

Feasibility Study on Offering Bachelor of Science in Agribusiness (BSAB) program in Sorsogon State University, Castilla Campus

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Abstract— This study aimed to determine the profile of the participants and identify the strengths and weaknesses on the feasibility of offering the Bachelor of Science in Agribusiness (BSAB) in Sorsogon State University, Castilla campus. Utilizing descriptive method using survey questionnaire, the data were gathered from 772 participants in six feeders' schools of Castilla campus as well as to different agencies in Sorsogon province. Supplemental informal interview was also conducted to the representative participants and documentary analysis to validate the data gathered. Statistical tools such as mean, rank and percentage were used to determine the quantitative result of the study.

Results revealed that participants agreed that offering the BSAB program has benefits and advantages to the students, to the community and to different agribusiness sectors in the province and beyond. They also agreed that program is highly needed in the economic industries in the country and the world. Student-participants also declared their intentions to enroll in the program due to its offered economic opportunity. As to the management, market demand, financial, and operational aspect of the program, results showed that offering the program is viable.

In conclusion, offering BSAB program is feasible based on the participants' responses. Faculty complements are also observable following the minimum requirements stated in BSAB CMO 24, 2. 2007. The physical plants and facilities and the laboratories are also available to support and sustain the program. The proposed program is also aligned to the university mandate and to the six years strategic development plan of the university.

Index Terms— *BSAB, feasibility study, Sorsogon, strength and weakness*

1 INTRODUCTION



Institutional mandate and needs

Sorsogon State University (SorSU)-Castilla campus as one of the tertiary agricultural schools in the province of Sorsogon has mission 'to provide industry related programs that are anchored on a culture for research and entrepreneurship for the development of Sorsogon and beyond'.

Thus, the SorSU- agriculture department participates in the development and growth of local and national economy by linking the agribusiness program with the agricultural industry.

Additionally, since the institution is already a university through R.A 11088, this paper also addresses the need of additional quality program in agriculture department to comply with the requirements set by the Commission on Higher Education. Further, considering that there are no tertiary schools in the province offering the same program, thus this program could be another choice of the students who would like to venture in the agriculture and/or agribusiness course. In addition, the office of the Governor in the province of Sorsogon also prioritizes the development of agriculture sector and infrastructure of the province in general. Further, R.A. 7666, Sec 2 stipulates that university is mandated to offer courses in the field of agro/fisheries courses.

Government Policies: An Overview

Republic Act 8435 prescribes urgent measures to modernize the agriculture and fisheries sectors of the Philippines in order to enhance the profitability and prepare different sectors for the challenges of globalization (see also Quinco, n.d.). To roll this out, agencies of the government such as DOLE, NEDA, DPWH, DTI, LGUs, DAR, DECS, CHED, DENR, DOST, DOF and other agencies are called to support in the implementation of this Agriculture Fisheries Modernization Plan (AFMP). One of the focuses of this Act is the enhancement of the agribusiness sectors in the Philippines which play a role in the Philippine economy. Bugador (2015) emphasizes that Agribusiness contributes to the country's Gross Domestic Product (GDP), boosting production and employment.

As such, the Department of Labor and Employment (DOLE) identifies agribusiness as one of the preferred skills in priority industries along with fisheries, BPO, tourism, hotels and restaurants, construction, wholesale and retail trade [1][4]; Verrecio, (2016). DOLE also indicates that Agribusiness is one of the top occupations based on its minimum wage rates and DBM salary grade for entry and middle level government employees[3]. Also, the National Economic and Development Authority (NEDA) classifies Agribusiness as one of the priority programs and projects in

2017-2022 under the Expanding Economic Opportunities in Agriculture, Forestry, and Fisheries (AFF), (NEDA, 2019). Similarly, as stated in the national industry roadmap localization and consultation conducted by the Department of Trade and Industry (DTI), agribusiness is highly prioritized in all regions in the country (Bugador, 2015; see also DOLE 2015).

Given such need of agribusiness in the industries, CHED also intensifies the promotion of agribusiness as field of study, thus CMO No. 24. S. of 2007, the Policies and Standards (PS) of BSAB is promulgated by the Commission. Its purpose is to rationalize the undergraduate agribusiness education in the country with the end of keeping at pace with the demands of global competitiveness (CMO No. 14, s. 2007).

Anchored on the concepts mentioned, together with the response to the Medium-Term Development Plan which is designed to improve productivity, income, entrepreneurship throughout the country (CMO No. 24, s. 2007), p.1) the Sorsogon State University, Castilla

Campus supports the government agencies' promotion as well as the need of the community through a feasibility study of the possible offering of Bachelor of Science in Agribusiness (BSAB) in the province and eventually produce competency standard for agribusiness.

Agribusiness and Its Scope

By definition, Agribusiness focuses on creating and going into business in agriculture. It is engaged in the production and operation of the farm, the manufacture and distribution of farm equipment and supplies, and the processing, storage, and distribution of farm commodities locally and globally (CMO No. 24, s. 2007; see also Bugador, 2015). As to its scope, agribusiness constitutes wide range and interconnected industries. In other words, the core of agribusiness is agriculture which focuses on crop production, animal production, forestry and logging, fishery and agri-support services and manufacturing.

Assessment, Challenges, and Opportunities

In general, it is propitious that agriculture contributes about 40 percent of gross domestic product (GDP) in the economy^[10]. Also, looking into the plans, programs, and priorities of government agencies in the country, it is promising that the overarching agenda is about food security to meet the food requirements which is more affordable and available to Filipinos at all times.

Recently though, the shift towards global information technology affects and continuously facing challenges the agriculture performance in the country. One of these is the shift to electronics and services industry which affects the overall production of the country from agricultural to industrial and commercial aspects (Bugador, 2015). Sanchez (2015) identified challenges such as 'lack of important provisions that will guarantee food security and reduce poverty in the country side, lack of programs that will link agriculture and industry, and in-

sufficient activities aimed to vigorously transfer advanced production and the lives of the Filipino people.

These are challenges for the government including other agencies such as DA, DTI, DOLE, LGU, academic institution, and others to revive agricultural industry and continue to respond to the need of many local communities.

At present, DA, LGU, DAR, and other related bureaus push for the implementation of many programs and strategies for the Agribusiness sector thereby broadening its scope and services to all the consumers.

Similarly, Sorsogon State University-Castilla Campus (SSU-CC) takes the opportunity to support the programs and policies of the government by way of proposing a new program on Agribusiness to be able to extend its 4 mandates (instruction, research, production, and extension) in the community and beyond.

Looking Ahead: The Way Forward

Looking closely into the other studies conducted which focused also on the viability of offering a particular program in other contexts, the researchers determine the financial capability, institutional capability, marketability and others. One of which is Balingbing (2014) who focused on the feasibility of offering a four-year ladderized course in AB in information Technology at CSPC, Nabua, Camarines Sur. He concluded that ABIT with BPO specialization is highly feasible, attractive and employable locally and internationally.

Verecio (2016) also explored the feasibility of offering MSIT and MIT graduate program in Leyte Normal University, Tacloban City. Based on his SOT analysis conducted, he found out that the program had a great advantage to their university since they have already laboratories and facilities as well as qualified faculty who are going to teach in the subjects under said program. Similarly, Fortales (2018) feasibility study on offering Master of Engineering in Romblon State University also found that the management, market, financial viabilities were also feasible to offer the said course in the said university.

Based on the reviewed studies, it is highly important to conduct a feasibility study on how the program supports the strategic plan of the university and the specific department, the market viability, financial viability, and other services viability of the university. Hence, SorSU-Castilla Campus conducted the same feasibility study to address such needs.

Indeed, despite the adversities that the country is facing today such as the COVID-19 pandemic, together with the series of typhoons which caused too much destruction in agriculture and infrastructure, Sorsogon State University eagerly joins in the nation's end goal to intensify the agriculture workforce and to promote sustainable agriculture for communities' food sufficiency and economic sustainability. Hence, this study was conducted to determine the feasibility of offering the program in terms of needs of the community and the readiness of the college in offering such program.

OBJECTIVES OF THE STUDY

General Objective: Determine the feasibility of offering Bachelor of Science in Agribusiness (BSAB) Program in Sorsogon State University, Castilla Campus.

Specific Objectives:

1. Determine the profile of the participants in terms of:
 - a. Senior High School Track
 - b. Employees' agencies
 - c. Intention of the senior high school graduates to enroll in BSAB program
2. Identify the strength and weakness (internal and external factors) in offering BSAB program in SorSU-CC in terms of:
 - a. Management aspect
 - b. Market demand aspect
 - c. Financial aspect
 - d. Operational aspect

2. MATERIALS AND METHODS

Research Design

This study utilized the descriptive survey method. This method was used as basis for offering new program/s in college/university [11].

Respondents

The respondents of this study were composed of Senior High School graduate students with TVL, Academic, and Sports and Arts Tracks, respectively. These students are representatives from the six (6) feeder schools (Oras, San Rafael, Mayon, Cumadcad, Dinapa, and Macalaya National High Schools, Castilla, Sorsogon) of the university. Other participants were DepEd Officials, LGU-OPAG, DA, and other private entrepreneurs. Table 1 illustrates the respondents of the study.

Research Instrument

The study utilized survey questionnaire, informal interview and documentary analysis (based on the data, records, files or documents available in the campus) to validate/triangulate the data gathered.

Data Collection and Procedures

The following procedures were used in collecting the data, to wit: a. Survey Questionnaire: 1) *Preparation*. This first step was done in the preparation of the questionnaire through the available books, e-journals, and theses. The questionnaire was available both printed and google form (e-copy). Consent letter was also crafted utilizing the form provided by ORDES.; 2) *Validation*.

The first draft of the questionnaire was piloted to identified students and employees for the comments and suggestions for the improvement of the questions. 3) *Administration*. The questionnaires were administered using the

referral technique^[5]. This involves identifying individuals who meet inclusion criteria, gaining their cooperation, and then asking them to recruit additional participants with the same situation/condition. This technique was used since the researchers cannot travel due to the travel restrictions brought by the outbreak of COVID 19 pandemic.

B. Informal Interview. This was done through the use of online platform such as messenger, email, call, and personal messages to the participants.

c. Documentary Analysis. Important documents such as vision, mission and goals for the university and the department, academic programs, memoranda, faculty and non-teaching personnel, facilities and equipment, other support services and other pertinent documents in the HRMO, Library and Supply Offices were retrieved and considered in the analysis.

Mean and percentage were used in the study to determine the sample population. Rank was also used to determine the intention of the students to enroll in the program as well as to determine the advantages and benefits of the program to the community.

3. RESULTS AND DISCUSSION

Profile of the participants

Figure 1 illustrates representatives from different agencies both private and public in the province of Sorsogon as well as the secondary schools in Castilla, Sorsogon. It shows in the figure that 46% of the students from different senior high schools in Castilla, Sorsogon, said that they are willing to take up agriculture specifically agribusiness since their families' source of income is mostly farm the farm produce. There are also 37% private business in the municipalities also agree that offering BSAB program could help the business sectors in the municipality to enhance their distribution, processing, storage of farm commodities. Further, 14% of DepEd employees believe that the program being proposed by SorSU- Castilla Campus is very timely considering that they are catering the senior high school students with TVL tracks. They mentioned that BSAB is a very good career opportunity of the TVL senior graduate students who are willing to pursue their baccalaureate degree aligned to their chosen track. Also, 3.5% of the participants from DAR, PLGU and LGU agree that the proposed program answers the call to boost and secure the future of the agri- industry of province country, in the and the general.

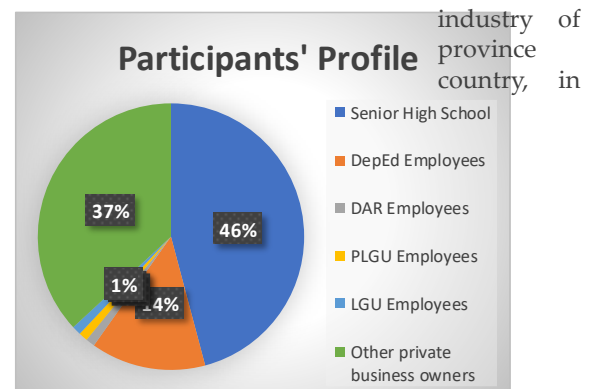


Figure 1. This shows the percentage of the participants from different agencies in Sorsogon and feeder schools of the university

As indicated in the result, the participants give their support for the possible offering of BSAB program. They are certain that SorSu-Castilla campus as one of the premier institutions that delivers quality agriculture graduates, can support and help grow the agricultural industry of Sorsogon and beyond.

As to the intention of the senior high school graduates to enroll in BSAB program, table 2 shows that ranks 1 to 5 pertain to the knowledge and skills that they could get from the institution and eventually the achievement of their goals through self-actualization, the family business that they want to pursue and the free tuition fee being offered by SorSu as one of the universities which offers free gov-

ernment higher education subsidy to students.

Table 2: Intentions of the graduate students to enroll in BSAB program

2.Strength and Weaknesses:

a. Management aspect. Looking closely into the management aspect/viability of the proposed BSAB program, table 3 indicates capability and qualifications of the faculty members who will be handling the subjects. This also includes the management capability and administrative competence.

Strength	
1. Qualifications of the faculty members to handle the subjects in BSAB program.	Core Faculty -28 With master's degree - 14 With PhD degree -2 On-going master's degree-12
	GE Faculty - 9 With master's degree - 2 With PhD Degree -3 Ongoing master's degree -4
2. Administrative competence of the BSAB Department	The agriculture department has qualified program chair who is a master's degree holder in agriculture as an allied program identified in BSAB PSG (CMO No. 24, s. 2007) with the rank of Assistant Professor.

1	Enhancement of Skills and knowledge
2	Self-actualization
3	Family Business
4	Faculty competence
5	Professional growth
6	Reasonable tuition fee
7	Socialization
8	Accessibility
9	Opportunity to do research and extension
10	Linkages
11	Strong governance
12	Sound admissions and enrolment policies
13	Adequacy of library holdings

Weakness		%	
Senior high school	19	19.43	
Faculty Complements	15	15.15	
DepEd employees	104	12.95	
DAR employees	2	0.26	
PLGU employees	10	1.3	
LGU employees	15	1.94	
Other private business			
Owners	286	37.05	
Total	772	100	

Table 3: Management Capability and administrative competence of SorSU-Castilla Campus

Table 3 shows the agriculture department's readiness to offer the program as to the management capability and administrative competence is highly feasible. This result is in congruence with the general requirements of BSAB CMO

24,s 2007 p. 7, to wit.’

9.1. General Requirements

9.1.1. As a rule, a master’s degree in the discipline or its equivalent is preferred for teaching in the tertiary level.

9.1.2. A minimum of 50% of the faculty teaching professional courses in agribusiness must have a Master;s degree in the discipline or in allied fields.

9.2. Qualification of Faculty. Faculty teaching in a BSAB program, must have an appropriate master’s degree from any of the allied fields in Section 4.

Thus, based on the data shown, the faculty members who are currently teaching in the department are highly qualified to teach in the program. They graduated master’s and phd’s in top performing universities in the country. From the 50% minimum requirement as stipulated in the 9.1.2 of the PSG, the institution maintains approximately 57% of full-time faculty members who can teach in BSAB program.

While, the management capability of the department is achieved based on the data, consideration of hiring faculty members with major in agribusiness is highly needed to specifically focus on teaching agribusiness related subjects.

b. Market demand aspects. This aspect focuses on the viability of proposed BSAB program in terms of demand of the graduates/employment opportunities, prospective enrolment/enrolment projection, and presence of existing higher education institutions (HEIs) offering the same course in the area.

As to the graduates/employment opportunities, the province has several agribusiness industries. These are Bicol Integrated Coconut Processing Plant in Sorsogon City, Gubat Agritech Industries Company, handicraft industries, dairy farm, to name a few and other agencies such as DAR, PLGU, LGU, and several agribusiness sectors catering production and processing of rice, corn, vegetables, small and large ruminant production, poultry and swine production. There are several secondary schools as well as some tertiary schools in the province. These industries, agencies, and academic institution need more employees (corporate planners, entrepreneurs, business consultants, business managers, sales representatives, credit analysis, teachers, researchers, extensionists) to supply the demand of the markets in Sorsogon and beyond.

These data presented are validated by the participants who said that the graduates of BSAB program have lots of opportunities that awaits them not only in the province but also in different industries/sectors around the world. The business owners who were interviewed also said that they can absorb the graduates of SorSU for they believe in the quality of education the institution is giving to the students.

In general, the participants identify and rank the advantages and the benefits of the proposed program to the community as shown in tables 5 and 6, respectively.

Table 5. Advantages of BSAB program to students

Rank	Description
1	Develop the critical thinking skills, scientific and leadership potentials among the stu-

	dents
2	Promote and strengthen the value of camaraderie among the students
3	Provide more opportunities for the students to attend seminars, colloquiums, presentation and other similar activities that will enhance and strengthen entrepreneurial practitioner’s competencies
4	Reorient and strengthen the values of students
5	Enhance the student’s personal and social characteristics

Table 6. Benefits of the proposed program to the community

Rank	Description
1	Promote the field of agribusiness
2	Establish and strengthen linkages with others agency and stakeholders
3	Strengthen its being an institution of learning
4	Tap immense research potentials in the areas of business
5	Attain fulfillment on the opportunity of the college to extend and maximize its services to its clientele
6	Facilitate the development of Agri-industry in Sorsogon province and beyond by producing agri-entrepreneurs
7	Provide more avenues to disseminate information on programs and projects of the college
8	Strengthen awareness and responsibilities between SorSU and community.

As regard the projected enrolment. Figure 2 shows the increasing number of enrollees for the next five years. This is a very promising projection which could cater most of the students in the feeder schools of the campus as well as other students in the province who ay opt to enroll in the course. Even those who have tracks also consider the BSAB program based on the result of the survey. The participants mentioned that there is really a need to offer the BSAB program in Castilla campus so that the students have another choice of what career they want to venture in their college years.

Academic Year 2022-2026

Figure 2. This shows the projected 5-year enrolment for the proposed BSAB program.

It can also be noted that only SorSU-Castilla Campus has a proposed BSAB program offering in the province, thus there is no duplication in the program being offered by other colleges in the area. As to other universities in Region V, BU is the only university that offers the same program in Albay and CSBUA and PSU in Camarines Sur which also offer the same program.

C. Financial Aspect. As to the financial viability of the institution for the sustainability of the operation of the proposed program, the projected income and expenditure of the program for A.Y. 2022-2026, are the following which indicates the income for the tuition, fiduciary, other services, and miscellaneous fees.

1) Tuition Fees	1) 10, 892,700.00
2) Fiduciary Fees	2) 3, 533, 660.00
3) Other Service Fee	3) 301, 750.00
4) Sub Total	4) 14, 728, 110.00
5) Miscellaneous Fees	5) 200, 000.00
6) Grand Total	6) 14, 928, 110.00

As regard to the financial viability of BSAB, the participants determine the free tuition program of the government given to SUCs, thus going to SorSU-Castilla is very affordable. Even the standard of living in the area is within the means of the students. Thus, this becomes opportunity of the proposed program.

d. **Operational Aspect.** Regarding the operational aspects of the campus focuses on its strategic location. SorSU-Castilla is strategically located at the center of Sorsogon and Daraga/Legazpi, thus very accessible particularly, the availability of transportation especially that the roads are ready widened from crossing Mayon going to Barangay Mayon proper wherein the campus is situated. Also, it is very conducive to learning considering that there are no destructions (malls, bars, and others) near the area.

Instructional facilities such as laboratory and academic buildings are well repaired.

Instructional facilities and laboratory areas are also well maintained as part of the minimum requirements of CHED RQAT for the instructional purposes of agriculture program.

4. CONCLUSION AND RECOMMENDATION

The study showed that the possibility of offering the Bachelor of Science in Agribusiness is feasible based on the result of the survey and interview with the participants. The proposed offering of a new program is also aligned to the mission of the university as well as RA 1108 as mandate of the university. The result also indicated that the campus has strengths in terms of management, market demand, financial, and other operational aspect that could support and sustain the operations of the new program.

Based on the result of the study, it is recommended

that faculty hiring plan for agriculture be given attention as well as the faculty development program for agriculture could be crafted and implemented to address the increasing number of enrollees in the campus vis a vis the additional programs to be offered by the university for the succeeding years. Additionally, more facilities, equipment and laboratory buildings and areas be enhanced and strengthened to achieve quality graduates. Also, graduates' tracer study could be conducted regularly to determine the whereabouts of the graduates and to evaluate their performance in the workplace. Furthermore, continuous acquisition of library collections (books, journals, magazines, dictionaries, almanacs, and others) be strengthened to address the needs of the clientele in the programs of the campus.

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