

Entrepreneurial Mindset Development in Agricultural Production: An Imperative for Enhancing Food Security Among Public University Workers in South-East, Nigeria.

¹ Bassey, Njorkun Ndubuisi (Ph.D)

bassey.ndubuisi@unn.edu.ng

+2348065921618

² Akah Maryrita Nnenna(Ph.D)

ritagemma6@unn.edu.ng

+2348076946323

³ Offiong, Agnes E. A. (Ph.D)

agnesoffiong@yahoo.com

08035915139

⁴ Nwoke Okechukwu Simon (Ph.D)

siokechukwu@gmail.com

08036660171

⁵ Akpa Joshua Ojonugwa

joshakpa85@gmail.com

07059103462

¹ Department of Agricultural Education,
University of Nigeria, Nsukka.

^{2 & 4} Department of Vocational and Entrepreneurship Education, University of Nigeria,
Nsukka.

³ Department of Environmental Education,
University of Calabar, Calabar.

⁵ Department of Business Education,
University of Nigeria, Nsukka.

Corresponding Author: Dr. Bassey N. Ndubuisi (08065921618,
bassey.ndubuisi@unn.edu.ng)

Author's ORCID: <https://orcid.org/0000-0003-3301-8250>

Entrepreneurial Mindset Development in Agricultural Production: An Imperative for Enhancing Food Security Among Public University Workers in South-East, Nigeria.

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Abstract

The study determined entrepreneurial mind-set development in agricultural production as an imperative for enhancing food security among public university workers in South-East, Nigeria. The study was guided by three objectives and three research questions. A descriptive survey research design was adopted and it was conducted in three Federal Universities in South East, Nigeria. A total population of 330 lecturers was randomly selected from the three Federal Universities and sampled using accidental sampling technique. Structured questionnaire was used for data collection and it was face validated by three experts in Agriculture and Entrepreneurship. Cronbach alpha reliability method was used to ascertain the internal consistency of the instrument and a reliability coefficient of 0.88 was obtained. Data collection was carried out by the researchers and three research assistants. Mean and standard deviation were used to analyse the data collected. The findings revealed 13 lucrative areas of agricultural production university workers in south east can develop entrepreneurial mind-set in for sustainable food security, 10 benefits of developing entrepreneurial mind-set in agricultural production, and 12 strategies for effective engagement in agricultural production among university workers. Based on the findings, it was concluded that entrepreneurial mind-set development in agricultural production is a vital tool for sustainable food security and survival among university workers. The study recommended that university administrators should allocate available lands to staff interested in agricultural production; Federal government should encourage university workers to embark on massive food production by providing them with soft loans and farm inputs among others.

Keywords: Entrepreneurial Mind-set, Agricultural Production, Food Security, University Workers.

Introduction

Food security is a critical issue globally, with a significant proportion of the population not having reliable access to nutritious and affordable food. The global food security challenge has become increasingly pressing, with the United Nations estimating that the world's population will reach 9.7 billion by 2050 (United Nations, 2020). In Nigeria, food insecurity persists, particularly among vulnerable groups such including public university workers (Oyebade et al., 2020). The country's agricultural sector, which employs approximately 30% of the workforce, has significant potential for addressing food security concerns (Federal Ministry of Agriculture and Rural Development, 2020). Agricultural production has been identified as a crucial sector for enhancing food security ((Food and Agricultural Organization (FAO), 2018). However, the traditional approach to agriculture, characterized by subsistence farming, has limitations in meeting the increasing demand for food (Kumar

et al., 2020). The development of an entrepreneurial mind-set in agricultural production among university workers is essential for transforming the sector and ensuring food security (Afolabi et al., 2020).

Food security is a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (FAO, 2021). Food security can also be regarded as the ability of individuals to obtain an adequate diet in terms of quality, quantity, and cultural acceptability, without compromising access to other basic needs and the ability to make food choices (Pinstrup-Andersen, 2012). Food security is the successful provision of sufficient, safe, nutritious, and culturally acceptable food for all individuals within a society, achieved through sustainable food systems that promote equity and resilience (FAO & WHO, 2019). It emphasizes the need for food systems that are not only productive but also inclusive and environmentally sustainable.

Food insecurity on the other hand is the inability to have access to sufficient, safe, and nutritious food for an active and healthy life. According to Sharma, DePue, and Coberley (2021), food insecurity refers to barriers that prevent individuals from obtaining enough nutritious food to meet their dietary needs. This can result in hunger, malnutrition, and other health related issues due to lack of essential nutrients. Developing entrepreneurial mind-set in agricultural production would be one of the effective ways of tackling food insecurity issues in Nigeria.

Mind-set is defined as a mental attitude which determines how an individual interprets and responds to situations (Ruhara & Kayitana, 2018). Entrepreneurial mind-set on the other hand involves the willingness to take risks, a proactive approach to problem-solving, and the ability to adapt to changing circumstances in order to seize new opportunities (Minniti, 2016). According to Gibb (2020), entrepreneurial mind-set encompasses a combination of creativity, resilience, and a strong sense of self-efficacy. Entrepreneurs with this mind-set are not afraid to think outside the box nor to bounce back from failures, and they believe in their own ability to navigate challenges and achieve success. Olszewski and Tymczynska (2018) argue that entrepreneurial mind-set involves a constant drive for improvement and growth. Entrepreneurs with such mind-set are always seeking new opportunities for learning and development, whether through formal education, networking, or hands-on experience. Entrepreneurship mind-set development is very crucial for success in any business venture.

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Entrepreneurial mind-set development is the process through which individuals cultivate a set of attitudes, behaviours, and skills that enable them to identify opportunities, take calculated risks, and drive innovation (Niemi et al., 2021). This emphasizes the importance of cultivating a proactive and opportunity-driven mind-set that is essential for success in entrepreneurship. Lumpkin et al. (2019) defined entrepreneurial mind-set development as the process of acquiring a set of cognitive, affective, and behavioural characteristics that enable individuals to identify and exploit opportunities, navigate uncertainty, and persist in the face of setbacks. Entrepreneurial mind-set development is very much needed for successful engagement in agricultural production enterprises.

Agricultural production is the process of growing crops, raising livestock, and harvesting natural resources for the purpose of generating food, fibre, and other products for human consumption. It can also be described as the management of resources and activities involved in the cultivation, harvesting, and processing of agricultural products for consumption and sale (Johnson, 2021). According to Harasym (2019), sustainable agricultural production involves utilizing environmentally friendly practices that promote long-term ecological balance while meeting the food needs of consumers.

There are many lucrative areas of agricultural production which anyone including university workers can develop entrepreneurial mind-set for sustainable food security and survival. They include but not limited to cassava production and processing, poultry farming, fish farming, vegetable production, rice production, plantain and banana production, snail farming, honey production among others. Ojiako et al. (2020) noted that university workers can focus on cassava farming, processing, and marketing due to the fact that cassava aside being a staple food in Nigeria, and the South East region has favourable climate conditions for its cultivation. Also, poultry farming such as broiler birds and table egg production is another lucrative enterprise university worker can engage in so as to enhanced food security. According to Okoro et al. (2019), poultry farming is a profitable venture in Nigeria, with increasing demand for eggs and meat. University workers can develop entrepreneurial skills in poultry production and marketing of poultry birds and equipment including poultry feeds. Furthermore, university workers can engage in is vegetable crop production. Ezeaku et al. (2020) maintained that vegetables have high demand especially in urban areas, and South East Nigeria has suitable climate conditions which favour its growth and productivity. In addition, Ezeaku et al. (2020) pointed out that university workers can focus on fluted pumpkin, okra, tomato among other vegetables for sustainable food production in South East, Nigeria.

There are many benefits university workers would derive in developing entrepreneurial mind-set in any of the agricultural production enterprises. According to Ogbonna et al. (2019), developing entrepreneurial mind-set in agricultural production can provide additional sources of income for university workers. Extra sources of income are very crucial to university workers in currently because of the poor remunerations of university workers in Nigeria and high cost of goods in the market. Also, developing entrepreneurial mind-set in agricultural production can improve food availability and food security in South East region of Nigeria (Ezeaku et al., 2020). When university workers go into agricultural production, aside getting extra source of income, it will also lead to massive production of food. Furthermore, entrepreneurial mind-set development in agricultural production ventures as noted by Adebayo et al. (2020) can create employment opportunities not only to the university workers and their children but also to others in South East region. Developing an entrepreneurial mind-set in agriculture contributes to Nigeria's economic growth and development (Ogbonna et al., 2019).

The importance of developing entrepreneurial mind-set in agricultural production among university workers in South East, Nigeria cannot be overemphasized especially in this era of economic uncertainty and high inflation in Nigeria. Entrepreneurial mind-set development in agricultural production is an increasingly vital for enhancing food security in South East regions of Nigeria, where a significant portion of the population relies on agriculture for sustenance. Agricultural production plays a crucial role in the economy of Nigeria, and promoting an entrepreneurial mind-set development among public university workers can lead to innovative agricultural practices, increased productivity, and ultimately, improved food security. Also, by equipping university workers with the relevant skills and entrepreneurial mind-set needed to identify and seize opportunities in the agricultural sector can significantly contribute to increasing food production and food security in the region. Hence, this study examined entrepreneurial mind-set development in agricultural production as an imperative for enhancing food security among public university workers in South-East, Nigeria.

Specifically, the study determined the:

1. Lucrative areas of agricultural production university workers can develop entrepreneurial mind-set for sustainable food security;
2. Benefits of developing entrepreneurial mind-set in agricultural production among university workers in South East, Nigeria; and
3. Strategies for effective engagement in agricultural production for sustainable food security among university workers in South East, Nigeria.

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Research Questions

The following research questions guided the study:

1. What are the lucrative areas of agricultural production university workers can develop entrepreneurial mind-set for sustainable food security?
2. What are the benefits of developing entrepreneurial mind-set in agricultural production among university workers in South East, Nigeria?
3. What are the strategies for effective engagement in agricultural production for sustainable food security among university workers in South East, Nigeria?

Theoretical Framework of the Study

The study is anchored on the Theory of Planned Behaviour and Opportunity Recognition Theory

Theory of Planned Behaviour

The theory of planned behaviour was proposed in 1985 by Icek Ajzen, an American social psychologist. The theory seeks to predict and understand human behaviour by focusing on an individual's intentions. According to this theory, an individual's intention to perform a certain behaviour is the most immediate determinant of the behaviour itself. These intentions are influenced by three main factors: attitude towards the behaviour, subjective norms, and perceived behavioural control. *Attitude towards the behaviour* refers to an individual's evaluation of the behaviour in question. *Subjective norms* are the perceived social pressure to perform or not perform the behaviour, while *Perceived behavioural control* refers to an individual's belief in their ability to perform the behaviour.

Theory of Planned Behaviour can be applied to understand the factors influencing university workers' intentions to engage in agricultural entrepreneurship. This could be broken into three main factors of the theory of planned behaviour which are attitude towards the behaviour, subjective norms, and perceived behavioural control. *Attitude Towards Behaviour*- assessing university workers' attitudes towards agricultural entrepreneurship and how it affects their intention to engage in it; *Subjective Norms*- examining the role of social pressure from colleagues, family, and friends in shaping university workers' intentions to engage in agricultural entrepreneurship; and *Perceived Behavioural Control*- investigating the extent to which university workers believe they have control over starting and managing an agricultural enterprise. By understanding these factors, the study can identify strategies to promote entrepreneurial mind-set development among university workers, ultimately enhancing food security in the region.

Opportunity Recognition Theory

The Opportunity Recognition Theory is attributed to Scott Shane and Sankaran Venkataraman (2000). The opportunity recognition theory posits that entrepreneurship involves identifying and exploiting opportunities that others may not see. The tenets of the theory include opportunity identification, opportunity evaluation, and opportunity exploitation. According to the theory, *opportunity identification* is the process of recognizing and discovering opportunities; *opportunity evaluation* deals with assessing the feasibility and potential of identified opportunities; whereas *Opportunity Exploitation* has to do with taking action to capitalize on identified opportunities.

In the context of the research study, the Opportunity Recognition Theory can be applied to investigate how university workers identify and exploit opportunities in agricultural entrepreneurship. This could involve examining their ability to recognize market needs, assess the feasibility of agricultural projects, and take action to start and manage agricultural enterprises. By understanding the opportunity recognition process among university workers, the study can identify strategies to enhance their entrepreneurial mind-set and promote food security in the region.

Research Methodology

The study adopted a descriptive survey research design and it was conducted in three federal universities in South East, Nigeria. The universities are University of Nigeria, Nsukka (UNN), Michal Okpala University of Agriculture, Umudike, and Nnamdi Azikiwe University, Awka. The three universities were selected through a purposive sampling technique. The population of the study consisted of all the lecturers in the three federal universities while a sample size of 330 university lecturers was selected and sampled using accidental sampling technique. A structured questionnaire was used for data collection. The instrument was structured into four-point response options of Strongly Agree (SA), Agree (A), Strongly Disagree (SD) and Disagree (D) with assigned weights of 4, 3, 2, and 1 respectively. The questionnaire was face-validated by three experts. The experts consisted of two lecturers from the Department of Agricultural Education and one lecturer from the Department of Vocational and Entrepreneurship Education, all from University of Nigeria, Nsukka. The reliability of the instrument was trial tested by administering the instrument to 25 respondents in Enugu State University of science and Technology (ESUT). The data generated from the pilot testing were analysed using Cronbach Alpha reliability test and the values obtained from the three research questions were 0.88, 0.89 and 0.87 respectively and a grand value of 0.88 co-efficient.

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Data collection was carried out by the researchers. A total of 330 copies of the questionnaires were produced and distributed to lecturers from the three federal universities in South East, Nigeria. At the end, a total of 320 out of 330 questionnaires were retrieved and used for data analysis. Data collected were analysed using mean and standard deviation. Mean was used to answer the three research questions; standard deviation was used to determine how close or far the responses of the respondents were to the mean. The cut-off point of 2.50 was used for decision-making. Any item with a mean rating of 2.50 and above was accepted while any item with mean value below 2.50 was rejected. All the analyses were done using Statistical Package for Social Sciences (SPSS) software.

Presentation of Results

Table 1: Mean Responses on the lucrative areas of agricultural production university workers in South East can develop entrepreneurial mind-set for sustainable food security

S/No	Items on Cultural Background:	$\bar{X}$ (Mean)	Std Deviation	Remarks
1	Cassava production and processing	3.42	0.72	SA
2	Fishpond production	3.53	0.59	SA
3	Fingerlings production	3.37	0.77	SA
4	Honey bee production	3.24	0.79	SA
5	Snail farming	3.35	0.73	SA
6	Palm oil processing	3.36	0.77	SA
7	Vegetable crop production	3.26	0.75	SA
8	Broiler and table egg production	3.30	0.73	SA
10	Goats/sheep/cattle farming	2.56	0.98	A
11	Pig farming	3.25	1.00	SA
12	Rice/Maize production	3.40	0.69	SA
13	Plantain and banana production	3.12	0.78	SA

Key: $\bar{X}$ = Mean; SD = Standard Deviation; SA = Strongly Agree, A = Agree, N = 320

Table 1 showed the mean responses of respondents on the lucrative areas of agricultural production university workers can develop entrepreneurial mind-set for sustainable food security. The result revealed that all the 13 items obtained mean values of 2.56 and above were which is above the cut-off point of 2.50. This indicated that the respondents agreed that they are the lucrative areas of agricultural production university workers can develop entrepreneurial mind-set for sustainable food security. The corresponding standard deviation to each of the items ranged from 0.59 to 1.00 showing that the opinions of the respondents were very close to each other.

Table 2: Mean responses on the benefits of developing entrepreneurial mind-set in agricultural production among university workers in South East, Nigeria

S/N	Items on Financial Background:	$\bar{X}$	SD	Remarks
1	Increases sources of income for university workers	3.11	0.80	SA
2	It leads to improve food security	3.14	0.76	SA
3	It creates additional jobs for university workers	3.00	0.67	SA
4	Enhances skills development such as business planning, marketing, and financial management	3.12	0.69	SA
5	It provides university workers opportunities for networking with other farmers, processors, and marketers	2.77	0.78	A
6	It provides personal satisfaction and fulfilment of university workers	2.48	0.50	D
7	It contributes to community development through improved livelihoods and infrastructure	2.44	0.88	D
8	It contributes to Nigeria's economic growth and development	3.10	0.84	SA
9	It enhances proper time utilization and management	3.41	0.67	SA
10	Promote efficient utilization of school and community lands	3.40	0.70	SA
11	It can lead to developing passion for agricultural production	2.88	0.76	A
12	It enables university workers to produce food they consume	3.33	0.79	SA

Key: N = 320, $\bar{X}$ = Mean; SD = Standard Deviation; SA = Strongly Agree, A = Agree

Table 2 showed the mean responses of the respondents on the benefits of developing entrepreneurial mind-set in agricultural production among university workers in South East, Nigeria. The result revealed that 10 items out of the 12 items had mean values ranging from 2.77 to 3.41 which was above 2.50 cut of point. This indicate that the respondents strongly agree that the items are the benefits of developing entrepreneurial mind-set in agricultural production among university workers. Also, two items recorded mean responses below 2.50 cut of mark which showed that the respondents disagreed that they are the benefits of developing entrepreneurial mind-set in agricultural production among university workers. Similarly, the corresponding standard deviation presented on the table revealed that respondents are not far from each in their responses.

Table 3: Mean Responses on the strategies for effective engagement in agricultural production for sustainable food security among university workers

S/N	Items Statement	$\bar{X}$	SD	Rmks
1	Access to funds/financial assistance	3.00	0.60	SA
2	Availability of lands	3.17	0.56	SA
3	Formation of farming cooperative society among university workers	3.54	0.57	SA
4	Establish mentorship programmes with experienced agricultural entrepreneurs	2.53	0.69	A
5	Develop and promote risk management strategies to mitigate agricultural risks	2.48	0.58	D
6	Developing agricultural value chain	3.10	0.66	SA
7	Advocate for policies supporting agricultural entrepreneurship development among public workers	2.99	0.77	A
8	Create networking opportunities for university workers to connect with other agricultural entrepreneurs	2.68	0.74	A
9	Establish monitoring and evaluation mechanisms to track progress and provide feedback	2.88	0.87	A
10	Provide good quality crop seeds and good livestock species to university workers at subsidized rate	3.46	0.71	SA
11	Subsidize the prices of agro-chemicals such as fertilizers, herbicides, pesticides	2.78	0.63	SA
12	Provide workshops for university workers on agricultural production	3.18	0.67	SA
13	Set up a standard crop and livestock farm within the university for university workers to model	3.12	0.87	SA

Key: N = 320, $\bar{X}$ = Mean; SD = Standard Deviation; SA = Strongly Agree, A = Agree

Table 3 showed the mean responses of on the strategies for effective engagement in agricultural production for sustainable food security among university workers in South East, Nigeria. The table revealed that all the items except item 5 obtained mean values above the cut of mark of 2.50, which indicate that the respondents accepted the 12 items as the

strategies for effective engagement in agricultural production for sustainable food security among university workers in South East, Nigeria. The corresponding standard deviation to each of the items ranged from 0.56 to 0.87, indicating that the respondents are close to each other in their responses.

Discussion of Findings

The findings presented in Table 1 revealed thirteen (13) lucrative areas of agricultural production university workers can develop entrepreneurial mind-set for sustainable food security. The lucrative areas include: cassava production and processing, fishpond production, fingerlings production, honey bee production, snail farming, palm oil processing, vegetable crop production, broiler and table egg production, goats/sheep/cattle farming, pig farming, rice/maize production, and plantain and banana production. The finding is in support of Ojiako et al. (2020) who observed that university workers can focus on cassava farming, processing, and marketing due to the fact that cassava aside being a staple food in Nigeria, and the South East region has favourable climate conditions for its cultivation. Cassava production and processing is a viable business enterprise anyone including university workers can venture in for sustainable food and income generation. The finding is in line with Okoro et al. (2019), the authors noted that poultry farming is a profitable venture in Nigeria, with increasing demand for eggs and meat. With the increasing demand for protein sources, poultry farming has become a lucrative venture which university workers can explore especially in the areas poultry breeding, feed formulation, rearing among others (Olaitan, 2021). The finding also aligns with Umeh (2020) who contended that university workers can embark on rice production either in small or large scale because Southeast Nigeria has the potential for rice cultivation due to favourable climatic conditions. Enhancing production techniques and exploring value addition could help meet local and national demand for rice thereby enhancing food security in the nation. The result is also in conformity with Ekanem (2022) who opined that fish farming is increasingly important for food security, and university workers can engage in sustainable aquaculture practices. The finding further aligns with Ezeaku et al. (2020), who noted that vegetables have high demand especially in urban areas, and South East Nigeria has suitable climate conditions which favour its growth and productivity. University workers can focus on fluted pumpkin, okra, tomato among other vegetables for sustainable food production in the region (Ezeaku et al., 2020). On the contrary, the findings seemed to disagree with Ikejiani and Uche (2020) who buttressed that engaging in agricultural ventures requires significant time investment, and university workers may find themselves overstretched, juggling research, teaching responsibilities, and their entrepreneurial pursuits, which could lead to burnout or diminished

performance in their primary roles. The findings further deviate from Oche and Nasiru (2020) who noted that the focus on agricultural entrepreneurship by university workers may lead to a reallocation of resources (both financial and intellectual) away from academic initiatives towards personal business ventures, potentially jeopardizing research programmes or academic collaboration.

The data presented in Table 2 revealed ten (10) benefits of developing entrepreneurial mind-set in agricultural production among university workers. The benefits are increases sources of income for university workers, it leads to improve food security, it creates additional jobs for university workers, enhances skills development such as business planning, marketing, and financial management, it provides university workers opportunities for networking with other farmers, processors, and marketers, it contributes to Nigeria's economic growth and development, it enhances proper time utilization and management, promote efficient utilization of school and community lands, among others. The finding is in conformity with Ogbonna et al. (2019) who pointed out that engaging in agricultural production can provide additional sources of income for university workers. Extra sources of income are very crucial to university workers in Nigeria currently especially with the poor salary and high inflation rate in the country. The finding also supports (Ezeaku et al., 2020), who stated that developing entrepreneurial mind-set in agricultural production can improve food availability and food security in South East region of Nigeria. Food insecurity is a major issue of concern, so university workers engaging in agricultural production is a vital way of addressing food insecurity. The finding also agrees with Ibeawuchi and Pogu (2020) who maintained that by developing an entrepreneurial mindset, university workers can contribute to enhancing food security, providing solutions and alternatives to local food production, and ensuring food availability for communities. In addition, the finding is in line with Adebayo et al. (2020), who maintained that developing entrepreneurial mind-set in agriculture can create additional employment opportunities for university workers, their children and even others. Promoting entrepreneurship among university staff can lead to the establishment of new agricultural ventures, contributing to job creation and overall economic growth in Southeast Nigeria (Chukwuma & Okereke, 2020). The findings did not align with Adebayo and Adegbusi (2021) who stated that university workers might face a reduction in their academic status or professional reputation if seen as shifting focus from academia to agriculture. The authors also added that the perception of being less committed to academic diligence can impact negatively especially in the aspects of collaborations, promotions, and funding opportunities for university workers. In addition, the results do not conform to Ezeani and Onuoha (2020) who stressed that engaging in agricultural production may disrupt the work-life balance that many university workers try to maintain. The authors further stated that the shift can lead to

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personal life issues and affect overall wellbeing, potentially leading to academic and entrepreneurial failures.

The result presented in Table 3 revealed twelve (12) strategies for effective engagement in agricultural production for sustainable food security among university workers in South East, Nigeria. The strategies are as follows: access to funds/financial assistance, availability of lands, formation of farming cooperative society among university workers, establish mentorship programmes with experienced agricultural entrepreneurs, developing agricultural value chain, advocate for policies supporting agricultural entrepreneurship development among public workers, create networking opportunities for university workers to connect with other agricultural entrepreneurs, establish monitoring and evaluation mechanisms to track progress and provide feedback, provide good quality crop seeds and good livestock species to university workers at subsidized rate, among others. The finding is in line with Okoro et al. (2019) who noted that university workers need to be provided with regular training via workshop on agricultural entrepreneurship, business planning, and management. Oyo and Akindele (2021) maintained that providing specialized training programmes focused on entrepreneurial skills and agricultural practices can empower university workers to embark on agricultural production ventures. Regular workshops on business management, marketing, and agribusiness can create a more entrepreneurial culture. Through this training and workshops, the workers will be able to acquire basic skills in agricultural productions and develop entrepreneurial mind-set in the agricultural venture they acquire. The finding is also in conforms with Nwankwo et al. (2020) who encourage cooperative formation among university workers to facilitate collective action. The finding is also in support of Ogbonna et al. (2019) who highlighted the need to establish mentorship programmes with experienced agricultural entrepreneurs and university workers so as to enable them to be mentored by experienced agricultural entrepreneurs. According to Cohen and Golan (2021), establishing mentorship initiatives where experienced agricultural entrepreneurs guide university workers in establishing and operating agricultural ventures can enhance learning and practical knowledge. The finding further aligns with Ugwunta and Uzoechi (2020) who opined that ensuring university workers have access to necessary resources, such as funding, land, and technology, is vital for fostering an entrepreneurial approach in agriculture.

Conclusion

The study examined entrepreneurial mind-set development in agricultural production as imperative for enhancing food security among workers in public universities in South East,

Nigeria. The study determined the vital areas of agricultural production which university workers can develop entrepreneurial mind-set; highlighted the importance of promoting entrepreneurship among workers in public universities as well as the strategies for enhancing effective engagement of university workers in agricultural production. By developing entrepreneurial mind-set, university workers can contribute to improving agricultural productivity, enhancing food security, and driving sustainable development in the region. It was therefore concluded that entrepreneurial mind-set development in agricultural production is a vital tool for enhancing sustainable food security and survival among university workers in South East, Nigeria.

Recommendations

1. University administrators should allocate available lands to staff interested in agricultural production.
2. Federal government should encourage university workers to embark on massive food production by providing them with subsidized farm inputs such as seeds, fertilizers, herbicides among others.
3. Workshops and training pertaining to entrepreneurship and agricultural production should be constantly organized for university workers by school administrations.

Conflict of Interest

The authors declare no conflict of interest

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References

- Adebayo, B. O., & Adegbusi, O. (2021). The impact of entrepreneurial activities on academic reputation among university staff in Nigeria. *International Journal of Academic Research in Business and Social Sciences*, 11(2), 220-233. DOI: 10.6007/IJARBS/v11-i2/8829.
- Adebayo, O. O., Omitoyin, B. O., & Adewumi, M. O. (2020). Entrepreneurial agriculture and job creation in Nigeria. *Journal of Entrepreneurship and Innovation*, 11(2), 1-12.
- Afolabi, C. O., Oyewole, O. B., & Adegoke, G. O. (2020). Entrepreneurial mindset and agricultural entrepreneurship in Nigeria. *Journal of Entrepreneurship and Innovation*, 11(1), 1-12.
- Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50(2), 179-211.

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Chukwuma, C., & Okereke, W. (2020). Agricultural entrepreneurship for youth development in Nigeria: The role of universities. *Nigerian Journal of Agricultural Economics*, 10(1), 1-15. DOI: [10.7753/NJAESP.2020.00001] (<https://doi.org/10.7753/NJAESP.2020.00001>).

Cohen, S., & Golan, I. (2021). Mentorship in entrepreneurship: The impact on the start-up ecosystem. *Journal of Small Business Management*, 59(2), 342-364. DOI: [10.1080/00472778.2021.1877723] (<https://doi.org/10.1080/00472778.2021.1877723>)

Ekanem, E. E. (2022). Sustainable aquaculture practices and food security in Nigeria. *Journal of Fisheries*, 45(2), 112-125. DOI: 10.1007/s12343-021-00304-4.

Ezeaku, P. I., Okechukwu, R. U., & Nwosu, A. C. (2020). Impact of agricultural entrepreneurship on food security in Abia State, Nigeria. *International Journal of Food Science and Nutrition*, 5(2), 1-9.

Ezeani, A. O., & Onuoha, U. (2020). Effects of work-life balance on academic performance of university workers in South East Nigeria. *International Journal of Management Studies*, 7(4), 112-123. DOI: 10.3885/ijms.v7n4.2906.

Federal Ministry of Agriculture and Rural Development. (2020). *The national agricultural policy*. Federal Ministry of Agriculture.

Food and Agriculture Organization of the United Nations & World Health Organization. (2019). *Sustainable healthy diets: Guiding principles*. FAO.

Food and Agriculture Organization of the United Nations (2021). The state of food security and nutrition in the world 2021. FAO.

Food and Agriculture Organization. (2018). *The future of food and agriculture: Trends and challenges*. FAO.

Harasym, K. (2019). *Sustainable agriculture: Concepts, analysis, and case studies*. Springer. <https://doi.org/10.3389/fsufs.2021.673167> United Nations. (2020). *World population prospects 2019*. New York, NY:

Ibeawuchi, I. I., & Pogu, R. M. (2020). Entrepreneurial initiatives for food security in Nigeria: The role of agricultural education. *Journal of Agricultural Science*, 12(11), 39-49. DOI: [10.5539/jas.v12n11p39] (<https://doi.org/10.5539/jas.v12n11p39>).

Ikejiani, A. O., & Uche, I. (2020). Time management challenges in academic and entrepreneurial tasks among university staff in Nigeria. *Journal of Education and Practice*, 11(10), 67-75. DOI: 10.7176/JEP/11-10-10.

Johnson, S. (2021). *Value-added agriculture: Strategies for success in a competitive market*. Routledge.

- Kumar, P., Kumar, V., & Sharma, D. (2020). Sustainable agricultural practices for food security. *Journal of Environmental Science, Computer Science and Engineering & Technology*, 8(2), 154-163.
- Lumpkin, G. T., & Zapkau, F. B. (2019). *Entrepreneurial mindset: What do we know and need to know?* In R. Welter, W. B. Gartner, A. N. Liebl, & M. H. Woywode (Eds.), *Handbook of entrepreneurial behavior and motivation* (pp. 17-43). Edward Elgar Publishing.
- Minniti, M. (2016). *The entrepreneurial mindset*. Springer.
- Niemi, P., Henttonen, K., Kianto, A., & Vanhala, M. (2021). Fostering entrepreneurial mindset in university students. *Technovation*, 101, 1025-1044.
- Nwankwo, L. C., Okeke, G. C., & Nwosu, A. C. (2020). Cooperative entrepreneurship and agricultural development in Nigeria. *Journal of Cooperative Studies*, 43(2), 1-12.
- Oche, J. E., & Nasiru, R. (2020). Resource allocation challenges faced by academic staff engaging in agriculture. *Journal of Agriculture and Environment for International Development*, 114(1), 1-12. DOI: 10.12895/jaeid.20201.
- Ogbonna, D. N., Onyemauwa, C. S., & Nwosu, E. C. (2019). Agricultural entrepreneurship and economic growth in Nigeria. *Journal of Economic and Financial Studies*, 8(2), 1-12.
- Ojiako, I. A., Okeke, G. C., & Nwakalor, C. E. (2020). Economic analysis of cassava production in South East Nigeria. *Journal of Agricultural Economics and Rural Development*, 8(1), 34-43.
- Okoro, V. O., Ngwu, J. N., & Opara, M. N. (2019). Capacity building for agricultural entrepreneurship development in Nigeria. *Journal of Agricultural Education*, 40(2), 12-20.
- Olaitan, M. A. (2021). Poultry production and food security in Nigeria: An overview. *Journal of Agricultural Research*, 15(3), 245-258. DOI: 10.1007/s00124-021-00656-8.
- Olszewski, R., & Tymczynska, M. (2018). Skills and competences of entrepreneurial mindset. *Journal of Entrepreneurship, Management and Innovation*, 14(1), 29-49.
- Oyebade, S. A., Oguntinyinbo, F. A., & Oyedele, O. J. (2020). Food insecurity among Nigerian households. *Journal of Agricultural and Food Economics*, 8(1), 1-12.
- Oyo, A., & Akindele, O. (2021). Enhancing agricultural productivity through entrepreneurship training among university graduates. *Journal of Agricultural Education and Extension*, 27(3), 252-265. DOI: [10.1080/1389224X.2021.1880505](<https://doi.org/10.1080/1389224X.2021.1880505>)
- Pinstrup-Andersen, P. (2012). Food security: Definition and measurement. *Food Security*, 4(2), 131-142.

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Bassey, Njorkun Ndubuisi (Ph.D); Akah Maryrita Nnenna (Ph.D); Offiong, Agnes E. A. (Ph.D); Nwoke Okechukwu Simon (Ph.D); Akpa Joshua Ojonugwa.

Ruhara, C. M. & Kayitana, C.R. (2018). Mindset and entrepreneurial activities in Rwanda: A firm level investigation. *East African Research Papers in Business, Entrepreneurship and Management*, No. 12.

Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217-226.

Sharma, S., DePue, J., & Coberley, C. (2021). Understanding food insecurity and the role of the built environment in addressing social determinants of health. *Frontiers in Sustainable Food Systems*, 5.

Ugwunta, D. O., & Uzoechi, M. O. (2020). The role of resources in fostering entrepreneurship among agricultural practitioners in Nigeria. *Agricultural Economics*, 51(3), 337-346. DOI: [10.1111/agec.12545] (<https://doi.org/10.1111/agec.12545>)

Umeh, J. C. (2020). Challenges and opportunities in rice production in Nigeria. *Nigerian Journal of Agronomy*, 3(3), 122-120. doi:10.21203/rs.3.rs-33879/v1.