

Assessment Of Farm Record Keeping Among Farmers In Etsako East Local Government Area Of Edo State, Nigeria

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ABSTRACT

The study assessed the status of record keeping among farmers in Etsako East Local Government Area of Edo State. Sample for the study comprised one hundred and twenty (120) farmers who were selected using simple random sampling technique. Structured questionnaire was used to collect data which were analyzed with descriptive and inferential statistical tools. Majority of the farmers were fulltime farmers (84.17%), males (54.17%), aged between 51-60 years (34.17%) with almost half of the respondents (47.50%) having no formal education. Record keeping status was low as only 18.3% of the respondents kept any form of record. Major reasons adduced for not keeping farm records were lack of knowledge (39.8%) and not considered necessary which were (34.7). Chi-square test showed that there were significant relationships between the farmers' educational level ($X^2 = 32.125$; $p \leq 0.05$), types of enterprise ($X^2 = 16.185$) and farm record keeping status. The t- test result shows that there were significant differences between the age ($t = 4.427$; $p = .003$) and years of farming experience ($t = 2.337$; $p = .009$) of record keepers and non record keepers. The study recommends adult literacy programme for farmers in Etsako East LGA and capacity building of the farmers on farming as a business venture.

Key words: Farm records, Record keeping, Farm enterprises

INTRODUCTION

Nigeria's agriculture is characterized by small scale farmers who have low level of education and take up farming as a way of life rather than as a business. These farmers equally maintain low level of contact with extension services. At individual, regional, national and global levels, record keeping is crucial for resource planning, programme implementation and evaluation to achieve meaningful progress. The attainment of the Millennium Development Goals (MDGs) will depend on food security and alleviation of poverty which implies that agriculture must be practiced effectively and efficiently as a business. This connotes agriculture in which proper recording of farm operations, financial report and inputs owned and used, production and other relevant information about the farm enterprise is done. According to Emokaro and Ingawa (2007), record keeping is an integral part of the effective management of farm enterprises. Its profit maximization and other welfare goals are the objective.

Farm records are essential for effective farm management, which include providing detailed knowledge about the operations of the farm, identification of the trend of farm activities, having accurate control over finance and product qualities, identifying individual cost in order to allow changes to optimize profit, keeping track of money owned and to avoid theft (World Bank 2010). Farm records help to document important activities and provide data in order to make informed decisions. This is particularly so in agriculture, where problems tend to emerge from time to time as found in climate change, incidence of pests and diseases and drought.

In spite of the enormous usefulness, record keeping among farmers in Nigeria is generally low this is because farmers do not appreciate the value or know how to keep relevant records (Obasi, 2003). Farmers need to practice record keeping in order to move from subsistence to profit oriented farming. Oluwole and Olayide (2010) traced the challenges of data collection and low utilization of the data collected to the socio-economic characteristics of farmers. An average

local farmer in Nigeria has poor record keeping ability (Idekhai, 2001), mainly caused by low level of education. In addition, time consumption, lack of zeal and inability to afford the cost of procuring some recording materials such as ledgers, journals may be relatively high in relation to the income of these farmers.

Nigerian farmers, like other farmers in some developing countries of the world do not keep farm records, where they are kept, inappropriate methods are often used hence dearth of reliable data which will negatively affect attainment of the MDG target of eradicating extreme poverty and hunger through maximizing use of resources. Farmers in Edo State like others in the country are expected to be served by the extension service of the State Agricultural Development Programme (ADP) and other governmental and Non Governmental Organizations (NGOs) which should ensure that farmers acquire basic knowledge and skills needed to keep records of farming activities. One of the objectives of the extension sub-programme of Edo State ADP is to provide technical assistance to farmers in order to improve their productivity and income (Edo State ADP, 2008). This includes farm record keeping which could enhance their opportunity to meet bank loan conditions, determine profitability of far business and assist farmers to make informed decisions. Edo State ADP technical assistance to farmers on record keeping seems not to be effective or not achieving the desired impact.

Based on this background, it is important to assess the status of record keeping among farmers in order to know “where they are” in farm record keeping and consequently address the situation, considering its importance to the attainment of enhanced productivity and income consequently sustainable development. The main objective of the study therefore was to assess the level of record keeping among farmers in Etsako-East Local Government Area (LGA) of Edo State. The specific objectives were to:

- i. examine the socio-economic characteristics of the farmers;
- ii. examine farm record keeping status of the respondents; and
- iii. identify the problems associated with record keeping among these farmers;

Study Hypotheses

Ho(1): There is no significant association between respondents’ socio- economic

characteristics and their farm record keeping status.

Ho(2): There is no significant relationship between selected characteristics of farm record keepers and non record keepers

METHODOLOGY

Etsako-East is one of the eighteen (18) Local Government Areas (LGAs) in Edo State. The LGA has an area of 1,133km² and a population of 145,996 according to the 2006 census (Etsako-East LGA, 2010). It is bordered by Kogi State in the North and Etsako West in the South, Akoko Edo LGA in the West and Etsako Central towards the South-East. Agriculture is the major occupation of the people in the study area. This involves the production of arable crops, livestock, fish, snail, poultry and some tree crop production such as cocoa, mango and orange. The farming system is predominately traditional with the use of farming tools such as hoes and cutlasses.

Simple random sampling technique was used to select six (6) villages namely; Okpella, Igiode, Ovaio, Iviari, Iviebua, and Ivianokpodi from the thirty six (36) villages that make up the study area. Furthermore, twenty (20) farmers were randomly selected from each of these villages which gave a total sample size of 120 farmers (respondents).

Primary data were obtained using a well structured interview schedule. Data were analyzed using frequency counts, percentages and means while Chi square statistic was used to test the association between respondents’ socio economic characteristics and their record keeping status. T-test was used to test the difference between the characteristics of record keepers and non record keepers.

Record keeping status was measured at nominal level (Yes/No) for any farm record kept. Regularity of keeping farm record was measured using a 4-point Likert type scale where never=1, sometimes=2, often=3 and very often=4. Any value ≥ 2.50 mean score value indicated regularly kept farm record.

RESULTS AND DISCUSSION

Socio-economic characteristics of respondents

As presented in Table1, 45.8% of the respondents were females while 54.2% were males. This implies that there were as much female farmers as there are male farmers in the area. Majority of the respondents (34.2%) were

between age brackets 51-60 years while the average age of the respondents was 43.2. The respondents were relatively old and probably not economically active. It was also shown in Table 1 that majority of the respondents (67.5%) were married with family size of nine persons and above (55.8%). The large family size could imply the availability of labour for farming because labour is a major constraint in peasant production in Nigeria (Gocowski and Oduwole, 2003). Furthermore, almost half of the respondents (47.5%) had no formal education which is crucial to record keeping. Ampaire and Rothchild, (2010) asserted that education enables farmers to know how to seek for and apply information in day to day problem solving. The major occupation of majority of the respondents (75.0%) was farming. This constitutes an important reason why their primary means of livelihood should be given attention to enhance performance beyond subsistence.

It was further shown in Table 1 that majority of the respondents (77.5%) had farm size below 2.0 ha with mean size of 1.31ha implying that they were mostly small scale farmers. Majority of the respondents (55.0%) had over 20years farming experience and practiced crop farming (70.0%). Only 18.3% kept one form of farm record or the other. This implies that most farmers in the study area do not embark on their agricultural enterprises as business ventures that need to be supported with documentation. It could also be that the subsistence nature of farming does not produce any incentives for keeping farm record. Ergano and Nurteta (2006) found lack of farm record to be a limitation to livestock development.

Reasons for not keeping farm record

The various reasons advanced by the farmers for not keeping records are as presented in Table 2. The result shows that 39.8% do not know how to keep farm records. This could probably be due to the low level of education of these farmers, as 34.7% of the respondents thought it was not necessary as this would only make their job more complicated and demanding. About 9.2% felt they don't need it as it would make no difference to the way they have been operating while 14.3% expressed lack of interest because of the size of their enterprises

Table 1: Frequency distribution of the socio economic characteristics of respondents

Variables	Freq	%	Mean
Sex			
Female	55	45.83	
Male	65	54.17	
Age (range)			
30 & below	20	16.67	
31-40	29	24.17	
41-50	30	25.00	43.16
51-60	41	34.17	
Marital Status			
Married	81	67.50	
Single	29	24.17	
Divorced	10	8.33	
Family Size			
4 & below	28	23.3	
5-8	25	20.8	9.25
9 & above	67	55.8	
Education			
None	57	47.50	
Primary	15	12.50	
SSCE	26	21.67	
NCE/OND	13	10.83	
8HND/B.Sc	9	7.50	
Major occupation			
Teaching	11	9.17	
Trading	8	6.67	
Farming	90	75.00	
Artisan	11	9.17	
Farm Size (ha)			
1.0 & below	36	30.00	
1.1-2.0	57	47.50	1.31
2.1-3.0	22	18.33	
3.1-4.0	5	4.17	
Farming experience range (years)			
10 & below	16	13.33	
11-20	38	31.67	
>20	66	55.00	
Major agric enterprise			
Crop production	84	70.00	
Livestock	19	15.83	
Fisheries	5	4.17	
Processing	12	10.00	
Record keeping status			
Do not keep farm records	98	81.7	
Keep record	22	18.3	

Table 2: Reasons advanced by respondents for not keeping farm record

Reasons	Freq	Percent
Don't know how	39	39.8
Not necessary	34	34.7
Don't need it/not important to me	9	9.2
Small farms do not require records	14	14.3
Indifferent	2	2.0
Total	98	100.0

Reasons for keeping farm record

The major reasons advanced by the respondents for keeping farm record are presented in Table 3. About 50% kept farm record mainly to enable them remember important events. This could help them see trends in their enterprises, make strategic plans to improve as well as take informed management decisions. Only 13.6% of the respondents kept record to determine financial profitability of their enterprises. This could be an indication that agriculture is not practiced as a business by most farmers.

Table 3: Reasons given by respondents for keeping farm records

Reasons	Freq.	Percent
To determine profitability	3	13.6
To remember important events	11	50.0
For future references	4	18.2
Decision making	3	13.6
As obtain tax relief / benefit from agric development initiative	1	4.5
To while away time	-	-

Types of farm record kept

Types of farm records kept by the farmers and the degree to which they were kept are shown in Table 4. The findings show that finance/cash record ($\bar{x} = 2.59$) and total wage cost ($\bar{x} = 2.50$) were the most kept type of farm records while records on man-hour was the least kept (mean=1.59). Keeping accurate financial record which Fetuga, (2006) affirms is all a farmer needs, could be attributed to the need to meet the demands financial institutions or for the purpose other formal transactions. The records of wage cost, farm hands and input could be to articulate investment in order to determine profitability of

the enterprise. Record of man-hour which was not regularly kept exposes the inadequacy of the agri-business skill of the record keepers or they prefer to pay for the task performed/piece rate.

Table 4: Type of farm record kept by the respondents

	Mean	SD
Finance	2.59*	.503
Wage cost	2.50*	.512
Number of farm hands	2.45*	.510
Input	2.36*	.492
Inventory	2.27*	.456
Time Spent	2.18*	.395
Date of Work done	2.00*	.000
Manhour	1.59	.503

*Regularly kept (mean > 2.50)

Constraints to keeping of farm records by respondents

Constraints faced by farmers in keeping farm records are shown in Table 5. Record keepers were mostly constrained by time ($\bar{x}=2.41$), unavailability of materials ($\bar{x} =2.27$) and no motivation ($\bar{x} =2.27$). the constraints of the non record keepers were lack of formal education ($\bar{x}=2.38$), inadequate knowledge due to poor contact with extension ($\bar{x} =2.30$), unavailability of materials ($\bar{x}=2.26$), financial constraint unavailability of materials ($\bar{x} =2.21$) and small size of enterprise unavailability of materials ($\bar{x}=2.11$). Record keepers and non record keepers were generally constrained to keep farm records due to lack of formal education (mean= 2.32), unavailability of materials (mean= 2.26), inadequate extension contact ($\bar{x} = 2.14$) financial constraint ($\bar{x}=2.19$) and smallness of enterprise ($\bar{x}=2.03$). The constraints of the non record keepers were more in number and intensity. No motivation ($\bar{x}=2.27$) probably from extension service or close associates, time constraints ($\bar{x}=2.09$) posed more challenges to the record keepers. The findings could mean that the farmers were not sensitized on the importance of farm record to the performance of their enterprises by extension agents or enumerators. The finding is in agreement with (Obasi, 2003; Olayiwola, 2006)

that farmers often do not know the value of record keeping which is importance to the growth of the farm business. Alabi and Oguniyi (1990) attributed this to poor extension service on the subject matter.

Table 5: Constraints to keeping of farm records

Constraints	Farm record keeping categories					
	Record Keepers (n=22)		Non Record Keepers (n=98)		Total Sample n=120	
	Mean	SD	Mean	SD	Mean	SD
Unavailability of materials	2.27*	.417	2.26*	.758	2.26*	.587
Lack formal education	2.05*	.398	2.38*	.684	2.32*	.542
Don't know how to keep because of poor contact with extension service	1.45	.436	2.30*	.659	2.14*	.547
No motivation	2.27*	.508	1.49	.536	1.63	.522
Small size of farmland/enterprise	1.68	.438	2.11*	.477	2.03*	.457
Time constraint	2.41*	.393	1.59	.648	1.74	.520
Financial constraint	2.09*	.537	2.21*	.745	2.19*	.641

*Serious constraint (mean \geq 2.00)

Association between socio-economic characteristics and farm record keeping

The chi-square result is shown in Table 6 in which age ($\chi^2= 13.0$), education ($\chi^2= 32.1$; $p<0.05$), farm size ($\chi^2=7.7$; $p<0.05$), farming experience ($\chi^2= 7.2$; $p<0.05$), and major enterprise ($\chi^2= 16.1$; $p<0.05$) were significant to farm record keeping status. This implies that these were associated with record keeping status of the farmers. This could be explained with the fact that no formal education and small size of enterprise were constraints. The significance of major enterprise could be due to enterprises involving livestock and fisheries require some level of management records. This could be supported with Obasi (2003) which states that livestock farmers tend to keep records more than crop farmers.

Table 6. Chi-Square results

Variables	χ^2 Value	Df	Prob level
Sex	3.439	1	.521
Age (range)	13.013*	3	.008
Marital status	4.373	2	.642
Education	32.125*	6	.007
Family size range	2.084	2	.626
Major occupation	8.98*	3	.650
Farm size (ha)	7.758*	3	.016
Farming experience range	7.285*	2	.003
Major agric enterprise	16.185*	3	.000

*Significant ($p<0.05$)

Difference in socio-economic characteristics of farm record keepers and non record keepers

As shown in Table 7, the t-test analysis is an indication that record keepers and non record keepers differed significantly with respect to age ($t= 4.427$; $p=.003$) and farming experience ($t= 2.337$; $p=.009$). Record keepers had lower mean age (45.5years) and less mean years or farming experience (19.32years). Although record keepers had higher mean farm size (1.64ha), it was not significant at 5% level. This implies that farm record keepers were younger with less farming experience compared to the non record keepers.

Table 7: Difference between socio-economic characteristics of farm record keepers and non record keepers

Variable	No. of cases	Mean	Mean Difference	t-value	P	Decision
Age (years)						
Farm record keepers	22	45.50	12.66	4.427*	.003	Significant
Non Farm record keepers	98	58.16				
Farm size (ha)						
Farm record keepers	22	1.64	0.21	0.6439	.438	Not significant
Non Farm record keepers	98	1.43				
Farming Experience (years)						
Farm record keepers	22	19.32	6.41	2.337*	.009	Significant
Non Farm record keepers	98	25.73				

* Significant at 5% ($p \leq 0.05$)

CONCLUSION

Based on the results discussed, we can conclude that most of the farmers in the study area are old, without formal education, engage in crop farming, with small farm sizes and have long years of farming experience but do not keep any form of farm records. Poor knowledge of record keeping and not seeing the need for record keeping such records are major constraints while younger farmers with less farming experience kept farm records compared to older farmers. However, education, farm size and major enterprise engaged in by the farmers are significantly associated with farm record keeping.

RECOMMENDATIONS

To improve the status of record keeping in Etsako East Local Government Area, Edo State ADP sensitize the different classes of farmers through the extension services on the value and need for farm record keeping. There is also the need to motivate the farmers and build their capacity building. One way of doing this is by encouraging Edo State ADP, Etsako Local Government Council and relevant stakeholders to mount adult literacy programmes and agribusiness workshops for the farmers. Finally incentives should be put in place to encourage younger and more educated farmers to go into farming.

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