



*Original Research Report*

## Consumption Pattern of Wild Edible Green Leafy Vegetables Found in Osogbo Local Government Area of Osun State, Nigeria

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**Abstract:** This study investigated the consumption pattern of wild edible green leafy vegetables found in Osogbo Local Government Area of Osun State using a descriptive survey research design. The sample size for this study was two hundred and eleven (211) respondents. A four-likert scale structured questionnaire containing twenty-four (24) items was used for data collection. Data were analysed using mean scores and standard deviation. The findings of the study revealed that "Yarin," "Worowo," "Gbure," and "Ebolo" are major wild edible green leafy vegetables found in the study area, and their consumption is quite low. The finding showed that wild edible green leafy vegetables have benefits such as alleviating malnutrition at no cost and can be a good source of income. The findings also showed that urbanisation's preference for cultivated vegetables over wild edible green leafy vegetables, as well as uncultured ideas like ignorance and poverty and well-researched information about cultivated leafy vegetables, are among the factors influencing the intake of wild edible green leafy vegetables. The findings of this study asserted that wild edible green leafy vegetables, when compared with cultivated ones, can alleviate malnutrition, prevent micronutrient deficiency, and equally serve as a source of income at little or no cost. Therefore, it was recommended that there is a need to explore, analyse, and document that wild green edible leafy vegetables are nutritious, health-promoting, and easy to cultivate, and bring out substantial yields even under difficult climatic and edaphic conditions.

**Keywords:** Consumption Pattern, Green Leafy Vegetable, Nutritional Qualities, Wild Edible

## 1. Introduction

Malnutrition is a manifestation of inadequate or excessive consumption of nutrients, which may be macro or micronutrients. Undernutrition, vitamin and mineral deficiencies, obesity and other diet-related diseases are world notorious diseases affecting the health status of many citizens in many countries (WHO, 2023). Non-consumption of vitamin A-rich food sources like green leafy vegetables, among others, causes reddened eyes, dry eyelids, retarded growth, weakened respiratory systems, high infant and maternal mortality, mental retardation and learning disability in human beings (Agbelemoge, 2014). Interestingly, increasing evidence shows that consuming vegetables can solve these precarious nutrition-related diseases worldwide. However, people must be knowledgeable about how best to make use of their resources to ensure nutritional well-being. Generally, Green leafy vegetables contain highly protective substances (which include dietary fibre, vitamins, proteins, minerals, and essential fatty acids), which are meant for the development and proper functioning of body organs. The high level of dietary fibre allows potentially harmful substances to be moved through the intestinal tract and helps to lower blood cholesterol levels (Knudsen, 2022). They complement those cereals and tuber crops with lysine from pulses and methionine from green leafy vegetables (Agbelemoge, 2014). They have a wide range of health benefits. Hence, the importance of green leafy vegetables (GLVs) in diet cannot be overemphasised for maintaining good health, fighting diseases and building body immunity, preventing nutrient deficiency disorders like obesity and reducing the risk of cardiovascular diseases (Sarma & Tr, 2024).

These GLVs are rich in macro-and micronutrients, significantly impacting people's nutritional status, including vitamins such as A, C, K, and carotene (provit A) (Beane et al., 2021). They are also sources of essential minerals such as iron, potassium, zinc, iodine, and calcium (Arasaretnam, 2018). Commonly consumed GLVs in Nigeria include waterleaf (*Talinum fruticosum*), fluted pumpkin (*Telfaira occidentalis*), bitter leaf (*Vernonia amygdalina*), jute mallow (*Corchorus olitorius*), and clove (*Syzygium aromaticum*). Despite the medicinal, nutritional, and economic benefits of these vegetables, they are still underutilised by the population. This limitation may be due to the lack of awareness regarding the nutrition and health benefits of these GLVs. It is argued that providing the necessary information about the nutritional and medicinal benefits of GLVs that are commonly consumed may encourage low-income populations in rural Nigeria to cultivate and consume more of these GLVs. This research study is hinged on the "Theory of Planned Behavior" (TPB) by Ajzen, (1991). The theory explains human behaviour in terms of three key factors. The first is an attitude, which is an individual's beliefs and opinions about consuming wild, edible, green, leafy vegetables. Subjective norms explain the social pressures and norms influencing individuals' decisions to consume these vegetables. Lastly, perceived behavioural control explains the individuals' perceived ability to control their consumption behaviour.

The research aims to address the issue of micronutrient deficiencies at little or no cost, advancing a livable food system without seasonality problems, promoting cultural heritage, enhancing food-improved healthy living and annihilating the problems of food insecurity. The ability

of any food to provide nutrients is one of the important components of food security. Wild edible green vegetables presently contribute to the alleviation of household food insecurity (Mavengahama et al., 2013), but this contribution could be increased through the promotion of their consumption and their integration into the maize-based cropping systems at the household level in subsistence farming systems in Nigeria in particular, and in smallholder cropping systems in general. Wild edible green leafy vegetables are important sources of both macro and micronutrients, antioxidants, and fibres; hence, they are a valuable source of rich diets. One attribute of Wild edible green vegetables, about which there is general agreement among researchers, is their potential to combat 'hidden hunger' (Harvestplus, 2021; Mavengahama et al., 2013). This is especially important among low-income earners and the rural population (Mavengahama et al., 2013) as the vegetables are not purchased. The micronutrient quality of poor diets could be improved with readily available and accessible traditional green leafy vegetables (TGLVs), especially among populations with inadequate access to animal-source foods for economic reasons (Beal & Ortenzi, 2022; Ejoh et al., 2021). The findings of this study can help preserve cultural heritage and traditional knowledge. Consumption of vegetables in daily diet has been strongly associated with stress management and reduction in risk for the major diseases (Henderson, 2021). This research, hence, contributes to a deeper understanding of the complex relationships between food, culture, health, and the environment, which will enrich various fields of study in academia. The information from this study on the consumption pattern of wild edible green leafy vegetables can improve food security and the nutritional pattern of the people in the Osogbo Local Government Area of Osun State, and it can also be a source of income for cottage business owners. It will enhance Osun State's nutritional goals and address the problem of food insecurity. The study will also enhance sustainable agriculture and bring about local economic development and income generation. Nigeria is a developing country facing food security challenges presently. The outcome of this research can be a source of information for the government and policymakers on addressing food insecurity, nutrition, sustainable agriculture, socio-economic development, culture preservation, and rural and policy development at large.

In addition to all the aforementioned points, this research addresses the United Nations' Sustainable Development Goals (SDGs) two (Zero hunger, i.e. food security, sustainable agriculture) and three (Good Health and Well-being i.e. nutrition, health benefits of wild edible greens), it addresses aspiration one, two and three of African Union Agenda (2063) which postulated a prosperous Africa (food security, nutrition, sustainable agriculture), and integrated continent (regional trade, economic development) respectively. It also addresses Nigeria's National Development Plan Goals one (Economic Growth and Development – agriculture, food, security, nutrition) and two (Social Inclusion and human development – health, education, poverty reduction). In summary, the study contributes to attaining the aforementioned global, regional, and national development goals, promoting sustainable development, food security, nutrition and environmental conservation in Nigeria and beyond. Despite the nutritional and economic importance of vegetables, some species are gradually becoming extinct and are no longer available for consumption. The importance of Wild edible green vegetables has, until recently, been largely unrecognised and

unacknowledged by agricultural policymakers (Chauhan et al., 2018; Rubaihayo, 2012), researchers and nutritionists alike, and to the best of our knowledge, meagre information about this is equally available in the study area. It is, therefore, imperative to advance this knowledge. It is against this background that this research work aimed at assessing the nutritional qualities and consumption pattern of wild edible green leafy vegetables found in Osogbo Local Government Area of Osun State. Page | 107

### *1.1. Statement of Problem*

Inadequate or non-intake of green leafy vegetables (GLVs) causes many health complications or diseases, like difficulty in digestion, micronutrient deficiency symptoms and heart diseases, among others. While the majority of people's diets consist primarily of cultivated green leafy vegetable (CGLVs) species, the intake of varieties of WEGLVs has been decreasing recently. This is evident in the gradual extinction of wild edible green leafy vegetables. The utilisation of WEGLVs has decreased to date, and lesser recognition is accorded them compared to the conventional ones, which are seasonal and thus more expensive during the dry season and even more unaffordable to low-income earners in the society. In light of this and taking into consideration that GLVs are part of our staples, it is pertinent to investigate consumption patterns of WEGLVs found in the study area, which are not widely recognised.

### *1.2. Purpose of the Study*

The major purpose of this research is to investigate the consumption pattern of wild edible green leafy vegetables found in Osogbo Local Government Area of Osun State. The specific objectives are to:

- (a) document level of awareness of the availability of varieties of WEGLVs and CGLVs;
- (b) investigate the consumption pattern of WEGLVs;
- (c) identify the benefit of WEGLVs over CGLVs, and
- (d) determine the factors affecting the consumption of WEGLVs in the study area.

### *1.3. Research Questions*

The following research questions guided the study:

- (a) What are WEGLVs found in the Osogbo Local Government Area of Osun State?
- (b) What are the consumption patterns of WEGLVs found in Osogbo Local Government Area of Osun State?
- (c) What are the benefits of WEGLVs over CGLVs?
- (d) What are the factors affecting the consumption of WEGLVs in the study area?

## **2. Materials and Methods**

### *2.1 Design for the Study*

A descriptive research design was used for this study because it facilitates a clearer understanding of data collection, identification, and systematic evaluation for researchers, as well as the study of people's behaviours, motivations, and additional features. It is a method that entails the utilisation of surveys, questionnaires, interviews, or observations to obtain data that is then analysed and summarised to obtain conclusions regarding the study's respondents.

### 2.1.1. Ethics Statement

Our School Research Ethics Review Committee approved the study, and the researchers obtained respondents' informed oral consent. The study was conducted using survey procedures to obtain the information. The researchers also adhered to ethical standards for research involving human subjects, such as maintaining respondent anonymity and confidentiality.

### 2.2. Area of the Study

The study was carried out in Osun State, specifically in the Osogbo Local Government Area. Osogbo is one of the thirty (30) Local Government Areas in Osun State, located in the southwest region of Nigeria. The Osogbo local government area in Osun State is divided into fifteen wards. The Osogbo local government area in Osun State is divided into fifteen wards. The indigenes of Osogbo are a sub-ethnic group in Yorubaland, and they speak the Yoruba dialect. The people of the area are predominantly farmers who grow crops such as cocoa, cassava, kola nuts, maize, yam, and vegetables. Additionally, others are traders, civil servants, and artisans. This makes the area viable for study.

### 2.3. Population and Sample

The total number of households in the study area is ten thousand five hundred and sixty-two (10,562) (Osogbo Local Government Secretariat, Osun State, 2023). The sample size for this study was two hundred and eleven (211) respondents. A multi-stage sampling technique was used to select the sample for this study. This method is chosen because it is appropriate for striking a balance between rigour and practicality, thus ensuring a good representation and a miniature version of the population.

Stage A: The ballot sampling technique was used to select ten (10) wards in the Osogbo Local Government Area of Osun State.

Stage B: The purposeful sampling technique was used to select twenty-one (21) households from nine (9) of the selected wards, while twenty-two (22) households were selected from one of the wards.

Stage C: A simple random sampling technique was used to select a respondent from each of the selected households from the selected wards.

### 2.4. Instrument for Data Collection and Study Procedure

A 4-Likert scale structure questionnaire consisting of items meant to solicit information from respondents was used for the descriptive research design techniques aspect of the study. Four Likert Scale options indicating strongly agree (SA), Agreed (A), Disagreed (D), and Strongly Disagreed (SD) were used as the rating scale. The questionnaire was titled “Nutritional Qualities and Consumption Pattern of Selected Wild Edible Green Leafy Vegetables Questionnaire” (NQCPSEGLVQ). The questionnaire consisted of four sections: A, B, C and D. Section A contains the demographic data of the respondents. Sections B, C, and D include information on the various types of wild edible green leafy vegetables available, the consumption patterns, the benefits of wild edible vegetables compared to cultivated ones, and the factors that affect the consumption of wild

edible green leafy vegetables in the study area. The reliability index was estimated using Cronbach's alpha, and a value of 0.814 was obtained, confirming the internal consistency of the instrument.

### 2.5. Data Collection Technique

Two hundred and eleven (211) copies of the questionnaires were administered with the help of three trained research assistants. All the administered questionnaires were correctly filled out and collected immediately to avoid loss in transit, given a return rate of 100%.

### 2.6. Data Analysis Technique

Data from the questionnaires were collected and analysed using frequency count, percentages, mean and standard deviation. The mean of the questionnaire item was used and interpreted based on the real statistics limit of the number as follows: strongly agreed (SA) = 4, agreed (A) = 3, disagreed (D) = 2, and strongly disagreed (SD) = 1. A cut-off point was used to determine the accepted and rejected items. The cut-off point was determined by totalling the nominal value divided by the number of nominal values.

That is, C. O. P. = 2.50 ----- (1)

Decision Rule: Any mean of 2.50 and above was regarded as agreeable, while any below 2.50 was considered disagreeable.

## 3. Results and Discussion

**Table 1:** Mean and standard deviation of responses of the respondents on the level of awareness of availability of varieties of Wild and Cultivated Edible Green Leafy Vegetables found in Osogbo Local Government Area of Osun State

S/N	Level of awareness of the availability of varieties of Wild and Cultivated Edible Green Leafy Vegetables	N = 211, C = 2.50		
		$\bar{X}$	SD	Decision
<b>Wild Edible Green Leafy Vegetables</b>				
1	Yanrin	2.31	0.964	Not widely recognised
2	Worowo	3.69	1.094	Widely recognised
3	Ogunmo	1.93	1.038	Not widely recognised
4	Gbure	3.96	0.997	Widely recognised
5	Ebolo	2.32	1.014	Widely recognised
<b>Cultivated Edible Green Leafy Vegetables</b>				
6	Soko	3.46	0.917	Widely recognised
7	Efo tete	4.27	0.895	Widely recognised
8	Efirin	3.30	1.020	Widely recognised
9	Amunututu	3.70	0.927	Widely recognised
10	Ewuro	4.08	0.902	Widely recognised

Key: N = Total number of respondents, C= cut-off Point,  $\bar{X}$  = mean response of all respondents, SD= Standard deviation

Table 1 revealed the mean responses on the level of awareness of the availability of varieties of both wild and cultivated edible green leafy vegetables in the study area. The means of the items range from 1.93 to 4.27. The mean of items 2, 4, 6, 7, 8, 9, and 10 were above the cut-off point of



2.50; this implies that the respondents widely recognised the seven vegetable types out of the ten listed edible green leafy vegetables found in Osogbo Local Government Area of Osun State, while the mean of items 1, 3, and 5 were below the cut-off point of 2.50, indicating that those green leafy vegetables were not widely recognised. All five cultivated vegetables mentioned in this study were widely recognised, while only two out of the five WEGLVs were widely recognised. The outcome of the findings on edible green leafy vegetables found in Osogbo Local Government Area of Osun State indicates that *Yanrin*, *Worowo*, *Ogunmo*, *Gbure*, *Ebolo*, *Soko*, and *Tete* are the major wild edible green leafy vegetables found in the study. However, only two of the vegetables, namely *Worowo* and *Gbure*, are widely recognised. The level of awareness about the availability of wild-edible green leafy vegetables is low. This implies that most of the wild edible green leafy vegetables are gradually going into extinction, or only a few are now available, recognised, and consumed by many people, even though they are readily available at little or no cost. This may result from people not being able to recognise them, not being aware of their edibility, or not being able to access them easily. The result of this study concurs with the findings of Misra et al. (2008), who reported that even though they are valuable, they are underutilised as they lack awareness, which is a common feature of most traditional foods. These findings agreed with the opinion of Chauhan et al. (2018) and Ojuederie et al. (2024), who opined that only people in rural areas have free access to WEGLVs as they are collected from the wild, on farms, and plantations. The reluctance of people walking far distances to obtain WEGLVs is an impediment contributing to a decrease in utilising these indigenous vegetables (Dweba & Mearns, 2011). However, this is in contradiction with the findings of Chauhan et al. (2018), who reported that the reduced level of consumption of wild edible green leafy vegetables is a result of a shift in attention. This may be due to more exposure to environmental changes, among others.

**Table 2:** Frequency and Percentage of responses of the respondents on the consumption pattern of wild and cultivated edible green leafy vegetables found in Osogbo Local Government Area of Osun State

S/N	Consumption pattern of wild edible green leafy vegetables	Never	Once	Twice	Thrice	More than Thrice
Wild edible green leafy vegetables						
1	Yanrin	36(17.1%)	107(50.7%)	41(19.4%)	21(10.0%)	6(2.8%)
2	Worowo	4(1.9%)	34(16.1%)	31(14.8%)	73(34.6%)	57(27.0%)
3	Ogunmo	86(41.0%)	77(36.7%)	34(16.1%)	7(3.3%)	9(4.3%)
4	Gbure	5(2.4%)	15(7.1%)	61(28.9%)	87(41.2%)	70(33.2%)
5	Ebolo	9(4.3%)	56(26.5%)	65(30.8%)	71(33.6%)	14(6.6%)
Cultivated edible green leafy vegetables						
6	Soko	4(1.9%)	29(13.7%)	21(10.0%)	92(43.6%)	21(10.0%)
7	Efo tete	2(0.9%)	10(4.7%)	78(37.0%)	73(34.6%)	105(49.8%)
8	Efirin	11(5.2%)	30(14.2%)	63(29.9%)	68(32.2%)	24(11.4%)

9	Amunututu	2(0.9%)	19(9.0%)	84(39.8%)	43(20.4%)
10	Ewuro		16(7.6%)	30(14.29%)	87(41.2%)

Table 2 revealed the respondents' responses to consumption patterns of wild edible green leafy vegetables found in the Osogbo Local Government Area of Osun State. The table revealed that a higher percentage of 107 (50.7%) of the respondents consumed Yarin once. Likewise, a higher percentage of 86 (41.0%) of the respondents had never consumed *Ogunmo* before. Moreso, the study revealed that a higher percentage of the respondents consumed the following wild edible green leafy vegetables three times: 73 (34.6%) *Worowo*, 87 (41.2%) *Gbure*, 71 (33.6%) *Ebolo*, 92 (43.6%) *Soko*, 68 (32.2%) *Efirin*, 84 (39.8%) *Amunututu*, and 87 (41.2%) *Ewuro*. However, efo-tete is the only vegetable identified by the respondents that they have consumed more than three times. This implies that the consumption of most WEGLVs in the study area is low. The outcome of the analysis on the consumption pattern of WEGLVs found in the Osogbo Local Government Area of Osun State revealed that out of the five identified WEGLVs in the study area, only three had been consumed by the respondents three times in their lifetime. This low consumption can be attributed to the non-availability of the vegetable. This finding aligns with Kissanga et al. (2021), who discovered that urbanisation, preferences, and availability can impact the consumption of WEGLVs. They are less available in the urban areas. Hence, the residents have to make do with the cultivated ones that are available in the markets, which are expensive during dry seasons and are often dangerous to health because they are often cultivated with fertilisers. Nnamani et al. (2009) asserted that WEGLVs are considered food for low-income earners in society, food for famine, or food for starvation.

**Table 3:** Mean and standard deviation of responses of the respondents on the benefits of wild edible green leafy vegetables over cultivated green leafy vegetables

S/N	Benefits of wild edible green leafy vegetables over cultivated green leafy vegetables	N = 211, C = 2.50		
		$\bar{X}$	SD	Decision
1	Wild, edible green leafy vegetables alleviate malnutrition as a result of micronutrient deficiencies at no cost	3.85	0.370	Agreed
2	Sales of Wild, edible green leafy vegetables can be a source of income for the family	3.66	0.487	Agreed
3	The medicinal properties reported in Wild edible green leafy vegetables can keep consumers healthy.	3.69	0.472	Agreed
4	They can be used for textile design in clothing materials as ornaments, among others.	3.66	0.474	Agreed
5	It is economical because its availability is free of charge.	3.57	0.553	Agreed
6	It reduces the risk of diseases associated with organic fertiliser used in cultivated edible vegetables.	3.58	0.494	Agreed
7	It is nutrient-dense in terms of micronutrients such as mineral and vitamin content.	3.74	0.464	Agreed

Key: N = Total number of respondents, C = cut-off Point,  $\bar{X}$  = mean response of all respondents, SD= Standard deviation

Table 3 revealed that the mean responses of all the items range from 3.57 to 3.85. This indicates that the respondents agreed with all the item's statements on the benefits of wild edible



green leafy vegetables over cultivated green leafy vegetables because their mean was above the cut-off point of 2.50. The analysis revealed that WEGLVs offer several benefits over cultivated green leafy vegetables. They help alleviate malnutrition at no cost, serve as a source of income, contain medical property that keeps people healthy, can be used as dyes and ornaments in textile industries, are economical to produce, and reduce the risk of diseases associated with micronutrient deficiency. The findings agree with the opinion of Kissanga et al. (2021) and Uusiku et al. (2020) that wild, edible green leafy vegetables can solve diet-related diseases and prevent starvation. WEGLVs are the principal source of cheap vitamins and minerals, including other nutrients than cultivated ones. The findings of Towns and Shackleton (2018) opined that the use of WEGLVs can be a means of economising household spending. Findings by Ejoh et al. (2021) reported that wild green leafy vegetables compare well with the commonly consumed and cultivated green leafy vegetables.

**Table 4:** Mean and standard deviation of responses of the respondents on factors affecting the consumption of wild edible green leafy vegetables in the Study Area

S/N	Factors affecting the consumption of wild edible green leafy vegetables in the Study Area	N = 211, C = 2.50		
		$\bar{X}$	SD	Decision
1	Urbanisation favours the consumption of western vegetables at the expense of the Wild edible green leafy vegetables.	3.68	0.555	Agreed
2	The majority of the people associate the consumption of wild, edible green leafy vegetables with uncultured beliefs such as poverty and ignorance, among others	3.41	0.761	Agreed
3	Cultivated leafy vegetables are widely preferred to wild edible leafy vegetables because of well-researched facts about the availability of their nutrition.	2.66	1.084	Agreed
4	Unrecognition of their edibility values contributes to the reduced consumption of wild edible leafy vegetables	3.31	0.717	Agreed
5	Ease of accessibility of cultivated vegetables to the people contributes to the reduction of wild edible green leafy vegetable consumption	3.56	0.563	Agreed
6	Seasonal availability of most wild edible green leafy vegetables leads to a reduced consumption of these vegetables	3.72	0.522	Agreed

Key: N = Total number of respondents, C = cut-off Point,  $\bar{X}$  = mean response of all respondents, SD = Standard deviation

Table 4 shows that the mean responses of all the items range from 2.66 to 3.72. This indicates that the respondents agreed with every statement raised on the factors affecting the consumption of wild edible green leafy vegetables in the study area because their mean was above the cut-off point of 2.50. The findings on the analysis outcome on the factors affecting the consumption of wild edible green leafy vegetables in the study area revealed that urbanisation gratifies intake of cultivated vegetables at the cost of WEGLVs (Gido et al., 2017) the majority of people associate the intake of

WEGLVs with uncultured belief such as poverty, ignorance among other; Cultivated leafy vegetable is widely preferred to the wild edible leafy vegetables because of well-research fact about the availability of their nutrition; non-recognition of their edibility values contribute to the reduced consumption of wild edible leafy vegetables; Ease of accessibility of cultivated vegetables to the people contributes to the reduction of wild edible green leafy vegetable consumption; and that seasonal availability of most WEGLVs lead to reduced consumption of these vegetables. According to Ejoh et al., (2021), seasonal availability and preference for certain species determine the consumption pattern of traditional green leafy vegetables.

The implication is that the difficulty of WEGLVs is lesser known when compared with the cultivated ones, which may result from the difficulty in assessing them. The outcomes of this study also show that the consumption pattern of WEGLVs is low, which may be due to the general assertion that they are for low-income earners or the poor in society. The result of this study further outlines the benefits of WEGLVs, such as low cost, nutritional benefits, hunger and malnutrition alleviation, a means of promoting cultural heritage, and economic opportunity, among others. Including wild, edible green leafy vegetables in modern cuisine can enrich food culture and promote innovative culinary practices. The findings of this research study equally revealed the factors affecting the consumption of WEGLVs, such as favouritism of cultivated vegetables, seasonality, non-availability of well-researched facts, and uncultured beliefs such as poverty and ignorance associated with its consumption, among others. This study's findings asserted that WEGLVs, compared to cultivated ones, can alleviate malnutrition, prevent micronutrient deficiency, and equally serve as a source of income at little or no cost. The study is limited to only a local government in Osun State, which may affect the generalisation of the results. The gradual extinction of some of the WEGLVs makes it difficult to assess them for the study. The findings on the availability and edibility of the WEGLVs used in the study may not apply universally as there are regional differences in plant availability, cultural practices, beliefs, and dietary habits. Further studies should be carried out to examine these and many more relating to EGLVs in other parts of the country and other countries at large, exploration of innovative culinary uses and processing methods to enhance the consumption and appeal of wild edible green leafy vegetables, food safety aspects of wild edible green leafy vegetables can be investigated including contamination risks and proper handling practices also, policy analysis and regulations related to wild edible green leafy vegetables harvesting, trade and their impact on sustainable food systems. This study has been able to reveal the availability and consumption pattern, the diversities of varieties, the nutritional benefits, cultural values, and socio-economic roles of wild edible green leafy vegetables in the Osogbo local Government area of Osun State, Nigeria, paving the way for further research and practical applications.

#### **4. Conclusion**

The study concluded that recognition, as well as intake of WEGLVs, are low despite their numerous benefits in terms of malnutrition, poverty alleviation, eradication, medicinal value, contribution value

for filling food gaps and supplementing staple foods, and ability to prevent food insecurity through the provision of low cost and nutrient-dense diets, coupled with their been around all year round and their ability to with drought. WEGLVs can be a source of livelihood to the rural dwellers. Despite their immense benefits, consumption is ascribed only to the poor in society. There is a need to create awareness of the numerous benefits of WEGLVs. Thus, the government should promote the dietary intake of WEGLVs in the current groups that are currently obtainable in the country, and nutrition policies should canvass the use/consumption of WEGLVs as a very germane means of alleviation food insecurity, source of nutrient-dense diet, and a source of income to the rural dwellers in our nation.

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### **Conflict of Interest**

The authors declare no conflict of interest.

### **Author Contributions**

Bello Monsurat, Busari, Bidemi Zeinab, Olarewaju, Cecila Abiodun and Otolowo Temilade Dupe conceived the study, collected data and wrote the manuscript. All authors approve the final draft of the publication.

### **Data Availability Statement**

The original contributors presented in the study are included in the article. Further inquiries can be directed to the corresponding author.

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