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MARKET ANALYSIS AND CONSUMER BEHAVIOR FOR ORANGE FLESH SWEET POTATO IN IKWO LGA EBONYI STATE, NIGERIA

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Abstract
Limited understanding of market opportunities and consumer preferences for orange flesh sweet potato (OFSP) hinders its wider adoption and potential nutritional benefits in rural communities. This study aims to assess the market analysis and consumer behavior towards orange flesh sweet potato (OFSP) in Ikwo LGA, Ebonyi State, Nigeria. A purposive and random sampling was used to select fifty (50) participants for the study. A structured questionnaire was used to interview the farmers. The data collected were analyzed using descriptive and inferential statistics. The results showed that most of the farmers fell between the ages of 36–55 years, most of the farmers (52%) were males, 38% of the farmers had farming experience between 6-10 years, and most of the farmers (46%) had at least a secondary education. Also, 96% of the consumers are aware of orange flesh sweet potato, high positive perceptions (54.0%) as primarily sweet, buttery (36.0%) or earthy (10.0%). Similarly, its antioxidant content, versatile and nutritious rich option, low-calorie, and a good source of vitamin A and C significantly influenced consumers' perception towards orange flesh sweet potato. Challenges encountered in the orange flesh sweet potato include limited access to quality planting materials and processing infrastructure, high transportation costs, and limited market information. This study, therefore, recommends strengthened collaboration between government agencies, NGOs, and research institutions to provide farmers with access to quality planting materials, processing infrastructure, and access to market information.

Keywords: Market analysis; Consumer behavior; Orange flesh sweet potato; Ebonyi State

Introduction

Sweet potato (Ipomoea batatas L.) is a dicotyledonous plant from the morning glory family (Convovulaceae), which produces roots that are edible (Yahaya *et al.,* 2015). Nigeria is the second-largest producer of sweet potato in the world after China with an annual output of 3.46 million metric tons per year (Udemezue, 2019). Sweet potato can thrive in less fertile soils, but beyond this, the broad agro-ecological adaptability of the crop makes it a food security and staple crop as it can be grown in all of Nigeria's 36 states (eHealth Africa, 2016; Maru, 2017; Sugri *et al.,* 2017).

As a staple crop, it has been fortified in key vitamins especially vitamin A and minerals whose deficiency in most rural diets continues to pose a very serious constraint to human health and economic development (Global Panel, 2015). Globally, about 3 million pre-school children have been reported to present ocular signs of vitamin A deficiency (Mendu *et al.,* 2019). In sub-Saharan Africa, it has been estimated that 43 million children under the age of 5 are vitamin A deficient (Stathers *et al.,* 2018). In Nigeria, the prevalence of vitamin A deficiency (VAD) affects 29.5 % of her population, resulting in the World Health

Organization (WHO) listing Nigeria as one of the "category one" countries (eHealth Africa, 2016) with the highest risk of vitamin A deficiency (Kuku-Shittu *et al.,* 2016).

Vitamin A deficiency is also a major risk factor for pregnant and lactating women and a leading cause of visual impairments such as xerophthalmia, corneal scars and corneal xerosis (Tariku *et al.,* 2016). In extreme cases, it leads to premature death in children and pregnant women (United States Agency for International Development [USAID], 2016). The United Nations World Food Program estimated that over 700 million individuals globally lack sufficient food for a healthy lifestyle (Borras & Mohamed, 2020). Though less obvious, more than 2 billion people are estimated to be suffering from micronutrient malnutrition (Qaim *et al.,* 2007). Micronutrient malnutrition affects over 2 billion people, with vitamin A deficiency (VAD) being a prevalent form of malnutrition (Janaswamy & Dahal, 2021). VAD can lead to blindness, hinder growth, and development, and increase the risk of infections and mortality, especially among children and expectant/lactating women (Eliana Mansevich Wiseman *et al.,* 2017). Its acute deficiency has very high fatality rates, but even a little deficiency is also associated with the increase in preschooler mortality.(Adebisi *et al.,* 2020). Based on this, orange flesh sweet potato (OFSP) was developed through fortification of the indigenous variety with micronutrients specifically vitamin A to combat the issue of its deficiency. Impoverished households in developing nations rely on staple food crops, which lack essential vitamins and minerals (Nicola, 2021). Although staple foods are relatively cheap and rich in calories, they lack essential vitamins and minerals (Etumnu, 2016).

Biofortification involves breeding staple food crops enriched with beta-carotene, a precursor of vitamin A (Shahzad *et al.,* 2021). It is used to reduce micronutrient deficiency through traditional breeding of certain crops that contain higher levels of essential micronutrients (USAID, 2016). Orange-fleshed sweet potato (OFSP) is one such crop known for its high beta-carotene content (Oloniyo *et al.,* 2021; Olagunju *et al.,*2021), providing the daily pro-vitamin A needs of a preschooler (CIP, 2018) and non-lactating women (eHealth Africa, 2016). Orange flesh sweet potato is an improved variety of sweet potato (Ipomoea batatas) cultivated in tropical and semi-tropical regions of the world for food and source of income especially among the rural dwellers (Adebisi *et al.,* 2015 and Mitra, 2012). It is a staple crop that is high in beta-carotene and provitamin A carotenoid (Padmaja, 2009). In recent years, there has been growing interest in promoting the consumption of OFSP as a strategy to combat malnutrition and enhance food security in various parts of the world, including Nigeria (Scharff *et al.,* 2022). OFSP offers an opportunity to address vitamin A deficiency in Nigeria, a country with a high prevalence of this deficiency (Ene-Bong *et al*., 2020).

In Ebonyi State, the region's socio-economic and cultural characteristics make it a potential hub for OFSP production and consumption, benefiting the local economy and residents' health (Nwaigwe *et al.,* 2023). Understanding market dynamics involves assessing infrastructure, transportation systems, storage facilities, and intermediary actors along the value chain (Ridoutt *et al.,* 2019). Consumers acceptance of bio-fortified, orange-fleshed sweet potatoes examines factors like taste preferences, familiarity with OFSP, cultural beliefs, and perceived benefits rather than socio-economic factors (Etumnu, 2016).

However, despite the growing interest in orange flesh sweet potato (OFSP) as a potential solution to malnutrition and food security challenges, comprehensive research on the market dynamics and consumer behavior towards orange-fleshed sweet potato (OFSP) in Ikwo Local Government Area (LGA), Ebonyi state is lacking. Limited empirical data on supply chain networks, pricing mechanisms, and value-addition opportunities hinders effective strategies for promoting OFSP cultivation and utilization. Understanding consumer preferences, buying behaviors, and awareness of OFSP is essential for increasing its adoption. Unique cultural and economic factors in Ikwo LGA may influence the

successful integration of OFSP into local food culture, requiring focused attention. Therefore, this study aims at identifying socio-economic characteristics; assessing market dynamics; investigating consumer awareness/preferences and; identifying challenges and opportunities in the OFSP value chain, and exploring economic impacts. In view of this, the study seeks to address the following questions: (1) What are the socio-economic characteristics of key actors in the orange flesh sweet potato (OFSP) industry in Ikwo LGA, Ebonyi state? (2) How do market dynamics influence OFSP production and consumption in Ikwo LGA? (3) What is the level of consumer awareness, perceptions, and preferences regarding OFSP in Ikwo LGA? (4) What are the main challenges and opportunities in the OFSP value chain within the study area? (5) What could be the potential economic impact of promoting OFSP in Ikwo LGA? By addressing these questions, this study will contribute to agricultural development, nutrition, and food security by promoting the adoption of orange-fleshed sweet potato (OFSP) in Ikwo Local Government Area (LGA), Ebonyi State, and beyond.

METHODOLOGY

The study area is Ikwo Local Government Area (LGA) in Ebonyi State, Nigeria. It is the largest LGA in Ebonyi State, covering approximately 500 km^2. Ikwo Local Government Area (LGA) was selected as the study area for several reasons. Firstly, Ikwo LGA is known for its significant agricultural activities, including the cultivation of orange flesh sweet potatoes (OFSP). The area has a considerable number of farmers, traders, and other stakeholders engaged in the OFSP value chain, making it conducive for studying market dynamics and consumer behavior related to OFSP.

The data collection method involved the use of a well-structured questionnaire to collect primary data on the socio-economic characteristics of potato producers, potato production trends, yields, crop health, quality, and the adoption of climate-smart agricultural practices. A combination of purposive and random sampling was used to select fifty (50) participants for the study. Descriptive statistics was employed for data analysis. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were computed to summarize the demographic characteristics of the participants and their responses to survey questions related to the socio-economic profiles of key actors involved in OFSP production, market dynamics affecting OFSP production and consumption, consumer awareness, perceptions, and preferences regarding OFSP, challenges and opportunities within the OFSP value chain, and the potential economic impact of promoting OFSP in the region.

RESULTS AND DISCUSSIONS

Socio-Economic Characteristics of Respondents

Table1: **Socio-Economic Characteristics of Respondents**

Age	***Frequency***	***%***
18-25	6	12.0
26-35	10	20.0
36-45	11	22.0
46-55	11	22.0
56 and above	12	24.0
Total	50	100.0
Gender		
Female	24	48.0
Male	26	52.0
Total	50	100.0
Level of Education		

No Formal Education	11	22.0
Primary	11	22.0
Secondary	23	46.0
Tertiary	5	10.0
Total	50	100.0
Marital Status		
Single	9	18.0
Married	32	64.0
Widowed	9	18.0
Total	50	100.0
Occupation		
Farmer	23	46.0
Trader	16	32.0
Civil Servant	2	4.0
Student	9	18.0
Total	50	100.0
Role in OFSP value chain		
Farmer	23	46.0
Trader	21	42.0
Processor	5	10.0
Other	1	2.0
Total	50	100.0
Experience		
<1 year	1	2.0
1 – 5 years	6	12.0
6 -10 years	19	38.0
11 – 15 years	12	24.0
16 years and above	12	24.0
Total	50	100.0
Annual Household Income (N)		
<100,000	6	12.0
100,000 – 200,000	17	34.0
200,100 – 500,000	17	34.0
500,100 – 1,000,000	10	20.0
Total	50	100.0

Source: Field Survey, 2024

The study revealed that most respondents (52%) fell in the age range of 36–55 years, with the next largest age group (24%) being 56 years and above. The participants were almost evenly split between males (52%) and females (48%). In terms of education, nearly half of the respondents (46%) had obtained at least a secondary education, while 22% had no formal education and another 22% had completed only primary education. Most respondents (64%) were married, with 18% being widowed. Among the occupational groups, farmers constituted the largest category (46%), followed by traders (32%), civil servants (4%),

and students (18%). Similarly, most respondents (46%) played the role of farmers in the orange flesh sweet potato (OFSP) value chain, while 42% were traders and 10% were processors. A significant proportion of respondents (62%) had more than 5 years of experience in the OFSP value chain, indicating a substantial level of knowledge and expertise. In terms of household income, most households (34% each) fell within the range of ₦100,000 to ₦500,000 per year, encompassing a wide income segment.

Consumers' Awareness of OFSP

Table 2: Consumers' Awareness of OFSP

Awareness	*Frequency*	*%*
Yes	48	96.0
No	2	4.0
Total	50	100.0
Source of Awareness about OFSP		
From the Internet	1	2.0
From a friend or family member	23	46.0
From a nutritionist or other healthcare professionals	2	4.0
From a government or NGO program	13	26.0
From a farmer or food processor	11	22.0
Total	50	100.0

Source: Field Survey, 2024

The results show that a high percentage of respondents (96%) in Ikwo LGA are aware of OFSP, indicating significant awareness among the surveyed population. The findings also suggest that informal networks and awareness campaigns have played a crucial role in promoting OFSP in the community. Friends or family members were reported as the main source of awareness (46%), followed by government or NGO programs (26%). Farmers or food processors were mentioned by 22% of respondents, while other sources such as the internet (2%) and nutritionists/healthcare professionals (4%) had a smaller impact.

Perception of Consumers towards OFSP

The findings were based on a survey where respondents rated their level of agreement with each statement using a scale of 1 (strongly disagree) to 5 (strongly agree).

Table 3: Perception of Consumers towards OFSP

Statement	**SD (1)**	**D (2)**	**N (3)**	**A (4)**	**SA (5)**	**C**um	**M**ean	**S**ig
OFSP is a good source of vitamin A, which is essential for good vision, immunity, and growth.	0	0	0	44 (176)	6 (30)	206	4.12	Significant
OFSP is also a good source of other nutrients, such as dietary fiber, potassium, and vitamin C.	0	0	0	43 (172)	7 (35)	207	4.14	Significant
OFSP can help to prevent vitamin A deficiency, which is a common problem in developing countries.	0	0	2	33 (132)	15 (75)	207	4.14	Significant
OFSP is a nutritious and versatile food crop that can be eaten fresh, baked, boiled, fried, or roasted.	0	0	2 (6)	36 (144)	12 (60)	210	4.20	Significant

OFSP can be processed into a variety of products, such as purée, chips, flour, noodles, bread, and cookies.	0	0	6 (18)	37 (148)	7 (35)	201	4.02	Significant
OFSP is a good choice for people of all ages, including children, pregnant women, and older adults.	0	0	1 (3)	33 (132)	16 (80)	215	4.30	Significant
OFSP can help to improve children's cognitive development.	0	0	0	41 (164)	9 (45)	209	4.18	Significant
OFSP can help to boost the immune system.	0	0	0	34 (136)	16 (80)	216	4.32	Significant
OFSP can help to reduce the risk of chronic diseases, such as heart disease and cancer.	0	0	1	38 (152)	11 (55)	207	4.14	Significant
OFSP is a good source of antioxidants, which can protect cells from damage.	0	0	1 (3)	45 (180)	4 (20)	200	4.00	Significant
OFSP is a low-calorie food that is high in nutrients, making it a good choice for people who are trying to lose weight or maintain a healthy weight.	0	0	3 (9)	41 (164)	6 (30)	203	4.06	Significant

SA = Strongly, A = Agree, D = Disagree, SD = Strongly Disagree
Source: Field Survey, 2024

The study shows that consumers highly value OFSP for its antioxidant content (mean score: 4.32) and recognize its potential health benefits. They perceive OFSP as a versatile and nutritious food suitable for all age groups (mean score: 4.30). OFSP is also seen as a low-calorie, nutrient-rich option for weight management (mean score: 4.06). Consumers highly recognize OFSP as a good source of vitamin A (mean score: 4.12) and appreciate its other nutritional components like dietary fiber, potassium, and vitamin C (mean score: 4.14). Additionally, consumers view OFSP as a versatile food crop that can be prepared in various ways (mean score: 4.20).

Perception of Taste and Texture

Table 4: Perception of Taste and Texture

Perception of Taste	***Frequency***	***%***
Sweet	27	54.0
Earthy	5	10.0
Buttery	18	36.0
Total	50	100.0
Perception of Textures		
Creamy	13	26.0
Soft	31	62.0
Fluffy	5	10.0
Slightly chewy	1	2.0
Total	50	100.0
OFSP compared with other staple foods in terms of taste		
Much better	19	38.0
Slightly better	17	34.0

Similar	14	28.0
Total	50	100.0
OFSP compared with other staple foods in terms of nutritional value		
Much Higher	18	36.0
Slightly higher	24	48.0
Similar	8	16.0
Total	50	100.0

Source: Field Survey, 2024

Table 4 revealed that consumers perceive the taste of OFSP as primarily sweet (54.0%), with a smaller portion describing it as buttery (36.0%) or earthy (10.0%). The most common texture associated with OFSP is soft (62.0%), followed by creamy (26.0%), fluffy (10.0%), and slightly chewy (2.0%). When comparing the taste of OFSP to other staple foods, a significant portion of consumers find it to be much better (38.0%) or slightly better (34.0%) in taste. In terms of nutritional value, consumers perceive OFSP to be much higher (36.0%) or slightly higher (48.0%) than other staple foods, with only a small percentage considering it similar (16.0%).

Consumers' Preferences towards OFSP

Table 5. Consumers' Preferences towards OFSP

Consumed OFSP	Frequency	%
Yes	50	100.0
No	0	00.0
Total	50	100.0
Frequency of OFSP consumption in a week		
Once	5	10.0
Two times	6	12.0
Three times	15	30.0
Four times	11	22.0
Five Times	9	18.0
More than five times	4	8.0
Total	50	100.0
Primary Reason for consuming OFSP		
Taste	14	28.0
Health	13	26.0
Benefits	13	26.0
Availability	7	14.0
Cultural Preferences	3	6.0
Total	50	100.0
How OFSP was Consumed		
Boiled	29	58.0
Roasted	16	32.0
Mashed	4	8.0
Other	1	2.0
Total	50	100.0
Where OFSP was Purchased		
Local markets	12	24.0
Farmers' markets	27	54.0
Directly from farmers	11	22.0

Total	50	100.0
How much more consumers are willing to pay for a given quantity of OFSP		
₦101 - ₦200	14	28.0
₦201 - ₦300	25	50.0
₦301 - ₦400	10	20.0
₦401 and above	1	2.0
Total	50	100.0

Source: Field Survey, 2024

All respondents (100.0%) have consumed OFSP, with the most common consumption frequency being three times a week (30.0%), followed by four times a week (22.0%) and two times a week (12.0%). The primary reasons for consuming OFSP are evenly distributed among taste, health benefits, and general benefits, each representing 26.0% of respondents. Boiling is the preferred method of consumption (58.0%), followed by roasting (32.0%), while a smaller percentage mention mashing (8.0%) or other methods (2.0%). Farmers' markets are the most preferred purchasing location for OFSP (54.0%), followed by local markets (24.0%), and purchasing directly from farmers (22.0%). In terms of willingness to pay, 50.0% of consumers are willing to pay between ₦201 and ₦300, 28.0% are willing to pay between ₦101 and ₦200, 20.0% are willing to pay between ₦301 and ₦400, and only 2.0% are willing to pay ₦401 and above.

Challenges in the OFSP Value Chain

The study indicated several challenges in the OFSP value chain in Ikwo LGA. The findings were based on a survey where respondents rated their level of agreement with each challenge using a scale of 1 (strongly disagree) to 5 (strongly agree).

Table 6: Challenges in the OFSP Value Chain

Statement	SD (1)	D (2)	N (3)	A (4)	SA (5)	Cum	Mean	Sig
Production challenges:								
Lack of access to improved OFSP varieties	0	0	0	47 (188)	3 (15)	203	4.06	Significant
Lack of high-quality planting materials	0	0	3 (9)	35 (140)	12 (60)	209	4.18	Significant
Limited access to affordable inputs	0	0	9 (27)	28 (112)	13 (65)	204	4.08	Significant
Lack of knowledge of good agricultural practices (GAPs)	0	0	0	43 (172)	7 (35)	207	4.14	Significant
Pests and diseases	0	0	0	43 (172)	7 (35)	207	4.14	Significant
Climate change	0	1 (2)	12 (36)	33 (132)	4 (20)	190	3.80	Significant
Processing challenges:								
Lack of access to affordable and reliable processing equipment	0	0	3 (9)	32 (128)	15 (75)	212	4.24	Significant
Lack of knowledge of good processing practices	0	1 (2)	1 (3)	37 (148)	11 (55)	208	4.16	Significant
Lack of access to electricity and other utilities	0	0	1 (3)	32 (138)	17 (85)	226	4.52	Significant
Difficulty in meeting food safety standards	0	0	0	40 (160)	10 (50)	210	4.20	Significant
Competition from imported processed OFSP products	0	0	4 (12)	44 (176)	2 (10)	198	3.96	Significant
Marketing challenges:								

Lack of access to information about markets and prices	0	1 (2)	7 (21)	35 (140)	7 (35)	198	3.96	Significant
Lack of bargaining power	0	0	9 (27)	37 (148)	4 (20)	195	3.90	Significant
Competition from other food products	0	0	4 (12)	43 (172)	3 (15)	199	3.98	Significant
High transportation and storage costs	0	1 (2)	3 (9)	39 (156)	7 (35)	202	4.04	Significant
Post-harvest losses	0	3 (6)	14 (42)	31 (124)	2 (10)	182	3.64	Significant
Perishable nature of OFSP	0	14 (28)	12 (36)	23 (92)	1 (5)	161	3.22	Significant
Lack of brand awareness for OFSP	0	9 (18)	7 (21)	29 (116)	5 (25)	180	3.60	Significant
Policy and institutional environment challenges:								
Lack of supportive government policies and programs	0	0	1 (3)	39 (156)	10 (50)	209	4.18	Significant
Weak research and development (R&D) capacity	0	1 (2)	1 (3)	38 (152)	10 (50)	207	4.14	Significant
Poor infrastructure	0	0	0	41 (164)	9 (45)	209	4.18	Significant
Limited access to credit	0	0	2 (6)	42 (168)	6 (30)	204	4.08	Significant

SA = Strongly, A = Agree, D = Disagree, SD = Strongly Disagree
Source: Field Survey, 2024

Production challenges in the OFSP value chain include limited access to high-quality planting materials, farmers' limited knowledge of good agricultural practices, pests and diseases, limited access to affordable inputs, and challenges in accessing improved OFSP varieties. Processing challenges involve limited access to electricity and other utilities, affordable and reliable processing equipment, and meeting food safety standards. Marketing challenges include high transportation and storage costs, limited access to market information, competition from other food products, and farmers' limited bargaining power. Policy and institutional environment challenges encompass the absence of supportive government policies and programs, insufficient infrastructure, inadequate research and development capacity, and limited access to credit. Efforts should focus on addressing these challenges to enhance the efficiency and effectiveness of the OFSP value chain.

Opportunities in the OFSP Value Chain

The study shows several significant opportunities in the OFSP value chain in Ikwo LGA. The findings were based on a survey where respondents rated their level of agreement with each opportunity using a scale of 1 (strongly disagree) to 5 (strongly agree).

Table 7: Opportunities in the OFSP Value Chain

Statement	*SD (1)*	*D (2)*	*N (3)*	*A (4)*	*SA (5)*	*Cum*	*Mean*	*Sig*
Market Expansion:								
Increasing demand for OFSP products from domestic and international markets.	0	0	0	45 (180)	5 (25)	205	4.10	Significant
Developing new and innovative OFSP products.	0	0	0	38 (152)	12 (60)	212	4.24	Significant
Expanding the reach of OFSP products through new distribution channels.	0	0	3 (9)	39 (156)	8 (40)	205	4.10	Significant

Technological advancement:								
Developing new and improved OFSP varieties.	0	0	0	42 (168)	8 (40)	208	4.16	Significant
Developing more efficient and cost-effective OFSP processing technologies.	0	0	2 (6)	40 (160)	8 (40)	206	4.12	Significant
Improving OFSP storage and transportation technologies.	0	1 (2)	1 (3)	41 (164)	7 (35)	204	4.08	Significant
Value addition:								
Increasing the value of OFSP products through processing, packaging, and branding.	0	0	0	42 (168)	8 (40)	208	4.16	Significant
Developing new and innovative OFSP products with higher value.	0	0	0	41 (164)	9 (45)	209	4.18	Significant
Expanding the use of OFSP in non-food applications, such as animal feed and industrial products.	0	0	0	43 (172)	7 (35)	207	4.14	Significant

SA = Strongly, A = Agree, D = Disagree, SD = Strongly Disagree
Source: Field Survey, 2024

Opportunities in the OFSP value chain, with mean ratings ranging from 4.08 to 4.24, include market expansion through developing new products and increasing domestic and international demand, leveraging new distribution channels for broader reach. Technological advancements, with mean ratings ranging from 4.08 to 4.16, involve developing improved OFSP varieties, processing technologies, and storage/transportation methods to enhance efficiency and profitability. Value addition opportunities, with mean ratings ranging from 4.14 to 4.18, include innovating new products, increasing value through processing and branding, and exploring non-food applications of OFSP to attract consumers and create additional market avenues.

Conclusion and Recommendations

The study reveals that there is significant awareness of Orange Flesh Sweet Potato (OFSP) among the surveyed population (96%). Consumers highly value OFSP for its nutritional content and perceive it as a versatile and nutritious food suitable for all age groups. The taste of OFSP is primarily described as sweet (54%), and it is considered to have a higher nutritional value compared to other staple foods. Consumers consume OFSP frequently, with boiling (58%) being the preferred method of preparation. Farmers' markets are the most preferred purchasing location for OFSP (54%). Challenges in the OFSP value chain include limited access to high-quality planting materials, limited knowledge of good agricultural practices, pests and diseases, and marketing challenges. Opportunities lie in market expansion, leveraging new distribution channels, and technological advancements. The study highlights the need for supportive government policies, infrastructure development, research and development initiatives, and improved access to credit to enhance the efficiency and effectiveness of the OFSP value chain.

In conclusion, the findings of this study underscore the critical importance of understanding market dynamics and consumer preferences in promoting the adoption and utilization of orange flesh sweet potato (OFSP) in rural communities. Despite the recognized nutritional benefits of OFSP, its wider acceptance and integration into local markets face significant challenges, including limited access to quality planting materials, processing infrastructure, and market information. This study highlights the need for targeted interventions aimed at improving access to quality planting materials, processing infrastructure, and market information to facilitate the successful integration of OFSP into local markets.

Based on the findings, the following recommendations were proposed:

- Strengthen collaboration between government agencies, NGOs, and research institutions to provide farmers with access to high-quality planting materials and improve their knowledge of good agricultural practices.
- Enhance infrastructure for processing OFSP, including access to electricity, affordable processing equipment, and facilities to meet food safety standards.
- Improve farmers' access to market information through market information systems, training programs, and market linkages.
- Develop new and innovative OFSP products that cater to diverse consumer preferences.
- Invest in research and development to develop improved OFSP varieties with enhanced characteristics.
- Promote the adoption of efficient processing technologies for OFSP.
- Encourage value addition in the OFSP value chain through processing, packaging, and branding.
- Explore non-food applications of OFSP, such as animal feed and industrial products.
- Advocate for supportive government policies and programs that address the challenges faced by stakeholders in the OFSP value chain.
- Conduct regular monitoring and evaluation of interventions in the OFSP value chain to assess their impact and guide future strategies.

Implementing these recommendations can contribute to the growth and development of the OFSP market in Ikwo LGA, Ebonyi State.

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