INTERNATIONAL JOURNAL OF APPLIED

SCIENCE RESEARCH

FEDERAL POLYTECHNIC OKO, ANAMBRA STATE

CONTRIBTIONS OF HOME GARDENS TO FOOD SECURITY DURING AND POST COVID-19ERA IN NIGERIA

RACHAEL IFEDMA AGU

DEPARTMENT OF HOME AND RURAL ECONOMICS FEDERAL POLYTECHNIC OKO, ANAMBRA STATE NIGERIA 07034513318

agurachael61@gmail.com

Abstract

Home Garden has been embraced by households right from the olden days as a good source of food, thus promoting food security. Due to increase in population, the challenge of food security becomes inevitable in Nigeria. Further, the outbreak of corona virus disease exposed a lot of households to hunger due to restriction of movements placed as one of the measures for curbing the spread of the disease. This thereby greatly increased the need for home gardens. The paper reviewed the contributions of Home gardens to food security during and Post Covid-19 era. It is discussed under the following sub heads: concept of home garden, products of home garden, contributions of home garden to household food security, challenges faced by households in the practice of home gardens, strategies for improving the practice of home garden, among others. The review showed that inadequate accommodation, emergence of modern facilities such as interlock tiles and prohibition order placed by the landlords and the landladies are some challenges of home garden in Nigeria. It also revealed that planting food crops using containers and sacks along with crops that do not take time for harvesting has a great role in tackling the challenges of home garden to boast food security during and posit covid-19 era in Nigeria. From the review, it was concluded that home garden is a veritable tool in promoting food security, and recommended that household members should be encouraged to embrace home garden by cultivating crops using containers and sacks around their neighborhood.

Key word: Home garden, Food security, Household, Covid -19

INTRODUCTION

Housing is one of the essentials of life and helps in keeping both life and properties safe. Originally, people after building houses keep some portion of empty land within the compound where they grow different types of plants. These plants range from flower to food crops. This portion of land is called a garden, specifically a home garden because it is either situated within or outside but very close to the living house. According to Odebode (2006), home garden refers to the cultivation of a small portion of land which may be around the household or within walking distance from the family home. Anyakoha(2015) opined that gardening involves the cultivation of flowers, fruits and vegetables. As a regular source of fresh vegetables, the author further stated that the flower gardens, potted and ornamental plants also add beauty to the surroundings of a house. Okani and Okoli (2017) defined home garden as the cultivation of crops, vegetable crops, ornamental

FEDERAL POLYTECHNIC OKO, ANAMBRA STATE

plants for beauty and herbs at the backside of the home, specifically for consumption.

It is a mixed cropping system that encompasses vegetables, fruits, plantation crops, spices, herbs, ornamental and medicinal plants as well as livestock that can serve as a supplementary source of food and income (Galhena, Freed and Maredia, 2013).

Home garden has stood the test of time and is viewed by people from different perspective while some see it as a hobby, or a relaxing escape from pressure of an urban environment (Okani and Okoli, 2017), others see it as an important source of supplementary income for poor rural and urban households around the world (Marsh, 1998). Notwithstanding, home garden has been of great help to every household both when food is in season and out of season. With the increase in population, natural disasters, health challenges with food scarcity threats all over the country, the practice of home garden which seems to be over looked becomes more inevitable. The current state of home garden in Nigeria is not appealing based on the fact that most modern buildings do not have provisions for such as most landlords would want to put buildings in every available space to maximize financial benefits. With this development, it is obvious that occupants of such places do not have space for their vehicles, not to contemplate gardening activities. Further, with innovations such as the use of interlock tiles all over the compound for beautification purposes, the practice of home garden becomes more threatened, thus reducing the much desired supplemental food supply from home gardens.

Food which is an essential part of human life needs to be readily available for human consumption hence food security. In spite of the huge investment and annual budgeting allocation in the agricultural sector, and impressive figures turned out by the national bureau of statistics, the number of people without access to adequate food and nutrition continues to rise annually, especially among sub Saharan African countries (Agu and Okadi, 2019). Agu and Abazu (2020) noted that before the year 2020, Nigeria has been witnessing food insecurity as a result of insecurity of life and properties. Due to threat, killing and fear imposed by the herdsmen and bandits, a lot of farmers and families in the rural areas where food is produced have been killed, some rendered homeless and unproductive.

Covid-19 on the other hand has brought noticeable hunger in the country due to lockdown of the economy and social distance believed to be some preventive ways of curbing the spread of the disease. It is therefore believed that if home garden is acknowledged and supported by every household irrespective of their locations (urban or rural area) would have a lot to do in solving the problems of food insecurity

FEDERAL POLYTECHNIC OKO, ANAMBRA STATE

during the period of economic lockdown and in the post COVID-19 era. This paper reviewed the contributions of home garden to household food security during and post COVID-19 era in Nigeria.

Conceptual Clarification

Household: People live together under a roof to feed, share their views and as well carry out their daily activities. These people may or may not relate in one way or the other and are referred to as a household. Household according to the United Nations (2017) is a group of persons who make the same provision for food, shelter and other essentials for living. Mcgregor (2016) defined household as basis of residence whereas families are defined primarily by kinship. Most families live in a household but not all households contain families. Beaman and Dillon (2011), stated that the standard definitions of household usually include some intersection of keywords relating to residency requirements, common food consumption and common intermingling of income or production decision with a common household head. This paper thereby does not consider those living in the hostels, hospitals, prisons or camping ground as households.

Home Garden: Home garden has existed from the olden days with no universal definition rather continued to be the cultivation of a portion of land within the compound of a household situated either by the side, back or across the fence of the building. Tracing the origin of home garden, Landon-lane (2004) noted that people have had gardens near homes for the thousands of years as fruits, vegetables and grains gathered from the wild were taken to family huts for meal which in the process some seeds fell down and others been released after eating the fruit and thereby germinate, grow and were taken care of by family members who know what the plants were. The importance of home garden cannot be over emphasized as it has become an integral part of the livelihood system, contribute to the family food, income and the conservation of biodiversity (Igwe, Agu-Aguiyi and Nwazuroke, 2014).

Food Security: Food security is an inevitable aspect of human life and a most challenging situation to the society at large. Food security refers to when people have access to their various food needs. Its importance made the United Nations to include it as a component of the sustainable development goals which officially came into force on January 1st 2016 as successor to the Millenium Development Goals (Agu and Okadi 2019). Food Agricultural Organization (FAD) in Attah (2012) stated that food security obtains when all people at all time, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. Food is not secure if it does not consider the nutritional needs of the people that it is meant for. Onimawo (2012) identified that

FEDERAL POLYTECHNIC OKO, ANAMBRA STATE

under nutrition is the outcome of insufficient food intake (hunger) and repeated infectious diseases. When households are well fed, they are productive and contribute positively to their society. To this efffect, the United Nations (2017) thereby specified that Sustainable Development Goals 2 aims to end hunger and ensures access to sufficient safe and nutritious food by all people all year.

Corona Virus (COVID-19)

Corona Virus also known as COVID-19 is a very deadly disease that has claimed a lot of life all over the world since its emergence in December2D19. It is a highly transmitted and pathogenic viral infection caused by Severe Acute Respiratory Syndrome Corona virus 2 (SARS –COV-2), which emerged in Wuhan, China and spreads around the world (Shereen, Kham, Kazim and Bashir, 2020). COVID-19 is an acronym derived from corona virus disease 2019" chosen to avoid stigmatizing the virus origins in terms of populations, geography or animal associations. Being a respiratory disease, some illness caused by COVID-19 are cold. Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS). Covid-19 outbreak according to Cennimo (2021) was declared a global health emergency on January 30th, 2020 by the World Health Organization and on March 11th, 2020, a global pandemic. It is a pandemic haven affected the whole world. Lockdown of the economic activities, social distances and many more were the measures for preventing the spread of the virus. Post COVID-19 era is thereby referred to the period when the spread of the virus seems to have reduced and the lockdown gradually or totally lifted to allow people perform their duties from where they earn their livings.

Products of Home gardens

As the world's population increases, quest for food consumption also increased making home garden which was originally made of fruits, vegetables and grains as stated by Landon-lane (2004) to increase. Zerihum, Weyessa and Adugna (2011) added that household with gardens obtain more than half of their supply of vegetables and fruits including secondary staples such as plantain, cassava, cocoyam, sweet potato, yam, medicinal plants, herbs and rearing of animals for their animal proteins. Some of the animals found in household gardens include poultry, fish and goat. Fruits and vegetables such as oranges, pear, coconut, bitter leave, scent leaves, garden egg and many others are also the products of household garden.

Contributions of home garden to household food security

INTERNATIONAL JOURNAL OF APPLIED

SCIENCE RESEARCH

FEDERAL POLYTECHNIC OKO, ANAMBRA STATE

Some of the contributions of home garden to household food security in Nigeria are:-

1. Source of Food: Home garden is a good source of food to households. It provides quick and direct access to different foods that can be harvested, prepared and eaten by family members daily (Uzokwe, Giweze and Ofuoku, 2011). It is believed that some people died during COVID- 19 lockdown resulting not only from the disease but hunger as well. The hunger was so severe as people's source of livelihood was disrupted. In this case occupants of home gardens did not suffer much as they can easily lay hold on their products within their reach. UNDP and Marsh in Uzokwe et al (2011) noted that garden may become principal source of household food and income during periods of stress like the pre harvest lean season, harvest failure, prolong unemployment, health or other disabilities suffered by family members, agricultural or economic disruption caused by floods or war.

2. Boost Family Income: These products of home garden yields a lot of money to the households when sold. FAD (1995) noted that marketing of garden products and animals are often the only source of independent income for women .UNDP (1996) also described home garden as an important source of supplementary income for poor rural and urban households around the world.

3. Promotes nutritional health of the household: Food security encompasses the nutritional content of the food as a well nourished people according to Nnam (2012) learn and have better productivity than malnourished individual. Home garden provides a diversity of fresh foods that improve the quantity and quality of nutrients available to the family (Zerihum et al, 2011). One of the ways of fighting COVID-19 is by boasting the immune system to be high. This is very achievable with the products of household garden as they are always fresh and fresh foods retain its nutritional qualities.

4. Increase knowledge/skill in crop production: Traditional knowledge already known by households in crop and poultry production helps a lot in household garden production. Some have upgraded their knowledge through workshops and seminars for effective production and as well pass the knowledge to their younger ones who may not have an opportunity of staying where farming activities take place

5. Employment: Home garden has created employment to most unemployed people. It is also a second type of job for some working class people. The emergence of COVID-19 also made a lot of people to embark on other source of livelihood in which home garden is one of them.

Challenges Faced by Households in the practice of home gardens.

FEDERAL POLYTECHNIC OKO, ANAMBRA STATE

Inspite of the numerous contributions of home gardens to household food security, its application is no longer fully realized in Nigeria due to several challenges. Generally, there is inadequate accommodation for home garden in various household compounds. These days every landlords/ladies would want to engage all their available land spaces with buildings while developing their lands. In such place, the occupants of the environment even find it difficult to relax where as those with vehicles do not even have packing spaces for their vehicles and other activities. The aim of these landlords is to make more money through house rents.

Emergence of modern facilities also poses a great challenge to home garden. Modern buildings these days including renovated ones have interlock tiles within the compound which makes the place very neat and attractive. Across the fence where some climbing crops can grow are also utilized as electrical gadgets for security purposes are also placed.

Prohibition order placed by the landlords also affect household garden. Most landlords prohibit household gardens adding that it can affect the health of the occupants of those buildings. For instance poultry rearing pollutes an environmental whereas cultivated lands can attract harmful insects and snakes.

Strategies for improving the practice of house hold garden.

It is therefore of no doubt that home garden has gone a long way in promoting food security in Nigeria. The following strategies can be of help in improving its practice in the country for better yield.

1. Every household should acquire some managerial knowledge in order to make good use of every available space in their environment.

2. Households should involve in some methods of planting that do not have direct contact with the interlock tiles.

3. Planting of crops that do not take much time to be harvested should be embraced.

Conclusion

FEDERAL POLYTECHNIC OKO, ANAMBRA STATE

Home garden has been a good relieve to household regarding food security during and in post COVID-19 era. Though household garden seem to be adversely affected due to such factors as inadequate accommodation, arrival of modern facilities (interlock tiles), prohibition orders by the landlords, with the enumerated strategies, the challenges would be defeated.

Recommendation

Based on the review and the conclusion, the following recommendations were made

1. Plants can be planted using containers which can be situated at the balcony as done with flowers. Such plants include pepper, garden egg among others, thereby helps in minimizing spaces.

2. Innovations in Agriculture should also be adopted such as planting of food crops using sacks as done in some other countries like Zambia. Potatoes and yams are examples of such plants. This method does not only minimize space but also prevent the crop from having direct contact with ground (interlock tiles)

3. Planting of crops such as groundnuts, corn and many others that do not take a lot of time for maturity should be encouraged by households to avoid making the environment untidy. Constant clearing of the poultry houses is also inevitable to prevent environmental pollution that may adversely affect the health of the occupants of the environment.

References

- Agu, R.I and Abazu, H.U (2020). Approaches for Enhancing Food Security in Nigeria in a Post COVID-19 era. Paper presented at the Maiden international E. conference on Science and Technology, in Post COVID-19 era. Approaches and Emerging issues 15-16th December
- Agu, R.I and Okadi, A.O (2019), Role of information and Communication Technology in promoting Household Food security in Nigeria. Paper presented at the 1st international Conference on Information Science, Media, Academic Rresearch and Development. 25-26th August.

FEDERAL POLYTECHNIC OKO, ANAMBRA STATE

Anyakoha, E.U.(2015). Home Management for Schools and Colleges Africana first publishers plc.

- Attah, A.W. (2012). Food Security in Nigeria. The role of Peasant Farmers in Nigeria. African Research Review. An international multidisciplinary Journal, Ethiapida 6(4) pp173-190 Retrieved from https://dx.dio.org/10.4314/afreev.v614.12 ISSN 2070-0083
- Beaman, L and Dillon, A. (2011).Do Household definition Matters in Survey Design? Results from a Randomized Survey Experiment in Mali beamandillon-HH def. pdf.

Cennimo, D.J (2021), Coronavirus Disease 2019 (COVID-19): Practice Essential, Background, Route of transmission

Retrieved from https:// emedicine. Med-scape.com/article/2500114.

- Food Agricultural Organization, (1995). Improving nutrition through home gardening: a training package for preparing field workers in southeast Africa Asia Rome. p48.
- Galhena, D. H, Freed, R & Maredia, K.M (2013). Home gardens: A promising approach to enhance household food security and wellbeing from Agriculture and food security https://agricultureandfoodsecurity.biomedcentral.com/articles/10.1186/2048-7010-2-8
- Igwe, K, Agu-Aguiyi, F & Nwazuruoke, G.(2014). Social and Economic Implications of Home Gardening on the livelihood of Farm Households in Abia state, Nigeria. Developing country studies 4(1) www.iiste.org. ISSN2224-607 x (paper) ISSN2225-0565 online
- Landon-Lane, C. (2004). Livelihoods Grow in Gardens. Diversifying Rural Income through Home Gardens, Diversification Booklet 2, Food and Agricultural organization of the United Nation Rome.
- Marsh, R. (1998). Household Food security through home gardening. Evidence from Bangladesh and central America. Proceedings of an international livestock Research institute(ILRI) Rockefeller foundation workshop Addis Ababa, Ethiopa.
- Mcgregor, S.L.T (2016). Conceptualizing Home and Household

https://www.researchgate.net/publication/310425082.

Nnam, N.(2012). Strategies for improving Nutrition to achieve the Millenniun Development Goals" Targets in Nigeria. Proceedings of the 42nd Annual General meeting and scientific conference of the Nutrition Society of Nigeria 19-22 September, pp 26-30

7 INTERNATIONAL JOURNAL APPLIED SCIENCE RESEARCH, INJASR. VOL. 1, JUNE 2021

FEDERAL POLYTECHNIC OKO, ANAMBRA STATE

Odebode, S.O. (2006). Assessment of Home gardening as a potential source of household income in Akinyele Local Government Area of Oyo state Nigeria. Journal of Horticulture science 2 pp47-55.

Okani, N.O and Okoli, J.K. (2017) . Principles and practice of Home Gardening. J.B computer and publishing.

- Onimawo, I.A (2012). Food and Nutrition Security Situation as Indicators of Development in African states. Proceedings of the 42nd Annual General Meeting and Scientific conference of the Nutrition society of Nigeria 19-22nd September, pp11-25.
- Shereen, M.A, kham, S, Kazim, A & Bashir. N.(2020). COVID-19 infection: Origin, Transmission and Characteristics of Human Coronavirus. Journal of Advanced Research 24(9393)

Retrieved from https:// www.researchgate.net//publication /339970952. Dol:1016/ jare.

- United Nations. (2017). Measuring Progress towards the Sustainable Development Goals. <u>https://sdg-tracker.org./Accessed March 28</u>, 2021.
- Uzokwe, U.N, Giweze E.A & Ofuoku A.U (2016).Contribution of home gardening to family food security in Delta North Agricultural Zone, Delta state, Nigeria. International Journal of Agricultural Extension and Rural Development studies 3(2) pp 26-23.

Retrieved from www.eajournals .org Accessed April 21, 2021

Zerihum, K, Weyess, G & Adugna, D. (2011). Understanding Home garden in household food security strategy. Case study around Jimma, Southwestern Ethiopia. Research Journal of Applied Science 1(6) pp 38-43.