Information Needs of Oil Palm Farmers in Esan Central Local Government Area of Edo State, Nigeria

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ABSTRACT

The study assessed the information needs of oil palm farmers in Esan Central Local Government Area of Edo State, Nigeria. Through the use of structured interview schedule, 90 randomly selected oil palm farmers were surveyed. Findings showed that 73.3 percent of the respondents were males, 80 percent were between 31 and 50 years old, 73.3 percent were married, 70 percent had both primary and secondary education, 68.9 percent had farming experience of 11 years and above and 93.4 percent had between1 and 4 ha of farm size. Respondents obtained information mostly from radio ($\bar{x}$ = 2.60) and fellow farmers ($\bar{x}$ = 2.57). Perceived areas of information need include nursery practices ($\bar{x}$ =4.86), improved processing methods ($\bar{x}$ = 4.84), improved varieties ($\bar{x}$= 4.67) and fertilizer application ($\bar{x}$= 4.36). Perceived effects of lack of information on respondents' production were low income ($\bar{x}$ = 4.88), low yield ($\bar{x}$ = 4.86), continuous use of local technologies ($\bar{x}$ = 4.82), and non-awareness of improved processing methods ($\bar{x}$ = 4.67). Respondents' sex (χ^2= 8.489: P < 0.05) and educational background (χ^2= 10.460: P<0.05) had significant association with their perception of information needs. The need for new strategies for information dissemination, use of mass media and farmer training were recommended.

KEYWORDS: Information needs, oil palm farmers, Edo State.

INTRODUCTION

Information is one of the basic human needs after air, water, food and shelter and could be said to be one of the basic necessities of life (Stanley 1990). Also, Camble (1992) posited that man require information to be able to manipulate factors of production such as land, labour and capital resources into meaningful and productive use. Adedoyin (1990) noted that a steady flow of accurate, understandable and factual information links the scientist with farmers, in which for any true agricultural progress, farmers must know, understand, and act on this information. Therefore, how far people progress in whatever they are doing depends largely upon the availability and access to accurate and reliable information.

Information need identification is the first step in the development of any information activity and provides many things for the farmer. The analysis determines the information contents and how deficient farmers are in these contents and the sequence of tasks provides the sequence of information activity. Morris and Stilwell (2003) suggested that farmers are in the best position to determine whether any information is of greater value to meet their needs. Information is one of the most valuable resources in rural development (Morrow, et al.2002), and can assist small scale farmers take informed decisions and appropriate action (Harris, et al. 2001).

The Oil palm of commerce (*Elaeis guineensis)* is indigenous to West Africa (Hartley, 1988). The main oil palm growing area in Nigeria is the tropical rain forest and derived savannah portion. Domestic annual production of palm oil stands at about 785, 000 metric tonnes from about 2.5 million hectares of wild grove of small holdings and large estate plantations (Raw Materials Research and Development Council (RMRDC), 2004). However, the current annual demand is in excess of one million metric tonnes of palm oil and thus clearly shows a deficit. The supply gap, high returns' on investment and bright external trade opportunities in the oil palm business makes investment in the oil palm sector a safe and profitable venture (RMRDC, 2004). Areas of possible investment in the oil palm industry includes, seedling production, primary processing of fresh fruit bunches to produce palm oil, kernel oil, kernel cake, refining of the crude palm oil, production of Oleo chemicals and other downstream products like margarine, soaps and creams (RMRDC, 2004). However, oil palm production poses many challenges for small scale farmers (Kotschi, 2003) who require assistance to secure access to land, financial assistance and access to input and output markets (Viljoen et al. 2002). Aina (2004) also observed that the poor access to information and training by these categories of farmers was due to the initial policy formulation of Agricultural Development Programme (ADP) which was mainly directed at arable crops. Even when exposed to information, cursory observation revealed that most information disseminated by ADPs, Nigerian Institute for Oil palm Research (NIFOR) and other related institutions are usually given without needs identification and this has implication for capacity building. Similarly, according to Ozowa, (2004), "no one can categorically claim to know all the information needs of farmers especially in an information dependent sector like agriculture where there are new and rather complex problems facing farmers every day." Identifying information needs of oil palm farmers could stimulate research activities aimed at solving farmers' problems as well as assisting agencies involved in extension services to disseminate and design appropriate information programme for farmers. This is because competency in the various aspect of cultivation of the crop considering its huge potential could contribute to the poverty alleviation policy of government through improved income of rural farmers. This study therefore aimed to determine the information needs of oil palm farmers in Esan Central Local Government Area of Edo State with the ultimate objective of improving oil palm production as well as enhancing the standard of living of the farmers. Specific objectives were to:

- ascertain the socio – economic characteristics of the respondents;
- ascertain the sources of information for the respondents;
- identify the level of respondents' awareness of recommended technologies;
- identify the specific information needs of respondents;
- ascertain respondents' perception on the effect of lack of information on oil palm production and;
- determine the relationship between socio-economic characteristics of respondents and their information needs.

METHODOLOGY

The study was carried out in Esan Central Local Government Area of Edo State, Nigeria in 2006. The area lies between latitudes 6.636^{o}N – 6.909^{o}N of the equator and between longitudes 6.182^{o}E – 6.364^{o}E of the Greenwich meridian. It is situated in a rainforest zone with temperature ranging between 25^{o}C in the rainy season and 28^{o}C in the dry season. The major agricultural crops grown in the area are yam, tomatoes, rice, and Pineapple, Kola nut, Rubber, Cassava, Oranges and oil palm.

The target population for the study was the oil palm farmers in Esan Central local Government Area of Edo State. A two-stage sampling technique was used to select the respondents for the study. A simple random sampling technique was first used in the selection of six villages in the Local Government Area. Through the assistance of the ADP staff, contact farmers in each of the 6 villages were identified and a total of 90 respondents were randomly selected from this category of farmers.

A structured interview schedule was used for data collection. The instrument contained a 5–point Likert-type scale of Strongly agree (5), Agree (4), Undecided (3), Disagree (2), Strongly disagree (1) in determining respondents' perceived effects of lack of information on oil palm production and very important (5), important (4), undecided (3), not important (2), not very important (1), for respondents' perceived information needs. The instrument also contained a 3- point Likert-type scale of Always (3), Sometimes (2), Never (1) for determining respondents sources of information and Fully

aware (3), Partially aware (2), Not aware (1) for respondents' level of awareness of oil palm production technologies. The reliability of the instrument was determined using the test–retest method by administering it to 20 farmers from communities that were outside the 6 villages surveyed with a reliability coefficient of 0.85 obtained.

Data were analyzed using descriptive statistics such as frequency counts, percentages, means and standard deviation and chi-square was used to find the level of association between variables.

RESULTS AND DISCUSSION.

Socio-economic characteristics of respondents.

Table1 shows the socio-economic characteristics of the respondents. The result shows that majority (73.3%) of the respondents were males, which is an indication that majority of oil palm farmers are males. The result agrees with that of Hartley (1988) and Solomon (1995) that oil palm is a male crop. The reason for this could be that male farmers have easy access to land than their female counterparts (Oladeji and Oyesola, 2000). Result in Table 1 also indicates that majority of the respondents (80.0%) were between 31-50 years old with 73.3 percent of them been married. Majority of the respondents (70%) had both primary and secondary education. This result agrees with the view of Quisumbing and Meinzen – Dick (2001) "that many countries in sub-Saharan African have low level of education and that improving their education would probably increase agricultural productivity and reduce poverty." As regards years of experience, majority of the respondents (68.9%) had farming experience of 11 years and above. Most (93.4%) of the respondents had between1and 4 ha with about 1-2 plots. This indicates that oil palm farmers in the study area are small scale farmers, which is in line with the view of Erie (1996) that small farm holdings constitute more than 70% of all farming activities in Nigeria.

TABLE 1
Socio-economic characteristics of respondents (n=90)

Socio-economic characteristics	Frequencies	Percentages (%)
Sex		
Male	66	73.3
Female	24	26.7
Age		
21-30 years	4	4.4
31-40 years	42	46.7
41-50 years	30	33.3
50 years and above	14	15.6
Marital status		
Single	9	10.0
Married	66	73.3
Divorced	14	15.6
Widowed	1	1.1
Educational Background		
No Formal Education	13	14.4
Primary School	28	31.1
Secondary School	35	38.9
OND/NCE	14	15.6
Farming Experience		
6-10 years	28	31.1
11-15 years	29	32.2
16-20 years	28	31.1
21 years and above	5	5.6
Farm Size		
1-2	41	45.6
3-4 ha	43	47.8
5-6 ha	5	5.6
7 ha and above	1	1.1
No of Plots		
1-2	52	57.8
3-4	33	36.7
5 and above	5	5.6

Respondents' sources of information on oil palm production

Table 2 shows the respondents' sources of information on oil palm production. The result indicates that respondents obtained their information always from radio ($\bar{x}$ = 2.60) and fellow farmers ($\bar{x}$ = 2.57). The result on the use of radio as source of information agrees with the finding of Ajayi (2003) who found the use of radio as the most popular source of information in South-West Nigeria. Similarly, Antholt (1994) attributed the rise in farmers preferring fellow farmers' as a first hand information source to the apparent ineffectiveness in the public extension services in developing countries. The respondents also sometimes got information from the

extension agents of ADP ($\bar{x}$ = 2.12). It is surprising that the respondents were not getting information from the Nigerian Institute for Oil Palm Research ($\bar{x}$ = 1.32) which is the institute responsible for oil palm research in Nigeria and has an extension division.

TABLE 2

Respondents Sources of Information on Oil Palm Production.

Sources	Mean ($\bar{x}$)	Standard deviation
Radio	2.60	0.64
Fellow farmers (Contact farmers)	2.57	0.52
Television	2.13	0.74
Extension agent from (ADP)	2.12	0.98
Neighbor and friends	2.00	0.71
NGOs	1.52	0.86
Bulletin and posters	1.44	0.63
Extension agent from (NIFOR)	1.32	0.75

Likert- type scale: Always (3), Sometimes (2), Never (1).

Respondents' level of awareness of recommended oil palm technologies.

Table 3 shows the respondents' level of awareness of oil palm production technologies. Results indicate that respondents were fully aware of some oil palm practices such as use of chisel ($\bar{x}$ = 2.80), use of knife ($\bar{x}$ = 2.74), fertilizer application ($\bar{x}$ = 2.70), use of herbicides ($\bar{x}$ = 2.54) and were partially aware of nursery management ($\bar{x}$ = 1.52). However, the respondents were not aware of some important technologies such as mulching ($\bar{x}$ = 1.45) and improved processing methods ($\bar{x}$ = 1.37). According to Oladeji and Oyesola (2000), farmers may be aware of certain farm practices, but may not know how to carry out such operations if there is no further information on the practices.

TABLE 3

Respondents level of awareness of oil palm production technologies.

Recommended practice	Mean ($\bar{x}$)	Std. Deviation
Use of chisel for harvesting	2.80	0.73
Use of knife for harvesting	2.74	0.96
Fertilizer application	2.70	0.80
Use of herbicide	2.54	0.86
Nursery management	1.52	0.98
Mulching	1.45	0.74
Oil palm hybrid	1.42	0.94
Improved processing method	1.37	0.75
Chemical method on pest disease	1.34	0.89

Likert-type scale: Fully aware (3), Partially aware (2), Not aware (1).

Respondents' information needs on oil palm production and processing

Table 4 shows the information needs of the respondents as regards oil palm production and processing. The result shows that respondents perceived that information needs on nursery practices ($\bar{x}$ = 4.86), improved processing method ($\bar{x}$ = 4.84), improved varieties ($\bar{x}$ = 4.67) and fertilizer application ($\bar{x}$ = 4.36) as very important. Some of the results in Table 4 are expected because when farmers are not aware of certain technologies as reflected in Table 3, it is logical that they will definitely need information on such technologies so as to get better productivity from their farms. The result also shows that respondents perceived information needs on some technologies as important such as Chemical weed control ($\bar{x}$ = 3.82), improved cultural practices ($\bar{x}$ = 3.64), oil palm storage ($\bar{x}$ = 3.54) and palm oil marketing ($\bar{x}$ = 3.52).

TABLE 4
Respondents' perceived information needs on oil palm technologies.

Information needs	Mean ($\bar{x}$)	Std. deviation
Improved nursery practice	4.86	0.57
Improved oil palm processing	4..84	0.87
Improved varieties of oil palm	4.67	0.88
Fertilizer application	4.36	0.76
Chemical weed control	3.82	0.82
Improved oil palm cultural practices	3.64	0.98
Oil palm storage	3.54	0.89
Palm oil marketing	3.52	0.94
Oil palm harvesting	3.02	0.99
Credit facilities	2.02	0.92

TABLE 5
Respondents' perceived effects of lack of information on oil palm production.

Effects of lack of information	Mean ($\bar{x}$)	Std. deviation
Low income from palm produce	4.88	0.84
Low yield from farm	4.86	
Continuous use of local technologies	4..82	0.81
Non awareness of processing methods	4.67	0.68
Marketing of palm produce is affected	4.54	0.86
Getting credit from Banks is affected	1.82	0.87

Respondents' perception on effects of lack of information on their oil palm production

Table 5 shows the respondents' perception on the effect of lack of information on their oil palm production. The result shows that respondents strongly agreed with some of the statements that the effects of lack of information on their oil palm production were low income ($\bar{x}$ = 4.88), low yield ($\bar{x}$ = 4.86), continuous use of local technologies ($\bar{x}$ = 4.82), non awareness of improved processing methods ($\bar{x}$ = 4.67). They also agreed that lack of information will affect the marketing of palm produce ($\bar{x}$ = 4.54). They however disagreed that lack of information will affect their getting credit from banks. These results agreed with the views of Morris and Stilwell (2003) that farmers are in the best position to determine whether any information is of greater value to meet their needs.

Relationship between respondents' socio-economic characteristics and their information needs.

Table 6 shows the relationship between respondents' socio-economic characteristics and their information needs. The result shows that there was a significant association between the respondents' sex (χ^2 = 8.489: P < 0.05) and their information needs on oil palm production. The significant association of respondents' sex with their information needs might be due to the fact that more males are involved in oil palm production than the female farmers in the study area. Similarly, there was a significant association between the respondents' educational qualification (χ^2 =10.46: P<0.05) and their information needs. This result is not unexpected as people with good educational background are expected to be conversant with their information needs than those with low education. This view is supported by Yahaya (2003) who posited that people with better education take more advantage of new sources of information than those less educated.

TABLE 6
Relationship between respondents' socio-economic characteristics and information needs.

Socio-economic characteristics	Chi-square (χ^2)	Degree of freedom	P-level
Sex	8.489*	1	0.001
Educational qualification	10.460*	3	0.012
Marital status	1.796	3	0.850
Farming experience	5.088	3	0.165
Farm size	3.633	3	0.899
No of plots	2.711	2	0.258

* Significant at 5% level.

CONCLUSIONS AND RECOMMENDATIONS

Contrary to the view of Burton (2002) that most farmers in developing countries do not know what information they need, this study has established that farmers are aware of the importance of information in agricultural production as they were able to highlight the effect of lack of information on their production in this study. The study also established the vital areas of oil palm production that information is needed which include nursery practices, improved processing methods, improved varieties and fertilizer application. The study has also shown that the extension services has not been effective in disseminating information to oil palm farmers as farmers relied on radio and fellow farmers as sources of information which probably resulted in not being aware of major improved oil palm production and processing technologies.

Based on the findings, the following recommendations are made:

i. There is a need for the extension section of both NIFOR and the ADP to work together on how to disseminate adequate information to oil palm farmers as they do to crop farmers using extension methods such as field days, demonstrations and posters.
ii. There is a need to create more awareness on new technologies developed by NIFOR through more radio programmes aired at appropriate time and the use of leaflets produced both in English and local languages.
iii There is a need to conduct regular short training courses for farmers on oil palm production and processing.

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