Original Research Article

Ethno-Botanical Uses and Socio-Cultural Importance of White Yam (*Dioscorea rotundata*Poir.) in South-Eastern, Nigeria

ABSTRACT

Indigenous knowledge and uses of white yam (*Dioscorea rotundata*Poir.) in South-Eastern, Nigeria ~~was~~ were investigated. White yam is the most important species of yam in West Africa cultivated for the consumption of its starchy tuber. Yam plays a major role in the socio-cultural significance of the people of South-Eastern, Nigeria. A well-structured, pre-tested questionnaire on the uses and socio-cultural importance of yam as well as the economic status/income generation of farmers was designed and administered to obtain crucial information from the respondents within the study area. Five South-Eastern states of Nigeria namely; Abia, Anambra, Ebonyi, Enugu, and Imo states were randomly surveyed. The results showed that 99.16% of the respondents in Anambra state use yam for religious worship, bride price/traditional marriages, funerals, and cultural and masquerade festivals. Respondents utilized yam in diverse food forms such as fries/chips, cooked/boiled, roasted, pounded, and porridge. It was also observed that respondents utilized yam as a means of livelihood to generate income and support their families. The levels of income generation from yam farming varied. Overall, respondents within the study area who were aware of the indigenous knowledge of yam were significantly ($P<0.05$) higher than those who were unaware. This ~~ethno-botanical~~ethnobotanical study revealed the traditional concepts and practices relating to the socio-cultural importance of yam.

Keywords: Ethno-Botanical Uses, Socio-Cultural Importance, South-Eastern States of Nigeria, White Yam.

1. Introduction

The term "Ethno-botany" is a multidisciplinary science that deals with the study of how the people of an exacting culture and region make use of plants. [1] stated that "Ethno-botany" is an interdisciplinary field of research with a specific focus on the empirical knowledge of indigenous people ~~with respect to~~concerning natural plant substances that influence health and ~~wellbeing~~ well-beingand their associated risk. Different *Dioscorea* species ~~plays~~ playa remarkable position in ~~the~~ traditional medicines for the treatment of various diseases [2]. There are numerous reports available on ~~ethno-medicinal~~ethnomedicinal uses of different *Dioscorea* species worldwide [3]-[5]

White yam (*Dioscorea rotundata*Poir.) according to [6], [7] is the most important specie of yam in West Africa. It is a monocotyledonous, perennial herb cultivated for the consumption of its starchy tuber [8]. [9] reported that the principal food nutrient in yam is mostly carbohydrate and low content of protein as well as ascorbic acid. [10]-[11] reported that consumption of yam may be by preparation of ~~varieties~~ a varietyof palatable dishes from yam tubers. [7] pointed out that the yam tuber is the only economical part of the crop, consumed roasted, fried, boiled, pounded, or used as flour for baking and steaming for swallowing with soup. [12] reported that yams contribute significantly to food security and ~~its~~ theiravailability in the market for a considerable part of the year helps prevent food shortages because it stores relatively longer than other food crops.

[13]-[14] reported that yam is considered a man's crop and has ritual and socio-cultural significance. In addition to its nutritional value, [15]-[16] reported that yam also plays a major role in the socio-cultural significance of the people mostly the South-Eastern Nigeria and also in the middle belt of Nigeria among the Tiv tribe [17]. [18] reported that yam is a highly revered cultural crop and key festivities like marriage, chieftaincy ceremonies, conflict resolution, peace accords, and sacrifices to the gods are tied to it. [19] emphasized that our dietary footprints and food habits are to a large extent, ethnically, regionally, and culturally interconnected. This study aims to emphasize the uses and socio-cultural importance of yam by indigenous people of the South-Eastern, Nigeria.

2. Materials and Methods

2.1. Study Area

Geographically, South-Eastern Nigeria extends from latitudes 4^{O} 40^{I} to 7^{O} 20^{I} North and 6^{O} 00^{I} to 8^{O} 20^{I} East longitude. The map of Nigeria showing the boundary area of the ~~South-~~

~~Eastern States~~southeastern states of Nigeria is shown below (Figure 1). According to reports, 98% of the indigenous ethnic groups in the South-East are Igbos by tribe while 2% of the population is the Igala people who ~~lived~~ live in the North-Western part. The natural vegetation in many parts of the South-Eastern states is mainly grassland and woodland as well as tropical rainforest. Also, the annual rainfall is between 1,400mm in the north to 2,500mm in the south with soil pH in some parts ranging from 3.5 to 6.4 [20].

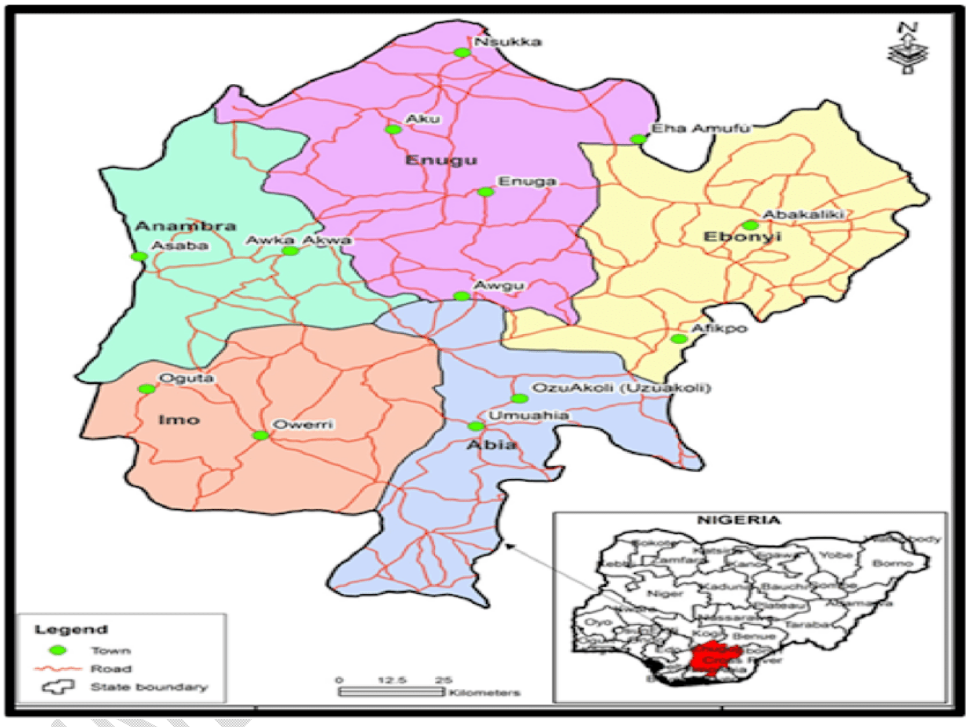

Figure 1: Map showing the Five South-Eastern States of Nigeria [21].

2.2. Ethno-Botanical Study of White Yam (*Dioscorea rotundata*Poir.).

The method of [22], [18], [23], [24] was adopted in this present study. This involved the use of a well-structured, pre-tested questionnaire to obtain vital information from the respondents in the field. The fieldwork process used interviews, public meetings, local informants, a review of secondary and grey ~~literatures~~ literature and keen observations [18]. The survey on

Ethno-botanical study was conducted between September, 2022 to December, 2022 and September, 2023 to December, 2023 in five states of South-Eastern, Nigeria. The states comprises comprise of Anambra, Abia, Enugu, Ebonyi, and Imo.

The interviews were segmented into two demographic categories (60 years and above and below 60 years) to understand generational differences and associated perceptions related to the topic of study [18]. A public meeting was organised organized at the point of yam loading and offloading. [18] reported that these informal yam stations signify a wider representation of yam farmers and a distribution of stakeholders from all demographic categories. These stakeholders were interviewed to discern their level of perception of yam farming and livelihood practices. A single interview lasted on average between 45 minutes to one hour. Four local informants were used to facilitate community entry, interactions with interviewees, clarification of issues, and interpretations of local dialects.

Field notes were recorded and later categorized and thematized. The questionnaires were sorted accordingly and data collected were used for analysis. The plant materials collected during the field study were pressed, preserved, and dried following the standard method of preparation of herbarium techniques [25]. These herbarium specimens were deposited with the taxonomist and curator, Mr. Finian Iroka of Botany Department, Nnamdi Azikiwe University Awka, Anambra State, Nigeria with their respective assigned voucher numbers, after proper identification and authentication.

2.3. Sampling Frame

The respondents to the questionnaire were the Igbo speaking Igbo-speaking ethnic group of South-Eastern States of Nigeria. The choice of selecting these areas was because they were

predominantly found in Igbo land and also to compare the previous study by [18], [24] who concentrated their study in one out of the five South-Eastern states, namely; Akwa-Ibom, Anambra and Cross River states. In addition, the South-Eastern states have similar cultural and traditional beliefs as well as reverence for yam. All the people speak the same language, Igbo with slight variations in their pronunciations and intonations.

2.4. Sample Size/Sampling Procedure: Administration of questionnaire

A well-structured, pre-tested questionnaire was designed and administered to assist in obtaining crucial information from the respondents in the study area. One hundred and twenty (120) questionnaires were randomly distributed to each of the five South-Eastern States making a ground total of six hundred (600) sampled questionnaires used in this survey.

The questionnaire was constructed to get vital information from respondents as follows;

i. Personal data/details such as age, sex, educational qualification, occupation, etc.
ii. Indigenous knowledge of yam cultivation.
iii. Labour practices and gender roles in yam cultivation.
iv. Methods of yam cultivation adopted in their locality.
v. Yam storage methods and distribution across livelihoods.
vi. Socio-cultural perspectives on yam distribution practices.
vii. Uses of yam in worship, marriages, funerals and festivals.
viii. Disease awareness on yam.
ix. Causes of ~~post harvest~~post-harvest disease of yam.
x. Methods of ~~post harvest~~post-harvest disease control of yam.

3. Results

The socio-cultural use of yam by the respondents in their various communities was surveyed in this study. Respondents gave various uses of yams in their community and their interactions within the community with yams for different cultural activities. These respondents interviewed had indigenous knowledge of yams in their community. Some of the uses of yams in their locality include; religious worship/religious rites, bride price/traditional marriages, funerals, cultural festivals such as chieftaincy title taking "ichiozo" and masquerade festival. In Anambra state, 99.16% of the respondents reported that they use yam for religious worship/religious rites, bride price/traditional marriages, funerals, cultural festivals, and masquerade festivals. This is followed by Abia state and Imo state where 97.41% and 96.37% of the respondents reported the same respectively (Table 1). The least was observed in Enugu state where 87.83% of the respondents reported that they use yams for all the socio-cultural practices. In Ebonyi state, 6.09% of the respondents reported that they use yam for religious worship/religious rites. In Enugu state, 7.63% of the respondents reported that they use yam for bride price in their community. There was a significant ($P<0.05$) difference between the respondents who ~~use~~ used yam for all the socio-cultural practices in their community to those who ~~use~~ used yam for socio-cultural practices separately (Table 1).

Yam is an important staple food source and has its usefulness in several other social and cultural functions. The diverse food forms and preparations from yam consumed by the respondents were investigated. The various food forms from yam ~~which~~ that respondents consumed ~~includes~~include; fries/chips, cooked/boiled, roasted, pounded, and porridge. In Anambra state, 50.15% of the respondents reported that they consume yam in all the diverse food forms enumerated such as fires/chips, cooked/boiled, roasted, pounded, and porridge.

This is closely followed by Ebonyi state where 49.95% of the respondents affirmed ~~to~~ consuming yam in all the aforementioned diverse food forms. The least was recorded in Imo state where 47.37% of the respondents affirmed that they consume yam in the aforementioned diverse food forms (Table 2). There was a significant ($P<0.05$) difference between the respondents who consume yam in all the aforementioned diverse food forms to those who consume yam separately in their diverse food forms. In Abia state, 18.10% of the respondents interviewed reported that they prefer consuming yam as fries/chips. In Anambra state, 8.40% of the respondents preferred consuming yam when cooked or boiled. Respondents who had a preference to roasted yam were recorded in Enugu state with 12.71% respondents. The highest value for preference for pounded yam was recorded in Anambra state where 10.40% of the respondents registered their preference. In Abia state, 26.73% of the respondents registered their preference for the consumption of yam in porridge form (Table 2). Plate 1 below shows the diverse food forms and preparations from yams consumed by respondents in their communities.

The local names of white yam (*Dioscorea rotundata*Poir.) varieties cultivated and consumed by the respondents in their community were evaluated. Some of the prevalent yam varieties cultivated and consumed by the respondents in their various communities were identified and recorded with their local names (Table 3). The local names of these white yam varieties cultivated and consumed by the respondents in their locality varied in their pronunciations and spellings based on the various dialects found within the study area.

The survey on the sustainability of yam farmer's income revealed that 99.14% of the respondents in Abia state reported that their income was not sustainable. This was followed by Anambra state where 97.48% of the respondents reported that their income was not

sustainable. The ~~least~~ lowestvalue (P<0.05) was obtained in Imo state with 91.05% of the respondents stating that their income was not sustainable (Table 4). Some of the yam farmers agreed that their income was sustainable. The highest percentage of yam farmers who affirmed that their income was sustainable was observed in Imo state with 8.95% of the respondents while the least was observed in Abia state with 0.86% respondents. Overall, respondents who reported that their income was not sustainable ~~was~~ weresignificantly (P<0.05) higher than those who said that their income was sustainable (Table 4).

Respondents were interviewed to evaluate if yam farmers could support ~~his~~ theirfamily familiesand make a decent livelihood out of yam farming. The highest value (P<0.05) was obtained in Abia state where 99.14% of the respondents affirmed that they cannot support their family and make a decent livelihood from yam farming. This was followed by Anambra state with 97.48% of the respondents reporting the same. The least was observed in Imo state with 90.70% of the respondents reporting the same. Respondents who ~~cannot~~ could notsupport their family and make a decent livelihood from yam farming were significantly (P<0.05) higher than those who could support their family and make a decent livelihood from yam farming (Table 4).

The level of income generation from yam farming by yam farmers was evaluated. Depending on their profit margins annually, their level of income generation from yam farming was determined. In Anambra state, 70.59% of the respondents revealed that they make an average income between ₦40,000 to ₦59,000 from yam farming annually. This was followed by reports from Imo state and Ebonyi state where 69.65% and 66.04% of the respondents reported the same respectively. The ~~least~~ lowestvalue was recorded in Enugu state where 63.90% of the respondents reported the same (Table 5). There was a significant (P<0.05)

difference between yam farmers who earned an income between ₦40,000 to ₦59,000 to those who earned higher income from yam farming. Yam farmers ~~that~~ who earned an income between ₦60,000 to ₦79,000 was significantly ($P<0.05$) higher than those who earned income between ₦80,000 to ₦99,000. The highest percentage was recorded in Anambra state where 27.73% of the respondents earned income between ₦60,000 to ₦79,000. This was followed by the values obtained in Abia state and Ebonyi state where 25.17% and 22.61% of the respondents reported that they earned the same income respectively (Table 5). Just a few yam farmers reported that they earned an income of ₦100,000 and above. The highest value was recorded in Ebonyi state where 3.96% of the respondents reported that they earned an income of ₦100,000 and above. On the other hand, 19.30% of the respondents in Imo state reported that they earned an income below ₦40,000. The ~~least~~ lowest value was obtained in Ebonyi state and Anambra state where 0.00% and 0.84% of the respondents respectively reported that they earn an income below ₦40,000 (Table 5).

Respondents provided additional information about their yam farming activities in their locality. Most of the respondents interviewed reported that they lack financial aid/support from the government and need such urgently. In Enugu state, 59.32% of the respondents reported that they require financial support from the government to boost their yam farming business. This is followed by reports from Ebonyi state and Anambra state where 52.17% and 49.58% of the respondents reported that they urgently need financial assistance in the form of loans and grants from the government. Similarly, in Imo state, 63.16% of the respondents reported that they lacked sufficient support either as a subsidy or improved seedlings for use. In Anambra state, 35.29% of the respondents reported that flooding of yam stead affected storage periods during the peak of the ~~raining~~ rainy season. About 15.13% of the respondents pointed out that income from yam production was not sustainable. In Ebonyi state, 30.44% of

the respondents reported that yam is a male crop and requires tedious ~~labour~~labor. About 17.39% of the respondents stated that yam is a cultural crop and has its norms and cultures (Table 6).

Table 1: Socio-Cultural Uses of White Yam (*Dioscorea rotundata*Poir.)

	Socio-Cultural Uses of Yam (%)					
States	**Religious Worship**	**Bride Price**	**Funerals**	**Cultural Festivals**	**Masquerade Festival**	**All of the Above**
Abia	0.00	2.59	0.00	0.00	0.00	97.41
Anambra	0.00	0.00	0.00	0.84	0.00	99.16
Ebonyi	6.09	3.48	0.87	1.74	0.00	87.83
Enugu	0.00	7.63	0.00	2.54	0.00	89.83
Imo	0.00	3.63	0.00	0.00	0.00	96.37

Table 2: Diverse Food Forms and Preparations from Yams Consumed by Respondents

	Diverse Food Forms (%)					
States	Fries/Chips	Cooked/Boiled	Roasted	Pounded	Porridge	All of the Above
Abia	18.10	4.31	0.86	1.72	26.73	48.28
Anambra	14.29	8.40	6.72	10.40	10.04	50.15
Ebonyi	13.04	6.09	8.76	6.68	15.48	49.95
Enugu	11.69	6.78	12.71	3.39	16.96	48.47
Imo	15.48	8.21	7.96	9.86	11.12	47.37

Table 3: Local Names of White Yam Varieties in ~~the~~ South-Eastern Nigeria

States	**Local Names of Cultivated and Consumed White Yam Varieties**
Abia	Abiaotulugo, Ji-Mgbada, Ji-Agba-aka, Epe, Ji-Igwe, Ji-Arueri, Nkoroto
Anambra	Epe, Mumuye, Adaka, Ji-Iyoo
Ebonyi	Ji-Ekpuruma, Ji-Mbila, Ji-Iyoo, Oke-Ji, Ji-Oku, Ji-Mmanu (Nwuny ji)
Enugu	Igume, Unegbe, Ji-aga, Nwanyikochoo, Aga-Nvuma, Ono
Imo	Ede-Ji, Ji-Awom, Nkukpo-Oba, Ji-Oke, Ngaraga, Nkukpoagwa, Ji-Oma, Nwanyi-Aga

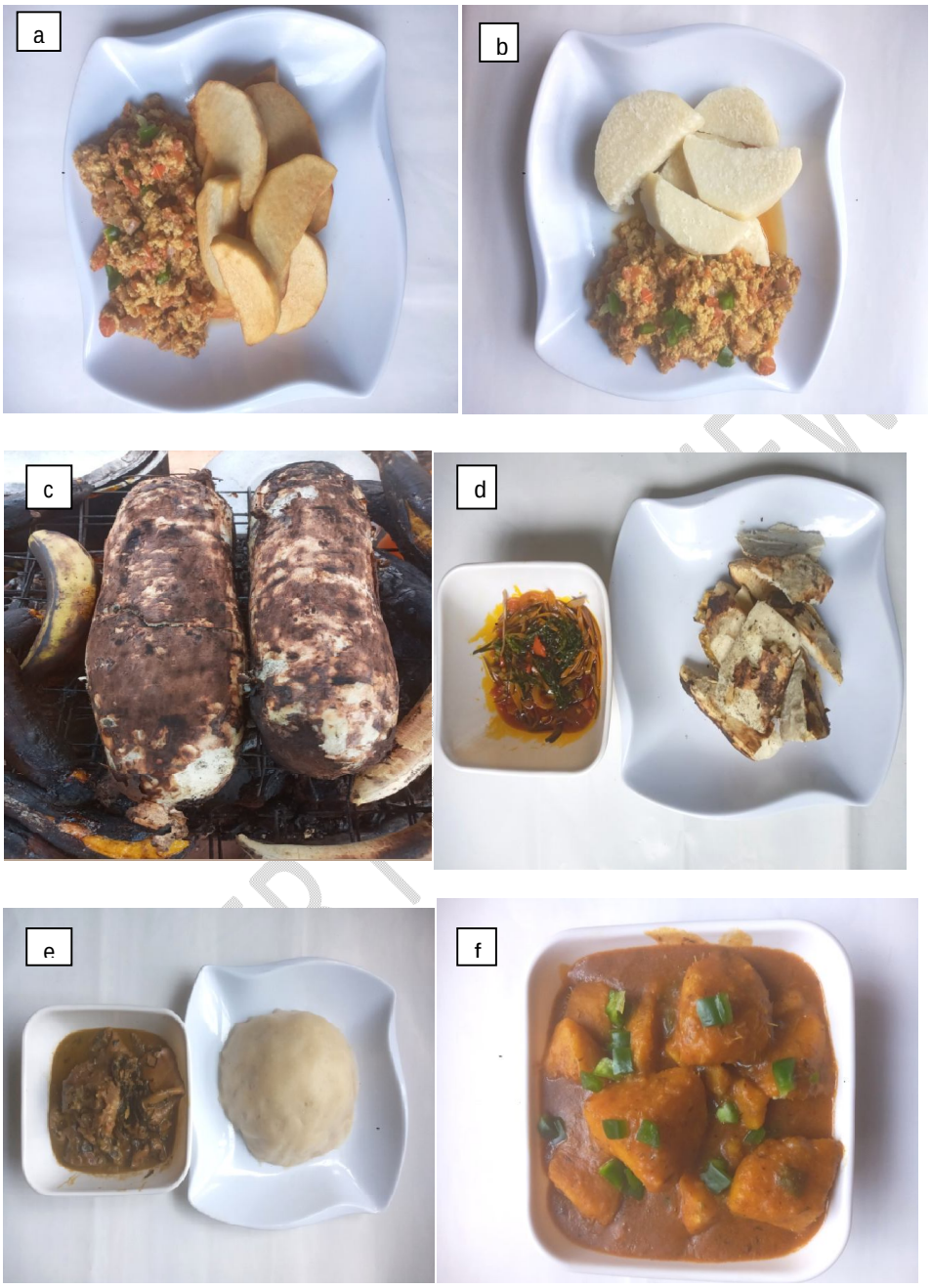

Plate 1: Diverse Food Forms and Preparations from Yams Consumed by Respondents (a) Fries/Chips (b) Cooked/Boiled (c) Roasted yam (d) Roasted yam paired with palm oil sauce (e) Pounded yam paired with "~~ofe~~ of nsala" (f) Porridge

Table 4: Sustainability of Yam Farmer's Income for Family Support and Livelihood from Yam Farming

	Sustainability of Yam Farmer's Income		Family Support and Livelihood from Yam Farming	
States	Yes (%)	No (%)	Yes (%)	No (%)
Abia	0.86	99.14	0.86	99.14
Anambra	2.52	97.48	2.52	97.48
Ebonyi	7.83	92.17	9.13	90.87
Enugu	6.61	93.39	4.24	95.76
Imo	8.95	91.05	9.30	90.70

Table 5: Level of Income Generation from Yam Farming (Naira)

	Level of Income Generation from Yam Farming (%)				
States	₦40,000-₦59,000	₦60,000-₦79,000	₦80,000-₦99,000	₦100,000 and above	Below ₦100,000
Abia	64.83	25.17	0.00	0.00	10.00
Anambra	70.59	27.73	0.84	0.00	0.84
Ebonyi	66.04	22.61	7.39	3.96	0.00
Enugu	63.90	17.63	5.93	3.22	9.32
Imo	69.65	3.51	7.02	0.53	19.30

Table 6: Additional Information about Yam Farming

States	Additional Information from Respondents	Frequency	Percentage(%)
Abia	Lack of financial support from the government	49	42.24
	None	67	57.76
Anambra	Financial aid/loans highly solicited for	59	49.58
	Flooding of yam stead affects the storage period	42	35.29
	Income from yam production is not sustainable	18	15.13
Ebonyi	Grants and financial aid from the government	60	52.17
	Yam is a cultural crop and has its traditions	20	17.39
	Yam is a male crop that requires tedious ~~labour~~labor	35	30.44
Enugu	Financial aid from the government is needed	70	59.32
	None	48	40.68
Imo	Financial aid from the government	42	36.84
	Lack of sufficient support for farmers either as subsidy or improved seedling for use	72	63.16

4. Discussion

Socio-cultural uses of yam by the respondents in their various communities across the ~~South-Eastern~~Southeastern states of Nigeria were surveyed. In this study, it was observed that respondents had ~~indigenous~~ Indigenousknowledge of yam in their communities for various cultural and religious purposes such as religious worship/religious rites, bride price/traditional, funerals, cultural festivals such as chieftaincy title taking "ichi~~ozo~~zoo" and masquerade festivals (Table 1). A great majority of the respondents noted that they utilize yam for all the aforementioned cultural and religious purposes. This is in tandem with [26], [27], [18] who reported that among Nigeria's Igbo ethnic group, yam is the most ~~favourite~~ favoritefood and has a purpose in social functions such as marriages, burials, and other traditional ceremonies and rituals. [18] also added that all ethnic groups in South-Eastern Nigeria share a common perception of yam as a religious, social, and cultural crop. This perception largely explains why the annual yam festival is a shared cultural heritage across the region.

It was observed that the respondents consumed yam in diverse food forms. Yam is an important staple food and has its usefulness in several other social and cultural functions [28]. The diverse food forms from yam consumed by the respondents ~~includes~~include; fries/chips, cooked/boiled, roasted, pounded, and porridge. Most of the respondents affirmed that they consume yam in the aforementioned diverse food forms. This observation resonates with [29], [30], [18] who reported that beyond its cultural and religious values, yams are nutritious and beneficial to human health. They affirmed that yam can be eaten boiled, roasted, in a pounded form, or processed into yam chips, snacks, and flakes.

Local names of white yam varieties cultivated and consumed by the respondents in their community were identified and recorded (Table 3). The local names of these white yam varieties cultivated and consumed by the respondents in their locality varied in their pronunciations and spellings based on the various dialects found within the study area. This is in tandem with the study by [24] who observed that respondents from the Obudu local government area of Cross River state, Nigeria ~~has~~ have a special breed of local white yam called "Atam yam" in their dialect.

~~Majority~~ The majority of yam farmers interviewed during this survey reported that their income was not sustainable and could not support their ~~family~~ families and make a decent livelihood out of yam farming (Table 4). This observation is in tandem with the study of [14], [31], [24] who reported that yam farmers complement their income through extra paid ~~labour~~ labor services and ~~through~~ the sale of other farm produce they ~~realised~~ realized from their farms.

A great number of yam farmers affirmed that they make an income of ₦40,000-₦59,000 annually as their level of income generation from yam farming while about 7.71% of the respondents make an income of ₦100,000 and above (Table 5). This is in contrast with [31] who reported that ginger farmers make an annual income of ₦72,487.5 on average. There were yam farmers who affirmed that they make an annual income of below ₦100,000 as well.

Most of the respondents interviewed reported that they require financial aid/support from the government urgently, grants or support either as a subsidy or improved seedlings for use as additional information. Others reported that their income from yam cultivation was not

sustainable. A ~~54 years old~~54-year-old female respondent who retails yam tubers at the Otuocha market in Anambra state said that flooding of yam stead affects the storage period at the peak of the ~~raining~~ rainyseason. A ~~39 years old~~39-year-old male respondent in Ebonyi ~~state~~ reported that yam is ~~a~~ cultural and has its norms and culture. He also said that yam is a male crop requiring arduous ~~labour~~labor. This view is in sync with the observation by [14] who reported that men and women hold different rights of production, ~~labour~~labor, ownership, access, and marketing of specific crop types. [18] pointed out that designating specific crops for specific gender ~~category~~ categories~~has the capacity to~~can produce differential effects ~~in~~ onproductivity, vulnerability to shock, and income generation prospects.

There were limitations encountered during the survey of the ~~ethno botanical~~ethnobotanical study. The first is the sample size. It is important to state that one hundred and twenty (120) questionnaires are not enough to obtain all the vital information from each state of South-Eastern, Nigeria. Secondly, relevant stakeholders such as traditional rulers, religious priests, public officials, and urban dwellers were not interviewed. This inability to interview these individuals means that the findings in this study do not represent every segment of what is applicable about yam in South-Eastern, Nigeria. Furthermore, insecurity in the South-Eastern states of Nigeria restricted interviews in major ~~yam cultivating~~yam-cultivating zones of the region during this survey.

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This study offers significant insights into the indigenous knowledge and cultural practices associated with white yam in a specific region of Nigeria. By focusing on a staple crop

deeply embedded in local traditions and the economy, the research underscores the intersection of agriculture, culture, and socio-economic factors. Such studies are crucial for several reasons: they help preserve indigenous knowledge that contributes to biodiversity conservation, highlight the role of such crops in cultural identity and heritage, and inform policies aimed at protecting intangible cultural assets. Additionally, they demonstrate the economic significance of traditional agriculture and its role in income generation, potentially influencing agricultural policies and support programs. Furthermore, highlighting the diverse food forms of yam underscores its nutritional value and potential to enhance food security, particularly relevant in regions where food scarcity is a concern.

In examining the ethnobotanical uses and socio-cultural importance of white yam in South-Eastern Nigeria, it is valuable to compare this with similar studies conducted among Indigenous communities in Panama and Venezuela, particularly the Kariña ethnic group. Both regions share a reliance on traditional agriculture, but the socio-demographic contexts and cultural perceptions of agricultural practices can differ significantly [32, 33, 34].

In the Kariña communities in Venezuela and other sites in Panama, traditional agriculture is often closely linked with cultural rituals and social structures [35, 36]. For instance, various crops such as maize, cassava, and plantains hold socio-cultural significance in Kariña traditions, much like the yam's role in Nigeria. These crops are not only food sources but also integral to rituals, festivals, and social ceremonies [37, 38].

Just as yam farming supports livelihoods in Nigeria, traditional agriculture among the Kariña people is a primary economic activity. However, the scale and market integration may differ. In many indigenous communities in Latin America, including the Kariña, there is a mix of

subsistence farming and small-scale market engagement [39, 40]. The economic strategies often include a combination of farming, hunting, and gathering, reflecting a diversified approach to livelihood [41, 42].

The use of agricultural products in cultural and religious ceremonies is a common thread. In Nigeria, yam is used in religious worship and various social events like marriages and funerals. Similarly, in Kariña culture, agricultural produce plays a central role in traditional rituals and communal gatherings, reinforcing social bonds and cultural continuity [43, 44, 45].

Both studies highlight the importance of indigenous knowledge transmission. In Nigeria, the awareness and practice of traditional yam cultivation are significantly higher among the population. In Kariña communities, traditional agricultural knowledge is also passed down through generations, though it faces challenges from modern agricultural practices and socio-economic changes [46, 47].

The comparative analysis of the ethnobotanical study of white yam in South-Eastern Nigeria and the socio-cultural agricultural practices among the Kariña ethnic group reveals both similarities and differences in how indigenous communities integrate agriculture into their socio-cultural and economic frameworks [48, 49]. These studies emphasize the importance of preserving indigenous agricultural knowledge and practices, which are vital for cultural heritage, economic stability, and biodiversity conservation[50, 51]. By understanding these dynamics, policymakers and researchers can better support indigenous communities in maintaining their cultural identity and sustainable agricultural practices.

5. Conclusion

Respondents from the five South-Eastern states of Nigeria had indigenous knowledge of yam. This study has demonstrated the importance and functions of yam in structuring the social, economic, religious, and cultural fabric of a society. Findings from this survey will be utilized as a basis for further investigations on the emerging indigenous practices and sustainability impact.

Disclaimer (Artificial Intelligence)

Authors hereby declare that NO generative AI technologies such as large language models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during the writing or editing of the manuscript.

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