The Unwanted College Major: Decisions Made by Nigerian UG students to Pursue Agriculture as a College Major and Career

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Abstract for MS. Non-thesis Project

Introduction

Agricultural productivity in Nigeria faces numerous challenges, including inadequate financing, high land fragmentation, small-scale farming, poor technological transfer, bad debt, low savings and investment, high input costs, high labor costs, low adoption of improved technologies, high storage costs, an increase in aging farmers, and the mass migration of youth from rural communities to cities (Ajibesin et al., 2023; Idoge, 2013; Ike & Umuedafe, 2013; Okoye & Adamade, 2016). One of the key strategies to transform the sector is by engaging youth through agricultural education. The development of human capital and future workforce for agricultural industry is critical for the sustenance of the industry as well as the survival of the nation. Expertise in agriculture is crucial for addressing the sector's challenges and ensuring its sustainability (Goecker et al., 2015; Jordan et al., 2020). Educational institutions play a vital role in cultivating this expertise among youth, preparing them for careers in the agricultural sector (Donaldson et al., 2023). According to Iloputaife et al (2010), agricultural education facilitates career readiness among students and youths as a productive future work force. Admission into higher agricultural education programs in Nigeria is essential for providing young people with skillsets required in the industry, research, academia, developmental organizations, and national and international agricultural policymaking space (FAO, 2013). Transformational change in the agricultural sector is hinged on quality education, resilient skillsets which are pivotal for employment opportunities for the broader population, including the youths (Brooks et al., 2013).

Purpose Statement and Research Question

The purpose of this study was to understand Nigerian undergraduates' decision-making process when choosing agriculture study as a major. The central question of this study is, why do Nigerian undergraduates choose agriculture as a major?

Methodology

This qualitative narrative was engaged to gain insights into factors influencing undergraduate students' decision to pursue a career in agriculture. The method allowed for an indepth exploration of the stories behind students' career choices in agriculture which reflects their personal and social interactions, past, present and future as well as their environment (Clandinin & Connelly, 2000). This qualitative study focused on Nigerian undergraduates enrolled in different departments in the faculty of agriculture in Obafemi Awolowo University, Ile-Ife, Nigeria (O.A.U) and was guided by the theory of planned behavior (Ajzen, 1991). The sample size for this study was 19. Participants were purposively selected based on the criteria that they were enrolled students in the faculty of agriculture. Participants were recruited based on selfnomination but their level in the program and their department was used as a second screening tool to ensure that participants were representative of the existing five departments in the faculty of agriculture in the school. Participants who voluntarily signed up for the study were recruited for the study. A one-on-one interview was conducted for each participant which lasted one hour on zoom using a semi structured interview protocol. Data were transcribed using Otter ai and cleaned before data was inductively and deductively coded using Atlas TI. Codes were aggregated into subthemes which were later grouped into themes. Names of participants were deleted to ensure confidentiality.

Results

This study investigated how attitudes towards agriculture, subjective norms, perceived behavioral control, agricultural knowledge and experience, and challenges faced in the agriculture sector influence students' intentions to study and pursue a career in agriculture. Participants were enrolled in the departments of Agricultural Economics, Soil science, Animal science, Crop production and protection and Agricultural Extension.

Among the 19 participants, which consisted of 10 males and 9 females, five were in their final (fifth) year, four were in their fourth year, four were in their third-year, four were in their second year, while 2 were freshman. The participants were representative of all the departments and levels thus, could provide relevant information based on their years of academic experience in their various departments. Their age ranged from 19 to 27 with an average of 17 years. They came from a family with 2 to 12 kids and occupied different position in their family structure. The highest level of education obtained by majority of participants siblings was bachelor's degree. Six of them were first born which could mean that they could be role models to their siblings. Other than that, they may or may not have access to mentorship to shape their decisionmaking process. Six of the participants reported that one of the parents had at least a bachelor's degree while only one reported no form of formal education for either of the parents. In addition, 17 out of the 19 participants were from the western states where the school was located while two participants were from the eastern states. Six of the participants reported to seek advice from individuals who had bachelor's and master's degrees respectively, three sought form individuals with Ph.D. and two did not seek advice from no one. Five themes emerged from the analysis of career choice, informed knowledge, attitude, subjective belief, perceived behavioral control, and intention.

Theme 1: Career choice. The analysis identified four key themes: intended course of study, career trajectory changes, post-admission feelings, and influential factors. Participants' career choices were influenced by social networks, economic, educational, and environmental factors. Initially, 84.2% (n=16) aimed to study Medicine, Nursing, or related fields, while two preferred engineering and one business administration, indicating agriculture was not a primary choice. Most participants (14) had no prior knowledge of their agricultural course upon university admission. Those who did were only generally aware of agriculture. Participant 7 noted, "it had never crossed my mind that people willingly study agriculture," reflecting the limited exposure to university courses.

Career aspirations often shifted during the admission process due to factors such as failing to meet cut-off marks, stress related to intended courses, family interest in agriculture, financial constraints, and non-accreditation of desired courses. Participant 7 mentioned, "when you don't meet a cut-off mark, another course is given to you," and participant 1 noted, "most of us that picked nursing were given Animal sciences."

Psychological reactions to admissions varied: some participants felt positive, while others were initially disappointed. Participant 12 shared, "I attended conferences and have seen people that have made it in agriculture. This has made me rethink my plans and consider getting a master's in agriculture."

Theme 2: Behavioral belief. This theme was divided into three subthemes. Which were the journey of discovery, demonstration of interest and desire to make impact

Participants shared mixed feelings about their academic journey in agriculture. Many felt their first-year studies were unrelated to their course, unlike peers in more hands-on fields like

medicine. Participant 6 mentioned a lack of excitement due to this disconnect, while Participant 10 noted the broad opportunities in agriculture. Despite the challenges, some found their studies enjoyable and enriching.

Several participants struggled to connect their coursework with future careers. For example, Participant 6 envisioned becoming a farmer, and Participant 9 saw agriculture as a promising career. Others, like Participant 5, enjoyed their studies without facing significant challenges. The desire to contribute to nation-building was a recurring theme. Participants were inspired by mentors and saw agriculture as a means to achieve food security and economic growth in Nigeria. Participant 9 cited influential lecturers, while Participant 7 expressed a commitment to addressing food accessibility. Participant 12 planned to apply his agricultural knowledge in various fields, and Participant 3 enjoyed teaching and sharing knowledge with younger students. **Theme 3: Subjective Norms.** The subthemes that emerged were family and friends (including faith-based friends), societal stigma as well as institutional structures (academic and financial institutions and governmental policies).

Participants received varying levels of support from family and friends in their agricultural career pursuits. Some, like Participant 12, had full backing from parents, while others, like Participant 7, faced partial disapproval. Friends and mentors also played significant roles. Participant 1 was inspired by a friend's dedication to Animal Science, while Participant 15 found motivation from meeting successful peers in agriculture.

Lecturers' influence was mixed. Positive rapport with faculty often led to encouragement, as noted by Participant 1, whose lecturer described agriculture as "the new oil business in Nigeria." However, Participant 7 felt that lecturers' support or lack thereof did not affect their resolve. Societal bias against agriculture as a course of study was common, attributed to limited knowledge and the perceived low success rate in the profession. Participant 4 noted, "some people still take agriculture with levity," and Participant 16 mentioned, "People criticize agriculture a lot."

Economic, financial, and governmental policies significantly impacted participants' career decisions. While Participant 13 chose Agricultural Economics due to financial limitations, Participant 6 was discouraged by the lack of policy implementation. However, Participants 10 and 14 acknowledged efforts by financial institutions to support agricultural ventures through loans.

Theme 4: Perceived Behavioral Control. Three subthemes that emerged were access to resources, coping strategies for mental and physical stress.

Access to resources significantly impacted students' perception and effectiveness in their agricultural studies. Participant 16 emphasized the importance of quality advice from those in agribusiness for building connections. Participant 9 shared that leveraging relationships in business and agriculture motivated him to continue his studies. However, Participants 6, 9, 12, and 19 highlighted limited access to land, finances, educational resources, and equipment as barriers. Participant 12 noted the need for updated machines and adequate practice time, while Participant 19 mentioned overcrowded and unconducive learning environments.

Students found strength in faith, positive attitudes, determination, time management, task prioritization, and social support. Participant 6 credited his faith in God and a positive mindset for his resilience, while Participant 11 stressed the importance of time management. Participant 14 emphasized relaxation and self-care to manage stress. Social support from peers, as noted by Participant 19, also played a crucial role in coping with academic pressures.

Combining farm work with studies was physically demanding. Strategies included building relationships with colleagues and coordinators, resilience, adaptability, and planning ahead. These helped create a supportive network and manage workloads. Participant 13 found that good relationships reduced stress, and Participant 12 managed by prioritizing tasks and relying on friends' support. Participant 6 believed planning, faith, and a positive mindset would help navigate future challenges.

Participants 4, 7, and 17 identified planning as crucial for managing physical stress. Early academic preparation and not compounding work were essential, as noted by Participant 4. Participant 7 stressed timely planning to lessen academic burdens, and Participant 17 highlighted the importance of personal learning time.

Theme 5: Intention to Pursue a Career in Agriculture After Graduation. The four themes that surfaced were uncertainty about future career, pursuit of advanced degrees in agriculture related disciplines, career readiness in agriculture and career divergence.

Only Participant 4 remained undecided about pursuing a career in agriculture, focusing on finishing exams first. Some students expressed intentions to pursue higher education, including master's and Ph.D. degrees. For instance, Participant 1 aims to study Veterinary medicine, Participant 15 plans to get a B.Sc. and possibly a Ph.D., and Participant 12 wants to focus on Agricultural Extension and rural development. The majority (n=16) intended to pursue careers in agriculture. Participant 6 envisions running a farm and farm market, and Participant 8 aspires to be an Animal Scientist, educating others about the diverse aspects of agriculture. However, three participants planned to switch fields. Participant 11 intends to pursue nursing, Participant 13 aims to become a business mogul in cosmetology and fashion, and Participant 17 is interested in UI/UX design.

Conclusion, Recommendation and implication

The study reveals that while a significant majority of participants (84.2%) initially preferred fields such as Medicine or Engineering, many ended up in agriculture due to factors like unmet cut-off marks, financial constraints, and limited prior knowledge of the field. Despite initial reservations, a considerable number have grown to value their agricultural studies, influenced by mentors, societal impact, and personal resilience. Challenges such as inadequate resources and societal bias were evident, impacting students' learning experiences and career aspirations. The transition into agriculture for many students was driven by external factors rather than initial interest. However, positive experiences and the desire to contribute to nation-building have fostered a commitment to the field. To enhance agricultural education, universities should address resource limitations by updating equipment and improving learning environments. Additionally, increasing societal awareness and reducing stigma associated with agriculture can help boost students' enthusiasm and career commitment. Encouraging early exposure and mentorship can further align students' interests with their academic and career goals, ultimately strengthening the agricultural sector's workforce. These changes could lead to more informed career choices and a more robust, motivated agricultural workforce, contributing to the sector's growth and development.

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