



**INFORMATION NEEDS OF COCONUT FARMERS IN BADAGRY LOCAL  
GOVERNMENT AREA OF LAGOS STATE, NIGERIA**

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**ABSTRACT**

The study focused on information needs of coconut farmers in Lagos State, Nigeria. Simple random sampling technique was used to select 120 respondents for the study. Data were collected on the respondents' personal characteristics, sources of information available to the respondents, respondents' level of awareness of improved coconut production technologies, perceived effect of lack of information on coconut production and information needs of the respondents using a structured questionnaire. Data were analyzed using frequency counts, percentages, mean, standard deviation and Pearson Product Moment Correlation. Results showed that the mean age of the respondents was 45 years, 68.3% were male, 75.8% were married, 60% were Yoruba, while mean years of formal education was 9. The most utilized sources of information among the respondents were contact/fellow farmers  $\bar{x}=3.68$ . On the level of awareness of the respondents on coconut production technologies, majority of the respondents were fully aware of transplanting of seedlings  $\bar{x}=2.74$ . Perceived major effect of lack of information on coconut production was non-awareness of processing methods  $\bar{x}=3.91$ . The major information need of the respondents was on improved nursery practices  $\bar{x}=2.78$ . Correlation analysis showed there was significant relationship ( $r=0.36$ ;  $p=0.00$ ) between respondents' level of awareness of coconut production technologies and their information needs. The study concluded that among the information needs of the farmers, the major information need was on improved nursery practices. It is therefore recommended that extension agents intensify efforts in liaison with research institutes for information on improved nursery practices to meet farmers need in coconut production.

**Key Words:** Coconut, Farmers, Information, Needs and Production

**INTRODUCTION**

The present age has been rightly called an Information Age. Information has become the most important element for progress in society. Everyone needs information about everything even in day-to-day life. Information can be seen as a resource that can liberate man. In other words, "an informed mind is an enriched mind". Every rational being needs some information for his day-to-day existence and wellbeing. No society can grow beyond its level of information awareness, acquisition and appropriation (Helen, 2012). Information is an important tool used in the realization of any objective or goal set by individuals, thus it remains the lifeblood of any individual or organization. It is a valuable resource required in any society; thus, acquiring and using information are critical and important activities. In a similar vein, Ekoja (2010) said information is required for individual growth and development and by extension, societal growth and change. He further said it is needed for personal, social and/or work –related activities of individuals and for the development of societies and states.

Apata and Ogunrewo (2010) view information as power and an important working tool for the advancement of human and society. Societies that do not have access to the information they



need will sooner or later be left behind in terms of cultural and technological development. In agriculture environment, relevant and timely information helps farmer's community to take right decision to sustain growth of agricultural activities. Use of information in agriculture sector is enhancing farming productivity in a number of ways. Providing information on weather trends, best practice in farming, timely access to market information, helps farmer make correct decisions about what crops to plant and where to sell their product and buy inputs (Bachhavn, 2012).

There is no agreed definition of information needs as a phrase among information professionals (Nicholas and Herman, 2009). However, these authors provided a working definition or understanding that an information need is information that enhances research or improves a job; when an anomaly is seen, people want this corrected. Simply put by Nicholas and Herman (2009), an information need is the "need for information that individuals ought to have in order for them to perform their job effectively". It is often believed that information need may exists when there is a gap between the state of the present knowledge possessed by somebody and that which they need to deal with some particular issues or solve some problems or handle a present situation. These information needs are various, multi-dimensional, dynamic and not subject to generalization. Concluding a study of change agents and information provision in rural communities, Okeh (2002) pointed out that if information needs have to be met, they must be carefully identified by change agents who have to rely on accurate, accessible and useful sources or channels.

Coconut (*Cocos nucifera*) is a tropical monocotyledon plant which belongs to the order Aracaceae and the family Palmae. It is an important crop in the agrarian economy of many countries providing food, drink, shelter and raw materials for industries (Nair *et al.*, 2003). The coconut tree (*Cocos nucifera* L, also known as the Coconut palm) is grown in 92 countries of the tropics (FAOSTAT, 2008), where it is used for domestic use, as a source of food, oil production and for construction materials. The shells are used directly as fuel and in making household articles. Worldwide, about 83% of the coconuts are produced in Asia where Indonesia is the largest producer with 3.0 million ha that produce about 18.3 million tons of nuts, followed by Philippines that has an area of 3.5 million ha with production of 15.35 million tons of nuts. India has an area of 2.1 million ha that produce about 11.9 million tons of nuts (FAOSTAT, 2014).

Without adequate information, particularly to the rural farmers, there will be lack of awareness about new developments within the agricultural sector and this may lead to low productivity and consequently a danger to the survival of the nation. The inability of the rural farmers to seek for information may result in poor production output, food insecurity, inability to feed the nation. Lack of investment in information may also result in the creation of an information-poor society.

Furthermore, studies in the past have not addressed information needs of coconut producers. Rather efforts were made on other crops; information needs of oil palm farmers (Ajayi, *et al.*, 2010), information needs of rice farmers (Oladeji and Oyesola, 2000) and information needs of cassava farmers (Omoregbee and Banmeke, 2014). Also, Aina (2004) observed that the poor access to information and training by tree/permanent crop 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, Nigeria Institute for Oil palm Research (NIFOR) and other related institutions are usually given without needs identification and this has implication for capacity building (Ajayi *et al.*, 2010). Similarly, 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 coconut farmers could stimulate research activities aimed at solving farmers' problems as well assisting agencies involved in extension services to design and disseminate appropriate information to farmers.

Hence, the study determined the information needs of coconut farmers in the study area. The specific objectives examined included; socioeconomic characteristics of respondents, sources of information available to the respondents, respondents' level of awareness of improved coconut production technologies, respondents' perceived effect of lack of information on coconut production and the specific information needs of respondents. The study tested relationship between respondents' level of awareness on coconut production technologies and their information needs.

## **MATERIALS AND METHODS**

### **The Study Area**

The study was carried out in Lagos state, specifically in Badagry Local Government Area. Badagry is a coastal town in the state. It is situated between Metropolitan Lagos, and the border of the Republic of Benin at Seme. As of the preliminary 2006 census results, the municipality had a population of 241,093. (Federal Republic of Nigeria Official Gazette, 2007). The population of the study consisted of all the registered coconut farmers in Badagry Local Government. A Multi stage sampling procedure was used for this study. The first stage was the purposive selection of Badagry Local Government Area of Lagos State due to its peculiarity with coconut production. The second stage involved the random selection of ten (10) communities from Badagry Local Government Area. The third stage was the random selection of twelve (12) coconut farmers from each of the selected communities to make a total of 120 respondents. Data for the study were gathered through administration of structured questionnaire. Level of awareness of improved coconut production technologies among respondents was measured using a three (3) point scale. Data were analyzed using frequency counts, percentages, mean, standard deviation and Pearson Product Moment Correlation (PPMC) at 0.05 level of significance.

## **RESULTS AND DISCUSSION**

### **Socioeconomic Characteristics of the Respondents**

Result in Table 1 shows that the mean age of the respondents was 45 and this implies that majority of the respondents were agile and still very active. According to Umar *et al.* (2015) it was discovered that the age of individuals affects their mental attitude towards new ideas. Male respondents made up 68.3% of the of the farmers. This is however expected considering the hectic nature of agricultural activities (Fapojuwo *et al.*, 2021), the percentage of female respondents recorded points to the fact that women are now increasing their participation in perennial and labour-intensive crops. Majority (75.8%) of the respondents were married. This indicates that many of the respondents have family responsibilities and this should enable them seek information to increase production in order to meet demands. On the basis of religion, about half (48.3%) of the respondents were Christians and majority (60%) were Yoruba. Though close interaction revealed they are originally of the minority tribe (Ogu) but subsumed into Yoruba for recognition. The mean years of formal education among the respondents was nine (9).

**Table 1: Distribution of respondents' socioeconomic characteristics (n=120)**



Variables	Frequency	Percentage	$\bar{x}$	Std. d
<b>Age</b>			<b>45</b>	<b>10.4</b>
≤ 30	13	10.8		
31 – 40	30	25.0		
41 – 50	42	35.0		
≥ 51	35	29.2		
<b>Sex</b>				
Male	82	68.3		
Female	38	31.7		
<b>Marital status</b>				
Single	9	7.5		
Married	91	75.8		
Divorce	5	4.2		
Widowed	15	12.5		
<b>Religion</b>				
Christianity	58	48.3		
Islam	39	32.5		
Traditional	23	19.2		
<b>Tribe/Ethnic group</b>				
Hausa	11	9.2		
Igbo	37	30.8		
Yoruba	72	60.0		
<b>Education</b>			<b>9</b>	<b>3.7</b>
≤ 6.00	39	32.5		
7.00 - 12.00	64	53.3		
13.00+	17	14.2		
<b>Other forms of education</b>				
Islamic	23	19.1		
Vocational	55	45.8		
Nomadic	10	8.3		
Adult	32	26.7		
<b>Household size</b>			<b>6</b>	<b>2.0</b>
≤ 4.00	37	30.8		
5.00 - 7.00	65	54.2		
8.00+	18	15.0		
<b>Primary Occupation</b>				
Livestock	40	33.3		
Cropping	43	35.8		
Processing	11	9.2		
Artisan	11	9.2		
Trading	15	12.5		

Field survey, 2022.

More than half (53.3%) of the respondents had between 7 – 12 years of education. This suggests that there is a low level of education among the respondents in the study area. This result agrees with the view of Quisumbing and Meinzen – Dick (2001) who reported that many countries in sub-Saharan Africa have low level of education and that improving their education would probably increase agricultural productivity and reduce poverty.” About 45.8% of the respondents also claimed to be vocationally trained in one field or the other as an alternative or secondary source of income. The mean household size of the respondents was 6 persons per household. Cropping (35.8%) and rearing of livestock (33.3%) were the dominant primary occupation in the study area.

### **Sources of information available to Respondents.**

Access to information is one the most valuable resources in agricultural development (Adekoya, 2016). The result in Table 2 shows how the respondents got their information on coconut production technologies. The mean score shows that respondents accessed information on coconut production technology mostly through fellow farmers (contact farmers) ( $\bar{x}$ =3.68), neighbours and friends ( $\bar{x}$ =3.37), radio ( $\bar{x}$ =3.31) and social groups ( $\bar{x}$ =3.19). The most popular source of information among respondents was fellow farmers. The reliance on fellow farmers for information could be as a result of proximity, costlessness of such source and easy access to fellow farmers. The implication is that an approach that can be used to create awareness of a technology as well as enable technology dissemination is to use model farmers and the communication can trickle down to the rest of the farming households.

**Table 2: Sources of information available to the respondents (n=120)**

S/N	Sources of information	Always	Occasional ly	Rarely	Never	$\bar{x}$	SD	Rank
1	Radio	62(51.7)	42(35.0)	11(9.2)	5(4.1)	3.31	0.84	3 <sup>rd</sup>
2	Fellow farmers (Contact farmers)	87(72.5)	29(24.2)	4(3.3)	-	3.68	0.55	1 <sup>st</sup>
3	Television	36(30)	43(35.8)	29(24.2)	12(10)	2.87	0.95	8 <sup>th</sup>
4	Extension agents	45(37.5)	48(40)	22(18.3)	5(4.2)	3.12	0.84	5 <sup>th</sup>
5	Neighbours and Friends	74(61.7)	26(21.7)	14(11.6)	6(5)	3.37	0.92	2 <sup>nd</sup>
6	Non-Governmental Organizations	26(21.7)	66(55)	24(20)	4(3.3)	2.93	0.75	7 <sup>th</sup>
7	Bulletin/Magazines/Posters	15(12.5)	46(38.3)	35(29.2)	24(20)	2.44	0.94	10 <sup>th</sup>
8	Social groups	61(50.8)	27(22.5)	30(25)	2(1.7)	3.19	0.90	4 <sup>th</sup>
9	Research institutes	33(27.5)	41(34.2)	32(26.6)	14(11.7)	2.74	0.98	9 <sup>th</sup>
10	Informal training through workshops/seminars	51(42.5)	41(34.2)	22(18.3)	6(5)	3.10	0.91	6 <sup>th</sup>

**Source:** Field survey, 2022

### **Respondents' level of awareness of improved coconut production technologies**

Result in Table 3 presents the respondents' level of awareness of improved coconut production technologies. From the result, respondents demonstrated awareness of all the technologies at different rating but in increasing order of mean score, awareness was more on transplanting of seedling ( $\bar{x}$ =2.74), mulching of seedlings ( $\bar{x}$ =2.68), hybrid seed selection ( $\bar{x}$ =2.63), application of manure ( $\bar{x}$ =2.57) and safe transportation to market ( $\bar{x}$ =2.63). This implies that respondents desire for knowledge would increase on seedling transplanting, mulching of seedlings, hybrid seed selection, application of manure and transportation. 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. Generally, result in



Table 4 reveals that level of awareness of improved coconut production technologies was high among majority (65.8%) of the respondents while 34.2% of them had low level of awareness.

**Table 3: Respondents' level of awareness on coconut production technologies**

S/N	Recommended practices(n=120)	Fully aware	Partially aware	Not aware	$\bar{x}$	Std. d
1	Hybrid seed selection	84(70)	27(22.5)	9(7.5)	2.63	0.61
2	Nursery establishment	55(45.8)	57(47.5)	8(6.7)	2.41	0.61
3	Nursery management	89(74.2)	27(22.5)	4(3.6)	2.49	0.55
4	Transplanting of seedlings	93(77.5)	25(20.8)	2(1.7)	2.74	0.48
5	Mapping and planting into the field	71(59.1)	38(31.7)	11(9.2)	2.51	0.64
6	Mulching of seedlings	76(63.3)	27(22.5)	17(14.2)	2.68	0.73
7	Application of manure	80(66.7)	28(23.3)	12(10)	2.57	0.67
8	Use of organic herbicides	68(56.7)	27(22.5)	25(20.8)	2.36	0.81
9	Regular pest and disease control	71(59.2)	32(26.7)	17(14.1)	2.45	0.73
10	Pruning	72(60)	38(31.7)	10(8.3)	2.51	0.64
11	Intercropping	74(61.7)	32(26.7)	14(11.6)	2.49	0.70
12	Selective harvesting	74(61.7)	35(29.1)	11(9.2)	2.53	0.64
13	Safe transportation to market	80(66.7)	24(20)	16(13.3)	2.56	0.70

**Source:** Field survey, 2022

**Table 4: Categorization of respondents' level of awareness of coconut production technologies**

Level	Range	Frequency	Percent	Minimum	Maximum	Mean	Std. d.
Low	0 – 19.92	41	34.2	0.00	26.0	19.93	3.68
High	19.93 - 26	79	65.8				
<b>Total</b>		<b>120</b>	<b>100.0</b>				

**Source:** Field survey, 2022

### **Respondents' perceived effects of lack of information on coconut production**

Result in Table 5 presents the respondents' perceived effects of lack of information on coconut production. For ease of reporting, strongly agreed and agreed response options were merged to form "agreed" while strongly disagreed and disagreed response options were merged to form "disagreed". Majority (64.2%) of the respondents agreed that lack of information on coconut production could bring about low income, low yield from farm was part of the effect of lack of information on coconut production as agreed by 65% of the farmers in the study area, while many (73.4%) of the respondents agreed lack information could lead to continuous use of local technology in coconut production. Most (80%) of the respondents agreed that non-awareness of processing methods was one of the effects of lack of information on coconut production. Low pricing due to glut in the market, problem of inputs and credit facilities and non-awareness of improved coconut varieties were also part of the perceived effects of lack of information on coconut production as agreed to by 61.7%, 70.8% and 67.5% of the respondents in the study area. Information is a vital resource that drives any human process including agriculture. It should however be noted that farmers are in the best position to determine whether any information is of greater value to meet their needs (Morris and Stilwell, 2003).

**Table 5: Respondents' Perceived effects of lack of information on coconut production**

S/N	Effects on lack of information (n=120)	SA	A	U	D	SD	$\bar{x}$	Std. d
1	Low income from coconut production	26(21.7)	51(42.5)	22(18.3)	14(11.7)	7(5.8)	3.58	1.13
2	Low yield from farm	23(19.2)	55(45.8)	15(12.5)	18(15)	9(7.5)	3.51	1.18
3	Continuous use of local technologies	35(29.2)	53(44.2)	10(8.3)	14(11.7)	8(6.6)	3.73	1.23
4	Non-awareness of processing methods	27(22.5)	69(57.5)	13(10.8)	9(7.5)	2(1.7)	3.91	0.91
5	Low pricing due to glut in the market	24(20)	50(41.7)	30(25)	13(10.8)	3(2.5)	3.68	0.97
6	Problem of inputs and credit facilities	27(22.5)	58(48.3)	21(17.5)	2(1.7)	12(10)	3.75	1.10
7	Non-awareness of improved coconut varieties	38(31.7)	43(35.8)	17(14.2)	19(15.8)	3(2.5)	3.79	1.11
8	Low contribution to GDP	3(2.5)	42(35)	37(30.8)	15(12.5)	23(19.2)	2.87	1.17

Source: Field survey, 2022

### Information needs of the respondents

Result on information needs of coconut farmers as shown in Table 6 reveals that respondents needed information on improved nursery practices ( $\bar{x}=2.78$ ), improved varieties of coconut ( $\bar{x}=2.62$ ), handling and processing ( $\bar{x}=2.62$ ) and marketing ( $\bar{x}=2.68$ ). This implies that there is dearth of information among the farmers on improved nursery practices, improved varieties of coconut, handling and processing, and marketing in the study area.

Categorization of respondents based on their information needs, as reported in Table 6, it can be observed that 57.7% of the respondents were in high need for coconut production information, while 42.3% were in low need. There is high need for information in coconut production operations in the study area. This indicates that the respondents in the study area were not operating efficiently and optimally in coconut farming practices.

**Table 6: Information Needs of the Respondents (n=120)**

S/N	Information needs	Highly needed	Occasionally needed	Not needed	$\bar{x}$	Std. d
1	Improved Nursery Practices	97(80.8)	18(15)	5(4.2)	2.78*	0.50
2	Credit facilities	72(60)	27(22.5)	21(17.5)	2.43	0.78
3	Weed control	52(43.3)	45(37.5)	23(19.2)	2.28	0.73
4	Improved varieties of coconut	85(70.8)	23(19.2)	12(10)	2.62*	0.66
5	Fertilizer application	62(51.7)	37(30.8)	21(17.5)	2.36	0.75
6	Improved coconut cultural practices	59(49.2)	41(34.2)	20(16.6)	2.34	0.74
7	Handling and processing	83(69.2)	30(25)	7(5.8)	2.62*	0.60
8	Marketing	88(73.3)	21(17.5)	11(9.2)	2.68*	0.62

Field survey, 2022. Mean  $\geq 2.51$  = Information needed

**Table 7: Categorization of respondents based on level of information needs**

Level	Range	Freq.	Percent	Minimum	Maximum	Mean	Std. d.
Low	0 – 14.10	51	42.3	0.00	16	14.11	1.89
High	14.11 – 16	69	57.7				

<b>Total</b>	<b>120</b>	<b>100.0</b>
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**Source:** Field survey, 2022

**Relationship between respondents' level of awareness on coconut production technologies and information needs.**

Result of test of correlation in Table 8 reveals that there was a positive and significant ( $p=0.00$ ) relationship between the respondents' level of awareness on coconut production technologies ( $r=0.36$ ) and their information needs. This implies that the more awareness respondents have on coconut production technologies; the more information they would need.

**Table 8: Test of relationship between respondents' level of awareness on coconut production technologies and information needs using PPMC (n=120)**

<b>Variables</b>	<b>R</b>	<b>p-Value</b>	<b>Decision</b>
Relationship between respondents' level of awareness of coconut production technologies and their information needs	0.36	0.00	S

**Source:** Field survey (2022)      p-Value is significant at 0.05 level (2 tailed)

## CONCLUSION AND RECOMMENDATIONS

The study concluded that respondents' information needs were on improved nursery practices, improved varieties of coconut, handling and processing and marketing of coconut. It is therefore recommended that extension agents intensify efforts in liaison with research institutes for information on the areas of needs identified by the farmers. Government should resuscitate commodity boards in order to address marketing problems in agriculture.

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