

Analysis of Socioeconomic Factors Influencing Saving Among Rural Smallholder Farmers in Gwaram LGA, Jigawa State, Nigeria

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Abstract

The study was conducted to analyze socioeconomic factors influencing saving among rural smallholder farmers in Gwaram LGA area of Jigawa State. Data was collected with the aid of well structured questionnaires. A total of 60 respondents were selected and interviewed. The sample was drawn through multi-stage sampling technique. Total of five (5) of villages, one from each of the five districts in the LGA were selected. The data was analyzed by both descriptive and inferential statistics. The results revealed that the average age of the farmers was 37 years with minimum and maximum age of 22 and 53 respectively. The average household size was 11 persons per household. About 79.33% of the respondents were married and about 28.33% acquired secondary education with 98.22% having farming as the main occupation. The average farm size was 2.33ha and about 60% of the respondents had less 1ha of farmland. Majority (>60%) of the farmers own their farmlands. The average annual income from farm and off-farm operation was N128, 275 while the average monthly savings was N5000. Estimated annual cost of production was between N35000 to 89,000. More than 90% of the farmers depend solely on personal savings as source of finance for farm operations. 51.7 % save their money in kind forms. Factors such as farm size, age, years of education, annual income from farm and off-farm and household size were significant variables that determines the amount of money to be saved by farmers. Regression analysis further revealed that, there is 61% variation between the dependent variable and the independent variables. Household size (-270) and age (-1.715) negatively affect monthly saving of the respondents at both 1% and 10% level of significance respectively.

1. Introduction

Savings are of great importance in developing country like Nigeria, this because of the direct bearing it has on the level of economic activity of the nation within the agricultural sector. The degree of progress attained will largely depends upon what the farmers do with the additional income generated from year to year from their farm activities.

Adequate integration of saving and investment programmes into development strategies is capable of improving resource allocation, promoting equitable distribution of incomes and reducing credit delivery and recovery cost. Oyenwaku and Ozoh, (1992)

Savings is a means of accumulating assets that perform specific function for the future Ike and Idoge, (2006). It is also the setting aside of some items for future use (Shipton, 1990).

According to Pearce, (1981), capital accumulation is very difficult because with low income, very little savings or investment occur out of existing income. Saving is categorized into financial

and non financial (physical) savings. Cash is the most liquid asset (monetary form) while the non-financial form of savings include livestock, grain, land, gold and other valuables.

Ayanwale and Banire (2000), expressed that, the saving behaviors of the farmers in developing countries is less dependent on the absolute level of aggregate income, but more dependent among other factors on relationship between current and expected income, the nature of the business, household size, wealth and other demographic factors.

The broad objective of this study was to analyze the socioeconomic factors influencing saving behaviors of smallholder farmers in selected villages of Gwaram LGA of Jigawa State, Nigeria while the specific objectives were to describe socioeconomics of the respondents; determinants of saving among smallholder farmers and identify the constraints faced by the farmers that hinder achieving effective savings.

2. Methodology

The study was conducted in Gwaram LGA Jigawa state, Nigeria. Gwaram is situated in the Sudan Savannah agroecological zone of Nigeria located between latitude 10°13.977 North and longitude 10°17.14 East. The LG occupies a total of land mass of about 1,912Km square. The predominant occupations of the people in the area are farming, fishing, animal rearing, handcraft and trading. The 2006 census estimates put Gwaram LGA population at 272,582 with growth rate of 2.82% per annum.

In line with the purpose of the study, multi-stage sampling was used to draw samples .First involved purposive selection of five (5) villages from list of all villages in the LGA based on peculiar rurality features, one from each of the five (5) districts in the LGA. The villages included in the study were Malle, Rungo, Dingaya, Zandam, and Kafin Fulani. The second staged involved systematic random selection of 12 respondents from list of farmers from each of the five (5) selected villages making total of 60 respondents for the study. Data were collected by use of well structured questionnaires supported with interview schedules.

The data collected data were analyzed using descriptive statistics and multiple regression models to achieve the object of the study.

3. Results and Discussion

The result as presented in Table 1 revealed that 35% of the respondents were within the age range of between 31 to 40 years with an average of 35 years. This is an indication that the respondents were within their active age and this gives them the opportunity to actively participate in farming activities. Majority of the respondents (81.66%) were married while 13.30% were single. This is obviously possible taking into consideration of the cultural and religious factor of the study area that encourages early marriage. The implication of this is that majority of the farmers have dependents that rely on them for domestic expenditures thus have adverse effect on their monthly savings. Also 66.7 % of the respondents were found to obtained Qur'anic education while 10% respondents had primary education, 20% with secondary education and only 3.3% had tertiary education. This is an indication that both people with formal and non formal education were engage in farming in the study area. In respect of the main occupational status majority (55%) of the respondents had farming as their main occupation, 25% had handcraft as main occupation, 15% had trading as main occupation, and only 3.33% had civil service as their main occupation. However, most of the respondents (26.7%) had 1-5 years of farming experience. The study further revealed that (43.3 %) of the respondents had between 5-10 persons, the implication is that the larger the household, the higher the expenditure which will in variable have effect on the on saving behavior of the farmers.

Table 2 showed that, 48.33 % of the respondents had between N51000 (\$333.33) to N100000 (\$653.59) as the average annual income from both on farm and off-farm operations, this

figure is presumably low compared to the time and space extended to both on-farm and off-farm activities and invariably has effect on saving behavior of the farmers. Also table 3 revealed that majority (55%) of the respondents cultivated between 0.5-1ha size of land while 35% cultivated between 1.5-2ha of land size. This is grossly inadequate for profitable venture and it also shows the level of subsistence of the study area.

Table 4 further revealed that 28.66% had between N61000-N80000 as estimated annual cost of production while 26.33% had between N41000-N60000; the implication of this is that, the farmers hardly breakeven to talk less of profit that will provide surplus income for saving.

Personal saving accounted for 81.66% of source for finance for farm operations while 3.33% sourced finance from their relatives and only 1.66% sourced finance from association as indicated in table 5. This is an indication that there is need for farmers in the study to form cooperative society in order to encourage saving so that the farmers could generate adequate funds for their farm operations.

Table 6 showed the various farms which the farmers saved with 30% of the respondents using livestock as means of saving, 21.66% in grains form while 81.33% in cash form. This implies that the saving culture is mostly in kind form with only 18.33% saving in cash form. With majority using small ruminants such as sheep and goat to save money for their farm operations hence having access to improved breeds of these will greatly improve the magnitude of funds to farmers.

28.33% of the farmers' average monthly saving was between N5501 –N7000, while 26.66% saved between N4001-N5500 and 21.66% saved between N1000-N2500 monthly bases. The mean monthly was N5000.5 this low saving is attributed to high dependency ratio with most of the money earned expended on household expenditure.

Table 8 revealed that, household size ranked first (33.33%) as the major constraint militating against saving as substantial part of income goes into domestic consumption expenditure due to relatively large household size.

The regression analysis result in table 9 revealed that coefficient of age (-248.40) is negatively related to saving @ 10% level of significance, this is against popular belief that age is a strong determinant of saving. The household size had a negative coefficient (-16989.9) @ 1% level of significance, this is in agreement with a prior expectation that large household size will result to low saving while years of farming experience indicated a positive relationship with saving having a positive coefficient (+17.78) @ 10% level of significance, this implies that the higher the number of years of farming the more the farmer learns how to manage resources efficiently. Annual income also had a positive coefficient @ 1% level of significance this also is in agreement with a prior expectation that higher income encourages saving. Farm size is also positively related to saving @ 5% level of significance.

4. Conclusion and Recommendation

Factors such as farm size, age, years of education, annual income from farm and off-farm and household size were significant variables that determine the amount of money to be saved by farmers. Household size is considered to constitute a major challenge to the amount of saving by rural farmers and the farmers' means of saving is heavily dependent on personal savings. Thus, the farmers should be encouraged to form a cooperative society so that they can pool their resources together for improved productivity and income.

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Table 1: Distribution of respondents according to socioeconomic variables

Variables	Frequency	Percentage (%)
Age		
21-30 years	7	11.70
31-40 years	21	35.00
41-50 years	18	30.00
Above 50years	14	23.33
Minimum age = 22 Maximum age = 53		
Marital standing		
Single	8	13.30
Married	49	81.66
Widow	3	5.00
Educational standing		
Primary level	6	10
Secondary level	12	20
Tertiary level	2	3.3
Qur'anic level	40	66.7
Occupational Standing		
Farming	33	55
Civil Servant	2	3.33
Trading	9	15
Handcraft	15	25

Source: Survey, 2013

Table I: Socioeconomics Continuation

Variable	Frequency	Percentages (%)
Farming Experience		
1-5 years	16	26.7
6-10 years	12	20
11-15 years	12	20
16-20 years	5	8.3
Above 20 years	5	8.3
Household Size		
2-4 Persons	14	23.3
5-10 Persons	26	43.3
11-14 Persons	13	21.7
15-19 Persons	4	6.7
20-24 Persons	3	5.0
Total	60	100

Source: Survey, 2013

Table 2: Distribution of respondents according to average annual income from farm & off-farm

Interval	Frequency	Percentage (%)
20000-50000	9	15.00
51000-100000	29	48.33
101000-150000	10	16.66
151000-200000	7	11.66
201000-250000	5	8.33
Total	60	100
Minimum=	Maximum =	

Source: Survey, 2013

Table 3: Distribution of respondents according size of farmland

Interval	Frequency	Percentage (%)
0.5-1ha	33	55
1.5-2ha	21	35
2.5-3ha	5	8.33
Above 3ha	1	1.66
Total	60	100

Source: Survey, 2013

Table 4: Distribution of respondents according to estimated annual cost of production

Interval	Frequency	Percentage (%)
21000-40000	9	15
41000-60000	16	26.66
61000-80000	17	28.33
81000-100000	12	20
Above 100000	6	10
Total	60	100

Source: Survey, 2013

Table 5: Distribution of respondents according to source of finance for farm operations

Source	Frequency	Percentage (%)
Personal Savings	48	81.66
Relatives	3	5.00
Friends	2	3.33
Association	1	1.66
Total	60	100

Source: Survey, 2013

Table 6: Distribution of respondents according to form of saving

Form	Frequency	Percentage (%)
Cash	11	18.33
Livestock	18	30
Grains	13	21.66
Total	60	100

Source: Survey, 2013

Table 7: Distribution of respondents according to magnitude of average monthly saving

Interval	Frequency	Percentage (%)
1000-2500	13	21.66
2501-4000	9	15.00
4001-5500	16	26.66
5501-7000	17	28.33
7001-8500	5	8.33
Total	60	100

Source: Survey, 2013

Table 8: Distribution of respondents according challenges affecting saving

Challenge	Frequency	Percentage (%)	Ranking
Household size	20	33.33	1 st
Low value of farm produce	10	16.7	2 nd
Cost of production	8	13.33	3 rd
Uncertainty in Prices	7	11.7	4 th
Lack of financial institution	5	10.3	5 th
Total	60	100	

Source: Survey, 2013

Table 8: Regression Estimates for Determinants of Saving among Farmers

Variables	Coefficient	Standard Error	T-Value
Age (β_1)	-248.40	144.87	-1.715***
Farm size (β_2)	421.44	2205.02	0.191**
Years of farming Experience (β_3)	17.78	247.32	0.072*
Annual Income (β_4)	38.72	116.13	0.113***
Household size (β_5)	-16989.9		-270***
Constant (α)	1117.49	7038.64	0.159 ^{NS}
R ² Value = 0.612, R ² Adjusted = 0.596,			
*** Significant@1%LS, ** Significant@5%LS, * Significant@10%LS, NS= Not significant			

Source: Survey, 2013