

**Assessment of the Information Needs and Information Seeking Behaviour
of Oil Palm Farmers in Edo State**

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Abstract

The research assessed the information needs and information seeking behaviours of oil palm farmers in Edo State. Specifically, it identified the information needs of oil palm farmers in Edo State; the sources of information they commonly used; and the patterns and behaviours associated with how they seek agricultural information. The research adopted the descriptive survey design. The instrument for data collection was the questionnaire, and data were analysed using simple percentages and tables. The demographics showed that the farmers were fairly distributed across gender, age, and farming experience. The research findings indicated that the specific information needs for pest and disease identification and control, pricing and market information, value addition and procession of oil palm products, government policies and subsidies, soil fertility and land preparation, weather forecasts and climate-related updates, access to agricultural loans credit facilities, improved seedlings and planting techniques, and harvest and post-harvest techniques. The sources they consult to need these information needs are agricultural extension officers, and various informal sources of information. And in seeking information, the farers sought for pre-planting information, information at harvest, information when there was problem, information when there was poor yield, when there was need for high yield, and information on pest and disease control. The research concluded that the farmers are reactive rather than proactive in their information seeking; and recommended that efforts be taken to provide information on diverse topic for farmers, enhance their digital literacy skills, and be proactive in seeking information.

Keywords: Information needs, Information seeking behaviour, Information, Oil palm farmers, Oil palm,

Introduction

Agriculture is a cornerstone of Nigeria's economy, employing over 70% of the rural population and contributing significantly to food security and national development (National Bureau of Statistics, NBS, 2021). Among its key subsectors, oil palm cultivation remains a vital economic activity, particularly in Ed State, where suitable ecological conditions support commercial-scale production. Despite its prominence, Olowu and Oyedokun (2020) noted that the productivity of oil palm farming in Nigeria remains low due to outdated practices, limited access to agricultural inputs, and insufficient knowledge of emerging technologies. Access to accurate, timely, and context-specific information is crucial to improving oil palm productivity and ensuring sustainability; and as Agbaje, et. al (2022) noted, agricultural information empowers farmers to make informed decisions regarding cultivation methods, pest control and disease management, market access, weather predictions, and financial planning.

To ensure sustainability and scalability of oil palm farms, the information needs of these farmers must be met in record time, and accurately too. Case, et. al (2016) posited that information needs are the gaps in knowledge required to address specific tasks or challenges, while information seeking behaviour involves the processes and actions individuals undertake to identify and acquire the needed information. Understanding these needs and behaviours among oil palm farmers is essential for developing targeted agricultural support systems, including extension services, information platforms, and policy intervention. Emeziem and Ugwu (2023), and Okwu, et. al (2021) suggested that rural farmers often depend on informal sources such as fellow farmers, radio, and extension workers for information due to barriers such as digital illiteracy, lack of infrastructure, and limited access to formal sources like the library or the internet. In Edo State, these challenges may further complicate efforts aimed at disseminating essential information for oil palm development, thereby necessitating a focused investigation into the specific information needs and seeking behaviours of this group of farmers.

Objectives of the Study

The aim of the study is to assess the information needs and information seeking behaviour of oil palm farmers in Edo State. The specific objectives are:

- i. To identify the specific information needs of oil palm farmers in Edo State;
- ii. To examine the sources of information commonly used by oil palm farmers in Edo State;
- iii. To investigate the patterns and behaviours associated with how oil palm farmers seek agricultural information.

Literature Review

Conceptual Framework

The conceptual framework for this study is informed by Wilson's (1996) Model of Information Behaviour, which provides a comprehensive view of how individuals identify a need for information, seek it, and use it. This model is adapted here to contextualize the experiences of oil palm farmers in Edo State. This conceptual framework emphasizes that:

- Information needs are influenced by context (environmental, psychological, and social),
- Behaviour is shaped by motivators and barriers,
- Use of information depends on relevance, accessibility, and usability.

Table 1: Key Concepts and Relationships

| Concept | Description |
|--------------------------------------|--|
| Information Needs | Gaps in knowledge relating to farming practices, pests, weather, market prices, and government support. |
| Information Sources | Channels used by farmers – extension workers, radio, fellow farmers, digital platforms, etc. |
| Information-Seeking Behaviour | Actions farmers take to identify and access needed information – formal and informal strategies. |
| Barriers to Access | Challenges such as poor network, low literacy, cost, trust issues, and limited institutional support. |
| Information Use | How farmers apply the acquired information to make decisions and improve farming outcomes. |
| Support Systems | Role of libraries, extension services, NGOs, and government in providing or enhancing access to information. |

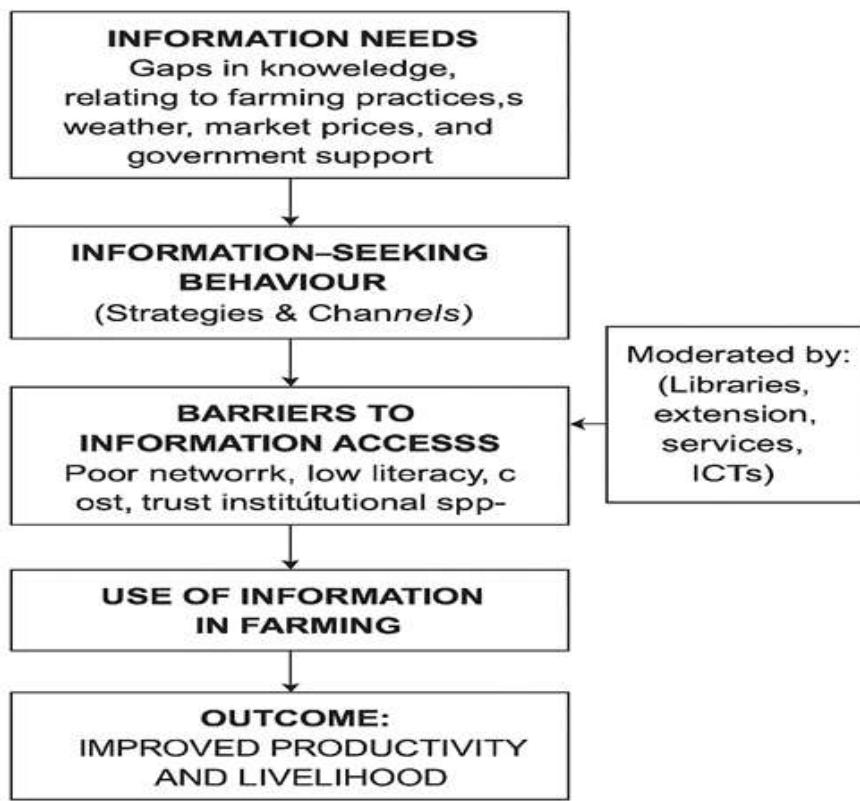


Figure 1: Information Seeking Behaviour of Oil Palm Farmers in Edo State

Empirical Reviews

There is a critical need for timely and relevant information for improved productivity and sustainable livelihoods in oil palm production and the agricultural sector in general. Aina (2004) noted that information needs and seeking behaviour among farmers play a pivotal role in shaping agricultural decisions and practices. Obuh and Chima-James (2022) observed that oil palm farmers in Delta State frequently expressed a need for technical information on pest management and post-harvest handling. Nnadozie and Nnadozie also found that in Anambra State, farmers prioritized information on market and economic policy.

Babalola and Anifowose (2020) reported that traditional sources of information such as extension officers, fellow farmers, cooperative societies and radio broadcasts are still predominant. For Aderibigbe and Ajayi (2019), digital platforms like WhatsApp groups and SMS services are gaining traction, especially among younger or more educated farmers. However,

Eze and Nwachukwu (2023) observed that oil palm farmers from different States in Nigeria displayed proactive information seeking behaviour when the perceived benefits such as higher yield or access to government subsidies was high; further revealing that farmers often rely on peer networks and information consultations when formal information systems are unavailable or inaccessible.

Despite the awareness of the need for agricultural information, significant barriers persist. Research findings show that these challenges include limited digital and agricultural literacy, poor infrastructure (notably electricity and internet access), language differences, and lack of trust in formal institutions (Nhadozie and Nhadozie, 2021; Babalola and Anifowose, 2020). Aderibigbe and Ajayi (2019) noted that many farmers still prefer interpersonal communication because it is more reliable and accessible, regardless of its limitations in accuracy and depth. Empirical studies unanimously indicate that improved access to timely and relevant information significantly enhances farm productivity, decision-making, and financial planning among oil palm farmers. Eze and Nwachukwu (2023) linked effective information use to better planting decisions and income optimization. Strengthening the integration between information services providers such as librarians, extension agencies and ICT platforms, and the farming communities is essential for empowering oil palm farmers in Nigeria. The strategic role of information in agricultural transformation cannot be overstated. Eze and Nwachukwu (2023) averred that when farmers are equipped with accurate, timely, and context-specific knowledge, the result is improved productivity, risk mitigation, and market competitiveness; reporting that farmers who actively used information obtained through extension agents and digital tools experienced up to a 20% increase in yield within two forming sessions.

The literature reviewed consistently affirms that oil palm farmers in Nigeria are information-dependent actors whose behaviours and productivity are significantly shaped by the availability, accessibility, and usability of agricultural information. Moreover, the integration of libraries, ICT-based agricultural services, and rural extension systems offers promising avenues for innovation in agricultural information delivery. The empirical evidence underscores the need for an integrated approach to agricultural information dissemination that combines traditional and digital channels, tailors content to local contexts, and addresses infrastructural

and educational barriers. Enhancing farmers' access to relevant information will not only improve oil palm yields but also contribute to broader goals of rural development and food security in Nigeria.

Methodology

The research adopted the descriptive survey research design; the population of the study comprises of all oil palm farmers who have outreach services rendered to them by the Nigerian Institute for Oil Palm Research (NIFOR), Benin City. The total population was difficult to determine, but the population adopted for this study were the farmers who were readily available and willing to respond to the research questions. The instrument for data collection was the questionnaire, and a period of 2 weeks was used for the data collection. The research instrument was distributed through the help of extension workers in NIFOR. Data collected were analysed using simple percentages, and tables

PRESENTATION OF RESULTS AND DISCUSSION OF FINDINGS

Table 2: Demographics

| Gender | Frequency | Percentage |
|------------------------------------|------------------|-------------------|
| Females | 37 | 54 |
| Males | 31 | 46 |
| Total | 68 | 100% |
| Age | | |
| Under 26 | 5 | 7 |
| 26 – 35 | 8 | 12 |
| 36 – 45 | 13 | 19 |
| 46 – 55 | 23 | 34 |
| Above 55 | 19 | 28 |
| Total | 68 | 100% |
| Experience in Oil Palm Farm | | |
| Less than 6 years | 22 | 33 |
| 6 – 10 years | 6 | 9 |
| 11 – 15 years | 7 | 10 |
| 16 – 20 years | 28 | 41 |
| Above 20 years | 5 | 7 |
| Total | 68 | 100% |

From the demographics, we see that the farmers were evenly distributed across gender, with 37 (54%) as females and 31 (46%) as males. For their age distribution, 5 (7%) of the farmers are below 26 years of age, 8 (12%) are between the ages of 26 and 35 years, 13 (19%) of the farmers are between the ages of 36 to 45 years, 23 (34%) of the farmers are between the ages of 46 to 55 years, and 19 (28%) are above 55 years of age. This showed that majority of the farmers are those who are already retired or approaching retirement, as 42 (62%) of the farmers are at least 46 years old. However, it is seen that some younger respondents are venturing into agriculture at a tender age, showing that Nigerians are now embracing agriculture in a bid to be self-sustaining.

On their experiences on the oil palm farming jobs, 22 (33%) of the respondents have less than 6 years' experience, 6 (9%) have an experience of between 6 to 10 year, 7 (10%) have an experience of between 11 to 15 years, 28 (41%) have an experience of between 16 to 20 years, and 5 (7%) of the farmers have been in the business for a period above 20 years. This showed that the respondents are still actively involved in the farming of oil palm, as majority of them are just only venturing into the business, with 35 (52%) of the respondents having at most 15 years' experience in the business of farming oil palms.

Table 3: Specific information needs of oil palm farmers in Edo State

| I need information on ... | Yes | % | No | % |
|--|-----|-----|----|----|
| Improved seedlings and planting techniques | 52 | 76 | 14 | 24 |
| Soil fertility and land preparation | 62 | 91 | 06 | 9 |
| Fertilizer types and application methods | 25 | 37 | 41 | 63 |
| Pest and disease identification and control | 68 | 100 | 00 | 00 |
| Harvest and post-harvest techniques | 39 | 57 | 29 | 43 |
| Pricing and market information | 68 | 100 | 00 | 00 |
| Value addition and procession of oil palm products | 68 | 100 | 00 | 00 |
| Weather forecasts and climate-related updates | 61 | 90 | 07 | 10 |
| Access to agricultural loans credit facilities | 53 | 78 | 15 | 22 |
| Government policies and subsidies | 63 | 93 | 05 | 07 |

Table 3 shows the specific information needs of oil palm farmers in Edo State. These farmers need information for pest and disease identification and control (100%), for pricing and market information (100%), value addition and procession of oil palm products (100%), they also need information on government policies and subsidies (93%), soil fertility and land preparation

(91%), weather forecasts and climate-related updates (90%), access to agricultural loans credit facilities (78%), improved seedlings and planting techniques (76%), harvest and post-harvest techniques (57%); but rarely need information on fertilizer types and application methods, as only 37% of the farmers sought information on fertilizer.

These findings are in tandem with those of Omenesa, et. al (2022), that oil palm farmers were found to priorities information related to pest and disease control, best agronomic practices, climate change adaptation strategies, market prices, and post-harvest technologies. Eze, et. al (2021) also reported that inadequate pest control knowledge among oil palm farmers directly correlates with reduced productivity. Adereti and Olasunkanmi (2022) also found that access to improved agricultural technologies significantly enhanced smallholder farmers' efficiency. These findings also support Adebayo (2021), who noted that access to timely and accurate market information is crucial for empowering farmers and minimizing farmers' exploitation by intermediaries and middlemen.

Ogbanga, et. al (2022) also noted that farmers expressed the needs for timely weather forecast and climate-smart agricultural practices to mitigate risks, as climate resilience strategies is of paramount importance in Nigerian agriculture. For Adio, et. al (2023), access to financial and institutional information for loan services determines farmers' ability to scale operations and adopt innovation, as lack of knowledge about how to access agricultural loans and extension services creates an information gap on farmers.

Table 4: Sources of information used by oil palm farmers in Edo State

| Sources of information I use are ... | Yes | % | No | % |
|---|-----|-----|----|----|
| Agricultural extension officers | 68 | 100 | 00 | 00 |
| Fellow farmers / peer groups | 43 | 63 | 25 | 37 |
| Farmers' cooperatives / associations | 58 | 85 | 10 | 15 |
| Local radio stations | 13 | 19 | 55 | 81 |
| Television programmes | 15 | 22 | 53 | 78 |
| Mobile phones (SMS, calls, apps) | 08 | 12 | 60 | 88 |
| Internet (search engines, agricultural websites, YouTube) | 33 | 49 | 35 | 51 |
| Social media (WhatsApp, Facebook, etc) | 21 | 31 | 47 | 69 |
| Community meeting / town halls | 48 | 71 | 20 | 29 |
| Agricultural input dealers (eg agro shops) | 51 | 75 | 17 | 25 |
| Printed materials (newspaper, leaflets, flyers) | 61 | 90 | 07 | 10 |

Table 4 presents the sources of information used by oil palm farmers in Edo State. All the respondents (100%) agree to consulting with agricultural extension officers, 90% of the respondents seek information for printed materials (newspaper, leaflets, flyers), 85% of them seek information by consulting with their farmers' cooperatives / associations, 75% of the farmers seek information from agricultural input dealers (eg agro shops), 71% of the farmers seek information on oil palm from community meeting / town halls, and 63% of the farmers seek information from their fellow farmers / peer groups. However, the farmers of oil palm in Edo State rarely seek information from the Internet (search engines, agricultural websites, YouTube) (49%), social media (31%), television programmes (22%), local radio stations (19%), and mobile phones (SMS, calls, apps) (12%).

These findings corroborate those of Omenesa, et. al (2022), which emphasized that extension officers are perceived as credible sources of information due to their expertise and localized knowledge. Adekunle and Agbaje (2022) also reported that farmers often exchange knowledge during cooperative meetings, market interaction, and informal gatherings, that farmer-to-farmer networks are vital channels for disseminating indigenous and experiential knowledge. The findings also agree with Owolabi, et. al (2022) who noted that farmers often receive information from agro-dealers who provide advice on fertilizer use and pest control alongside product sales, but such information may be biased for commercial interests. The research findings also agree with Oladele (2022) who observed that internet use and library resources were found to be minimal among oil palm farmers; attributing it primarily to limited digital literacy, high data cost and poor internet penetration in rural areas; thus emphasizing that without deliberate digital inclusion efforts, rural farmers will be marginalized in access online agricultural resources.

However, the findings are in variance with Eze, et.al (2021) who highlighted the continuing importance of radio in rural agricultural communication, particularly where literacy levels are low. The research findings also negate those of Okeke, et. al (2023), who noted the growing role of mobile technology in enhancing information flow among rural farmers in Nigeria.

Table 5: Patterns and behaviours of oil palm farmers who seek agricultural information in Edo State

| Pattern and behaviours of oil palm farmers | Yes | % | No | % |
|--|-----|-----|----|----|
| I seek pre-planting information | 68 | 100 | 00 | 00 |
| I seek planting information | 59 | 87 | 09 | 13 |
| I seek post-planting information | 53 | 78 | 15 | 22 |
| I seek information at harvest | 68 | 100 | 00 | 00 |
| I seek information when there is problem | 68 | 100 | 00 | 00 |
| Poor yield make me seek information | 68 | 100 | 00 | 00 |
| Need for high yield make me seek information | 68 | 100 | 00 | 00 |
| I seek information on pest and disease control | 68 | 100 | 00 | 00 |
| I seek information based on government policy update | 52 | 76 | 14 | 24 |
| I seek information because of market prices | 66 | 97 | 02 | 03 |
| I seek information based on climate conditions | 63 | 93 | 05 | 07 |

Table 5 focused on patterns and behaviours of oil palm farmers who seek agricultural information. In seeking information, 100% of these oil palm farmers in Edo State sought for pre-planting information, information at harvest, information when there was problem, information when there was poor yield, information when there was need for high yield, and information on pest and disease control; 97% of the respondents seek information because of market prices, 93% seek information based on climate conditions, 87% of them seek planting information, 78% of the respondents seek post-planting information, and 76% of them seek information based on government policy update.

These findings align with those of Eze, et. al (2021), who noted that rural farmers often seek information primarily to solve immediate farming challenges rather than for general knowledge, as the information-seeking behaviour of oil palm farmers is predominantly need-driven and problem-focused. Adekunle and Agbaje (2022) also stressed the importance of social networks in rural information dissemination, as farmers prefer face-to-face interactions with agricultural extension officers, fellow farmers, and community leaders, largely due to immediate feedback, trustworthiness, and cultural familiarity there interactions provide. Olorunfemi, et. al (2023) noted that most farmers typically demonstrate a reactive information seeking pattern, as they seek information when confronted with specific problems such as pest outbreaks, or market price fluctuations, because proactive or continuous information seeking is less common. Okeke also observed that age and education significantly influence information

seeking behaviours; and Oladele (2022) observed selective information acceptance behaviour, who often cross-verify new information with trusted peers or extension agents before adopting them.

Conclusion

This study assessed the information needs and information seeking behaviour of oil palm farmers in Edo State, and revealed critical insight into the patterns, and sources associated with agricultural information acquisition among this very important farming population. The findings indicated that oil palm farmers have diverse information needs, primarily related to pest and disease management, improved farming practices, market access, weather conditions, and access to loan facilities. These information needs are vital to enhancing productivity, improved livelihoods, and sustaining oil palm farming as a significant economic activity in Edo State and neighbouring States.

The study further demonstrated that oil palm farmers predominantly rely on interpersonal sources of information that are trusted allies; these include agricultural extension workers, and fellow farmers. Moreover, the farmers' information seeking behaviour is largely reactive than proactive, and it is motivated by specific problems that they encounter during their farming activities.

Recommendations

Based on the findings and conclusion of this study, the following recommendations are proposed to enhance the information access, and seeking behaviour of oil palm farmers in Edo State, and the overall agricultural productivity of oil palm farming in Edo State.

- i. Edo State ministry of agriculture, in collaboration with Edo State ministry of information, should employ the services of agricultural extension workers to provide a variety of information that will be made readily available for oil palm farmers to access in different formats, as their information needs span across diverse areas of needs.
- ii. Edo State ministry of agriculture should collaborating with the co-coordinating ministry for information and communications technologies to provide digital literacy trainings for



oil palm farmers, in order to be able to harness the rich digital information contents on oil palm farming.

- iii. Edo State ministry of agriculture in collaboration with the State Library Board should educate oil palm farmers on the need for continues and life-long learning habits, so as to become proactive in their information seeking behaviours, rather than being reactive information seekers.

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