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Financial Literacy amongst Small Scale Farmers in Zambia

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***Abstract**: This study aimed to determine the levels of financial literacy of Small Scale Farmers and to establish the link with their usage of financial services.*
The OECD/INFE financial literacy measurement household telephone survey questionnaire was adapted and administered to Small Scale Farmers. Financial literacy was measured by adding up scores in financial knowledge, financial attitude and financial behaviour. Financial service usage was assessed by asking respondents whether the respondents had used any of the specified services. Pearson's Chi-square test for independence was used to test the hypotheses as categorical variables were mostly involved.

Most respondents (90.6%) scored low to medium (0 – 14.9). Only the respondent's educational level had a significant and positive effect on the financial literacy score. Registration status and annual sales revenue and had an effect on financial service usage.

However, the majority of the farmers (73.5%) had used financial services. This could be attributed to the broader definition of financial services used for the study.

***Field of Research:** Finance*
***Keywords:** Financial Literacy, Small Scale Farmers, Financial Services, Usage.*

I. Introduction

Given the high levels of poverty and unemployment in Africa, economic growth is necessary to move the majority of people out of poverty. The contribution of well-functioning financial markets to economic growth and development is generally not disputed. However, low levels of financial inclusion have been recorded in Africa, with many economic units financially excluded due to constraints on the supply and the demand side of financial services.

One effective way to grow economies and create employment is to foster entrepreneurship through SMMEs (Ministry of Commerce, Trade and Industry, MCTI, 2006). Despite the informal nature of most Small Scale Farmers in developing countries, studies have shown that they have the ability to drive economic development (Tang & Boon, 1996; International Monetary Fund, IMF, 2012). However, access to financial services has been identified as a major hindrance to the growth of SMMEs and small scale farmers in particular, in Africa (African Development Bank, ADB, 2012). On the demand side of financial services, lack of awareness of such services on the part of SMME owners including Small Scale Farmers has been identified as a major factor (Financial Sector Deepening Kenya, 2013).

According to Fin Scope Zambia (2009), the main barriers to financial access include poor physical access, unaffordable and inappropriate financial products, lack of confidence in the formal financial services, and poor understanding of available products and services. The last two barriers relate to what is referred to as financial literacy. Financial literacy is variously described as financial capability, financial education, consumer literacy,

financial culture, or financial insight. Atkinson and Messy (2012:14), define financial literacy as "a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial well-being".

Financial literacy has attracted attention around the world because of its importance in financial decision making. A number of economic, demographic and social developments have further highlighted its significance. These include over-indebtedness, financial scams, financial crises, globalisation, changing demographics, and sophisticated and complex financial products and services (Organisation for Economic Co-operation and Development, OECD, 2005). Information asymmetry in financial markets implies that financial service providers possess information advantage over consumers which can be detrimental to consumers. Market conduct rules, transparency and disclosure norms enshrined in consumer protection regimes may compliment financial literacy efforts. The Fin Scope Survey of 2009 found that 16% of adults in Zambia reported using more than half of their income to service debt[1], while 18% said they had missed a loan repayment in the previous 12 months (Fin Scope, 2009).

Financial literacy benefits everyone: consumers, financial market players and institutions, government, employers, civil society organisations and donors. Financial literacy encourages appropriate and productive use of financial products and services by individuals, households and business Enterprises (OECD, 2013). Several countries have now embraced financial literacy at policy level. The Zambian government has adopted the National Strategy on Financial Education (NSFE) and the New National Education Curriculum, and also participates in the annual International Youth Literacy week (Musona, PiprekGerda & Simbotwe, 2011; World Bank, 2012).

1.1 The Research Problem

Small Scale farmers and other SMMEs have been identified as a channel to create more equitable income distribution and much-needed jobs (MCTI, 2006). However, a major challenge facing SMMEs and Small Scale Farmers in emerging countries is that they fail to survive beyond their launch, and those that survive do not grow for a number of reasons, and most often remain informal (Ihua, 2009; Franco & Haase, 2010).Most Small Scale farmers remain peasant farmers forever.

Despite notable growth in access to financial services in the country, challenges remain, especially amongst the vulnerable and marginalised groups such as the youth, women, peasant farmers, rural inhabitants, and the low income groups, the self-employed and those in the informal sector. The reasons for this include poor physical access and usage barriers (Fin Scope, 2005, 2009, Financial Sector Deepening Zambia, FSDZ, 2016).

This study, thus, identified financial literacy and financial services utilisation as the potential causes of the failure and lack of growth of Small Scale Farmers.

1.2 Research Objectives

The main objective was to measure the levels of financial literacy among the Small Scale Farmers and to determine the extent to which this impacts their' utilisation of financial services in three rural and three urban districts of Zambia. Other objectives were to establish the determinants of financial literacy among Small Scale Farmers in Zambia, and to determine the extent to which individual farmer's characteristics affect Enterprise financial service usage.

II. Literature Review

In the broader sense, literacy consists of the use and understanding and knowledge of words, symbols and arithmetic operations. This idea of literacy is applied to particular skill set areas such as computer literacy (Wecker, Kohnle, & Fischer, 2007).

Financial literacy can thus be seen as having two broad dimensions: understanding financial matters or having financial knowledge, and using or applying such knowledge (Lusardi & Turfano, 2009; Huston, 2009). Ability

[1]The regulatory threshold is 35% of disposable income; this is monitored by the central bank through inspections.

and confidence is required to use financial knowledge to make decisions to improve one's financial well-being; this is considered an appropriate financial behavior.

Measuring financial literacy thus entails assessing how well an individual can understand and use financial information. However, there is no common measure of financial literacy. Different measures have, thus, been used by researchers (USAID, 2009; Oseifuah, 2010; Wise, 2013; Sucualu, 2013). Most studies have used scores and indices as proxies based on financial knowledge, behaviours, attitudes and financial experiences (Oseifuah, 2010; Huston, 2010).

Miller, Godfrey, Levesgne, and Stark (2009) argue that while there is widespread agreement that financial literacy is generally low worldwide, there is relatively little objective and comparative data. In addition, consumers tend to overestimate their financial skills.

Several studies around the world reveal widespread financial illiteracy especially among specific population groups (Bernheim, 1995; Klapper, Lusardi and Panos, 2012). Lusardi and Mitchell, (2011). Lusardi and Turfano (2009), established a relationship between gender, age and educational level, and financial literacy.

Few studies have been conducted on financial literacy in Africa and so estimates of financial literacy levels are either scarce or non-existent (Sayinzoga, Bulte and Lensink, 2014). But the few studies done reveal varying levels of financial literacy, but generally low, amongst different demographic groups across Africa (Lusimbo & Muturi, 2016).

A diagnostic review of consumer protection and financial literacy in Zambia found high levels of financial exclusion associated with the high cost of financial products and low consumer confidence in formal financial providers (Musona et al, 2013).

Lack of awareness and appreciation of financial services and how to access them (financial literacy) has been identified as one of the major factors hindering Small Scale Farmers' access to financial services and financial inclusion (ADB, 2012).

The Consumer Buying Decision economic model is based on assumptions of rationality, near perfect knowledge and utility maximization; the consumer will take all available information into account in an objective manner before making a decision (Nicosia, 1966).

Kotler, Keller and Jha (2009) identify five stages in the purchase process: Problem or need recognition, information search, evaluation of alternatives, purchase, and post-purchase behaviour. Each stage requires awareness and knowledge to make the decision. The particular order the consumer takes will depend on the nature of the purchase, the importance of the purchase, the uncertainty of the task, the extensiveness of choice, and perceived buyer power (Bunn, 1993).

Given the complexity and uncertainty involved, prospective consumers of financial services also proceed within the above framework; they need information on, about, and around the service. They need knowledge, awareness and skills in relation to the product or service. Financial knowledge, skills and confidence result in positive financial behaviour exhibited through appropriate usage of basic financial services, subsequently moving on to more sophisticated services (Nunno & Andoh, 2012).

This conceptualisation is in line with the definition of financial access in Finscope surveys which define financial access as "the ability of an individual to obtain, and on a sustainable basis, use financial services that are affordable and appropriate to their financial needs" (Finscope, 2009:2).

This study focused on Small Scale Farmers in their capacity as decision-makers who may access financial services for the farm as individuals as there is usually no legal or practical distinction between the individual owner and the farm/Enterprise.

USAID (2009:5) defines a financially literate SMME/farm owner/manager as "someone who knows what the most suitable financing and financial management options for his or her business at the various growth stages of his/her business; knows where to obtain the most suitable products and services; and interacts with confidence with the suppliers of these products and services. He or she is familiar with the legal and regulatory framework and his or her rights and recourse options".

Applying the above definition, and drawing on Kotler et al.'s (2009) five decision stages, for a farm owner to decide to utilise financial services, he or she needs to be aware of his or her needs.

The theoretical framework for this study was adapted from the OECD/INFE (2012) under which the measurement of financial literacy is based on Atkinson and Messy's (2012) definition of financial literacy. A financially literate person is expected to have basic knowledge of key financial concepts and the ability to display numeracy skills. He or she is also expected to exhibit positive attitudes and preferences in financial matters. Underlying traits relating to knowledge, skills, attitudes and behaviours are thus identified to measure financial literacy.

2.1 Hypothesis of the Study
In line with the conceptual framework the following sets of hypothesis were developed:
Set A:
H_i: the Small Scale Farmer's financial literacy has an effect on the Enterprise's usage of financial services.

Set B:
H_i: the gender of the Small Scale Farm owner has an influence on his/her financial literacy score.

H_i: the level of education of the Small Scale Farm owner has an influence on his/her financial literacy score.

H_i: the age of the Small Scale Farm owner has an influence on his/her financial literacy score.
Set C
H_i: the level of sales revenue of the Small Scale Farmer affects the Small Scale Farmer's usage of financial services.

H_i: the investment outlay of the Small Scale Farmer affects the Small Scale Farmer's usage of financial services.

H_i: the location of the Small Scale Farmer affects the Small Scale Farmer's usage of financial services.

H_i: the period of activity or existence of the farm affects the Small Scale Farmer's usage of financial services.

H_i: the registration status of the Small Scale Farmer affects the Small Scale Farmer's usage of financial services.

H_i: the nature of business formation of the Small Scale Farm affects the Small Scale Farmer's usage of financial services.

H_i: the number of employees the Small Scale Farmer have affects the Small Scale Farmer's usage of financial services.

H_i: the number of hours worked affects the Small Scale Farmers' utilisation/usage of financial services.

H_i: the regularity of income/sales revenue affects the Small Scale Farmer's usage of financial services.

III. Methodology

This was an exploratory, explanatory and descriptive empirical study that employed the survey research methodology. Data was collected by means of a paper-based, self-completion, structured and pre-defined questionnaire. The questionnaires were administered by the Alliance of Zambia Informal Economy Associations (AZIEA).

The study adapted the OECD/INFE financial literacy measurement core questionnaire for informal Enterprise owners with three explanatory variables: gender, level of education, and age.

The level of financial literacy was measured and scored in line with Table 1.1 below:

Table 1.1 Financial Literacy Measure

Component	Measure	Maximum Score
Financial Knowledge	Eight questions on a range of basic financial topics with correct and wrong answers. Correct response scored 1.	Maximum score 8 with 6 and above considered high score.
Financial Attitude	Three attitude statements on money and planning for the future requiring respondents to agree or disagree on a scale ranging from: Completely agree = 1 to Completely disagree = 5. Correct Attitude was given either 1 or 2 points depending on how positive the attitude is.	Maximum score was 5 with an attitude indicator of more than 3 considered high.
Financial Behaviour	Nine behaviour questions with responses on a scale ranging from Never = 1 to Always = 5. Correct behaviour was given either 1 or 2 points depending on the strength of the behavior.	Maximum score of 9 with 6 and above considered high.
Financial Literacy	Overall financial literacy score ranging from 0 to 22.	Maximum score of 22 with average combined score of 13.7 for OECD/INFE pilot study countries.

Source: Author, April 2022

Small Scale Farmers' characteristics were analysed in relation to utilisation of financial services, whereas owner characteristics were analysed in relation to financial literacy scores attained.

The sample size was 3 000 but only 1000 (33.33%) correct responses were received. The survey areas were divided equally between rural and urban districts where financial services can currently be physically accessed. The population was 822 000 informal Enterprises split into 419 000 urban and 404 000 rural (Fin scope, 2009).

Purposive and convenience sampling was used to select 6 districts with a with a quota of 500 for each. Individual informal Enterprises were then randomly selected.

The OECD/INFE coding guide was used to code responses to the survey questions and then inputted to SPSS Version 20 for analysis. Secondary data on financial literacy and informal Enterprises' access to financial services was obtained by way of desktop research.

In line with Pauly and Satterwaite (1981) and Nunno and Andoh (2012), the basic empirical model for analysis was as follows:

(1) $Fu_i = b_0 + b_1 CH_i + b_2 FL_i + v_i$ (2). $FL_I = \gamma_0 + \gamma_1 X_I + e_i$

Fu_i = usage of financial service (0, 1)
FL_I = financial literacy level of owner of informal Enterprise
X_I = vector of owner characteristics relevant to obtaining FL_I
CH_i = Small Scale Farmer characteristics (REV, INVES, LOC, ACT, PER, REG)
v_i and e_i = are random error terms
b_0 = the mechanical interpretation may relate to imposed financial service usage.
b_1 and b_2 are partial regression co-efficients.

Equation 1 expresses the relationship between usage of financial services and the financial literacy of the Small Scale Farmer, with usage taking any of the following: transactions, investment, credit or risk management services.

Equation 2 regresses the financial literacy of the Small Scale Farmer on Small Scale Farmer's characteristics namely: age (AGE), gender (GEN), and level of education (EDU).

(3). $$Fu_i = \beta_0 + \beta_1 FL + \beta_2 LOC + \beta_3 ACT + \beta_4 PER + \beta_5 REG + \beta_6 INVEST + \beta_7 REV + \mu$$

μ = random error terms.

β_1 to β_7 = relevant co-efficients

Equation 3 specifies Small Scale Farmers' characteristics that may be determinants of financial service usage: sales revenue (REV), investment outlay (INVES), location (LOC), period of activity (PER), and registration status (REG) (Nunno & Andoh, 2012).

IV. Data Analysis and Results

The data was analysed and interpreted in line with the OECD/INFE pilot survey (OECD, 2012). Under the OECD/INFE approach, financial literacy consists of financial knowledge, financial behaviour and financial attitudes (See Table 1.1 above).

Of the 3 000 questionnaires distributed, only 1 000 responses were received giving a response rate of 33.33%. Though the response rate was low it exactly meets the OECD/INFE threshold of a minimum of 1 000 respondents.

In terms of financial knowledge, only 8% of respondents scored 6 and above which is considered a high score, with 92% scoring below 6. The most frequent score was 4 with 13.2% of respondents scoring 4. This is an indication that overall, Small Scale Farmers in Zambia, have low levels of financial knowledge.

In the OECD/INFE pilot study of 14 countries around the world, most countries recorded scores below six. South Africa, Peru and Norway recorded the lowest scores for financial knowledge although the latter used different questions. At the other end Malaysia, Germany, Czech Republic, Ireland, Island, British Virgin Island, and Estonia had higher average scores. Hungary had the highest score at 69 %(Atkinson & Messy, 2012).

In terms of financial attitude, out of the 1 000 respondents 11.4% scored 3 or more which is considered a high score with 88.6% scoring below 3. The most frequent score was 2 with 26.2% of respondents achieving the score. These are much lower scores than OECD/INFE pilot study findings.

In the OECD/INFE pilot study, Peru had the highest attitudes and preferences score with 71% of the respondents scoring above the average attitude indicator of above 3 followed by Albania and Hungary, British Virgin Islands and Germany and with Armenia having the lowest score followed by Poland, Estonia, the UK and Ireland .

In terms of financial behaviour, out of the 1 000 respondents, 8% scored 6 or above which is considered high, with 92% scoring below 6. The most frequent score was 4 with 13.2% of the respondents achieving this score.

In comparison, there were large variations in scores in the OECD/INFE study, with Hungary recording the lowest saving behaviour at 27% and Malaysia the highest at 97 % (Atkinson & Messy, 2012).

Armenia had the highest negative behavior (borrowing) at 47%. British Virgin Islands had the highest positive behaviour with 71% achieving at least a score of 6. The lowest scores were exhibited by Estonia, Hungary and Albania (Atkinson & Messy, 2012).

The three components' scores were summed up into a score of financial literacy ranging from 0 to 22. The average score for the 1 000 respondents was 10.3900, with a mode score of 10 and a standard deviation of 3.43368. The minimum score was 0 and the maximum 21. For purposes of analysis, the scores were classified into ranges: Low - 0 to 9.9, Medium - 10 to 14.9, and High - 15 to 22.

Just over half of the respondents (50.9%) scored Low, 65.1% scored Medium, and 9.4% scored High with 44.7% scoring above the average score. This is an indication of a low level of financial literacy (See Appendix 1). The OECD/INFE average score was 13.7. However, it should be noted that OECD/INFE survey targeted households in general whereas this study targeted a specific demographic group – Small Scale Farmers.

These findings are also contrary to findings by Andoh and Nunno, (2012), who found high levels of financial literacy amongst SMME owners in Ghana. Oseifuah, (2010), also found above average financial literacy levels amongst youth Entrepreneurs in South Africa.

Set A:
There is a relationship between the financial literacy of the Small Scale Farmer and the Small Scale Farmer's usage of financial services (See Appendix 4).

Of the 1 000 respondents, 73.5% had used some or all of the four financial service categories whereas 26.5% of respondents had not used financial services. The greater proportion of those who scored Low and Medium actually had their Enterprises using financial services.

The most commonly used services were savings accounts (29.7%) and mobile money transfers (18.8%). Only 1.9% of the respondents had used or were using all the financial services listed. A total of 26.5% had not used financial services (See Appendix 3).

Only 2 Small Scale Farmer characteristics were found to be significant determinants of financial services usage, namely: the level of sales revenue and the Small Scale Farmer's registration status (See Appendix 2).

A significant and positive relationship between the financial literacy score of the Small Scale Farmer and the Small Scale Farmer's usage of financial services was established though not very strong. The proportion of owners that scored High on financial literacy using financial services was higher than those that scored Low. However, there was also significant usage of financial services by Small Scale Farmers whose owners were lower scorers (See Appendix 4).

The most significant socio-demographic factor linked to financial literacy was the educational level (See Appendix 6). Out of the 1000 respondents, 23.1% of respondents had some secondary education and of these 7.1% had low scores, 15.1% had medium scores and 0.6% had high scores; 17.8% had completed primary school and of these 5% had low scores, 8.3% had medium scores and 0.7% had high scores; 18.4% of the respondents had some primary school and out of these 3.6% had low scores,6.4% had medium scores and 0.4% had high scores;13.5% had no formal education and of these 2.0% had low scores, 8.7% had medium scores, and 2.8% had high scores; 2.9% had technical or vocational training and of these 1.3% had low scores, 1.3% had medium scores, and 0.3% had high scores; 11.5% had university education and of these 1.4% had low scores, 7.5% had medium scores, and 2.6% had high scores; 12.8% could not tell their level of education and out of these 0.7% had low scores, 1.1% had medium scores and none had high scores.

It can be seen from the findings that the largest proportion of the High scores were taken up by the University, Vocational/technical training and completed secondary school categories. The Medium scores were mainly taken up by the University down to some primary school education categories with complete secondary school and some secondary school education taking up the largest proportions in that order. The Low scores were mainly taken up by the complete primary school, complete secondary school and some primary school education categories. But the highest proportion of Low scores was attributed to the no formal education category.

This is in line with findings of the OECD/INFE pilot survey of fourteen (14) countries. The OECD/INFE pilot study found the relationship between increased levels of education and the financial literacy scores in all countries surveyed to be significant and notably strong in Germany, Malaysia and Poland.

These findings are also supported by the findings by Bernheim 1995, Lusardi & Mitchell (2007a, 2007b, 2008, 2011b), Lusardi & Turfano, (2009), Lusardi and Mitchell (2011), and Calvet, Campbell and Sodini (2007, 2009).

There was no significant relationship established between financial literacy and the age and gender of the Small Scale Farm owner. The majority of the respondents were male and most were aged between 30 and 49 (See Appendix 5).

However, these findings are contrary to findings in the OECD/INFE pilot study which found that age has an effect on financial literacy levels with the middle-aged scoring higher and the youngest and oldest scoring

lowest. However the relationship between age and financial literacy was less clear in Armenia, Poland and South Africa.

These findings also contradict findings by Agarwal et al (2009), Lusardi and Mitchell (2011), and Lusardi et al (2010), who found financial literacy low amongst the young.

Another factor considered in the analysis was the distribution of total financial literacy scores by location of the respondent. There was no significant difference between the total financial literacy scores between the rural and urban-based Small Scale Farm owners**.** Of the 177 rural-based respondents, 24.9% scored low, 65.0% scored medium and 10.2% scored high. For the 823 urban-based respondents, 25.5% scored low, 65.1% scored medium and 9.2% scored high.

This may be explained by the fact that the survey was conducted amongst a group of Small Scale Farmers with similar characteristics; the majority of the respondents had minimal or no education irrespective of their location. Because of low education levels, the majority may have failed to be absorbed in the formal employment sector and ended up in the Small Scale Farmers Sector not so much by design but by the force of circumstances.

The only Enterprise characteristics with a significant effect on financial usage were registration Small Scale Farmers Association of Zambia and/or other authorities, notably the local authorities that issue operating licenses and chiefs, and the level of sales revenue especially at the lower level (See Appendix 4).

V. Discussion of Findings, Conclusions and Recommendations

The study determined levels of financial literacy of Small Scale Farmers and related this to usage of financial services by their Enterprises, and established that a positive and significant relationship exists between the two variables. However, there was also significant usage of financial services even by Small Scale Farm whose owners were lower scorers.

The study also established that the level of education is a key determinant of the level of financial literacy.

These findings may be explained by the fact most of the respondents were based in peri urban areas where there was a much higher response rate and where there is greater financial inclusion and exposure to financial services than in rural areas with urban inclusion standing at 70.3% in 2015 up from 42% in 2009 compared with rural inclusion at 50.1% in 2015 up from 34.4% in 2009 (Financial Sector Deepening Zambia, 2016). General literacy levels are also higher compared to rural areas due to better access to schools and other education facilities, though financial literacy score levels were evenly distributed between rural and urban areas.

Financial usage for the research was broadly defined to include mobile-phone based financial services such as money transfers which are now widely accessible in rural areas. This broad definition captured more financial service users than may have been the case with a narrower definition.

The study also established that Small Scale Farmers characteristics such as registration and licensing with Small Scale Farmers Association of Zambia and/or other authorities, notably the local authorities and chiefs, and level of sales revenue at lower levels have significant effect on Small Scale Farmers usage of financial services.

Most of the respondents were involved in agriculture. With minimal investment outlays compounded by limited access to external financing, most of their transactions would be on cash basis limiting usage of financial services.

The Zambian Government and other stakeholders in the country's financial system should design appropriate and well-targeted strategies to improve the financial literacy of Small Scale Farmers. This will enhance the overall prospects of Small Scale Farmers by improving their access to and usage of financial services, especially credit which the literature notes is a major obstacle to the growth of this sector. The sector has the greatest potential to address unemployment and poverty challenges in the country.

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Appendices.

Appendix 1 Total_Financial_Literacy_Score

N	Valid	1000
	Missing	0
Mean		10.3900
Median		10.0000
Mode		10.00
Std. Deviation		3.43368
Skewness		.182
Std. Error of Skewness		.077
Kurtosis		.058
Std. Error of Kurtosis		.155
Minimum		.00
Maximum		21.00

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Low	255	25.5	25.5	25.5
	Medium	651	65.1	65.1	90.6
	High	94	9.4	9.4	100.0
	Total	1000	100.0	100.0	

Appendix 2 Logistic Regression Model Statistics

Characteristic Variable	Co-efficient B	Wald	Degrees of freedom df	P value Sig.	B Exponent Exp(B)
Total Financial Literacy score	0.115	18.513	1	0.000	1.122
Sales Revenue		14.162	4	0.000	
Up to K150 000	-0.718	4.287	1	0.038	0.488
K151 000 to K300 000	-0.038	0.012	1	0.915	0.963
K301 000 to K800 000	-0.078	0.045	1	0.832	0.925
Registration	-1.500	28.058	1	0.000	0.223
Licencing/Registration		34.698	5	0.000	
Local Authority licensing	-0.955	1.975	1	0.16	0.385
Chiefs registration	0.126	0.034	1	0.853	1.135
WARMA licensing	-0.254	0.129	1	0.719	0.776
ZASSF membership	-0.640	0.579	1	0.447	0.527

Appendix 3 Type of Financial Service utilised by Informal Enterprises

Type of Financial Service	Number of Respondents	Percentage	Cumulative Percentage
Pension	72	7.2%	7.2%
Fixed Deposit	39	3.9%	11.1%
Mortgage	10	1.0%	12.1%
Secured Bank Loan	26	2.6%	14.7%
Overdraft	18	1.8%	16.5%
Insurance	20	2.0%	18.5%
Shares	33	3.3%	21.8%
Bond	6	0.6%	22.4%
Savings Account	297	29.7%	52.1%
Mobile Money Transfer	188	18.8%	70.9%
Leasing	8	0.8%	71.7%
All of them	18	1.8%	73.5%
Don't Know Any	40	4.0%	77.5%
Cannot Answer	225	22.5%	100%
Totals	1000	100%	100%

Source: Survey Results (2022)

Appendix 4 Regression Model Statistics

Relationship	Value	Degrees of freedom df	P value Sig.	Asymp. Sig. (2-sided)
Gender and Total Financial Literacy score	5.147	2	0.076	0.076
Educational level and Total Financial Literacy score	99.073	14	0.000	0.000
Age and Total Financial Literacy score	23.034	14	0.060	0.076

Source: Survey Results (2022)

Appendix 5 Financial literacy score by Gender

Gender	Low score 0 to 9.9	Medium score 10 to 14.9	High score 15.0 to 22	Total
Male	12.2%	36.3%	5.4%	46.1%
Female	13.3%	28.8%	4.0%	53.9%
Total	25.5%	65.1%	9.4%	100%

Source: Survey Results (2022)

Appendix 6 Financial Literacy score by level of education attained

Education level	Low score 0 to 9.9	Medium score 10 to 14.9	High score 15.0 to 22	Total
University	2.0%	8.7%	2.8%	13.5%
Technical/vocational	1.4%	7.5%	2.6%	11.5%
Completed secondary school	4.4%	16.7%	2.0%	23.1%
Some secondary schooling	7.1%	15.1%	0.6%	22.8%
Completed primary school	5.0%	8.3%	0.7%	14.0%
Some primary schooling	3.6%	6.4%	0.4%	10.4%
No formal education	1.3%	1.3%	0.3%	2.9%
Cannot answer	0.7%	1.1%	0.0%	1.8%
Total	25.5%	65.1%	9.4%	100%

Source: Survey Results (2016)

Appendix 7 Financial Literacy score by Age

Age Band/Answer	**Low score 0 to 9.9**	**Medium score 10 to 14.9**	**High score 15 to 22**	**Total**
Cannot Answer	0.6%	0.7%	0.0%	1.3%
18 – 19	1.1%	4.5%	0.4%	6.0%
20 – 29	4.8%	11.5%	2.2%	18.5%
30 – 39	7.5%	16.9%	3.1%	27.5%
40 – 49	5.5%	15.2%	3.1%	22.2%
50 – 59	4.6%	14.8%	1.7%	21.1%
60 – 69	0.8%	1.1%	0.2%	2.1%
70 – 79	0.6%	0.4%	0.3%	1.3%

Source: Survey Results (2022)