

AGRICULTURAL EDUCATION ON FOOD SECURITY IN REGION I

KEVIN Y. BUGAON

Doctor of Philosophy
Lyceum Northwestern University, Dagupan City

Abstract

This study examined the role of agricultural education in ensuring food security within Region I. It specifically addressed the current state of agricultural education in enhancing knowledge and skills, its function in promoting diversification and innovation, policymakers' perceptions of its impact on food security, and challenges in aligning curricula with the evolving needs of the agricultural sector.

The study employed a descriptive research methodology, utilizing surveys, interviews, and document reviews to gather quantitative and qualitative data from farmers, educators, and policymakers. Data analysis involved frequency and percentage calculations to evaluate the contributions of agricultural education, as well as a five-point Likert scale to identify challenges in curriculum alignment for food security.

Key recommendations include developing partnerships with local farms and businesses to provide real-world training opportunities, expanding online platforms to improve accessibility of agricultural education in remote areas, and updating programs to incorporate training on advanced agricultural technologies such as precision farming and biotechnology. Additionally, the establishment of an innovation ecosystem to encourage technological experimentation and the creation of a committee to regularly update curricula were proposed.

To support these initiatives, sufficient funding should be allocated for educational infrastructure, including classrooms, laboratories, and digital learning tools. Investments in technology and research facilities are essential to modernize agricultural education and make it more inclusive, ensuring it meets the evolving needs of the sector and contributes to long-term food security.

Keywords: Agricultural education, Food security, Curriculum development, Technology, Innovation, Region I

Introduction

The smooth and efficient operation of any educational institution heavily relies on the dedication and effectiveness of its administrative staff. In particular, School Administrative Assistants and Administrative Officers play a crucial, yet often overlooked, role in ensuring the seamless functioning of schools within the SDO Urdaneta City (Waziana et al., 2022). These individuals serve as the backbone of the educational system, handling a multitude of responsibilities ranging from managing student records and coordinating schedules to supporting teachers and facilitating communication between the school and the broader community (Villanueva et al., 2021). Consequently, their job satisfaction is paramount to the overall success and effectiveness of the educational system (Dare & Saleem, 2022). This study explores the multifaceted aspects of job satisfaction among these vital personnel in SDO Urdaneta City, investigating the factors that contribute to their contentment, the challenges they face, and the potential avenues for enhancing their overall work experience.

The significance of job satisfaction cannot be overstated. A satisfied workforce is a productive workforce. When employees feel valued, appreciated, and fulfilled in their roles, they are more likely to be engaged, motivated, and committed to their work (Javed et al., 2014). This

translates to improved performance, reduced absenteeism, and lower turnover rates. In the context of education, the job satisfaction of administrative staff has a direct impact on the quality of education provided to students (Sutapa et al., 2022). A positive and supportive work environment for administrative staff fosters a positive school climate, which in turn benefits students, teachers, and the wider community (Cipriano et al., 2024).

This study aims to provide a comprehensive understanding of the job satisfaction levels among School Administrative Assistants and Administrative Officers in SDO Urdaneta City. It seeks to explore several key questions: What are the current satisfaction levels of these personnel? What factors contribute to their satisfaction or dissatisfaction? What challenges do they face in their daily work? What professional development opportunities are available, and how can these be enhanced? By addressing these questions, the study endeavors to offer valuable insights into the experiences of administrative staff and propose actionable recommendations to enhance their job satisfaction and the overall effectiveness of the educational system.

Employing a descriptive research approach, the study utilizes surveys, questionnaires, and interviews to gather data from a representative sample of administrative staff in SDO Urdaneta City. This methodology enables a detailed exploration of the participants' perceptions, experiences, and satisfaction levels. The use of a five-point Likert scale facilitates a quantitative assessment of job satisfaction, while open-ended questions in the surveys and interviews provide valuable qualitative data, capturing the nuances and complexities of the participants' experiences.

The study's findings are expected to shed light on the key factors influencing job satisfaction among administrative staff in SDO Urdaneta City, such as workload, work environment, recognition, professional growth opportunities, and relationships with colleagues and supervisors (Aldosiry, 2020). By identifying these factors, the study can inform the development of targeted interventions and strategies to enhance job satisfaction. Furthermore, the study will explore the challenges and sources of dissatisfaction faced by administrative staff, providing valuable insights into the areas requiring attention and improvement (Velde, 2021).

Additionally, the study examines the professional development opportunities available to administrative staff. Professional development plays a crucial role in enhancing job satisfaction by equipping employees with the skills and knowledge needed to excel in their roles (Jishtu, 2020). By assessing the current professional development landscape, the study can identify gaps and recommend strategies for expanding and improving these opportunities (Lestari et al., 2023), such as specific training programs, workshops, or mentoring initiatives.

Ultimately, the goal of this study is to contribute to the development of a developmental program aimed at enhancing workplace morale and productivity among School Administrative Assistants and Administrative Officers in SDO Urdaneta City (Medallo & Constantino, 2020). This program will be based on the study's findings and will incorporate actionable recommendations for improving job satisfaction, such as strategies for fostering a positive work environment, implementing effective recognition and reward systems, and promoting professional growth and development.

Method

Research Design

This study employed a descriptive research methodology to investigate the role of agricultural education in ensuring food security within Region I.

Participants

The study included 150 randomly selected farmers from various municipalities in Region I to assess their views on agricultural education's impact on farming practices and food

production. Additionally, 30 agricultural educators from secondary schools, technical-vocational institutions, and universities were purposively sampled to provide insights into curriculum development and teaching approaches. Lastly, 15 policymakers, including local officials, agricultural extension agents, and Department of Agriculture representatives, were interviewed to understand their perspectives on agricultural education's role in addressing food security and shaping policies.

Instrumentation

In this study on the impact of agricultural education on food security in Region I, the primary instrumentation employed is a survey questionnaire designed to collect quantitative and qualitative data from the selected population sample. The questionnaire is meticulously crafted to include the current state of agricultural education in Region I, contribute to the knowledge and skills of individuals, the role agricultural education plays in promoting diversification and innovation in agricultural production within the Region, policymakers' perception of the impact of agricultural education on the overall food security situation in Region I, and challenges exist in aligning agricultural education curricula in Region I with the evolving needs of the agricultural sector for ensuring food security. The questionnaire is developed based on a thorough review of relevant literature and pre-tested to ensure the questions' clarity, relevance, and reliability.

Data Analysis

To analyze the collected data, the study utilized a combination of quantitative methods. Quantitative data, such as survey responses, were analyzed using descriptive statistics, including frequencies, percentages, and measures of central tendency.

Results

Agricultural Education and Knowledge-Skill Development

The study findings indicate that agricultural education in Region I has a significant impact on the knowledge and skills development of individuals, particularly farmers and agricultural professionals (Njura et al., 2020). Most of the surveyed farmers (84%) reported that their participation in agricultural education programs, such as extension services and vocational training, has enhanced their understanding of modern farming techniques, crop management, and post-harvest handling. This has led to improved agricultural productivity and increased food production within the region.

Furthermore, the agricultural educators interviewed highlighted the emphasis placed on practical, hands-on learning in their curricula. This approach has been instrumental in equipping students with the necessary skills to apply their knowledge in real-world agricultural settings, fostering a more competent and adaptable agricultural workforce (Dangore et al., 2020).

Diversification and Innovation in Agricultural Production

The study revealed that agricultural education in Region I has also played a crucial role in promoting diversification and innovation in agricultural production. The incorporation of emerging technologies, such as precision farming and climate-smart agriculture, into the educational curriculum has enabled students to develop a forward-thinking mindset and the ability to address the evolving challenges faced by the agricultural sector (Pluzhnikova, 2022).

Many of the surveyed farmers and agricultural professionals acknowledged that the knowledge and skills gained through agricultural education have empowered them to explore new crop varieties, adopt more efficient farming practices, and diversify their agricultural enterprises. This has contributed to a more resilient and adaptable food production system in Region I,

enhancing the region's ability to respond to changing market demands and climate-related risks (Ramamoorthy & Natarajan, 2020).

The Role of Policymakers in Aligning Agricultural Education with Food Security

The study findings also highlight the critical role of policymakers in aligning agricultural education curricula with the evolving needs of the agricultural sector for ensuring food security in Region I. Interviewed policymakers, including government officials and agricultural extension agents, emphasized the importance of regularly reviewing and updating educational programs to address emerging trends, technological advancements, and the region's specific agro-ecological conditions.

Challenges and Opportunities

The study identified several challenges that hinder the effectiveness of agricultural education in contributing to food security in Region I. These include inadequate funding for educational infrastructure and resources, limited access to advanced technologies and training for both educators and students, and the need for stronger collaboration between educational institutions and the agricultural industry.

Despite these challenges, the study also revealed promising opportunities to enhance the impact of agricultural education on food security. These include increased investment in modern teaching and learning facilities, the integration of digital technologies in the curriculum, and the establishment of robust partnerships between educational institutions, government agencies, and the private sector to align educational programs with the region's evolving agricultural needs (Olusoga, 2014) (Oyediran & Omoare, 2017) (Gopal, 2020).

Discussion

This research highlights the multifaceted influence of agricultural education in fostering food security in Region I (Olusoga, 2014) (Gopal, 2020) (Njura et al., 2020) (Oyediran & Omoare, 2017). The study underscores the positive impact of agricultural education on enhancing the knowledge and skills of individuals, particularly farmers and agricultural professionals, which has contributed to improved agricultural productivity and diversification within the region.

The emphasis on practical, hands-on learning in agricultural education curricula has equipped students with the necessary skills to apply their knowledge in real-world agricultural settings. Furthermore, the incorporation of emerging technologies and innovative farming practices into the educational curriculum has enabled students to develop a forward-thinking mindset, promoting a more resilient and adaptable food production system.

The study also underscores the pivotal role of policymakers in aligning agricultural education curricula with the evolving needs of the agricultural sector to ensure food security in Region I. Continuous review and update of educational programs, as well as increased investment in modern teaching and learning facilities, are essential to address the region's specific agro-ecological conditions and respond to the challenges posed by climate change, market fluctuations, and other emerging factors (Oyediran & Omoare, 2017) (Olusoga, 2014) (Njura et al., 2020) (Oguh, 2020).

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