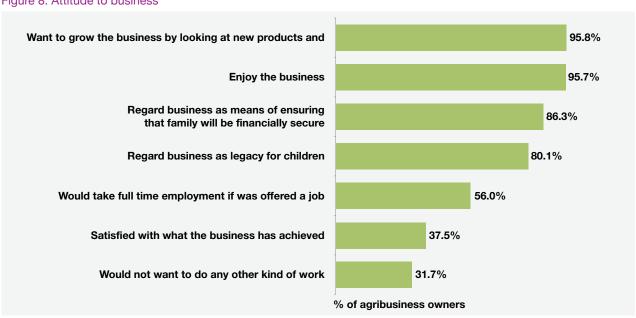
- Both business owners in the top 25% turnover segment of non-agricultural MSME's
 as well as agribusiness owners in the AgFiMS market segment were more likely to be
 entrepreneurial in their motivation to get involved in, or starting their businesses than being
 driven by necessity or other reasons.
- Agribusiness owners in the AgFiMS market segment were committed to their businesses and aimed to achieve business success; only 1.5% of agribusiness owners considered leaving their businesses for other alternatives.

Figure 7. Motivation for starting the business



*Note: Multiple responses per business owner possible

Figure 8. Attitude to business



4.4 Financial Orientation

As illustrated by the findings summarised in Figures 9-11:

Agribusiness owners in the AgFiMS market segment were aware of the financial status of their businesses, were willing to re-invest profits into their businesses, and were willing to borrow money or take financial risks to grow their businesses. Comparing them to their counterparts in the MSME sector indicated that non-agricultural MSME owners were almost equally willing to borrow money to grow their businesses (87%) but were less likely to invest profits into the business (20%).

Agribusiness owners were significantly more likely than their MSME counterparts to keep financial records for their businesses (63% vs. 43%).

Although agribusiness owners and MSME owners differed significantly with regard to their willingness to re-invest profits into their businesses, they were equally likely to save or put money aside for the purpose of their businesses (three in four putting money aside). Findings summarised in Figure 10 indicated that agribusiness owners in the AgFiMS market segment regarded assessment of interest rates and repayment terms as more important criteria than quick access and convenience of access to money when they were faced with choosing a money lender.

Although business owners in the AgFiMS market segment and their MSME counterparts seemed to be equally willing to take credit risks for the purpose of growing their businesses and agribusiness owners seemed to have a good understanding of how to choose potential lenders, MSME business owners in the top 25% turnover segment were significantly more likely to actually borrow money for business purposes (Figure 11). This posed the question of whether or not business owners in the AgFiMS market segment had less access to sources of credit than their MSME counterparts – a question which will be further explored in Chapter 8.



Figure 9. Agribusiness owners' attitude towards money, saving and borrowing

62.4% **Best interest rates** Best repayment terms 58.5% Quickest access to money 54.4% Most convenient access 28.5% Ease of use 14.7% Having previous experience with them 3.5% Having previous experience with them 3.0% % of agribusiness owners

Figure 10. Criteria applied by agribusiness owners in choosing lenders

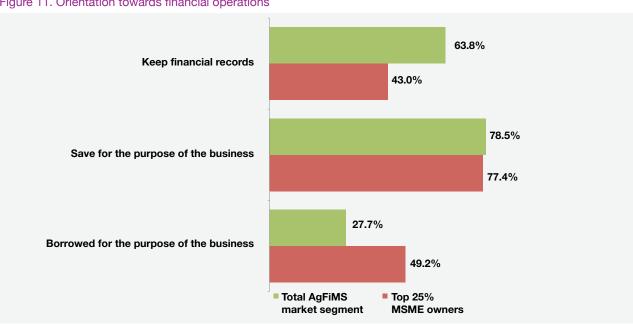
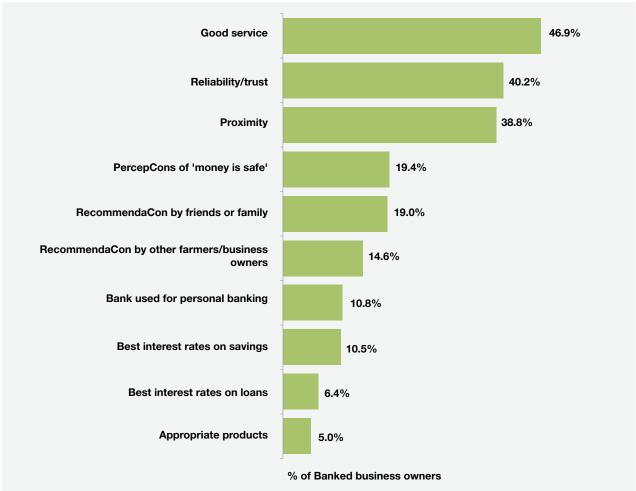


Figure 11. Orientation towards financial operations

In addition to business owners' financial orientation, their attitudes towards financial institutions and financial service providers could be expected to significantly influence their decisions regarding using these institutions and service providers for their business operations.

Figure 12 explores the criteria business owners apply when choosing a commercial bank for the purpose of their business money management.

Figure 12.Criteria applied by banked agribusiness owners in the AgFiMS market segment in choosing a commercial bank for the purpose of the business



*Note: Multiple responses per business owner possible

Findings summarised in Figure 12 indicated the level of trust in the institution to be one of the most important criteria for business owners when choosing a bank. In exploring the issue of trust in financial institutions and service providers, agribusiness owners in the AgFiMS market segment ranked financial service providers as follows:

- Commercial banks (most trusted).
- Mobile phone companies.
- SACCOs.
- Agricultural co-operatives.
- Microfinance institutions.
- Informal money lenders (least trusted).

Business Environment

In terms of the profile of business owners in the AgFiMS market segment, it seems that the AgFiMS approach successfully identified agribusiness owners with an entrepreneurial business orientation and who made sound financial decisions. However, the commercial success and/or potential of these businesses depend on more than just the orientation and attitude of the business owner. A key determinant would be whether or not the business environment is conducive for business success.

When looking at the business environment, AgFiMS assessed the following aspects:

- Access to land and business premises.
- Access to water.
- Access to infrastructure.
- Access to markets.
- Access to extension and other information services.
- Access to Land and Business Premises.

5.1 Access to Land and Business Premises

5.1.1 Access to land: producers

Producers in the AgFiMS market segment owned up to 2500 acres of land.

As 71% of producers in the AgFiMS market segment had access to more land than they owned to utilise for business purposes, access to land did not seem to be a major obstacle for these producers, although 12.4% indicated that limitations in terms of land access prohibited the growth potential of their businesses.

Food crop producers used on average 10 acres of land for their business activities, cash crop producers 10.6 acres, and livestock producers 10.2 acres.

Figures 13-15 give an overview of the distributions of size of land used for agricultural activities by producers in the AgFiMS market segment.

Figure 13. Distribution of size of land used by food crop producers

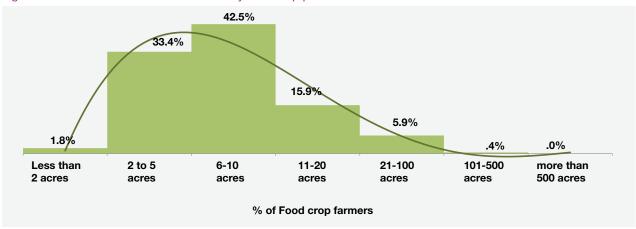
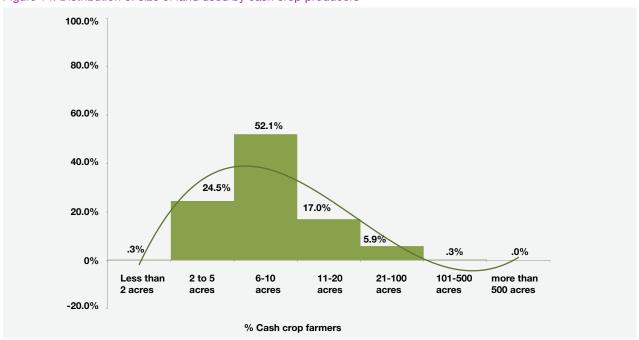


Figure 14. Distribution of size of land used by cash crop producers



36.9% 36.4% 18.0% 5.7% 2.3% .4% 101-500 Less than 2 to 5 6-10 11-20 21-100 more than 2 acres acres acres acres acres 500 acres % Livestock farmers

Figure 15. Distribution of size of land used by livestock farmers

Figure 16 gives an overview of the reasons why 29% of producers in the AgFiMS market segment did not use all the land they owned for the purpose of their business. These findings indicated that:

- Two in five producers who did not use all their land for their business activities, used part of it for other farming activities;
- Two in five lacked the necessary capital to enable them to use all their land for their business activities; whilst
- Two in five owned land of which a proportion is either not suitable for farming or the quality needed to be improved before it would be suitable for farming purposes.

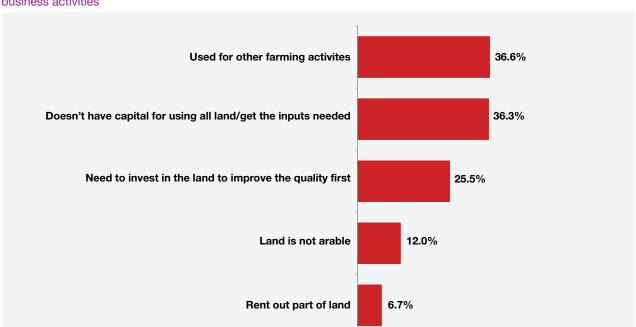


Figure 16. Main reasons for producers in the AgFiMS market segment not using all the land they own for their business activities

*Note: Multiple responses per business owner possible

Although producers in the AgFiMS market segment claimed land "ownership", most did not have title deeds to prove it:

% of Producers who don't use all their land

- 8.7% of food crop farmers compared to 4.2% of cash crop farmers had title deeds, whilst
- 21.2% of livestock farmers had title deeds to prove land ownership.

Lack of title deeds did not seem to contribute to a sense of vulnerability to eviction or loss of land amongst producers (only 1% of business owners were concerned about this risk) but this situation would significantly affect these producers' access to, or eligibility for, secured lending facilities.

5.1.2 Access to business premises: processors and service providers

Both agro-processors and agricultural service providers in the AgFiMS market segment identified access to premises to operate from as a key obstacle to growing their businesses:

- 30.9% of processors found it difficult to get access to premises compared to 37% of service providers.
 - Rural processors were significantly more affected by this phenomenon than urban processors; 40.8% of rural processors regarded access to premises as an obstacle compared to 19.3% of urban processors
 - For service providers there was no significant difference between urban and rural situations 35% of urban service providers and 39% of rural service providers found it difficult to get access to premises from which to operate

5.2 Access to Water

A key constraint in terms of the productivity of producers in Tanzania was lack of access to water (Figures 17-18):

- 26.5% of producers in the AgFiMS market segment indicated that they did not have access to an adequate amount of water to address business needs.
- A major factor compounding this situation was the lack of access to irrigation systems and having no alternative but to rely on nature (i.e. rain water collection, rivers, dams, springs) for water provision. Producers therefore had no control over the amount of water available at a given time for the purpose of the business.
 - 80.8% of producers in the AgFiMS market segment had no access to any form of irrigation
 - 10.9% of producers in this market had access to their own irrigation systems
 - 8.1% of producers had access to communal schemes

Figure 17. Water status of producers in the AgFiMS market segment

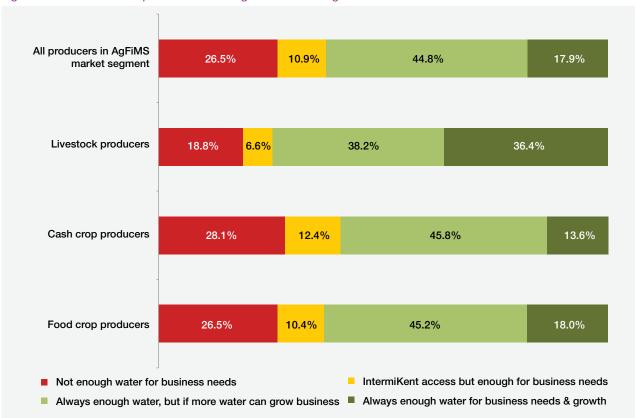
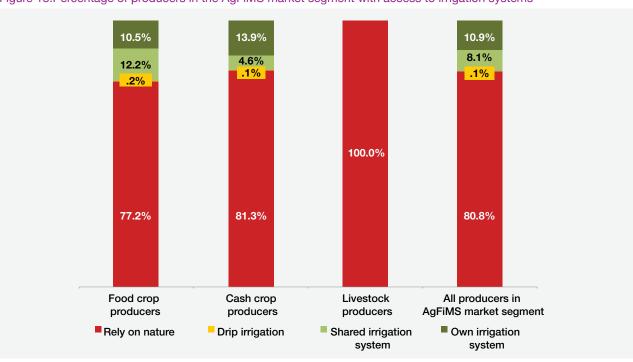


Figure 18.Percentage of producers in the AgFiMS market segment with access to irrigation systems



5.3 Access to Infrastructure

The percentage of producers in the AgFiMS market segment with access to electricity, tarmac roads, rail and harbours was significantly lower than the percentage of processors and service providers with access (Figure 19). This finding was expected. Almost 50% of AgFiMS processors and service providers were operating their businesses from within urban areas (where infrastructure is significantly better developed than in rural areas) whilst 85% of producers were operating from rural areas (Figure 20).

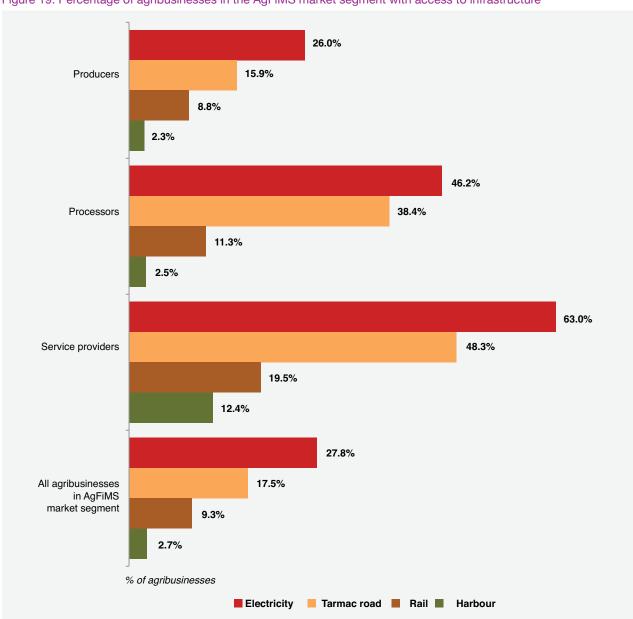


Figure 19. Percentage of agribusinesses in the AgFiMS market segment with access to infrastructure

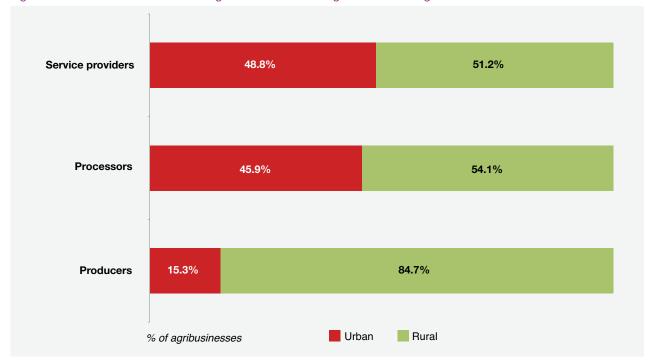


Figure 20. Urban-rural distribution of agribusinesses in the AgFiMS market segment

Comparing the level of access for agribusinesses in the AgFiMS market segment with that of their counterparts in the top 25% of non-agricultural MSME's was complicated. Questions regarding access to infrastructure used by the respective survey instruments were not always comparable.

- 27.8% of agribusiness owners in the AgFiMS market segment indicated that they had
 access to electricity for the purpose of their businesses. Although a comparable 29.8% of
 their MSME counterparts had access to electricity for the purpose of lighting, only 11.2%
 used electricity as the main source of working energy for their businesses.
- 17.5% of agribusiness owners indicated that they had access to tarmac roads. A comparable measure was not available for MSME's although 51.7% of business owners in the top 25% of non-agricultural MSME's indicated that their businesses were within an hour's walk of a tarmac road.
- 9.3% of AgFiMS agribusiness owners indicated that they had access to transport by rail.
 Access to rail transport was not specifically assessed by the MSME survey instrument and
 none of the business owners in the top 25% of non-agricultural MSME's indicated that they
 used rail transport for the purpose of their businesses.
- 2.7% of agribusiness owners indicated that they had access to a harbour. Once again
 access to harbours was not specifically assessed by the MSME survey instrument, but 0.6%
 of MSME business owners indicated that they used boat transport for the purpose of their
 businesses.

5.4 Access to Markets

Access to markets is a critical success factor for any business. In terms of the agribusinesses in the AgFiMS market segment, it was expected that the significant limitations in terms of access to infrastructure, would have a significant impact on access to markets specifically with regard to producers.

5.4.1 Producers

Almost half (47.3%) of the producers in the AgFiMS market segment faced challenges in getting their products to the market.

- i. Producers regarded distance to the market and the challenges related to transportation of produce (availability, reliability, cost) as key obstacles to market access (Figure 21).
- ii. Taking turnover of the business into account, there was a significant difference between the type of market access challenges faced by producers with a lower turnover compared to those with a higher turnover; the turnover-divide being at approximately USD \$6250 (or Tshs 10 000 000) per annum.
 - Although producers in both turnover categories (i.e. USD \$ 6250 and below and above USD \$6250) faced market access challenges, producers in the lower turnover category seemed to be more significantly challenged in terms of capital constraints (such as the costs related to affordable, reliable transportation), whilst producers in the higher turnover category were significantly more likely to face challenges related to the reliability of middlemen and auctioneers, warehousing or storage facilities, taxes and sale permits (Figure 22)
- iii. Producers faced with more severe capital constraints were more unlikely to overcome infrastructural constraints in accessing preferred markets. These producers were therefore more likely to engage in distressed sales (i.e. sales directly to the public in the village, the village market, local retailers and middlemen) whilst those in the higher turnover category (with less capital constraints) were more likely to access preferred markets (processors, wholesalers, co-operatives, trading companies, government agencies). This explains why they were more likely to face challenges relating to auctioneer fraud, taxes and sales permits.
 - Findings summarised in Table 4 and Figures 23 and 24 indicated that more than 50% of producers in the AgFiMS market segment engaged in distressed sales
 - Livestock (79%) and food crop producers (70%) were more likely than cash crop producers (21%) to engage in distressed sales
 - Because of the high likelihood of cash crop farmers accessing the preferred market, the turnover of the business did not affect potential access to preferred markets in the same way it affected livestock and food crop farmers
 - The higher likelihood of cash crop farmers to access preferred markets could be explained by their significantly higher likelihood of having contracts for the sale of their produce (Figure 25) one in three cash crop farmers had contracts compared to one in 50 livestock and food crop farmers
- iv. Findings summarised in Table 4 indicated a need for incentives for value-add to products being pushed into the market less than 1% of producers sold their produce to processors

which seemed to indicate that producers in the AgFiMS market segment flooded the market with raw products.

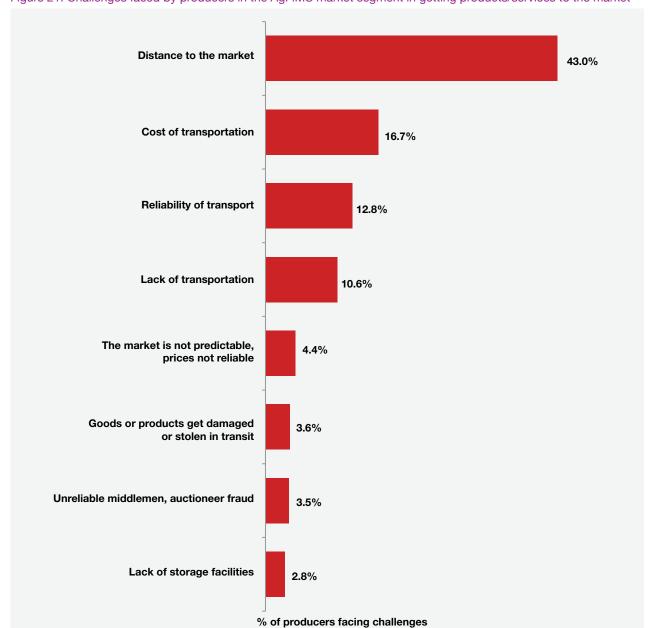


Figure 21. Challenges faced by producers in the AgFiMS market segment in getting products/services to the market

*Note: Multiple responses per business owner possible

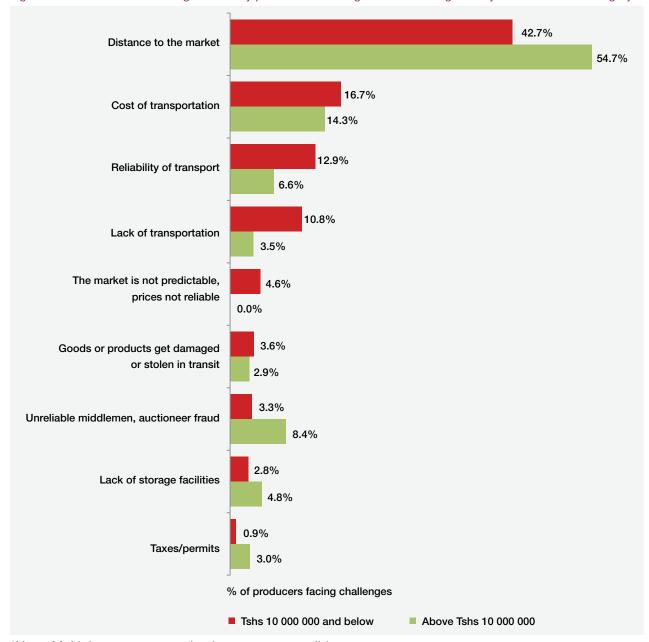


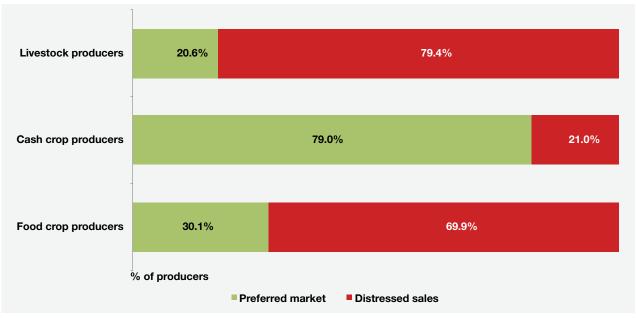
Figure 22.Market access challenges faced by producers in the AgFiMS market segment by annual turnover category

Table 4. Main customers of producers in the AgFiMS market segment

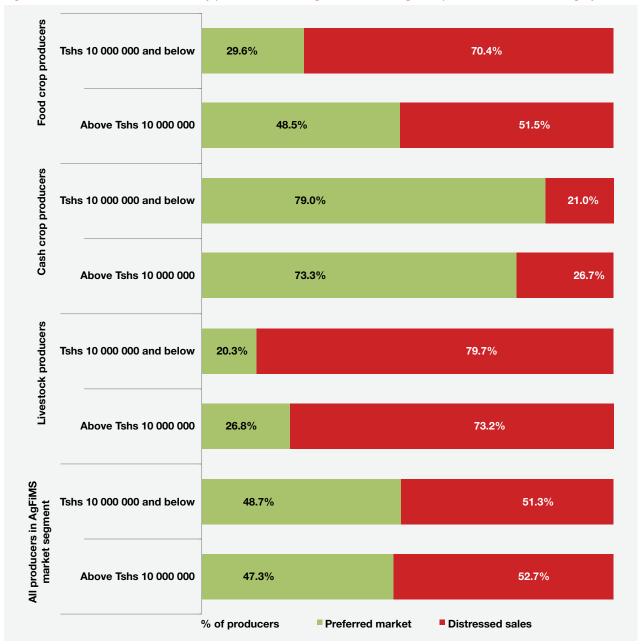
Main customer	Food crop producers	Cash crop producers	Livestock producers	All producers in AgFiMS market segment
Direct to a government agency	2.2%	0.7%	0.0%	1.4%
Trading company	0.7%	38.5%	0.6%	15.8%
Co-operative	1.2%	28.8%	1.6%	12.3%
Wholesaler	25.0%	10.5%	17.2%	18.5%
Processor	0.9%	0.4%	1.2%	0.7%
Middleman	30.0%	6.7%	14.7%	19.4%
Local retailer	29.5%	12.0%	50.1%	24.3%
Direct to the public	10.4%	2.3%	14.5%	7.6%

^{*}Note: Multiple responses per business owner possible

Figure 23. Actual markets accessed by producers in the AgFiMS market segment







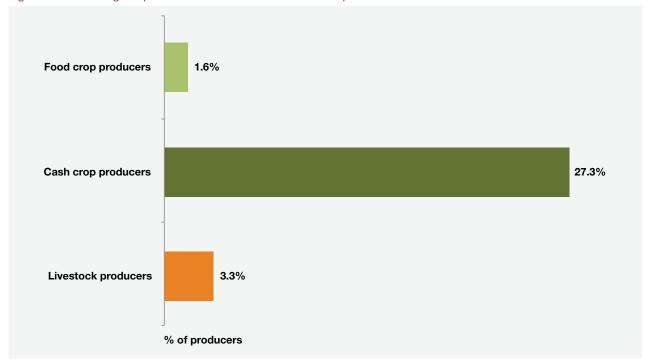


Figure 25. Percentage of producers with contracts to sell their produce

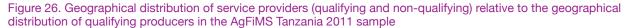
The geographic distribution of agro-processors and agricultural service providers relative to the geographic distribution of producers will have a significant impact on both the productivity and the market accessibility of producers – especially in situations where access to infrastructure is limited and difficult to overcome.

In order to illustrate the impact of the geographical distribution of processors and service providers on the productivity and market accessibility of producers in the AgFiMS market segment, Figures 26-32 summarise these distributions for those agribusinesses assessed during the AgFiMS Tanzania 2011 implementation.

Note: In terms of the geographical distributions shown in Figures 26-32, the size of the symbol used to indicate the location of agribusinesses is indicative of concentrations of businesses – i.e. a larger symbol indicates a higher concentration of businesses whilst a smaller symbol indicates a lower concentration of businesses.

Comparing the geographical distributions of qualifying producers in the AgFiMS Tanzania 2011 sample with that of agricultural service providers (Figure 26) and agro-processors (Figure 27), it could be concluded that:

- Qualifying producers seemed to have good access to service providers as the distribution of service providers generally overlapped with that of qualifying producers; and that
- Although there was a fair amount of overlap between the geographical distribution of processors and qualifying producers, there were some locations where there were high concentrations of qualifying producers where there were either very few processors or no processors at all. This finding seemed to indicate that, although qualifying producers did, in fact, have access to processors, this was not generally the case; access to processors in some locations was limited leaving producers who did not have the means to access processors in other locations with no alternative but to push raw products into the market.



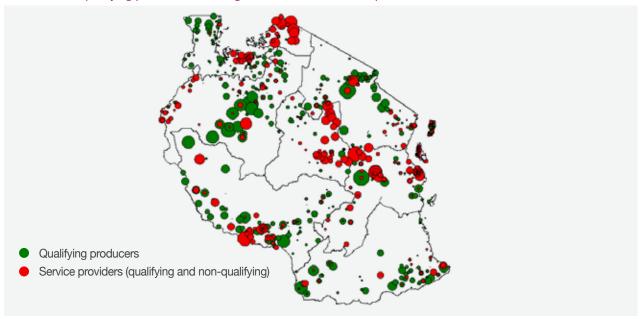
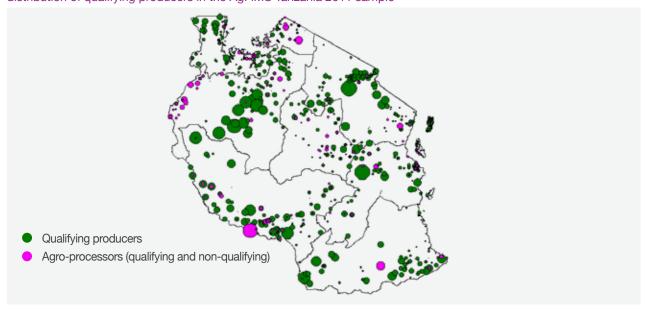


Figure 27. Geographical distribution of processors (qualifying and non-qualifying) relative to the geographical distribution of qualifying producers in the AgFiMS Tanzania 2011 sample



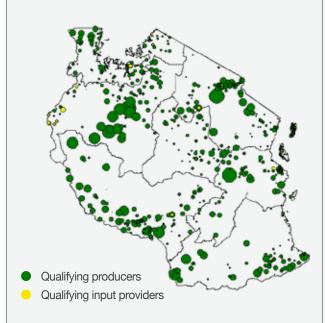
It could be argued that for qualifying producers to be optimally productive and commercially viable, they would service providers who are able to meet their more advanced needs. Based on this premise, it could be concluded that qualifying producers in the AgFiMS market segment would most likely be better served by qualifying service providers rather than non-qualifying service providers.

Figures 28-30 compared the geographical distributions of qualifying producers in the AgFiMS Tanzania 2011 sample with that of qualifying service providers. From these results the following conclusions could be drawn:

- The geographical distribution of qualifying input providers significantly affected their accessibility for qualifying producers (Figure 28). This implied that qualifying producers had no alternative but to rely on smaller, non-qualifying input providers for their needs. That these input providers could not adequately provide the needs of qualifying producers was highlighted by qualifying producers reporting inadequate access to inputs significantly affecting their productivity and therefore their ability to grow their businesses specific reference was made to unavailability of inputs, tools and materials, delayed access to inputs, poor quality of inputs such as drugs and seeds as well as poor quality of livestock/ breeding stock.
- Very few providers of professional services such as veterinarians, accountants and financial
 advisers were identified in the AgFiMS Tanzania 2011 sample. The geographical distribution
 of these qualifiers was therefore not mapped. This finding however led to the conclusion
 that qualified producers had very little access to these kinds of services a situation which
 should have a further significant effect on their potential commercial viability. Almost one
 in three qualifying producers cited lack of business and financial advice and assistance as
 significantly affecting their ability to grow.
- The geographical distribution of qualifying processors (Figure 29) relative to qualifying producers in the AgFiMS sample significantly affected their accessibility for these producers not only as a result of inadequate numbers but also as a result of dispersed distribution. This finding, together with the finding that non-qualifying processors were not accessed by these producers either, seemed to explain why only 1% of qualifying producers sold to processors and ended up pushing unprocessed products into the market.
- Assessing the geographical distribution of middlemen and traders (Figures 30 and 31) relative to qualifying producers in the AgFiMS Tanzania 2011 suggested that qualifying producers, had virtually no access to qualifying traders (especially given their limitations in overcoming infrastructural constraints). They had no alternative but to rely on middlemen who were more accessible. The distribution of qualifying middlemen (Figure 30) however left some locations with high concentrations of producers unserved with no alternative but to sell their produce in the village to small retailers and smaller middlemen.

Figure 28. Geographical distribution of qualifying input providers relative to the geographical distribution of qualifying producers in the AgFiMS Tanzania 2011 sample

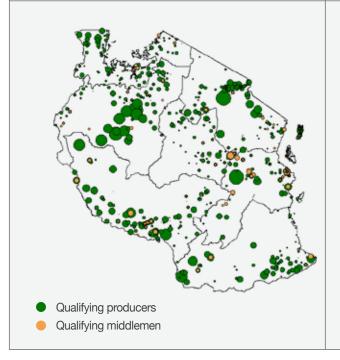
Figure 29. Geographical distribution of qualifying processors relative to the geographical distribution of qualifying producers in the AgFiMS Tanzania 2011 sample

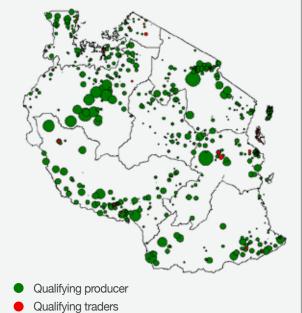


Qualifying producers
Qualifying processors

Figure 30. Geographical distribution of qualifying middlemen relative to the geographical distribution of qualifying producers in the AgFiMS Tanzania 2011 sample

Figure 31. Geographical distribution of qualifying traders relative to the geographical distribution of qualifying producers in the AgFiMS Tanzania 2011 sample





It was clear from looking at the geographical distribution of agricultural service providers relative to the geographical distribution of qualifying producers in the AgFiMS market segment, that the productivity as well as market accessibility of producers was significantly affected by their ability to access service providers that were adequately equipped to serve their needs. This situation significantly affected the effectiveness of the value chain and contributed to keeping emerging producer in the trap of having to engage in distressed sales rather than accessing preferred markets:

- Not having adequate access to input and service providers affected producers' ability to be more productive.
- Limited productivity, in turn, prevented qualifying producers from overcoming the operational capital constraints needed for them to overcome the distance to the market and transport-related obstacles they faced in order to access preferred markets.
- In some instances, access to preferred markets was further prohibited by area-based sales policies and regulations which decreased the likelihood of commercial success of emergent farmers even more.

5.4.2 Processors

More than one in three (35%) of the processors in the AgFiMS market segment indicated that they faced challenges in getting their products to market. There was however a significant difference between the type of challenges faced by processors operating in rural areas and those operating in urban areas (Figure 32):

- Similar to producers, distance to market and the related challenges regarding transportation of products and the cost thereof was also a major problem for processors, irrespective of whether they operated from urban or rural areas.
 - Reliability of transport and loss of stock whilst in transit were however challenges more likely to affect rural-based processors
- Lack of storage facilities posed a major challenge specifically in rural areas where processors were also more likely to be faced with a lack of refrigeration facilities.
- Urban-based processors on the other hand, were more likely to be challenged by unreliable middlemen, auctioneer fraud and their ability to obtain permits to sell their products in areas where there was a market but was outside of the area they operated from.

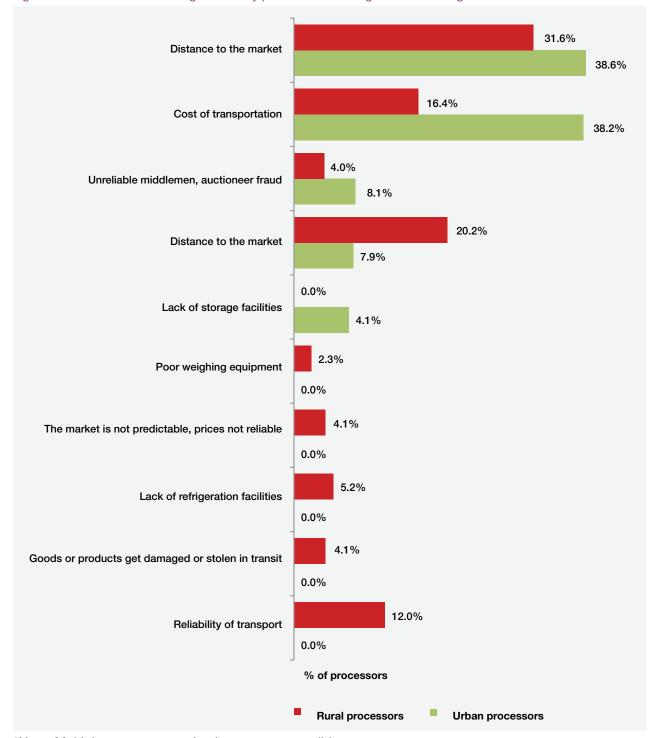


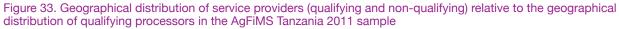
Figure 32. Market access challenges faced by processors in the AgFiMS market segment

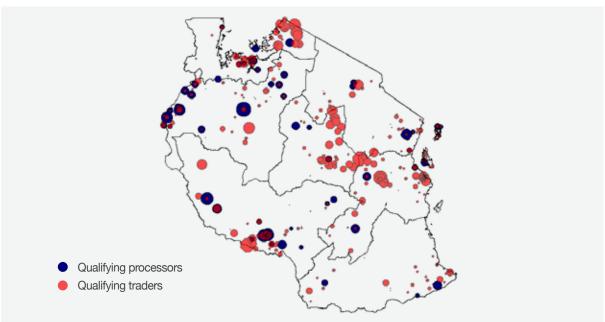
The challenges processors in the AgFiMS market segment faced in terms of access to markets were once again explained by incompatible geographical distributions of different links in the value chain (Figures 33-35).

Looking at service providers' (both qualifying and non-qualifying) geographical distribution relative to the geographical distribution of qualifying processors in the AgFiMS Tanzania 2011 sample locations, (Figure 33) it seems, at a first glance, that qualifying processors should not experience difficulty in accessing service providers. If it is considered however that AgFiMS qualifying processors represent the top 34% of processors in the Tanzanian market (in terms of turnover levels), it could be expected that their preferred market (i.e. the market that would enhance their potential to achieve commercial success or to be commercially viable) would be the qualifying traders.

Comparing qualifying traders' geographical distribution to the geographical distribution of qualifying processors in the AgFiMS Tanzania 2011 sample locations (Figure 34) illustrates the reason behind processors facing challenges with regard to distance to the market and transportation of products as there was almost no overlap in these geographical distributions.

As illustrated earlier, emerging farmers were not able to access qualifying processors effectively – a situation which would most likely affect the productivity of these processors and therefore their ability to overcome capital constraints to access preferred markets. This cycle once again ends with them engaging in distressed sales.





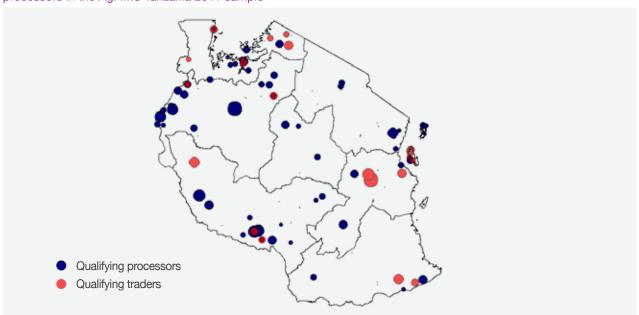


Figure 34. Geographical distribution of qualifying traders relative to the geographical distribution of qualifying processors in the AgFiMS Tanzania 2011 sample

More than 80% of qualifying processors engaged in distressed sales rather than accessing preferred markets (Figure 35).

Rural-based processors were significantly less likely to access preferred markets – 6.1% vs.
 32.2% of their urban counterparts.

Almost 60% of processors in both urban and rural areas indicated that they did not use the maximum capacity of their processing equipment (Figure 36). Main reasons reported for the under-utilisation of their equipment included:

- Not receiving enough products to process.
 - Less than 1% of qualifying producers sold their produce to processors.
 - Only 3% of qualifying traders who bought agricultural products from producers sold these products to processors.
 - Qualifying processors were therefore most likely to get most of their products from subsistence farmers and small traders that were not able to provide sufficient quantities to enable greater utilisation of their processing.
- Infrastructural constraints power shortages.
- Labour shortages mostly in rural areas.

Direct to the public/ back to farmers 35.5% All processors in AgFiMS market segment Distressed sales Local retailer 35.2% Middleman 11.2% Preferred market Trading company 0.8% Wholesaler 17.3% Direct to the public/ back to farmers 39.1% Distressed sales Rural processors Local retailer 33.9% 20.8% Middleman Preferred market 1.5% Trading company Wholesaler 4.6% Direct to the public/ back to farmers 31.1% Distressed sales Urban processors 36.7% Middleman Trading company Preferred market Wholesaler Direct to the public/ back to farmers 32.2% % of processors

Figure 35. Actual markets accessed by processors in the AgFiMS market segment

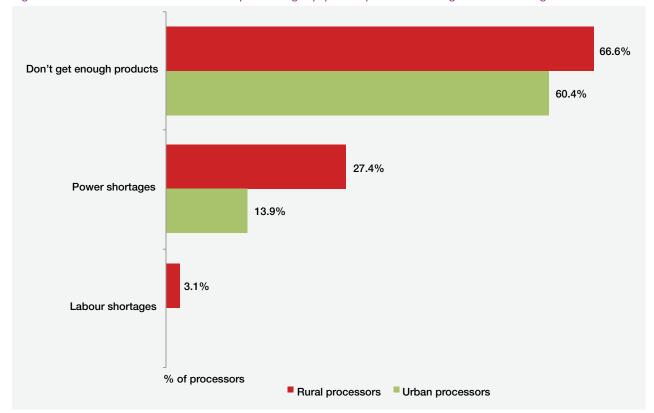


Figure 36. Reasons for under-utilisation of processing equipment: processors in AgFiMS market segment

5.4.3 Service providers

The broader segment of service providers within the AgFiMS market segment was sub-divided into:

- Input providers (seed, pesticides, fertiliser, equipment).
- Manufacturers of farming/processing equipment.
- Providers of services such as veterinary, information, extension, financial/accounting, leasing, etc.
- Traders in agricultural products (buying from producers/processors/other traders and selling on).

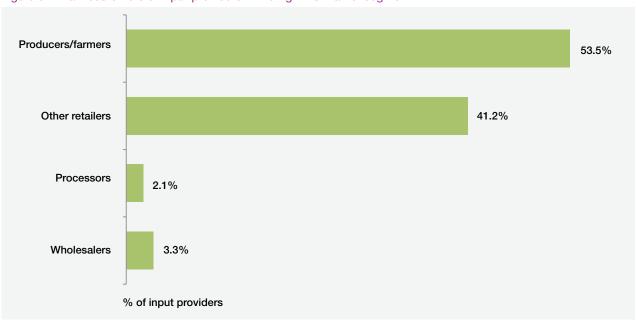
As the overall sample of service providers for the AgFiMS Tanzania 2011 survey was relatively small, the data did not allow for detail analysis of each of these sub-categories. This section will therefore just give a brief overview of market access in terms of input providers and agricultural traders.

5.4.3.1 Input providers

As could be expected given the composition of the market, input providers in the AgFiMS market segment catered mainly for producer needs and to a lesser extent for processor needs (figure 37). The main challenges they faced (Figure 38) in terms of getting their products to their markets were related to:

- Transportation the cost, availability, and reliability mainly as a result of the distance to the market (36% of input providers operated from urban areas having to reach producers in rural areas); and
- Storage facilities.

Figure 37. Main customers of input providers in the AgFiMS market segment



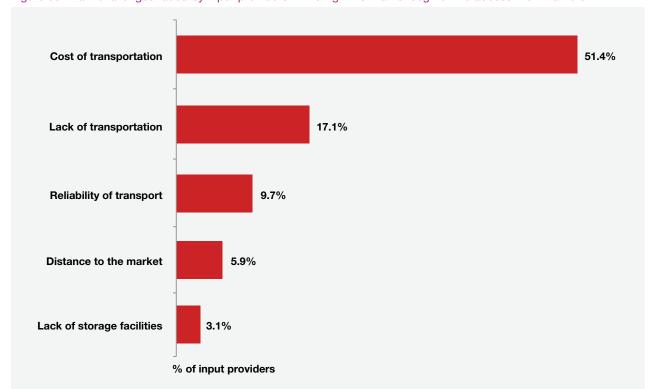


Figure 38. Main challenges faced by input providers in the AgFiMS market segment to access their markets

The challenges faced by input providers in the AgFiMS market segment in terms of market access were best explained by their own geographical distribution relative to the geographical distribution of their markets (Figure 39).

As the market for the input providers in the AgFiMS market segment would mainly include producers and processors, Figure 39 explored the geographical distribution of all farmers and processors identified by AgFiMS Tanzania 2011 relative to the geographical distribution of qualifying input providers.

This distribution indicated that these input providers would be able to serve only a small portion of their potential market. Attempts to enlarge their market would inevitably by inhibited by challenges related to the transportation of goods over long distances. This remains the case, irrespective of whether they chose to serve producers and processors beyond their natural catchment areas or whether they chose to distribute their products to smaller retailers located within areas with high concentrations of farmers and processors.

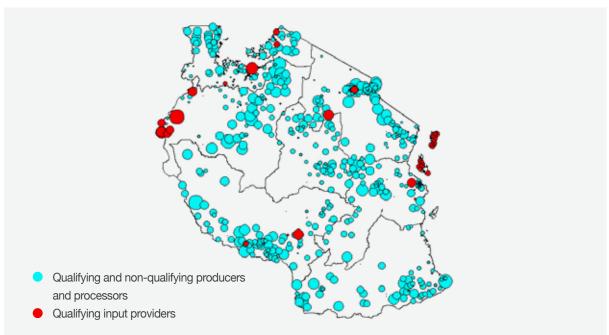


Figure 39. Geographical distribution of qualifying input providers relative to the geographical distribution of producers (qualifying and non-qualifying) and processors (qualifying and non-qualifying) in the AgFiMS Tanzania 2011 sample

5.4.3.2 *Traders*

Traders in the AgFiMS market segment operated mainly from urban areas (53%). As these traders were mainly intermediaries or middlemen (buying from farmers in rural areas and selling their products to other middlemen, retailers, wholesalers and trading companies most likely operating from urban areas), the obstacles they faced to get their products to markets were mainly related to transportation of goods (Figures 40-41):

- Distance to the market;
- Cost and reliability of transportation, products/goods getting damaged whilst in transit;
- Storage and refrigeration facilities; as well as
- Taxes and permits related to transporting goods from production areas to other areas.

Once again there was little evidence of value being added in the value chain:

Only 3% of traders sold the products to processors.

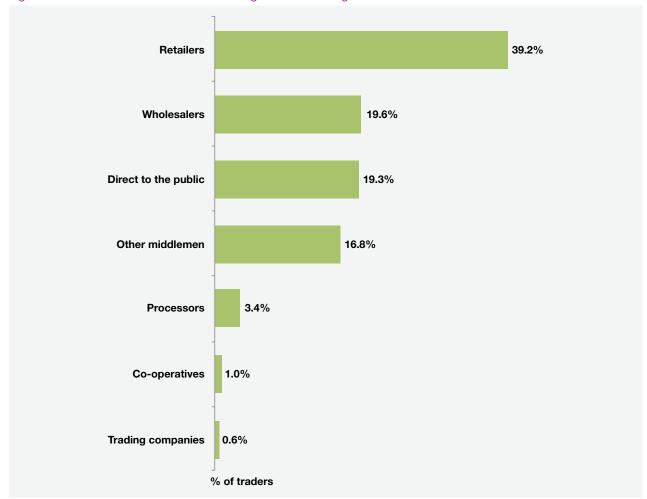


Figure 40. Main customers of traders in the AgFiMS market segment

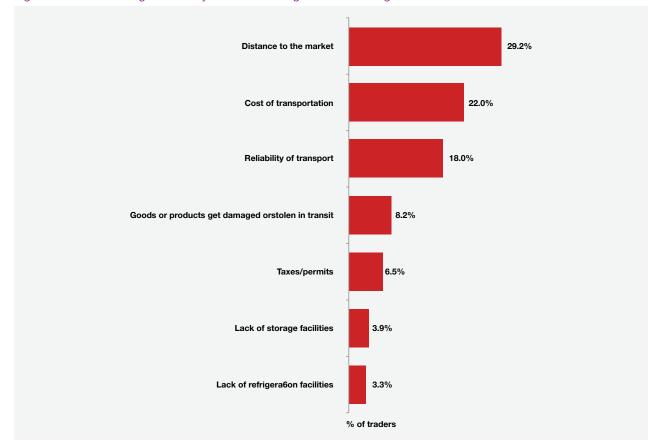


Figure 41. Main challenges faced by traders in the AgFiMS market segment to access their markets

5.5 Access to Extension and Information Services

Every business owner needs information to manage the business efficiently and effectively; to enable informed decisions about how best to prioritise the utilisation of business resources, to produce goods or provide services as well as to assess and pursue market opportunities, and manage business risks effectively. This is equally true for agribusiness owners; especially in an environment that is not particularly conducive for business success.

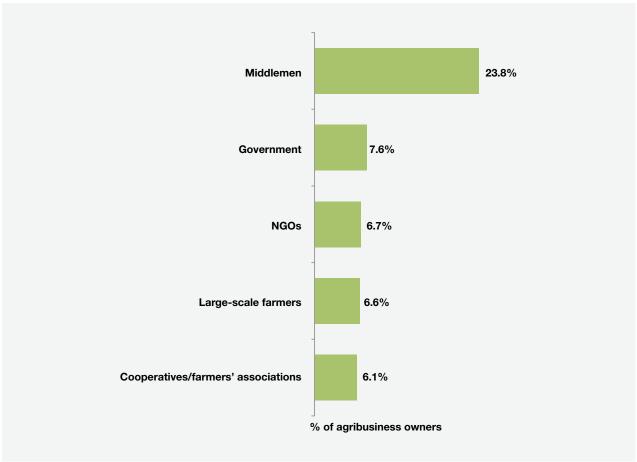
Business owners in the AgFiMS market segment had limited access to information and extension services:

- More than 80% of business owners did not know where to go for financial advice, did not
 have anyone to turn to for financial advice, or were not prepared to ask for financial advice
 for the purpose of the business.
 - While 15% of business owners obtained financial advice, information sources utilised were not necessarily credible or reliable – these included sources such as savings group members, extension agents, farmers associations, farmers – co-operatives, community leaders and loan officers
 - Only 2.4% of business owners obtained financial advice from financial institutions
- 33% of business owners reported that they received business advice, and 43% of business

owners reported that they received agricultural advice; it has to be emphasised that this kind of information support and advice was by no means extensive or necessarily expert advice.

- · Business advice obtained mainly focused on general marketing and pricing issuesv
- Agricultural advice received mainly covered general production matters and disease prevention

Figure 42. Sources of agricultural and business information



*Note: Multiple responses per business owner possible

Business Operations

The formality, size and maturity of the business were expected to have significant impact on the business operations. For the purpose of this report, the following characteristics of agribusinesses in the AgFiMS market segment were used as proxies for formality, size and maturity:

- i. Formality business registration.
- ii. Maturity number of years in operation.
- iii. Size/scale turnover, number of full-time paid employees (not family members), and business assets.

6.1 Business Registration

Of the agribusinesses in the AgFiMS market segment, 11.4% (approximately 59 200 agribusinesses) were registered. Owners of unregistered businesses were generally under the impression that their businesses "did not qualify" for registration as they were either "too small" or "hadn't reached the turnover target yet".

- Processors, service providers and cash crop businesses were most likely to be registered (Figure 43).
- The likelihood of registration amongst businesses in the AgFiMS market segment was significantly higher than that of businesses in the top 25% of the MSME sector of which only 4.5% were registered.
- Two in three owners of unregistered businesses did not understand the benefits of registration; they also did not know how to go about registering their businesses.



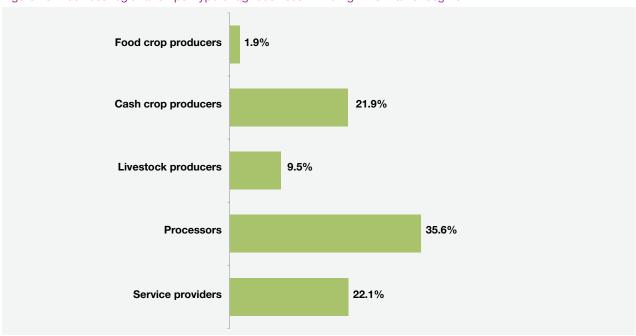
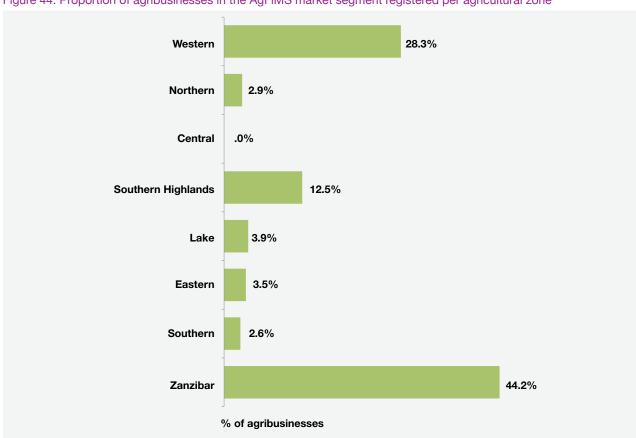


Figure 44. Proportion of agribusinesses in the AgFiMS market segment registered per agricultural zone

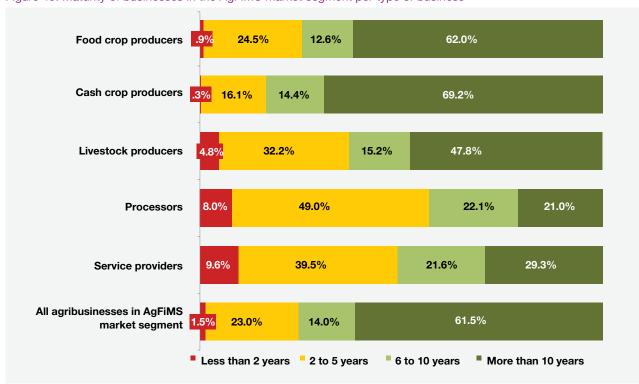


6.2 Business Maturity

Figure 45 explored the maturity of agribusinesses in the AgFiMS market segment indicating that:

- 1.5% (approximately 7 600) were in their start-up phase had been in operation for less than two years.
 - These businesses were most likely to be found amongst service providers (approximately 1 900 businesses 9.6% of service providers in start-up phase) and processors (approximately 750 businesses 8% of processors in start-up phase)
- 23% (approximately 119 500) were in the growth phase not fully established yet but have been in operation for two to five years and have demonstrated their ability to survive the challenges associated with starting a business in a "less-than-conducive" environment
 - These businesses were more likely to be found amongst processors (approximately 4600 businesses 49% of processors in their growth phase), service providers (approximately 7 900 businesses 39.5% of service providers in their growth phase) and livestock producers (approximately 13 850 businesses 32.2% of livestock producers in their growth phase)
- 75.5% (approximately 392 200) were established businesses having been in operation for longer than five years.
 - Established businesses were most likely to be found amongst crop producers approximately 350 900 of these businesses having been in operation for longer than five years

Figure 45. Maturity of businesses in the AgFiMS market segment per type of business



6.3 Scale of the Business

6.3.1 Business turnover

Although business turnover was used as an indication of the scale of agribusinesses in the AgFiMS market segment, it has to be noted that turnover data was regarded as being more indicative of scale rather than an accurate reflection thereof. The income of agribusinesses, producers in particular, can be irregular and is inconsistent. Although business owners claimed to have a "good sense of the financial status of their businesses" and kept financial records, it has to be taken into consideration that they did not have sophisticated financial systems – they were therefore more likely to have a general sense of the financial situation of the business rather than an accurate or reliable reflection of its balance sheet.

Based on the turnover data, findings summarised in Figure 46 indicated that:

- i. 32% of producers had a turnover of less than USD \$600 per annum (i.e. less than Tshs 900000) and therefore qualified in terms of the AgFiMS threshold by means of the size of the land they were using for the purpose of their business (i.e. five acres or more). This resulted in 30.5% of agribusinesses in the AgFiMS market segment having an annual turnover of less than USD \$600.
 - Crop producers were most likely to fall into the below \$600 turnover category
- ii. The turnover distribution of livestock producers was significantly different from that of crop producers it illustrated a less significant skew towards the below \$600 turnover category; only 3.5% of livestock producers in the AgFiMS market segment fell into this turnover category
- iii. 83% of agribusinesses in the AgFiMS market segment had an annual turnover of less than \$2000 (i.e. less than Tshs 3 000 000), 53% falling into the \$600 \$2000 turnover category
 - 85% of producers had a turnover of less than \$2000 per annum 88% of food crop producers; 86% of cash crop producers; 72% of livestock producers
 - The turnover distribution of agribusinesses was significantly skewed towards the \$600-\$2000 turnover category
 - This skew was most significant for livestock producers
 - 50.9% of service providers and 52.3% of processors in the AgFiMS market segment fell into the \$600 \$2000 turnover category, indicating that these businesses just qualified in terms of the \$1500 threshold applied for AgFiMS Tanzania 2011
- iv. 8.3% of businesses had a turnover of between \$2000 and \$3300 (i.e. Tshs 3000000 5000000).
 - Processing businesses (30.2%) and service providers (26.9%) were most likely to fall into this turnover category
- v. 5.1% of businesses had a turnover of between \$3300 and \$6700 (Tshs 5000000 10000000) with 3% having a turnover of above \$6700.
 - Service providers were most likely to have a turnover of above \$3300 almost a quarter (22.2%) of service providers falling into this income segment compared to 17% of processors and 7% of producers

 Livestock producers were twice as likely as crop producers to fall into the above \$3300 turnover category

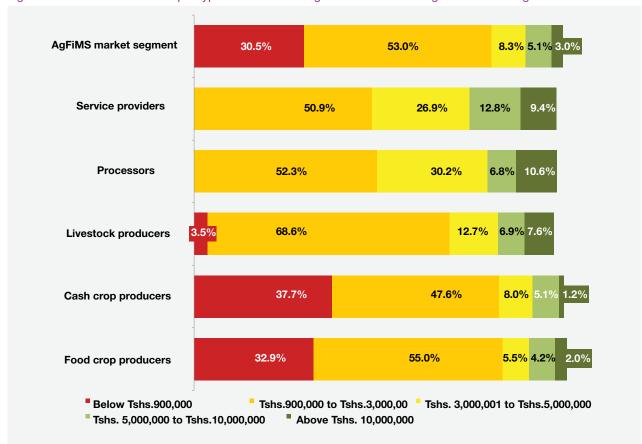


Figure 46. Turnover distribution per type of business for agribusinesses in the AgFiMS market segment

Table 5 provides a summary of the average annual turnover per type of agribusiness. It subdivides service providers in the AgFiMS market segment into input providers, providers of services, and traders,

What is significant about these findings is that the average annual turnover of livestock producer businesses was more comparable to that of processing and service providing businesses than to the average turnover of crop producer businesses.

Table 5. Average annual turnover of agribusinesses in the AgFiMS market segment per type of agribusiness

Type of business	Average turnover (USD \$)
Food crop producers	1350
Cash crop producers	1300
Livestock producers	3000
Processors	3600
Input providers	3400
Service providers	3200
Traders	3250

6.3.2 Number of employees

Using the number of non-family full-time workers employed by agribusiness as a measure of scale, findings summarised in Table 6 indicated that 87% of agribusinesses in the AgFiMS market segment did not employ non-family full-time workers. Processors (37.5%) and livestock farmers (34.4%) were the most likely to employ non-family full-time workers whilst cash crop producers were the least likely (6.7%).

Table 6. Full-time labour status (not family members) of agribusinesses in the AgFiMS market segment

Full-time labour status	Food crop producers	Cash crop producers	Livestock producers	Processors	Service providers	All Agribusinesses in AgFiMS market segment
No full-time workers	88.3%	93.3%	65.6%	62.5%	81.3%	87.6%
1-5 full-time workers	10.4%	6.4%	33.0%	36.1%	17.2%	11.5%
6-10 full-time workers	.8%	.2%	1.4%	1.4%	1.5%	.7%
11-20 full-time workers	.4%	.0%	.0%	.0%	.0%	.2%
More than 20 full-time workers	.0%	.1%	.0%	.0%	.0%	.0%

6.3.3 Business assets

Table 7 summarises findings related to assets owned by agribusinesses in the AgFiMS market segment indicating:

Mobile phones most likely being the most significant asset for these businesses as they provided 75% of these agribusinesses with connectivity potential.

Table 7.Assets owned by agribusinesses in the AgFiMS market segment

Asset	Food crop producers	Cash crop producers	Livestock producers	Processors	Service providers	All agribusinesses in AgFiMS market segment
Mobile phone	72.9%	71.7%	88.7%	89.0%	91.8%	74.8%
Office(s)	1.8%	2.6%	2.6%	39.0%	28.2%	3.8%
Factory	2.1%	2.3%	1.6%	19.7%	3.9%	2.5%
Storage facilities*	67.9%	68.6%	25.4%	41.4%	42.6%	63.2%
Stables/animal pens	21.3%	11.7%	87.5%	1.5%	6.0%	22.2%
Truck	22.1%	13.5%	6.6%	23.2%	52.1%	18.8%
Car	5.6%	1.6%	5.7%	9.8%	18.3%	4.7%
Tractor	19.8%	6.0%	9.6%	.9%	3.3%	12.8%
Refrigeration equipment	2.2%	.2%	10.4%	4.0%	7.0%	2.3%
Processing equipment	3.4%	1.8%	3.5%	77.8%	9.8%	4.4%

Significantly higher than total AgFiMS figure

^{*}Note: Although ownership of storage facilities was claimed, this should not be confused with warehouse/ facilities of significant size. For most crop farmers these, at most, referred to a small, single room used for storage

6.4 Financial Operations

In terms of the financial operations of the business, the following aspects were considered for the purpose of this report:

- Payment of suppliers.
- Payments received from customers.
- Saving for business purposes.
- Borrowing for business purposes.

6.4.1 Payment of suppliers

The fact that the payment system in Tanzania is, to a large extent, still cash-based was reflected in the payment methods used by agribusinesses in the AgFiMS market segment to pay their suppliers – 96.4% of these businesses paid their suppliers in cash (Table 8).

- Cash crop farmers were more likely than other business owners to pay their suppliers through bank transfers or through a farmers' association or co-operative. They were also more likely to have their inputs provided by their customers on credit and repayment deducted from their harvest income.
- Service providers were more likely than other business owners to use cheques and M-pesa transfers to pay their supplier.
- 9.4% of agribusinesses had access to supplier credit (Figure 47) cash crop farmers being the most likely (21.2%).
 - Having access to supplier credit was significantly correlated with contracted farming –
 85% of cash crop farmers who had access to supplier credit were contract farmers
 - Livestock farmers were the least likely to have access to supplier credit (0.8%)

Table 8. Method of payment of suppliers

Payment method	Food crop producers	Cash crop producers	Livestock producers	Processors	Service providers	All agribusinesses in AgFiMS market segment
Cash	99.4%	91.4%	99.8%	98.7%	99.5%	96.4%
Cheque	0.1%	0.7%	0.2%	0.0%	1.1%	0.4%
Pay cash into the bank	0.2%	1.7%	0.7%	2.6%	0.6%	0.9%
Cell phone, M-Pesa	1.0%	0.4%	0.6%	0.0%	1.2%	0.7%
Payment in kind	1.0%	2.2%	0.3%	0.0%	0.0%	1.3%
Through farmers' association/ co-op	0.0%	4.5%	0.0%	1.3%	0.0%	1.7%
Contract farmers: payment subtracted from payment for harvest at the end of the season	0.0%	2.3%	0.0%	0.0%	0.0%	0.9%

Significantly different from the total AgFiMS figure

*Note: Multiple responses per business owner possible

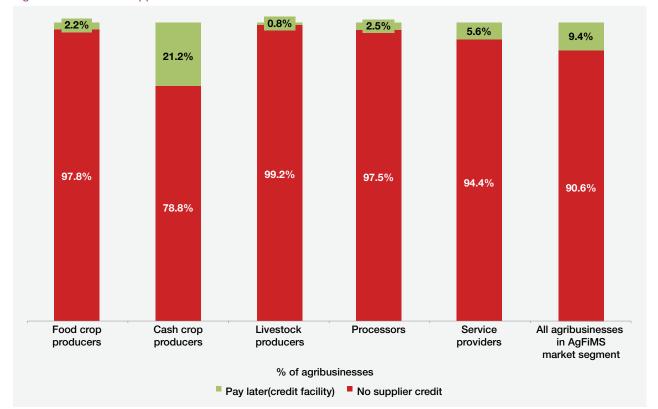


Figure 47. Access to supplier credit

6.4.2 Payments received from customers

As was the case with payment of suppliers, the cash-based nature of the payment system in Tanzania was evident in terms of the payment methods used by customers of agribusinesses in the AgFiMS market segment.

- i. Customers of 94% of agribusinesses paid mainly in cash for products and/or services delivered.
- ii. Cash crop farmers were more likely to use cheques and bank transfers or to transfer payments through farmers' associations or co-operatives to pay their customers than other business owners.
- iii. Agribusinesses were significantly more likely to provide credit facilities to their customers (25.6%, Figure 48) than their suppliers were to grant them credit facilities (9.4%, Figure 47).

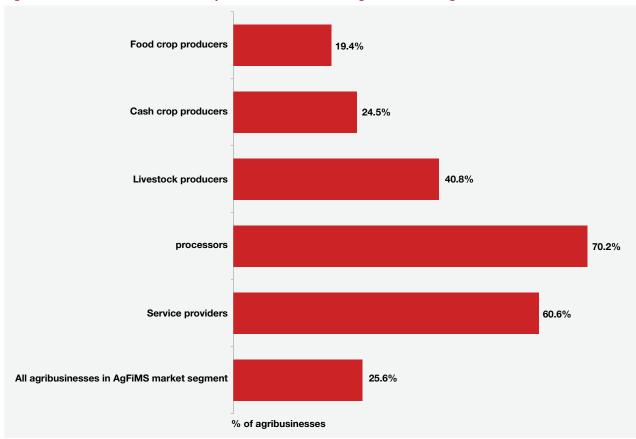
Owners of higher turnover businesses (processors, service providers and livestock farmers) were most likely to provide their customers with credit facilities.

Table 9. Customer payment methods

Payment type	Food crop producers	Cash crop producers	Livestock producers	Processors	Service providers	All agribusinesses in AgFiMS market segment
Cash	99.1%	85.7%	99.5%	98.5%	98.1%	94.0%
Cheque	0.5%	9.0%	0.0%	0.0%	0.7%	3.7%
Bank transfer/internet	0.4%	5.0%	0.5%	1.5%	2.9%	2.3%
Cell phone banking/M- pesa	0.1%	0.2%	0.5%	0.0%	0.2%	0.1%
Payment in kind	0.1%	0.3%	0.3%	1.5%	0.8%	0.2%
Through farmers' association/co-op	0.0%	2.0%	0.0%	0.0%	0.0%	0.8%

Significantly different from the total AgFiMS figure

Figure 48. Provision of credit facilities by business owners in the AgFiMS market segment



^{*}Note: Multiple responses per business owner possible

6.4.3 Saving for the purpose of the business

As was shown in Figure 11, 78.5% of agribusiness owners in the AgFiMS market segment saved or put money aside for business purposes.

- i. This behaviour was mainly driven by a growth-need i.e. to grow/expand the business or to start a new business (Figure 49).
- ii. 40% of agribusiness owners who put money aside did so to smooth cash-flows when needed, whilst 26.8% put money aside to stabilise the business in the event of an unexpected financial shock.
- iii. Owners of higher turnover businesses, i.e. processors, service providers and livestock producers, were slightly more likely to save than crop producers.

Most business owners who saved, kept all or some of their business savings at home or with a family member (79.4%).

Owners of higher turnover businesses (processors, service providers and livestock farmers) were more likely than other business owners to keep their business savings in a bank account. This is likely to be a result of these businesses meeting bank requirements for opening a business account

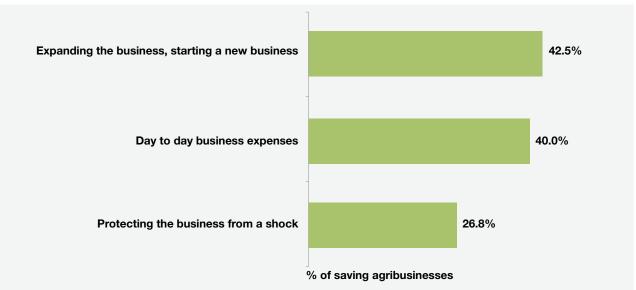


Figure 49. Drivers of savings behaviour amongst agribusiness owners in the AgFiMS market segment



Figure 50. Percentage of business owners in the AgFiMS market segment saving for the purpose of the business



Table 10. Savings mechanisms used by business owners in the AgFiMS market segment who saved

Processors

Service providers

Savings mechanism	Food crop producers	Cash crop producers	Livestock producers	Processors	Service providers	All agribusinesses in AgFiMS market segment
At home/with family member	83.5%	75.4%	72.6%	65.9%	87.7%	79.4%
Bank	26.4%	34.6%	41.6%	54.6%	41.7%	32.0%
Savings in livestock, assets, inputs, crops, business	25.2%	21.0%	22.6%	21.3%	15.7%	23.0%
Savings group	3.4%	1.5%	5.5%	3.4%	1.7%	2.8%
Microfinance institution (MFI)	1.9%	1.2%	0.4%	0.7%	1.4%	1.5%
Savings and credit co- op (SACCO)	0.9%	1.2%	0.0%	0.0%	0.3%	0.9%
Upatu	0.8%	0.1%	1.6%	0.4%	3.2%	0.7%
Village bank or co- operative	0.7%	0.3%	0.1%	0.0%	0.0%	0.5%
Shares	0.1%	0.0%	0.0%	1.1%	0.0%	0.1%
	Significantly worse than total AgFiMS figure					

Significantly worse than total AgFiMS figure
Significantly better than total AgFiMS figure

*Note: Multiple responses per business owner possible

97.4%

90.4%

6.4.4 Borrowing for the purpose of the business

One in four (27.7%) of agribusiness owners in the AgFiMS market segment borrowed for the purpose of the business. Like savings behaviour, the borrowing behaviour of business owners was driven by a growth orientation and a need to smooth the cash-flow of the business (Figure 51).

- One in five (22.8%) business owners borrowed money to stabilise the business in the event of a financial shock.
- Higher turnover businesses (processors, service providers and livestock farmers) were more likely to borrow than lower turnover businesses.
- Findings summarised in Table 11 indicated that the most likely source of credit for borrowers were family and friends (approximately 69 900 businesses), followed by savings and credit co-operatives (SACCOs) (approximately 23 700 businesses), banks (approximately 18 800 businesses) and microfinance institutions (MFIs) (approximately 14 300 businesses).
- Processors were more likely than other business owners to borrow from formal financial institutions (banks, MFIs and SACCOs).

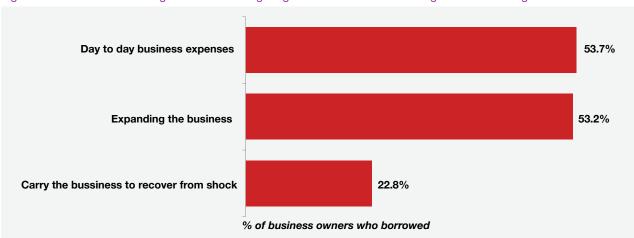


Figure 51. Drivers of borrowing behaviour amongst agribusiness owners in the AgFiMS market segment

*Note: Multiple responses per business owner possible

Figure 52.Percentage of agribusiness owners in the AgFiMS market segment borrowing for the purpose of the business

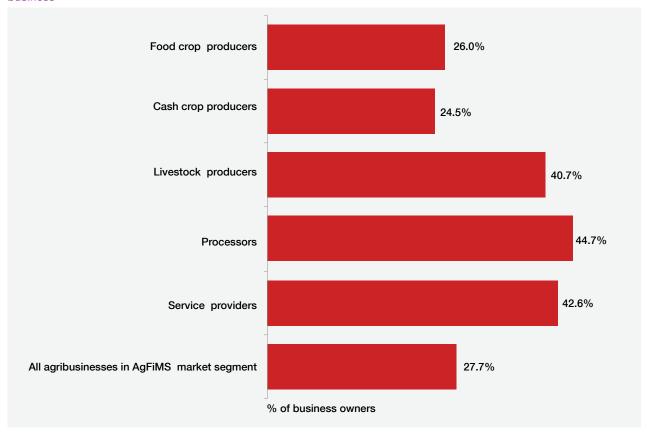


Table 11. Credit mechanisms used by business owners in the AgFiMS market segment who borrowed

Credit mechanism	Food crop producers	Cash crop producers	Livestock producers	Processors	Service providers	All agribusinesses in AgFiMS market segment
Friends and family	44.9%	55.1%	51.4%	30.5%	44.0%	48.6%
SACCO	15.7%	16.2%	18.6%	21.5%	16.7%	16.5%
Bank	13.2%	10.7%	13.6%	33.2%	14.4%	13.1%
MFI	9.5%	8.8%	13.9%	15.4%	9.4%	9.9%
Customers	8.6%	9.0%	8.6%	4.2%	13.5%	8.9%
Money lender	9.5%	9.4%	4.6%	8.8%	6.1%	8.7%
VICOBA	5.3%	4.5%	8.9%	0.0%	1.8%	5.1%
VSLA	4.8%	5.1%	5.4%	2.4%	3.3%	4.8%
Savings group	6.1%	4.0%	2.8%	4.5%	1.4%	4.7%
UPATU	2.2%	0.7%	5.3%	2.1%	11.3%	2.6%
	Significantly h	Significantly higher than total AgFiMS figure				

*Note: Multiple responses per business owner possible

6.4.5 Risk mitigation

While conducting the AgFiMS demand side survey, it seemed that the concepts of "risk" and "risk management" were not concepts agribusiness owners were familiar with. Spontaneous responses to risk-related questions left the impression that business owners were not aware of the risks which their businesses were exposed to. Nor did they have any risk mitigation strategies in place. However, responses to prompted questions regarding their experiences of specific events and how they coped with them indicated that this was not the case. Business owners were continuously exposed to risks such as weather and price fluctuations, and pests and diseases and therefore regarded them as part of everyday business rather than as "risks" or "unexpected events that could impact on the financial status of the business". Although they had risk mitigation strategies in place, these were not consciously managed as such and were rather regarded as simply "the way things are done".

Based on their responses to prompted questions regarding specific events, it could be concluded that:

- Business owners in the AgFiMS market segment regarded weather fluctuations as the most significant risk to their businesses followed by pests and diseases, and price fluctuations.
- Although these risks were not necessarily actively managed with explicit risk mitigation strategies, coping mechanisms included:
 - diversified income sources applied by 86.1% of business owners
 - saving for the purpose of the business applied by 78.5% of business owners
 - forward contracts to sell their products/services 3% of business owners
 - insurance 0.5% of business owners

Less than 1% of businesses in the AgFiMS market segment were insured. Very few of the risks these agribusinesses faced were insurable since insurance products for these kinds of risks (such as weather and price insurance) had not yet been developed in Tanzania.

Business owners did not seem to be aware of the lack of appropriate insurance products in the market. This could have been expected given that the main barriers to insurance uptake were a lack of awareness of insurance and insurance products, and a lack of information on how to go about getting insurance (Figure 53).

Only 10% of uninsured business owners regarded insurance products as too expensive.

Table 12.Perceived main business risks

Risk	Food crop producers	Cash crop producers	Livestock producers	Processors	Service providers	All agribusinesses in AgFiMS market segment
Weather (flood, drought, early/late rains etc.)	79.1%	69.2%	52.6%	29.5%	37.8%	70.7%
Pests/diseases	7.3%	12.2%	26.5%	1.3%	5.6%	10.6%
Prices (market prices, input prices, currency, etc.)	8.0%	10.7%	7.1%	14.3%	17.2%	9.4%
Products and/or services not being sold	2.0%	2.7%	5.3%	19.5%	23.7%	3.7%
Perils and accidents (fire, theft, equipment failure/breakage, etc.)	0.7%	2.3%	2.1%	12.1%	8.8%	2.0%
Power failure/shortages	0.5%	0.5%	4.3%	18.4%	3.0%	1.3%
	Highly significantly different compared to total AgFiMS figure					

Table 13. Risk mitigation strategies for specific financial shocks

Coping mechanisms	Weather related event	Pests/diseases	Price fluctuation	Market downturn
Did not do anything/had nothing in place	86.6%	45.1%	82.8%	82.7%
Sold livestock	4.6%	4.9%	3.0%	2.5%
Temporary Job	2.9%	1.5%	1.3%	1.4%
Sold Asset	2.8%	4.7%	1.9%	1.9%
Using savings	0.0%	36.6%	7.0%	7.6%
Took a loan/borrowed	3.1%	6.9%	2.5%	2.2%
Insurance	0.1%	0.0%	0.1%	0.2%

Significantly different compared to total AgFiMS figure

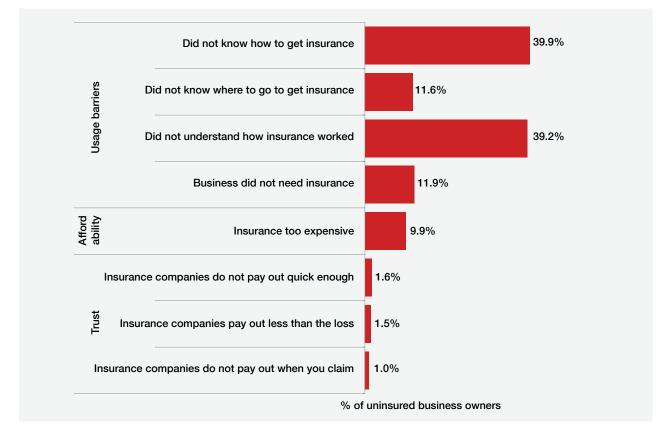


Figure 53. Perceived main barriers to insurance

*Note: Multiple responses per business owner possible

6.5 Networking

Given the significant obstacles in the business environment, it was expected that agribusiness owners in the AgFiMS market segment would harness the strategic advantages of networking with other agribusiness owners to overcome them. The AgFiMS findings however illustrated that this was not the case and that agribusiness owners, to a large extent, tended to operate in isolation.

- i. 30.1% of business owners in the AgFiMS market segment indicated that they networked with other agribusiness owners.
- ii. 25.2% of agribusiness owners in the AgFiMS market segment belonged to a group or association; cash crop producers being the most likely (44.2%, Figure 54).
 - 22.8% of agribusinesses owners belonged to a group or association that provided specific benefits for their businesses
 - The main barrier to group/association membership was the that existing groups did not meet their needs or did not offer any benefits to the group
- iii. Financial benefits received by agribusiness owners who were members of groups or associations:
 - 24.2% were able to get access to loans through their group membership
 - 51.1% were able to get access to supplier credit through their group membership
 - 19.8% shared in group profits

Figure 54. Membership of agricultural groups/associations per business type

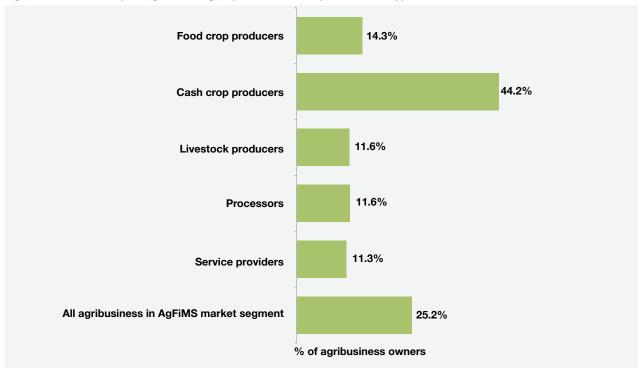
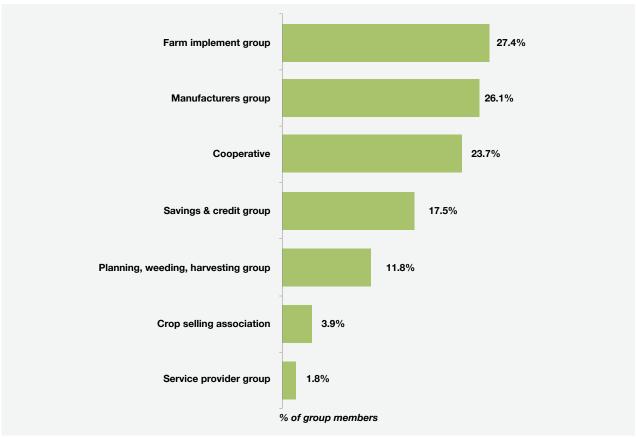
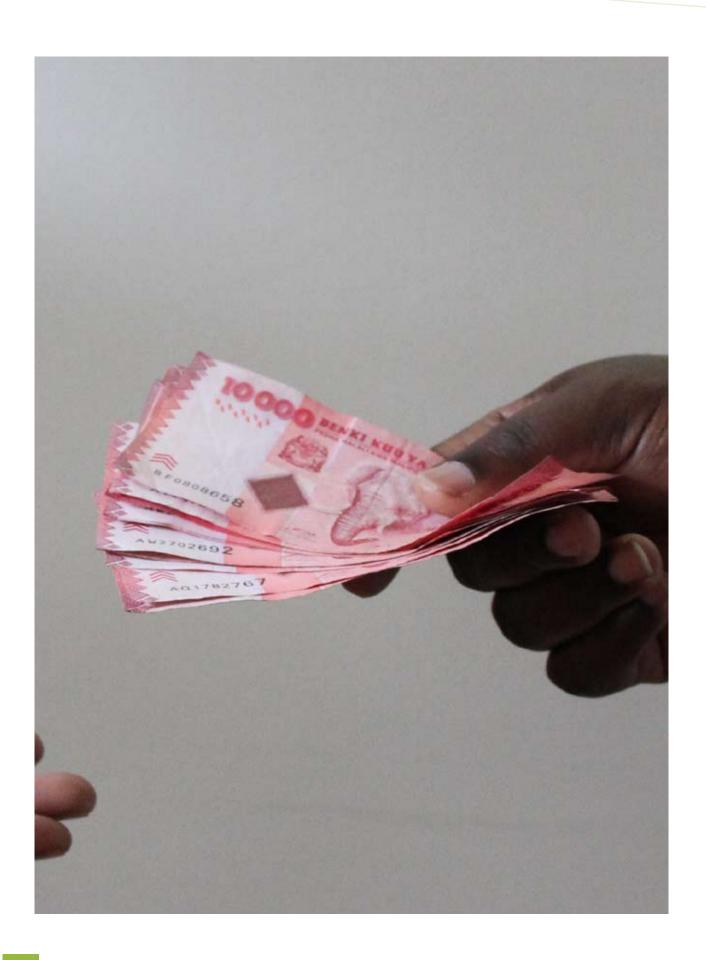


Figure 55. Type of groups agribusiness owners in the AgFiMS market segment belonged to



*Note: Multiple responses per business owner possible



Financial Inclusion

In pursuit of its goal of "making financial markets work for the poor" FinMark Trust developed the FinScope survey which has been implemented widely throughout Africa. FinScope provides a detailed understanding of the extent to which consumers are being served by both the formal and the informal financial sectors of a country. The term "financial inclusion" is commonly used in this context and generally refers to "being served by the financial sector "whilst "financial exclusion" generally refers to "not being served by the financial sector".

"Financial inclusion" is a complex concept which refers to both access to financial services and products, as well as the usage thereof; "access" referring to physical access, eligibility, affordability and appropriateness of financial products and services. Whilst the FinScope approach recognises this, it uses a simple but effective set of indicators to provide insight into "financial inclusion". AgFiMS applies the same approach focusing on agribusiness owners' usage of financial services and products as a proxy for being financially served or financially included.

Table 14. Indicators used to describe the level of financial inclusion of agribusinesses in the AgFiMS market segment

% of agribusinesses that are banked	Includes business owners who have or use any product or service from a commercial bank for the purpose of the agribusiness
% of agribusinesses served by formal non-	Includes business owners who have or use any product or service from any regulated or registered financial institution which is not a commercial bank for the purpose of the business.
bank financial institutions	For the purpose of AgFiMS Tanzania this refers to SACCOS, MFIs, insurance companies, NGO & government services, and money transfer services such as Western Union and M-pesa
Total % of agribusinesses formally served	Includes business owners who are banked AND/OR who are served by formal non-bank financial institutions for the purpose of the agribusiness
% of agribusinesses informally served	Includes business owners who use informal mechanisms to manage the financial matters of the agribusiness. This would include services offered by agricultural associations or groups, input providers, VICOBAs, VSLAs, ROSCAs, savings groups, and community-based money lenders
% of agribusinesses financially served	Includes business owners who are either formally AND/OR informally served for the purpose of the agribusiness
% of agribusinesses financially unserved/ financially excluded	Includes business owners who are neither formally OR informally served for the purpose of the agribusiness – for credit purposes they rely on family and friends; savings are kept at home or with family members; transactions are cash-based

7.1 Levels of Financial Inclusion of Agribusinesses in the AgFiMS Market Segment

More than half of agribusinesses in the AgFiMS market segment (54.3%) were financially excluded (Figure 56); business owners of these businesses used neither products or services from a formal financial institutions nor informal mechanisms to manage their business' finances.

- i. The overall level of financial exclusion was significantly influenced by the level of financial exclusion of producer businesses 55.6% of producers in the AgFiMS market segment were financially excluded.
- ii. Processors (30.2%) and service providers (33.6%) were significantly less likely than producers to be financially excluded than producers.

Bearing in mind that the AgFiMS market segment included the top 25% of agribusinesses in Tanzania, the levels of financial inclusion were regarded as low (Figure 56) – more so when compared to the levels of financial inclusion amongst business owners of the top 25% of MSMEs in Tanzania:

- 86.1% of the businesses owners in the top 25% of the MSME market segment were financially included compared to only 45.7% of their agribusiness counterparts.
 - Only 13.9% of MSMEs in the top 25% of the market were financially excluded compared to 54.3% of their agribusiness counterparts

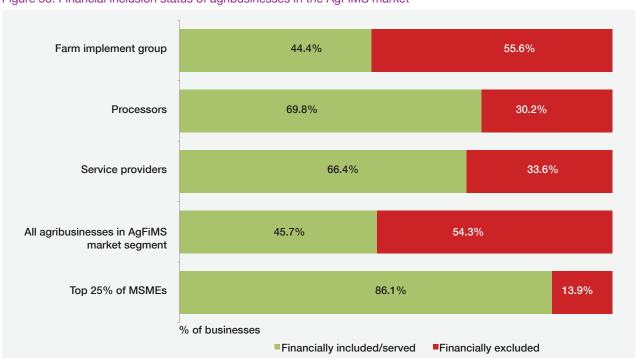


Figure 56. Financial inclusion status of agribusinesses in the AgFiMS market

Examining the drivers of financial inclusion, findings summarised ib Figure 57 indicated that the main drivers of financial inclusion for agribusinesses in the AgFiMS market segment were:

- Usage of commercial bank products and services 28.2% of business owners (approximately 146 500 businesses) were banked; and
- Usage of informal mechanisms 27.9% of business owners used informal mechanisms (approximately 144 800 businesses) to manage their business finances.

For MSME business owners in the top 25% turnover segment financial inclusion was predominantly driven by informal sector usage:

• 74.4% of business owners used informal mechanisms to manage their business' money matters compared to only 18.8% who used bank products and services.

Findings summarised in Figure 57 further indicated that non-bank formal financial products and services were used by only 8.6% of business owners (approximately 44 900 businesses). SACCOs, MFIs, insurance companies and money transfer agencies did not play a major role in support of agribusinesses in the AgFiMS market segment.

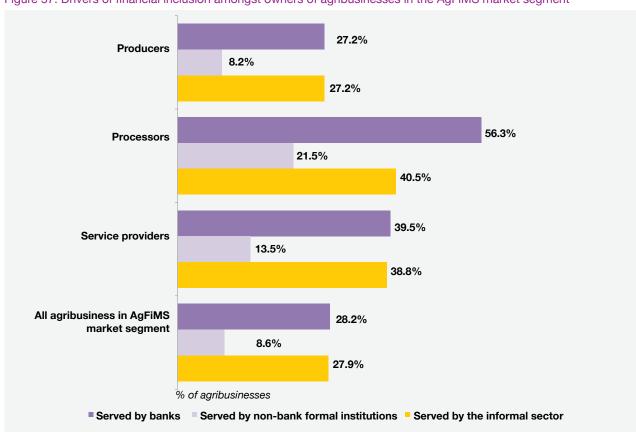


Figure 57. Drivers of financial inclusion amongst owners of agribusinesses in the AgFiMS market segment

Formal financial services refers to products and services provided by commercial banks and regulated non-bank financial institutions, whilst informal financial services refers to financial services provided by non-financial institutions, organisations, groups or individuals such as agricultural associations or groups, agricultural input providers, VICOBAs, VSLAs, ROSCAs, savings groups, and community-based money lenders.

Figure 58 explored the relative contributions of the formal and informal financial sectors in serving the financial services needs of agribusinesses in the AgFiMS market segment.

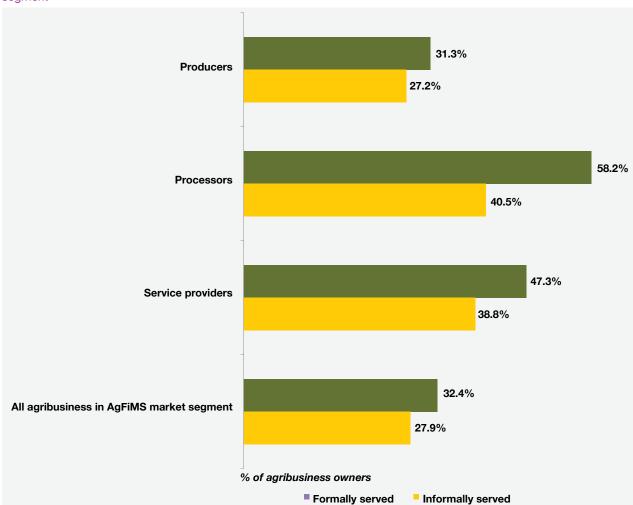


Figure 58. Comparing the role of the formal and infomal sectors in serving agribusinesses in the AgFiMS market segment

In summary Figure 58 indicated that:

- i. The formal financial sector serves 32.4% of agribusinesses in the AgFiMS market segment, whilst the informal financial sector serves 27.9%, indicating that these two sectors were of similar importance in terms of addressing the financial needs of these agribusinesses.
- ii. These findings illustrate the need for policy makers and financial sector decision makers to recognise the informal financial sector as a key role player in the agricultural sector not necessarily for the purpose of regulation (which could potentially make it inaccessible

for agribusinesses) – but rather to identify specific opportunities for collaboration and the creation of a conducive environment for such collaborations.

Although it was to be expected that there would be an overlap between formal and informal financial sector usage – i.e. agribusiness owners using a variety of financial services, products and mechanisms from either the informal or the formal sector to manage their financial needs – findings summarised in Diagram 3, raised the following questions:

- Were the financial services offered to agribusiness owners by formal institutions not meeting their needs? In other words, did these business owners have no option but to use informal mechanisms to help them manage their business finances? Or
- Was usage of informal mechanisms a matter of choice or preference?

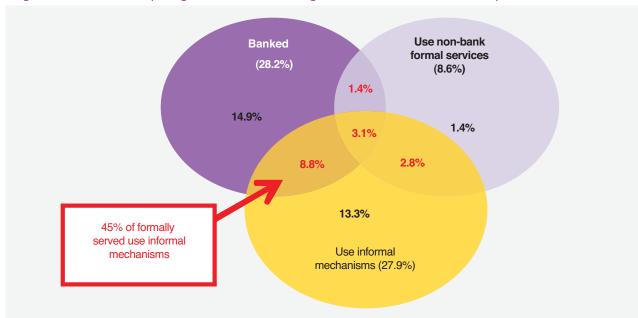


Diagram 3. Extent of overlap in agribusiness owners' usage of formal and informal services/products

7.2 Types of Financial Products and Services used by Agribusinesses

In an attempt to find an answer to why such a large proportion of agribusinesses that were served by the formal financial sector also used the informal sector, the types of financial products used by agribusiness owners were examined. The aim being to identify which of the types of products used were provided by the formal financial sector and which were provided by the informal sector.

The FinScope Landscape of Access was used for the purpose of the assessment, taking into account the:

- The percentage of agribusiness owners who had/used transactional products.
- The percentage of agribusiness owners who had/used savings products.
- The percentage of agribusiness owners who had/used credit products.
- The percentage of agribusiness owners who had/used insurance products.

Figure 59 gives an overview of the landscape of access for agribusinesses in the AgFiMS market segment. It indicated that it was more likely for agribusiness owners to use transactional, savings and credit products than insurance products:

- 26% of agribusinesses used transactional products
- 31% used savings products or mechanisms
- 30% used credit products or mechanisms
- Less than 1% used insurance products for the purpose of the business

Comparing the landscapes of access of producers, processors and service providers in the AgFiMS market segment, findings summarised in Figure 59 indicated that the types of financial products most likely to be used by business owners across the value chain were the same, albeit in different proportions.

The skew of the "diamond" indicates a skew towards a specific type of product being used

% of business owners have/use transactional products

% of business owners have/use insurance products

% of business owners have/use savings products

% of business owners have/use savings products

% of business owners have/use savings products

Figure 59. Landscape of access for agribusinesses in the AgFiMS market segment

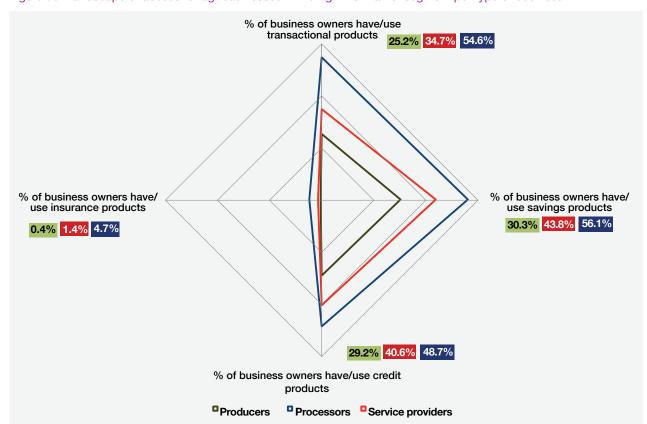


Figure 60. Landscape of access for agribusinesses in the AgFiMS market segment per type of business

Why were such a large proportion of business owners using formal financial products also using informal products? The findings summarised in Table 15 provided significant insight comparing the landscapes of access of commercial bank clients, non-bank financial institution clients and informal sector users.

Table 15. Comparison of the agribusiness landscape of access of commercial bank clients, non-bank financial institution clients and informal sector users

	Bank products used by banked business owners	Non-bank formal financial products used by business owners served by non- bank formal financial institutions	Informal sector mechanisms used by business owners who were informally served
Approximate AgFiMS market segment client base size	146 500	44 900	144 800
% of business owners have/use transactional products	92.4%	0.0%	0.0%
% of business owners have/use savings products	97.8%	22.5%	11.7%
% of business owners have/use credit products	13.8%	82.3%	95.7%
% of business owners have/use insurance products	0.0%	5.8%	0.0%

i. Although commercial banks served approximately 146 500 agribusinesses, there seemed to be little benefit for these businesses in having bank accounts:

- 92.4% of banks' agribusiness clients had transactional facilities whilst the AgFiMS findings illustrated that these agribusinesses operated on a cash basis. Very few would therefore need these transactional facilities for which they were paying transactional fees
- 97.8% of banks' agribusiness clients had savings facilities though most of these agribusinesses did not have long-term savings facilities. Their savings facilities would therefore not be likely to earn a significant amount of interest
- Only 13.8% of banks' agribusiness clients had access to bank credit
- ii. Although non-bank financial institutions served only 44 900 agribusinesses, which was three times fewer than the number served by banks, these institutions seemed to provide their clients with more benefit than banks:
 - 22.5% had savings facilities
 - 82.3% had credit facilities
 - 5.8% had insurance facilities

The informal sector, serving approximately 144 800 agribusiness, was the most likely provider of credit to agribusinesses, and was mostly used by agribusiness owners for this purpose. Only 11% of agribusiness owners who used the informal sector used it for the purpose of savings through savings group membership

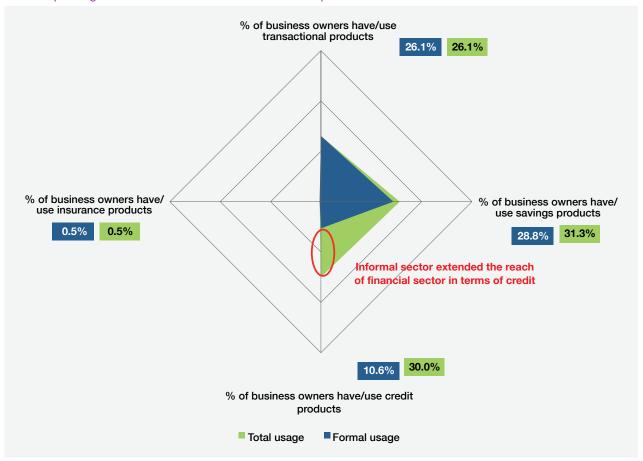
95.7% of agribusiness owners who used the informal sector used it for the purpose of credit – mainly borrowing from their customers and community-based money lenders

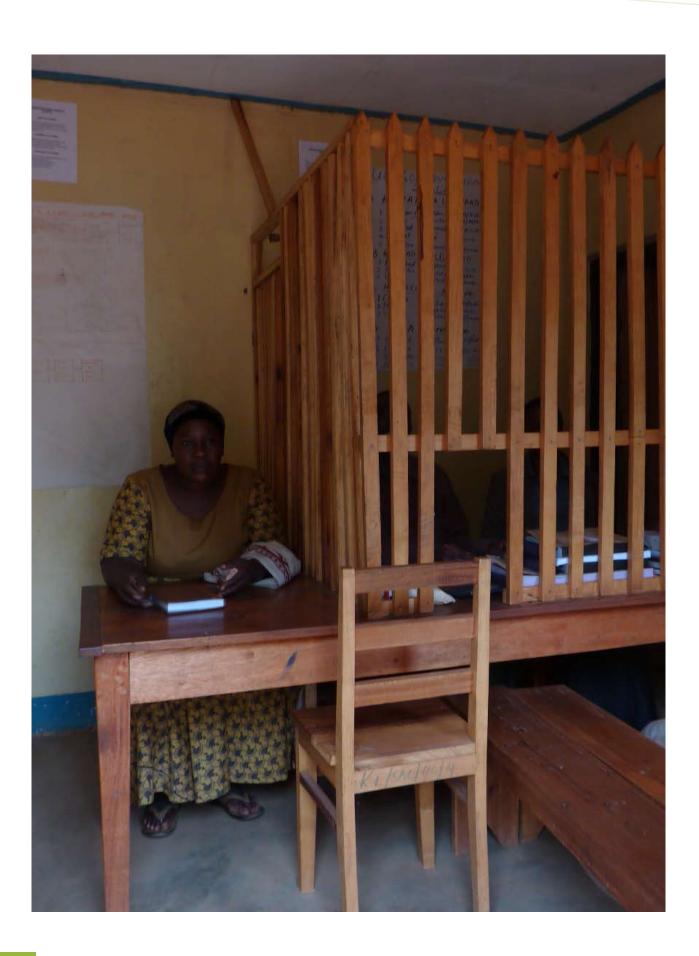
In conclusion, it seems that business owners in the AgFiMS market segment who were served by formal financial institutions but who also used informal financial mechanisms, did so mainly to access credit:

- Business owners who were banked were unlikely to obtain bank loans.
- Although non-bank formal financial institutions (SACCOs and MFIs) were likely to provide their clients with access to credit, they served the business needs of a relatively small proportion of agribusiness owners in the AgFiMS market.
- Agribusinesses turned to the informal sector for their credit needs.
- Agribusinesses did not use the informal sector out of choice but out of necessity.

Figure 61 indicated that the informal financial sector extended the reach of financial services for agribusinesses in the AgFiMS market segment, only in terms of credit. Without informal credit only 10.6% of business owners would have had access to credit; credit from the informal sector increases this proportion to 30%.

Figure 61. Landscape of access for agribusinesses in the AgFiMS market segment illustrating the role of the informal sector in pushing out the boundaries of access to financial products





Access to Credit

8.1 Sources of Credit

Although almost 90% of business owners in the AgFiMS market segment and their MSME counterparts seemed to be willing to take credit risks to grow their businesses, there was a significant difference between them regarding the proportion of business owners who actually borrowed for the purpose of the business:

- i. 27.7% of agribusiness owners in the AgFiMS segment borrowed for the purpose of their business; and
- ii. 52.5% of MSME owners borrowed for the purpose of their business.

An assessment of the credit sources used by these business owners (Figure 62) suggested that MSME owners were more likely than agribusiness owners to get a loan from formal financial service providers such as commercial banks, MFIs and Government schemes/NGOs. Agribusiness owners on the other hand were more likely to borrow from informal sources such as their customers, VICOBAs VSLAs, and savings groups.

- iii. The key difference between agribusiness owners and MSME owners was that 96% of the latter borrowed from money lenders in the community whilst only 9% of agribusiness owners in the AgFiMS market segment did so.
 - Whilst agribusiness owners used formal providers and various informal sources, MSME owners used either formal providers or money lenders

This finding seemed to indicate that agribusiness owners were not only aware that repayment terms and interest rates were more sound criteria for the selection of a lender (as was suggested by the findings in Figure 10) but that they also applied these criteria. Although they had no alternative but to turn to the informal sector for credit, they chose informal sources that most likely provided better interest rates and repayment terms than community money lenders. MSME business owners on the other hand seemed to be more likely to choose a lender in the informal sector based on quick access to money irrespective of interest rates and repayment terms – i.e. money lenders. The repayment terms of money lenders make them a more likely source of credit for business owners with a day-to-day income. This could explain why MSME borrowers make use of them. Agribusiness owners (especially producers), by the nature of their businesses, face greater uncertainty in both the timing and the value of their incomes, they would therefore be unlikely to meet the repayment terms of money lenders.

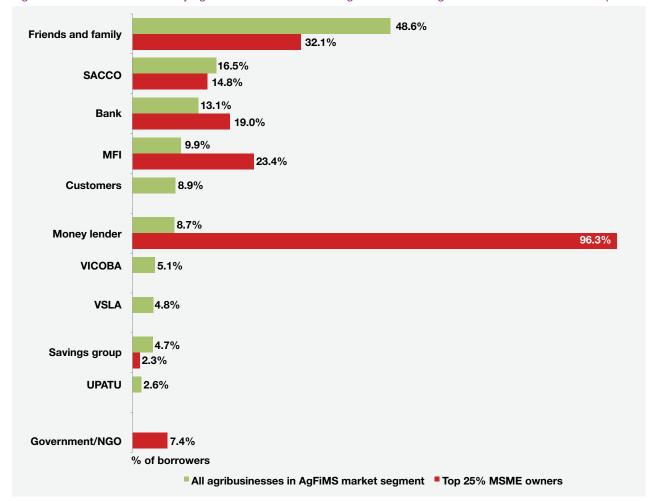


Figure 62.Credit sources used by agribusiness owners in the AgFiMS market segment and their MSME counterparts

*Note: Multiple responses per business owner possible

Interpretation of the findings in Figure 62 is summarised in Diagram 4, whilst Figure 63 and Diagram 5 provide more insight into how agribusiness owners used the sources of credit available to them to meet their credit needs.

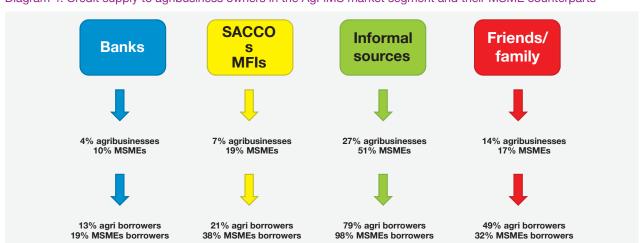


Diagram 4. Credit supply to agribusiness owners in the AgFiMS market segment and their MSME counterparts

Figure 63a: Sources of credit for agribusiness owners in the AgFiMS market segment

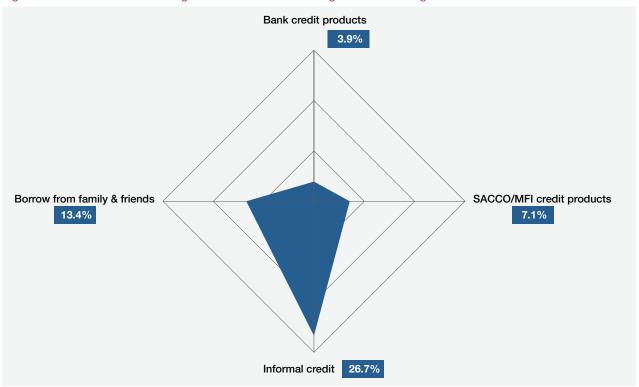
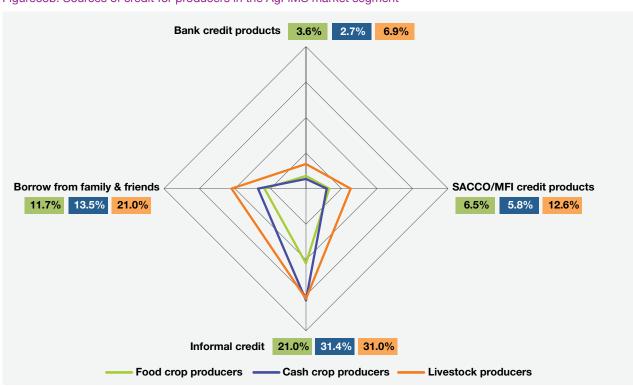


Figure63b: Sources of credit for producers in the AgFiMS market segment





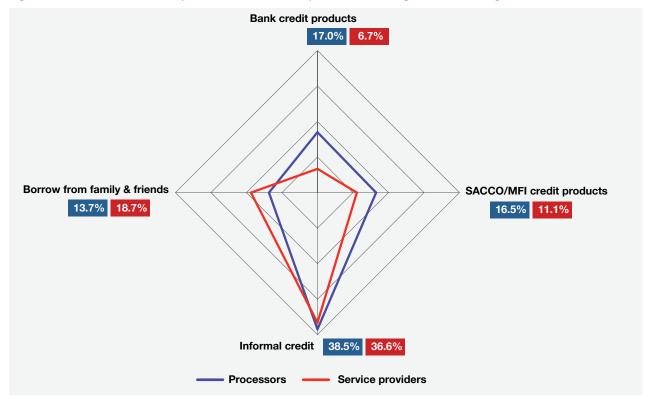
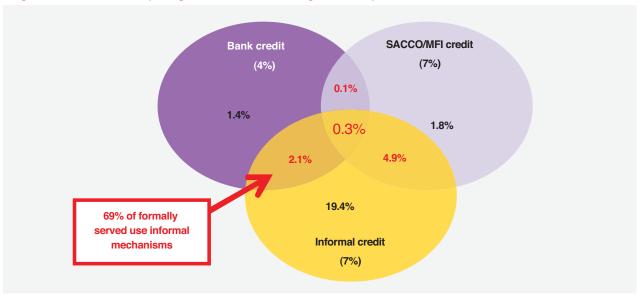


Diagram 5. Extent of overlap in agribusiness owners' usage of credit products and mechanisms



The AgFiMS supply side findings (Assessment of the Supply Side Component of the Agricultural Finance Sector in Tanzania, AYANI Inclusive Financial Sector Consultants) indicated that banks financed the agricultural sector mainly through three channels:

- i. Directly by banking agribusinesses and providing them with access to credit;
- ii. Indirectly:
 - through financing MFIs
 - through financing SACCOs

The demand side findings summarised in this chapter challenged the assumption that this strategy was effective in channelling finance towards **agricultural production**:

- iii. 28% of agribusinesses in the AgFiMS market segment were banked but only 14% were provided with direct credit from banks. Banks therefore served a mere 4% of agribusinesses in the AgFiMS market segment with credit approximately 20 800 agribusinesses.
- iv. Indirect credit channelled through MFIs and SACCOs was not serving agribusinesses:
 - Less than 10% of agribusinesses in the AgFiMS market segment were served by MFIs and SACCOs for agricultural purposes. Although SACCOs and MFIs provided almost all their clients with credit facilities, they served a mere 7% of agribusinesses in the AgFiMS market segment with credit – approximately 36 300 agribusinesses.
 - It is recognised that for many business owners the state of their household finances poses a significant risk in terms of their likelihood to draw from business resources to fund household expenditure. Most of the financing SACCOs and MFIs channel into rural areas might therefore not be used for agricultural productivity but more likely for smoothing household cash flows. The high value of the amounts of credit dispersed and the large volumes of rural clients served by MFIs and SACCOs, as quoted by the supply side report, are therefore not questioned. Based on the AgFiMS findings, it seems that the proportion of MFI and SACCO financing that is actually used for agricultural production growth is significantly less than these figures might suggest.

Figure 64 gives an overview of some of the business characteristics associated with agribusinesses in the AgFiMS segment using credit.

Registered businesses 37.8% 62.2% Unregistered businesses 26.3% 73.7% Producers with title to land 41.0% Producers without title to land 25.4% Businesses in start-up phase 33.4% 66.6% Businesses in growth phase 32.7% Established businesses 54.4% Turnover below Tshs.900,000 16.4% 83.6% 30.7% Tshs.900,000 to Tshs.3,000,00 69.3% Tshs. 3,000,001 to Tshs.5,000,000 41.6% **58.4**% Tshs. 5,000,001 to Tshs.10,000,000 39.4% 60.6% 31.7% Tshs. 10,000,001 to Tshs.15,000,000 68.3% Tshs. 15,000,001 to Tshs. 30,000,000 31.9% 68.1% Above 30,000,000 34.8% 65.2% Rural businesses 26.3% Urban businesses 34.4% Used credit Didn't use credit

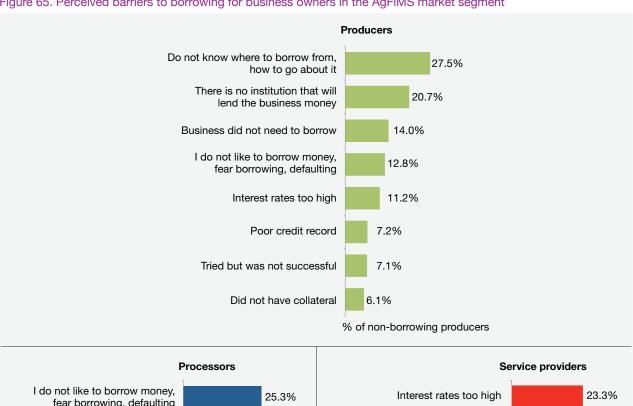
Figure 64: Business characteristics most likely to be associated with credit uptake by agribusinesses in the AgFiMS market segment

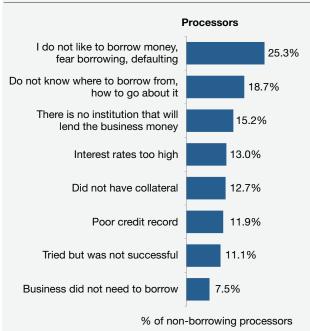
8.2 Perceived Barriers to Access to Credit

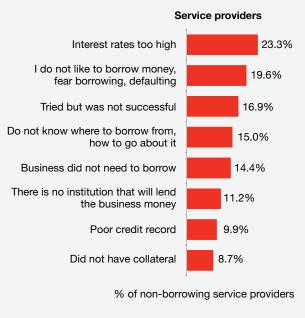
An assessment of business owners' perceptions regarding the main barriers to access to credit indicated that there was a significant difference between producers, processors and service providers in the AgFiMS market (Figure 65):

- Although all business owners who did not borrow for the purpose of the business
 regarded levels of awareness of potential lenders and perceptions regarding financial
 institutions as important barriers to access to credit, producers regarded them as the
 most significant. Processors and service providers regarded a negative attitude towards
 credit as more significant.
- **High interest rates** were the most likely factor to prevent service providers from borrowing.

Figure 65. Perceived barriers to borrowing for business owners in the AgFiMS market segment







*Note: Multiple responses per business owner possible



Development Needs in Perspective

9.1 Perceived Obstacles to Growth

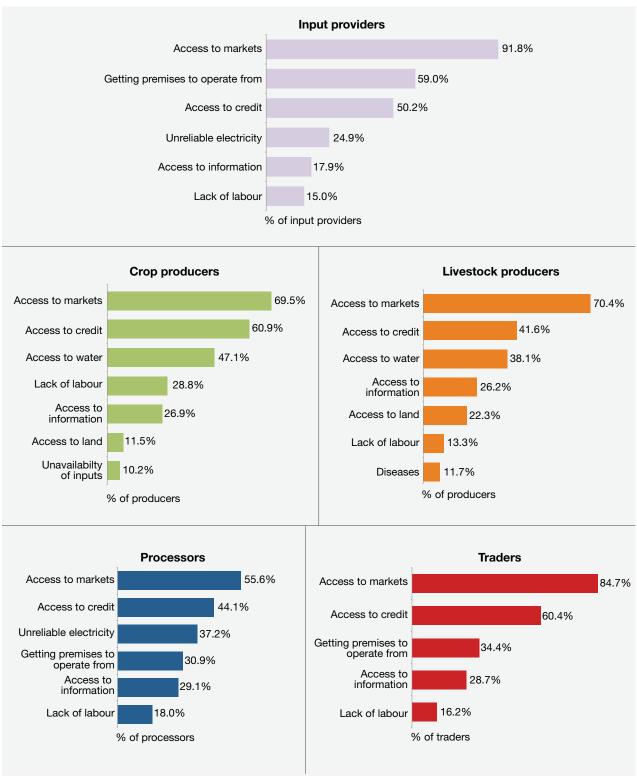
Obstacles to business growth, as perceived by agribusiness owners in the AgFiMS market segment, are reflected in Figure 66. These findings emphasised the fact that access to credit, although a significant obstacle to growth, cannot be addressed in isolation. Providing agribusinesses with credit without addressing other significant obstacles to growth, might, in fact, be detrimental to many agribusinesses throughout the value chain:

- i. From the perspective of agribusiness owners, the most significant obstacle to growth was lack of access to markets.
- ii. Lack of access to credit was identified as the second most significant obstacle to growth.
- iii. Lack of access to premises to operate from significantly affected input providers, processors and traders, whilst lack of access to water was a significant obstacle for producers.

Although lack of access to market was identified by all agribusinesses along the value chain as the most significant obstacle to growth, it has to be emphasised that the exact nature of access to market obstacles faced was significantly correlated with business turnover.

Agribusinesses in the lower turnover categories were significantly more likely to face challenges with regard to distance to the market and transportation of goods, whilst those in the higher turnover categories were significantly more likely to face challenges related to the reliability of middlemen and auctioneers, warehousing or storage facilities, and issues such as taxes and sale permits. This phenomenon had a significant impact on the type of credit needs of agribusinesses. For agribusinesses in the lower turnover category, credit needs were significantly more likely to be operational in nature. The credit needs of agribusinesses in higher turnover categories were significantly more capital expenditure/growth orientated – i.e. to get access to more land/bigger operating premises, more inputs and the ability to export.

Figure 66. Perceived obstacles to growth for agribusiness owners along the value chain within the AgFiMS market segment



*Note: Multiple responses per business owner possible

9.2 Identifying Drivers of Growth

Although the AgFiMS research instrument requires business owners to assess obstacles to business growth, responses might highlight only the immediate and most obvious obstacles that come to mind at the time of the interview. Individuals with little or no access to information and low levels of education such as business owners in the AgFiMS market segment might not be able to identify underlying key capacities needed for growth. They may also be unable to articulate these in a way that could guide interventions.

In order to guide interventions effectively by clearly identifying development needs, Yakini developed the Capacities Assessment Model. This model is based on the premise that in order to achieve success or an intended outcome, a business needs certain capacities. These capacities could be attributes of the business owner, the business itself or attributes of the environment within which the business operates or exists.

In terms of the agribusinesses in the AgFiMS Tanzania market segment, the aim was to:

- Identify capacities needed for more effective uptake or usage of formal financial services; as well as to
- Identify capacities needed for agricultural businesses to be commercially viable.

In principal the Capacities Assessment Model compares market segments and determines how they differ in terms of the capacities they have. The power of using the model lies within its ability to remove subjectivity from such a comparison. To achieve the AgFiMS Tanzania aim, the model was applied as follows:

- Identifying capacities significantly associated with the uptake of formal financial services and determining which of these capacities formally unserved agribusinesses lacked – relating these to development needs for uptake of financial services.
- Using turnover as a proxy for business success, identifying capacities significantly
 associated with higher turnover and determining which of these capacities agribusinesses
 with lower turnover lacked relating these to development needs for increased potential for
 commercial viability.

The findings of this assessment is summarised in Table 16.

Table 16. Key capacities needed by agribusinesses in the AgFiMS market segment

Key capacities needed for more effective formal financial services uptake	Key capacities needed for increased potential for commercial viability
Access to infrastructure	Usage of formal financial services & products
Access to markets	Access to credit
Access to/usage of credible financial advisory resources	Access to/usage of credible financial advisory resources
Access to/usage of credible business advisory resources	Access to/usage of credible business advisory resources
Access /exposure to appropriate agricultural advice/support	Access /exposure to appropriate agricultural advice/support
Access to networks & support structures	Access to networks & support structures

The findings summarised in Table 16 once again substantiated what was emphasised throughout this report – the inextricable link between access to infrastructure, access to markets, access to financial services (including credit) and turnover and therefore the need for a holistic approach for the development of the agribusiness sector, rather than a narrow focus on access to financial services.

- Agribusinesses with better access to infrastructure and markets were more likely to take up formal financial services.
- Agribusinesses with a higher turnover were more likely to have/use formal financial services and had better access to credit.

These findings were not unexpected. However, the findings summarised in Table 16 further indicated that key capacities needed for better uptake of formal financial services as well as for greater business success included:

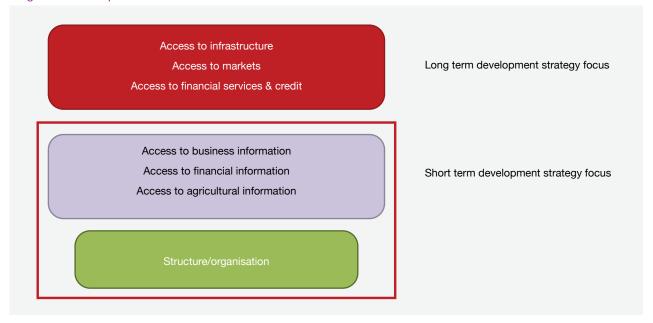
- i. Better access to information not only information about agriculture but also business and financial information. In short, a more informed business owner was more likely to be successful and was also more likely to use formal financial services to manage business finances.
- ii. More effective networks and support systems i.e. operating in groups/networks rather than as individuals in isolation business owners operating their businesses with the support of a group/network were more successful and more likely to get access to formal financial services and secure finance. Group structures or co-operatives were favoured by the supply side of financial services as a group would have more to offer in terms of collateral than individual farmers.

Group members were also less vulnerable to the obstacles posed by the business environment. Membership enhanced the likelihood of being able to pool scarce resources such as labour, irrigation/water and equipment. Group membership also strengthened the negotiating ability of agribusiness owners in terms of supplier credit and market prices, for example.

These findings were significant in showing that, although development actions in the long term should stay focused on addressing the rural infrastructural constraints, access to market

constraints, as well as access to finance, a shorter term development strategy which would yield more immediate results, could focus on providing agribusinesses in Tanzania with better access to the information they need, and to assist them to organise themselves.

Diagram 6: Development needs summarised



9.3 Segmentation of the AgFiMS Tanzania Market

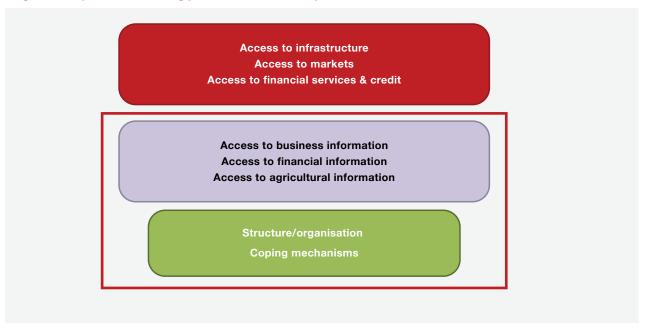
One of the objectives of AgFiMS Tanzania 2011 was to segment the AgFiMS market into homogeneous market segments with the intention of identifying the development needs of the different segments.

Identifying the capacities for greater potential for commercial success of agribusinesses, and the capacities for a greater likelihood of uptake and usage of formal financial services enabled such segmentation (Note: Based on sample size, processors and service providers were excluded from the segmentation analysis).

9.3.1 Segmenting the AgFiMS market based on producers' potential for commercial success

Based on the results of the capacities assessment, it was identified that the capacities summarised in Diagram 7 significantly influenced the potential for commercial success of producers in the AgFiMS market segment.

Diagram 7: Capacities influencing producers' commercial potentia



In terms of these capacities, the AgFiMS market segment was sub-divided into three market segments:

i. The opportunity segment – this represented approximately 163 000 producer businesses comprising commercial farmers and emerging farmers with the best potential for greater commercial success. These producers had significantly more capacity than producers in other market segments in terms of access to infrastructure, access to markets, access to financial services, access to formal credit, access to support structures and coping mechanisms. They were also significantly better organised.

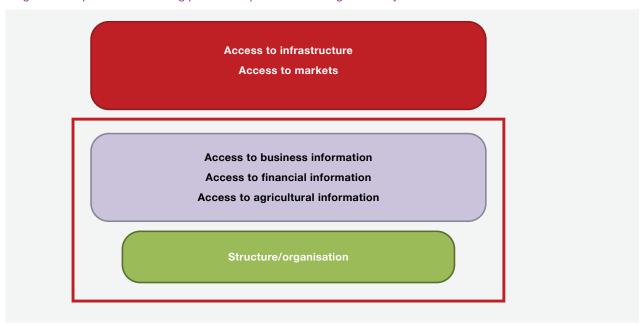
Although this segment comprised commercial farmers and emerging farmers with the best potential for greater commercial success, farmers in this market segment were still faced with the infrastructural and market access challenges that characterised the Tanzanian agricultural sector. Emerging farmers still lacked adequate financial information and advice.

- ii. The development segment this represented approximately 223 000 producers with the potential to achieve increased commercial success in the longer term. Producers in this segment, apart from facing the general infrastructural and market access challenges faced by all farmers, were less equipped than farmers in the opportunity segment with regard to:
 - Access to formal financial services and credit (relying mostly on family and friends for loans);
 - Access to information; and
 - Coping mechanisms to mitigate business risks.
- iii. The **intensive care** segment this represented approximately 104 000 (21%) producers significantly lacking in terms of all capacities needed and therefore most likely representing a market segment highly unlikely to achieve increased commercial success.

9.3.2 Segmenting the AgFiMS market based on producers' potential of being served by formal financial institutions

The capacities summarised in Diagram 8 significantly influenced the potential of producers in the AgFiMS market segment to be served by formal financial institutions.

Diagram 8: Capacities influencing producers' potential of being served by formal financial institutions



In terms of these capacities, the AgFiMS market segment was sub-divided into four market segments (Diagram 9):

 The currently served segment – this represented approximately 153 000 producer businesses that were already served by the formal financial sector (i.e. banks, MFIs and/or SACCOs). Producers in this segment had significantly more capacity than producers in other segments in terms of access to infrastructure, access to markets, access to information and access to support structures. They were also significantly better organised.

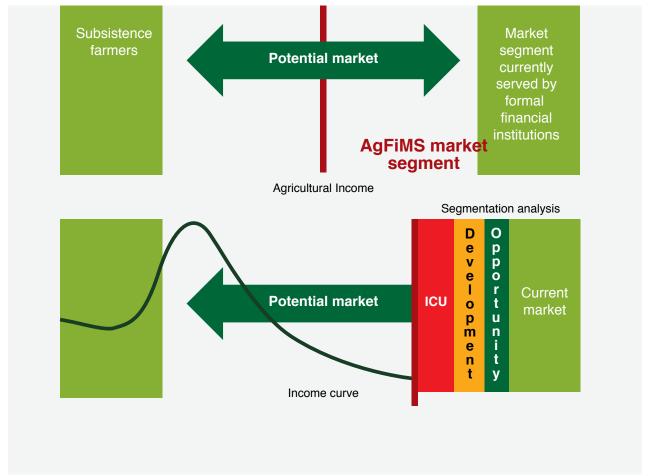
This segment, while already users of formal financial services, still provides new opportunities for financial service providers. AgFiMS findings have illustrated that there was a misalignment between the services being used and the financial needs of producers which could be addressed.

- The opportunity segment this represented approximately 95 000 producer businesses with similar capacities as the businesses in the currently served segment except for their access to financial information and advice.
 - This segment had the best potential for new market opportunities from formal financial institutions. In pursuit of these market opportunities, financial institutions would however have to take into account that these producers lack financial information and advice and that this deficiency should be addressed in taking up these opportunities.
- The development segment this represented approximately 110 000 producers who might

have potential to be served by formal financial institutions in the longer term but only after certain capacities have been addressed. Producers in this segment not only lacked access to financial information and advice, but they also had less access to business information and advice and less favourable access to markets.

The intensive care segment – this represented approximately 133 000 (27%) producers lacking in terms of all the capacities needed for formal financial inclusion and therefore represented those agribusinesses which would most likely need to be served through channels other than those currently provided by the formal financial sector.

Diagram 9: Segmenting the AgFiMS market based on producers' potential of being served by formal financial institutions



10

Recommendations

The Financial Sector Deepening Trust (FSDT) in Tanzania is a non-governmental organisation with the objective of facilitating greater access to the financial system in Tanzania through the development of innovative solutions. In summary, the FSDT aims to contribute towards the achievement of:

- A deeper financial system that contributes to economic growth and wealth creation which will eventually lead to poverty reduction.
- A capable financial sector that delivers the services and products that address the needs of consumers.

The AgFiMS demand side report provides valuable information to support the FSDT in achieving these objectives with regard to the agricultural sector of Tanzania. With this in mind, the following key recommendations are put forward:

1. The development approach should be holistic in nature; financial sector development for agriculture needs to be seen in context

The link between access to infrastructure, access to markets, access to financial services (including credit) and turnover should not be ignored. Without addressing some of the key obstacles agribusinesses face in terms of the environment within which they operate, financial sector interventions are unlikely to yield the intended outcomes. Addressing the crucial need for finance in the agricultural sector without addressing other key capacities needed for agribusiness success might, in fact, be more harmful than beneficial for increased commercial potential.

2. A conducive business environment is key to agribusiness success. Apart from addressing the rural infrastructural limitations to achieve this, it is recommended that interventions aimed at agricultural development in Tanzania should also take into account

- 2.1 Value chain composition and distribution
 - Distance to the market and transport-related obstacles resulted in a large proportion of agribusinesses across the value chain having no alternative but to engage in distressed

sales. This situation significantly affected their likelihood of commercial success. A geographical misalignment of compatible links in the value chain was, to a large extent, the cause of this. The processors and service providers who were better able to cater to the more advanced needs of the AgFiMS producers were not located within easy reach of these producers. The same is true of the proximity of AgFiMS processors to AgFiMS service providers.

Financial incentives for rural-based processors and service providers could address this in the longer term. A potential intervention strategy in this regard could be two-fold:

- The financing of operational premises in rural areas; thereby addressing one of the key obstacles to growth for processors and service providers, namely lack of access to premises to operate from.
- Channeling finance to producers through financing of input and other service
 providers. This strategy would have the benefit of not only serving to incentivise
 input and other service providers, but would have the additional benefit of providing
 producers with access to supplier credit which is currently lacking in the market.
 It would also provide some assurance that finance intended for agricultural
 development would actually be used for this purpose

2.2. Establishing an enabling regulatory environment

In establishing an enabling regulatory environment, the focus should be on:

- i. A review of the policies and regulations preventing agribusiness owners from accessing preferred markets is essential.
- ii. Although it is recognised that the matter of title deeds is being addressed, it is recommended that this process is fast-tracked in areas with higher potential for producers being commercially viable, or areas where other interventions (such as the Southern Agricultural Growth Corridor of Tanzania (SAGCOT) initiatives) are being implemented.
- 3. A skilled, well-informed business owner is crucial for commercial success. Enhancing the skills of agribusiness owners provides an opportunity for the development intervention strategies that could yield results in the short to medium term, irrespective of market and infrastructural constraints. In this regard it is recommended that the focus is on:

3.1. Better organised and structured agribusiness groups

The recommendation is not to focus on the structuring of agribusinesses into large co-operative unions with implied high cost structures, but rather to focus on the establishment of larger numbers of networked smaller groups. This will ensure that agribusiness owners share scarce resources such as means of transport, labour, irrigation and other equipment. This will not only enhance the capacity of business owners to overcome infrastructure and market constraints, but will also further enhance their power to negotiate better credit terms and better pricing. Farmer

groups/associations can further help farmers to become more attractive to financial institutions as borrowers, which will increase their likelihood of accessing secure finance by offering group assets as collateral.

It is recommended that extension officers/agents be tasked with the establishment of these groups. The focus not only being on their establishment, but also on making the group members aware of the potential benefits of membership, their obligations and responsibilities, and provide training on effective management of the group

3.2. Enhanced access to information

Business owners need information to manage the business effectively, to pursue market opportunities, and to produce goods or services in a cost effective manner.

For agribusiness owners the need for information was identified in terms of:

- i. Financial matters:
 - Financial products and services available and the eligibility requirements
 - Investments; debt; insurance
 - Long-term & short-term financial planning
 - General financial education and advice
- ii. Business management matters:
 - Financial management principles
 - Record keeping; debt management; income diversification; cash flow management
 - Strategic business decision making
 - Competitive advantages; pricing; marketing; contracting
 - Risks and risk management

iii. Agricultural matters:

- Inputs sourcing, pricing, risks, etc.
- Process preparation requirements, preventative measures, remedial actions, labour and labour relations, best practices
- Yield storage, transportation, timing, demand and price

It is recommended that the potential for the information needs of agribusiness owners being addressed through the utilisation of mobile connectivity be investigated, and current initiatives in the market supported.

One such example is the development of a platform with the core capability of information sharing. Additional capabilities that could be built onto such a platform would include a mobile payment system, as well as access to financial services such as money storage facilities, micro credit and insurance.

If the platform is used for two-way communication, stakeholders in the agricultural sector would

not only be able to share information with agribusiness owners, but agribusiness owners would be able to share crucial information about themselves and their needs with stakeholders. This would enable stakeholders to provide more appropriate services. It could further lead to stronger and more direct links between value chain components as these components would be in direct contact with each other through the exchange of information

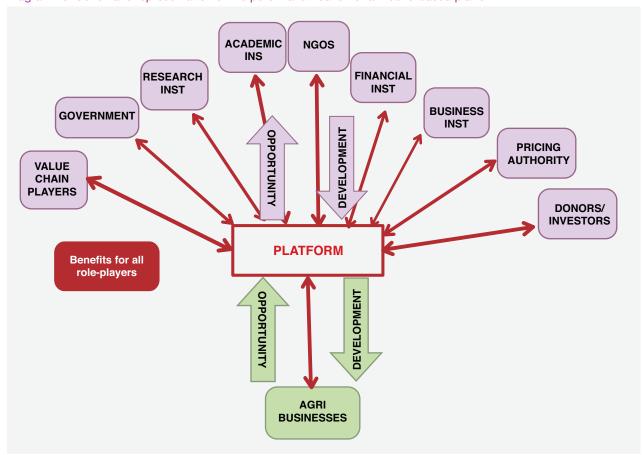


Diagram 10: Schematic representation of the potential utilisation of a mobile-based platform

4. AgFiMS identified a capable and responsive financial sector as a key driver of agribusiness success. In terms of appropriate interventions to achieve this, the following is recommended:

4.1. Identifying the potential for formal financial institutions to effectively provide financial services and products to agribusinesses in Tanzania

Assessment of the AgFiMS findings has illustrated that for a significant portion of agribusinesses in the AgFiMS market segment, commercial banking is unlikely to be a viable solution. AgFiMS illustrated that 28.2% of agribusinesses in the AgFiMS market segment were banked, but that even banked agribusiness owners were not receiving services beneficial to their businesses. It is therefore recommended that formal financial service providers use the following approaches to determine appropriate market segments to focus on, rather than attempt to serve the agricultural sector as a whole, or even the AgFiMS market segment as a whole:

• Assessment of the access frontier i.e. determining the extent to which the boundaries of service provision could be stretched – i.e. determining what proportion of agribusinesses could be served in addition to the agribusinesses currently served.

For this purpose it is recommended that financial service providers engage with the FSDT in order to further analyse the opportunities within the financial market segments identified by the AgFiMS market segmentation.

• Finding a suitable, lower risk, niche market in the agricultural sector on which to focus

In terms of finding a suitable, lower risk, niche market in the agricultural sector and providing more appropriate services to agribusinesses as an alternative strategy for financial institutions, it is recommended that the following opportunities are explored:

- Financing operational premises for input providers, service providers and traders
- Financing operational premises and equipment for processors
- Providing secured financing opportunities for producers in terms of irrigation equipment/ solutions, storage and refrigeration facilities, as well as transportation vehicles. With regard to producers it would be recommended that the market is not served by pursuing individual farmers but rather to market these services as financing for farmer groups or associations (which could serve as an incentive for the establishment of groups). Opportunity for the establishment of groups lies within financial institutions collaborating with extension officers, rather than attempting to establish and train these groups themselves. Financial institutions engaging in group establishment and training could become costly and would most likely affect the affordability of the service for producers in the end
- 4.2. Re-assessment of the channels used by commercial banks for the distribution of finance for the purpose of agricultural production

The AgFiMS demand side findings challenged the assumption that commercial banks were effective in financing agricultural production through financing MFIs and SACCOs. Although the supply side findings illustrated large amounts of finance channelled through these institutions to significant numbers of rural clients, it was concluded that MFI and SACCO credit was most likely used for consumption-based financial needs in rural areas. In this regard the following is recommended:

- Providing credit facilities only redeemable for agricultural inputs or services.
 - Where an agribusiness qualifies for commercial bank financing it is recommended that the payment of the loan amount is made directly to the agricultural service provider rather than to the agribusiness
 - If the client applies for a loan to buy inputs or to pay for veterinary services, for example, and the client qualifies for the amount being requested, the payment should be made directly to the input provider or the veterinary services provider, and the business owner should only receive the inputs or the services.
 - It is recommended that assistance is given to MFIs and SACCOs to enable them to set

up similar arrangements with input and service providers in their service areas. When loans for agricultural inputs or services are requested, and the applicants qualify to receive the loan, the money will be paid directly to the input and service providers, and the applicant will get only the inputs or the services from the supplier.

11 Conclusion

The main objective of AgFiMS was to provide an assessment of a potentially commercially viable segment of agribusinesses in Tanzania in order to highlight significant development needs. The findings illustrated once again the complexities of the relationships between access to infrastructure, access to markets, access to financial services and business success.

It is emphasised that, in order to develop this vital sector, a "one size fits all" approach would not be effective. Interventions should be targeted in terms of the specific and unique needs of different components of the value chain. The development approach however should be holistic in nature, addressing various key constraints simultaneously. Access to finance, perceived by many as the key constraint to agricultural development, if addressed in isolation, will not have the intended outcome in Tanzania's agricultural sector.

By emphasising the importance of a "holistic approach" this report is not suggesting that agricultural development should be handled as one coordinated intervention at the same time. Rather, it is advocating that whatever the specific focus of a stakeholder, an understanding of other important aspects of agriculture development should be sought and incorporated into the design of an intervention. Such holistic understanding will lead to better outcomes for interventions – regardless of how narrow their focus might be.

AgFiMS Tanzania 2011

Agricultural Zone Profile of Producers*

(*Sample of Processors and Service Providers not representative at Zonal Level)

Figures highlighted in red indicate a significant difference from the total AgFiMS figure

Agricult	ural zones	Western zone	Northern zone	Central zone	Southern Highlands zone
Re	gions	Tabora, Shinyanga, and Kigoma regions	Kilimanjaro, Tanga, Arusha and Manyara regions	Dodoma and Singida regions	Mbeya, Iringa and Rukwa regions
Soil t	Soil types ^[1] , ^[2]		Soils vary from volcanic ash to fertile clays derived from volcanic sediments and lavas. Most of the soils are fertile.	Soils mainly sandy and loamy of low fertil- ity - seasonally water- logged or flooded.	Soils vary from friable clays of low to moderate fertility to fertile soils and fertile volcanic ash at volcanic highlands plateaux.
Agri- businesses	Estimated number of pro- ducer businesses	311 300	404 250	142 750	365 750
AgFiMS	Food crop	32566	61686	12868	66012
market size	producers Cash crop	71573	5024	10951	27562
	producers Livestock producers		11873	789	4959
Agricult	Agricultural zones		Northern zone	Central zone	Southern Highlands zone
Business type	Food crop producers	30.4	78.5	52.3	67
	Cash crop producers	66.8	6.4	44.5	28
	Livestock producers	2.8	15.1	3.2	5
Main income generation activity	Food crop producers	Rice	Maize	Onions	Maize
				Sesame	
	Cash crop	Cotton	Coffee	Sunflower	Coffee
	producers	Tobacco			Tobacco
	Livestock producers	Indigenous cattle	Cattle - dairy	Indigenous cattle	Indigenous cattle
				Cattle - dairy	Cattle - dairy
				Cattle - beef	Pigs
Land size	Food crop	9.8	11.2	15.7	9.8
(acres)	producers Cash crop	10.6	10.7	17.2	10.7
	producers Livestock producers	6.2	44.6	5.3	4.3

Lake zone	Eastern zone	Southern zone	Zanzibar zone	Total: Tanzania
Kagera, Mwanza and Mara regions	Dar es Salaam, Pwani, and Morogoro regions	Lindi, Mtwara and Ruvuma regions	Unguja North, Unguja South, Town West, Pemba North and Pemba South regions	
Soils are sands and loams; in some areas clayey, heterogeneous soils of moderate to high fertility.	Soils mainly sandy and heavy textured clay. Fertility status is low to moderate.	Soils of variable texture from pre- dominantly sandy soils along the coast, friable clays to heavy clays in lowlands and valleys. Soil fertility levels are low to medium.	Good soils and rainfalls to support crop production as well as natural pastures for feeding livestock.	
240 300	207 450	232 200	17 150	1 921 150
22450	34536	16740	4974	251832
25623	7957	44221	2041	194952
2038	16123	1288	2954	43032
Lake zone	Eastern zone	Southern zone	Zanzibar zone	Total: Tanzania
44.8	58.9	26.9	49.9	51.4
51.1	13.6	71	20.5	39.8
4.1	27.5	2.1	29.6	8.8
Rice	Maize	Maize	Cassava	Maize
Beans	Rice		Bananas	Rice
Coffee	Cashew nuts	Cashew nuts	Cloves	Tobacco
Cotton			Coconut	Cotton
Indigenous cattle	Indigenous cattle	Cattle - dairy	Chickens	Indigenous cattle
Cattle - dairy				Cattle - dairy
7.2	9.2	9.2	4	10
7.8	7.6	11.3	5.3	10.6
3.7	3.6	2.6	2.4	19.2

	Agricultural zones	Western zone	Northern zone	Central zone
Business turnover	Below Tsh 900,000	34	25.9	48.1
	Tsh 900,000 - 3,000,000	51.6	52.9	41.1
	Tsh 3,000,001 - 5,000,000	8.6	7.5	4
	Tsh 5,000,001 - 10,000,000	4.6	6.9	5.2
	Tsh 10,000,001 - 15,000,000	0.2	2.1	0.6
	Tsh 15,000,001 - 30,000,000	1	2.2	0.3
	Above Tsh 30,000,000	0	2.5	0.7
Business registration		28.3	2.9	0
Business maturity	Less than 2 years	1.1	0.5	0.7
(age of agri-business)	2 - 5 years	16.6	18	32.6
	6 - 10 years	20.7	9.5	17.4
	More than 10 years	61.6	72	49.3
Title deeds (%)	Food crop producers	2.5	7.7	1.3
	Cash crop producers	1.2	8.2	0.7
	Livestock producers	18.4	23.1	23.7

Southern Highlands zone	Lake zone	Eastern zone	Southern zone	Zanzibar zone	Total: Tanzania
22.4	51.5	16.3	38.7	5.1	30.5
65.1	39.8	61.9	41.9	55.6	53
6.1	3.4	11.3	11.2	26.8	8.3
4.4	3.6	4.2	6.3	8.7	5.1
0.4	0.5	3.1	0.7	1.4	1
1.1	0.9	1.8	0.6	1.8	1.2
0.5	0.3	1.4	0.6	0.6	0.9
12.5	3.9	3.5	2.6	44.2	11.4
1.5	0.6	4.4	0.8	3.7	1.5
24.4	15.6	35.9	26.1	30.3	23
11.9	12.3	13.2	11.1	19.9	14
62.2	71.5	46.5	62	46.1	61.5
10.5	3.3	11.7	5.5	72.9	8.7
8.7	2.6	5.8	3.7	83.3	4.2
13.3	23	11.3	29	77.8	21.2

Agricul	Agricultural zones		Northern zone	Central zone	Southern Highlands zone
Access to infrastructure	Electricity	7.1	32.9	5.2	12.7
(%)	Tarmac Road	3.7	25.5	5.1	15.4
	Harbour	0.1	0.5	0	0.1
	Rail	9.9	1.7	0.6	5.4
Access to water (%)	Food crop producers				
	Nature	81.6	73.5	71.2	78.8
	Shared irrigation	10.6	22	20.7	6.4
	Own irrigation	7.8	4.5	8.1	14.8
	Cash crop producers				
	Nature	72.8	86.8	91.8	75.1
	Shared irrigation	5.9	7.1	4.9	3.1
	Own irrigation	21.4	6.1	3.3	21.7
	Livestock producers				
	Nature	100	100	100	100

Lake zone	Eastern zone	Southern zone	Zanzibar zone	Total: Tanzania		
9.4	20.3	3.5	65.2	26		
13.7	27.1	6.2	46.9	15.9		
0.8	1.2	0.4	29.9	2.3		
0	5	0	0	8.8		
77	85.2	70.7	62.4	77.4		
5.5	4.7	14.5	30	12.2		
17.5	10.1	14.8	7.5	10.5		
87.3	97.5	91	60.7	81.4		
2.4	0	4.2	28.8	4.6		
10.3	2.5	4.9	10.5	13.9		
100	100	100	100	100		

Agricultural zones	Western zone	Northern zone	Central zone	Southern Highlands zone
Main obstacles to growth	Access to credit	Access to market	Access to water	Access to market
	Access to market	Access to water	Access to market	Access to credit
	Access to water	Access to credit	Access to credit	Access to water
	Access to labour	Access to business and financial information	Access to business and financial information	Access to labour
Main market access challenges	Distance to market	Distance to market	Distance to market	Distance to market
	Reliability of transport	Cost of transport	Cost of transport	Cost of transport
	Cost of transport	Reliability of transport	Reliability of transport	Reliability of transport
	Lack of transport	Unpredictable/unreliable prices	Unreliable middlemen and auctioneer fraud	

Lake zone	Eastern zone	Southern zone	Zanzibar zone	Total: Tanzania
Access to market	Access to market	Access to credit	Access to market	Access to market
Access to water	Access to credit	Access to market	Access to credit	Access to credit
Access to credit	Access to water	Access to business and financial information	Access to labour	Access to water
Access to labour	Access to business and financial information	Access to water	Access to business and financial information	Access to labour
Distance to market	Distance to market	Distance to market	Distance to market	Distance to market
Cost of transport	Cost of transport	Cost of transport	Cost of transport	Cost of transport
Lack of transport	Reliability of transport	Reliability of transport	Goods damaged/stolen in transit	Reliability of transport
Reliability of transport	Goods damaged/stolen in transit	Lack of transport		Lack of transport

Agricultural zones		Western zone	Northern zone	Central zone	Southern Highlands zone
Business owner profile	Male	94.1	79.6	88.7	88.6
Gender (%)	Female	5.9	20.4	11.3	11.4
Education (%)	None	11.9	6.7	8.2	3.6
(highest level attained)	Some primary	7.9	6.5	4.4	7.4
	Completed Primary	73.4	68	79.7	77.5
	Technical after Primary	0	1.3	0.2	0.5
	Secondary	1.8	2.4	0.8	3.1
	Completed Secondary/O Level	4.2	8.9	5	5.8
	Completed Secondary/A Level	0.1	0.4	0	0.8
	Post-Secondary	0.7	5.8	1.7	1.3

Lake zone	Eastern zone	Southern zone	Zanzibar zone	Total: Tanzania	
84.4	80.1	86.6	82.1	86.5	
15.6	19.9	13.4	17.9	13.5	
11.9	10.7	10	5.3	8.7	
4.9	6.5	2	7.6	6.2	
71.5	65.8	77.5	25	71.8	
0.4	0.9	0.8	2.3	0.6	
2.1	2.7	2.1	29.7	3	
5.2	9.7	6.5	27.4	7	
2	0.9	0.2	0.9	0.6	
2	2.8	0.9	1.8	2.1	

A	gricultural zones	Western zone	Northern zone	Central zone	Southern Highlands zone
Financial inclusion (%)	Financially included	50.8	48	35.7	45.2
	Have/use commercial bank products/services	35.4	32.9	15.6	23.4
	Have/use non-bank formal financial products/services	4.7	8.5	8.5	9.2
	Use informal mechanisms/ services	37.7	24.9	23.8	27
	Financially excluded	49.2	52	64.3	54.8
Savers (%)	Food crop producers	75.9	69.4	81	87.9
	Cash crop producers	82.5	80.8	83.7	72.4
	Livestock producers	95.2	86	81.9	87.5
Borrowers (%)	Food crop producers	15.2	22.8	25.4	26.5
	Cash crop producers	28.2	25.1	20.1	25.2
	Livestock producers	20.1	39.8	6	48.8

Lake zone	Eastern zone	Southern zone	Zanzibar zone	Total: Tanzania
33.1	48.8	41	68.6	45.7
20.4	30.6	27.1	24.9	28.2
5.7	9.5	13.5	22.7	8.6
20.8	26.9	19.5	54	27.9
66.9	51.2	59	31.4	54.3
61.1	83.5	95.9	91.9	79.1
50.7	65.2	77.3	88.8	75.1
80	69.1	92.8	98.7	81.2
25.1	32.8	32.3	68.1	26
17.5	24.8	21.8	52.3	24.5
53.4	37.6	34.9	72	40.7

Agricultural zones		Western zone	Northern zone	Central zone	Southern Highlands zone
Borrowing sources (%)	Friends & family	58.6	42.3	53.7	49.5
	SACCO	9	10.9	17.5	15.8
	Bank	7.1	15.5	7.9	14
	MFI	10.8	9.8	18.5	13.2
	Money lender	15.3	3.3	8.8	10.9
	Customer	9.4	11.9	10.3	13.5
	VICOBA	0	11.1	6.8	4.1
	VSLA	2.5	8.1	6.6	2.8
	Savings group	4.8	6.6	0	5.9
	Upatu	1.4	1.5	0	1.9

Lake zone	Eastern zone	Southern zone	Zanzibar zone	Total: Tanzania
55.5	53.1	30.3	56.6	49.5
9.9	10.6	46	20	16.3
13.7	11.9	14.5	13.5	12.3
4.2	10	1.9	12	9.8
11.8	8.6	1.6	4.4	8.8
8.5	5.4	0.6	5.7	8.8
7.9	5.3	9.6	1.8	5.5
6.8	2.1	5.2	16.9	5
13.3	1.3	1.8	3.8	4.9
1.3	1.2	3.5	10	2.1

About Yakini

Yakini Development Consulting (Yakini) was founded with the ultimate goal of contributing towards effective development in Africa. We aim to achieve this by facilitating an understanding of development needs as well as an understanding of the key elements that would have to be addressed to achieve identified development needs. Yakini focus is therefore on the provision of robust, reliable research information which provides a better and holistic understanding of development needs and the dissemination of these research findings through extensive engagement with development agents throughout Africa.

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The AgFiMS Tanzania 2011 dataset offers a wealth of information that can be mined in greater depth. For more information, please contact:

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Annex 1. List of Committees Members

S/N	Name	Institution
1	Ahmed Makbel	National Bureau of Statistics (NBS)
2	Allan Magoma	Tanzania Investment Bank (TIB)
3	David Kwimbere	The Bank of Tanzania (BoT)
4	lan Anderson	Gatsby Charitable Foundation
5	Ibrahim Seushi	Tanzania Gatsby Trust
6	Irma Grundling	FinMark Trust
7	James Obama	PRIDE Tanzania Limited
8	Jane Kelly	Gatsby Charitable Foundation
9	John Wakiumu	Alliance for Green Revolution in Africa (AGRA)
10	Kees Verbeek	National Microfinance Bank PLC (NMB)
11	Maregesi Shaaban	CRDB Bank PLC (CRDB)
12	Mwallu Mwachang'a	Financial Sector Deepening Trust (FSDT)
13	Mwatima Juma	International Fund for Agricultural Development (IFAD)
14	Nangi Massawe	The Bank of Tanzania (BoT)
15	Nkuvililwa Simkanga	Prime Minister's Office (PMO)
16	Prof Andrew Temu	Sokoine University of agriculture (SUA)
17	Revelian Ngaiza	Ministry of Agriculture, Food Security & Coops
18	Salum Shamte	Agricultural Council of Tanzania (ACT)
19	Samuel Dyellu	Tanzania Chambers of Commerce Industries and Agriculture (TCCIA)
20	Sephania Mwakipesile	Ministry of Finance (MoF)
21	Sosthenes Kewe	Financial Sector Deepening Trust (FSDT)
22	Sylvia Meku	National Bureau of Statistics (NBS)







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