

Organic Agriculture: A Promising Major Field In The Bachelor Of Science In Agriculture

Myra Luz M. Homillano¹

¹Central Bicol State University of Agriculture

Abstract

Background: Academic institutions deal with curricular offerings for the enrolment and employment of graduates. The Central Bicol State University of Agriculture (CBSUA) is a higher education institution that provides curricular advances in agriculture. The University, by its name, takes the responsibility and the leadership in agriculture to undertake extension and development programs and provide the necessary instructional and research leadership in agricultural, environmental, and technological development in the Bicol Region.

Materials and Methods: A descriptive research design was employed to determine the feasibility of offering organic agriculture as a major field for the Bachelor of Science in Agriculture (BSA) degree program. A total of 310 Grade 12 students answered a survey.

Results: The findings revealed that the top preferred major fields were Organic Agriculture (18.33) and Animal Science (18.33), respectively. Institutions with better facilities (30.96%) was the most preferred criterion in choosing their tertiary education institution.

Conclusion: Most SHS students preferred Animal Science and Organic Agriculture as major fields in the Bachelor of Science in Agriculture. In choosing tertiary education, most of the students preferred institutions with better facilities. This indicates the feasibility of offering organic agriculture as a major field in the Bachelor of Science in Agriculture.

Key terms: organic agriculture, major field, Bachelor of Science in Agriculture, tertiary education institution

Date of Submission: 19-11-2022

Date of Acceptance: 03-12-2022

I. INTRODUCTION

Universities play a significant role in poverty alleviation. Higher agricultural education is a key factor in reducing poverty in rural areas (Asadi, Varmazyari, Kalantari, & Sadati, 2011). Aside from the traditional teaching and research roles, universities are expected to respond to the specific knowledge needs of local learners and other stakeholders. Higher Education Institutions (HEIs) have committed to becoming more sustainable, cooperating with a broad set of constituents with diverse goals (Dade, 2010).

The contributions of agriculture to humanity are crucial and evidently recognized worldwide. Agriculture impacts society in many ways that includes supporting livelihoods through food, shelter, and job opportunities; providing raw materials and other products; and building strong economies through trade. People use various agricultural products daily—from the clothes we wear to the paper we write on (The Balance Small Business, 2020). Agricultural education has long been noted as a key factor in reducing poverty in rural areas, where most poor people live (Asadi, Varmazyari, Kalantari, & Sadati, 2011; Landicho et al., 2014). In the Philippines, Agricultural Education is delivered through HEIs like State Universities and Colleges (SUCs) created by Acts of Congress (Zamora, 2014). As of 2020, 112 SUCs all over the Philippines offer agriculture courses and programs. Such degree programs shall be aligned with the K to 12 Curriculum. Agricultural universities must design and implement academic programs tailored to the community's needs. It is also encouraged to adjust degree programs to accommodate new fields of specialization whenever the need arises.

Organic Agriculture is a production system sustaining the ecosystems and people where ecological processes, biodiversity, and cycles adapt to local conditions rather than using inputs with adverse effects (IFOAM General Assembly, 2008). Organic Agriculture (OA), as defined in the Philippine Organic Agriculture Act of 2010 or RA 10068, includes all agricultural systems that promote ecologically sound, socially acceptable, economically viable, and technically feasible food production and fibers. Organic agriculture reduces external inputs by refraining from using chemical fertilizers, pesticides, and pharmaceuticals in farming.

As a premier government school, the CBSUA shall initiate developments in agriculture for the country. The University takes responsibility and leadership in agriculture and allied technological sciences, especially in the Bicol region. Section 2 of Republic Act No. 9717 states that the University shall primarily provide advanced

instruction and research in agriculture. With its expertise in agricultural and industrial technology, CBSUA is expected to develop and deliver technology to the community to spur higher productivity.

The encouragement of organic agriculture is supported by the law and the human desire to lessen conventional agriculture's negative environmental impact; such as the decline in soil productivity, soil compaction, loss of organic matter in soil, water-holding capacity, biological activity, and salinization of soils in highly-irrigated farming areas (Fisher, 2021). Hence, CBSUA intends to offer organic agriculture as one of the major fields of its curricular degree program, offering a Bachelor of Science in Agriculture.

The current study aims to determine the feasibility of Organic Agriculture as a major field degree in the Bachelor of Science in Agriculture program at the Central Bicol State University of Agriculture. Specifically, the study aims to: 1) identify the preferred major field of Grade 12 students regarding Bachelor of Science in Agriculture; and 2) determine the students' criteria in choosing a tertiary education institution.

II. Materials and Methods

The study employed a descriptive, non-experimental research design. A survey was used as an instrument for data collection. An informed consent form was given to the respondents along with the survey.

A total of 310 Grade 12 students responded to the survey. The students were taking up Science, Technology, Engineering and Mathematics (STEM), and Technical-Vocational-Livelihood (TVL) strands among Senior High School students in the locality. Purposive sampling was used to determine the respondents per school offering the abovementioned SHS tracks. The collected data were compiled and analyzed using frequency and percentage. The responses which had the highest frequencies were noted.

III. Result and Discussion

To determine the feasibility of the proposed major field of BSA, students were asked the following in the survey: preferred major field in terms of BSA course, criteria for choosing the tertiary education institution, and preferred tertiary education institution to be enrolled in.

Students' Major Field Preference. It can be observed in Table 1 that Animal Science (18.39%) and Organic Agriculture (18.39%) are the most preferred major field in the Bachelor of Science in Agriculture occupying the same slot. This result contradicts the study of Douglas, Singh, and Zvenyika (2017), where younger generations primarily prefer white-collar jobs rather than agriculture-related careers. An issue paper published by Asian Farmers' Association for Sustainable Rural Development (2015) explained why agriculture is not attractive to the youth nowadays. The possible reasons include: thinking that farming is not a profitable job, insecure land ownership and increasing land prices, lack of rural infrastructure, lack of supportive government policies and programs for farmers, lack of curriculum on agrarian reform and agriculture, and lack of organizations of young farmers. This implies that even though agriculture is no longer attractive to the youth, some are still interested in taking agricultural courses.

Table 1. Preferred major field of Grade 12 students in BSA

Major Field	f	%
Animal Science	57	18.39
Organic Agriculture	57	18.39
Agricultural Economics	47	15.16
Plant Pathology	41	13.23
Farming Systems	36	11.61
Soil Science	26	8.38
Horticulture	21	6.77
Agricultural Extension	10	3.23
Agronomy	10	3.23
Entomology	5	1.61
TOTAL	310	100%

Students' Criteria for Choosing Tertiary Education Institution. Table 2 reflects that 30.96% of the students preferred institutions with better facilities, 16.77% wanted institutions with reputable and high-quality faculty line-ups, and 12.58% were concerned about accredited programs. The data were similar to Saif, Nipa, and Siddique's (2017) study, wherein choosing the right higher education institution is a crucial issue in Bangladesh. An institution's image matters a lot to students when selecting a tertiary education institution, as observed by Sarkodie, Asare, and Asare (2020), where students' choice of education institution was affected by academic factors/reputation.

Table 2. Students' criteria in choosing preferred tertiary education institution

CRITERIA IN CHOOSING SCHOOL	f	%
Institutions with better facilities	96	30.96
Institutions with reputable & high-quality faculty line up	52	16.77
Accredited programs	39	12.58
Buildings and infrastructure	31	10.00
Presence of family members	28	9.03
Institutions near your residences	26	8.39
Institutions with low maintenance	26	8.39
Attractive gate	5	1.61
Institutions far from your residences	5	1.61
Others (please specify)	2	0.66
Institutions with better facilities	96	30.96
TOTAL	310	100.00

IV. Conclusion

Most SHS students preferred Animal Science (18.39%) and Organic Agriculture (18.39%) as major fields in the Bachelor of Science in Agriculture. In choosing tertiary education, 30.96% of the students preferred institutions with better facilities, 16.77% wanted institutions with reputable and high-quality faculty line-ups, and 12.58% were concerned about accredited programs. This indicates the feasibility of offering organic agriculture as a major field in the Bachelor of Science in Agriculture.

Campaigns and promotions about the importance and benefits obtained from organic agriculture as a major field may be developed. These will raise awareness of organic agriculture and may attract potential enrollees.

References

- [1]. Asian Farmers' Association for Sustainable Rural Development. (2015). A Viable Future: Attracting the Youth to Agriculture. <http://www.asianfarmers.org/wp-content/uploads/2015/07/a-viable-future-attracting-youth-agriculture.pdf>
- [2]. Asadi, A., Varmazyari, H., Kalantari, K., & Sadati, S. A. (2011). The study of agricultural students' effective entrance in agricultural fields after graduation: case study of students of University College of Agricultural and Natural Resources, Tehran University, Iran. *Research Journal of Applied Sciences, Engineering and Technology*, 3(1), 1-9. Retrieved from <https://maxwellsci.com/print/rjaset/v3-1-9.pdf>
- [3]. Dade, A. E. (2010). The Impact of individual decision making on campus sustainability initiatives. *UNLV Theses, Dissertations, Professional Papers, and Capstones*. 4. Retrieved from <https://digitalscholarship.unlv.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1003&context=thesisdissertations>
- [4]. Douglas, K., Singh, A. S., Zvenyika, K. R. (2017). Perceptions of Swaziland's youth towards farming: A case of Manzini region. *Forest Research and Engineering: International Journal*, 1(3), 83-89. DOI: 10.15406/freij.2017.01.00014
- [5]. Fisher, M.R. (2021). Conventional Agriculture. Retrieved from <https://pressbooks.umn.edu/environmentalbiology/chapter/conventional-agriculture/>
- [6]. International Federation of Organic Agriculture Movements (IFOAM) Organics International. (June 22-24, 2008). *Definition of Organic Agriculture*. Retrieved from <https://www.ifoam.bio/why-organic/organic-landmarks/definition-organic#:~:text=Organic%20Agriculture%20is%20a%20production,of%20inputs%20with%20adverse%20effects>
- [7]. Landicho, L.D., Paelmo, R.F., Cabahug, R.D., Visco, R.G., & Abadillos, M.G. (2014). Prospects and challenges in promoting organic agriculture in the upland communities in the Philippines: Implications to food security and nutrition. *International Proceedings of Chemical, Biological, and Environmental Engineering*, 67, 60-65. doi: 10.7763/IPCBE.2014.V67.12
- [8]. Organic Agriculture Act of 2010, Republic Act No. 10068, 14th Cong. (2010). Retrieved from <https://www.officialgazette.gov.ph/2010/04/06/republic-act-no-10068/>
- [9]. Saif, N. M., Nipa, N. J., & Siddique, M. A. (2017). Assessing the factors behind choosing universities for higher education: A case of Bangladesh. *Global Journal Of Management And Business Research*. Retrieved from <https://journalofbusiness.org/index.php/GJMBR/article/view/2094>
- [10]. Sarkodie, N. A., Asare, A., & Asare, D. (2020). Factors influencing students' choice of tertiary education. *Africa Development and Resources Research Institute (ADRI) Journal*. 28. 58-92. Retrieved from https://www.researchgate.net/profile/Noble-Sarkodie-Amoako-2/publication/343318494_Factors_Influencing_Students'_Choice_of_Tertiary_Education/links/5f22d6cea6fdcccc439964fb/Factors-Influencing-Students-Choice-of-Tertiary-Education.pdf
- [11]. The Balance Small Business. (2020). "What Is Agricultural Production?". Retrieved from <https://www.liveabout.com/what-is-an-agricultural-product-2538211>
- [12]. Zamora, O. B. (2014). Challenges and opportunities for sustainable agricultural education in the Philippines and in the ASEAN Region. *Journal of Developments in Sustainable Agriculture*, 9, 29-40. Retrieved from <https://doi.org/10.11178/jdsa.9.29>