

# Factors Affecting the Bachelor of Science in Agriculture Education Enrolment Rate at Tawi-Tawi Regional Agricultural College

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This study focused on the factors affecting the Bachelor of Science in Agriculture Education (BSAgEd) enrolment rate at Tawi-Tawi Regional Agricultural College (TRAC). The purposes of this study were to identify (a) the factors affecting the Bachelor of Science in Agriculture Education enrolment rates at Tawi-Tawi Regional Agricultural College in terms of tuition or miscellaneous fees, curriculum faculty members, physical facilities and equipment, and parent support; and (b) the significant difference in the factors affecting the Bachelor of Science in Agriculture Education enrolment rates at Tawi-Tawi Regional Agricultural College when respondents are grouped according to their profile variables. The study employed the descriptive method of research. A total of one hundred (100) respondents were used in the study through quota-convenience sampling. Findings revealed that the factors affecting the Bachelor of Science in Agriculture Education enrolment rates at Tawi-Tawi Regional Agricultural College are tuition or miscellaneous fees, the curriculum, the faculty members, physical facilities and equipment, and parent support. It was also concluded that affordable fees, a relevant curriculum, competent teachers, sufficient and complete facilities, and good student-parent relationship could attract students to enrol and increase the population of the Bachelor of Science in Agriculture Education. The results of the significant difference in the factors affecting the BSAgEd enrolment rates at Tawi-Tawi Regional Agricultural College when respondents were grouped according to sex and monthly income were not significant, and the null hypothesis was accepted. Thus, the variances of the variables were the same and comparable. On the other hand, age and year level variables are significant and so the hypothesis was rejected. Hence, the variances of

the two variables are not similar. It was recommended that the College of Agriculture Education should provide conducive learning to the students in the aspects of curriculum and instructions, faculty members, and the physical facilities and equipment.

**Key words:** *Enrolment rate, tuition fee, curriculum, quota-convenience, Tawi-Tawi Regional Agricultural College, Bongao, Philippines.*

## Introduction

Research has revealed that since 1994, the number of students enrolled in higher education institutions has improved tremendously (Steyn, & De Villiers, 2006). An educational institute is one of the most important factors in a student's life, because the future of an Agriculture Education student depends on the educational level, which could have long term effects, e.g., companionship, life partners, location and future life fulfillment. However, most of the time, it involves our personal and financial purposes (Kotler & Fox, 1995). Agriculture Education student's enrolled to the Tawi-Tawi Regional Agricultural College already decided their future lives and professional future by choosing their agricultural school (James, Baldwin, & McInnis, 1999).

Agriculture Education students of Tawi-Tawi Regional Agricultural College affect enrolment rates. One reason for this is the implementation of the K+12. Two years ago, Tawi-Tawi Regional Agricultural College had lower numbers of students because of the K12, and the College of Agriculture Education was affected. According to the Department of Education, Grade 1 entrants for 2012–2013 will be the first batch to undergo the K+12 fully, and incoming first-year high school students (or grade 7) will be the first to undergo the junior high school curriculum. And to prepare teachers for the new curriculum, which will begin in phases from last June, a nationwide summer training program for about 140,000 grades 1 to 7 public school teachers was held in May. The Department of Education said it is also working with various private school associations to cover teachers in private schools.

With the advent of K-12 program, Hirschi and Lage (2017) initiated a study that is more preventive than corrective of the problems or consequences that may occur when the K-12 is implemented in the Philippines, and no first-year students enrol in colleges. A more in-depth understanding of how the customers make their choices is essential considering image building, marketing, and advertising. The K-12 Education Plan was published on October 05, 2010 in the DepEd Discussion Paper. This is part of former president Benigno "Noy Noy" Aquino III's Educational Reform Program. The P-Noy Administration believes that adding more years to basic education in the Philippines could help solve the problem of unemployment, keep up

global standards, and give Filipino students more time to choose the career that best suits their skills.

With this scenario, the researchers aimed to assess the factors affecting the Bachelor of Science in Agriculture Education enrolment rates at Tawi-Tawi Regional Agricultural College. By way of this study, certain recommendations can be proposed to improve and increase the enrolment rates of the college.

### **Related Literature**

This study used the Enrolment System authored by Aquino (2005). Institutions have utilized information system technology to implement an enrolment system. Through this process, more enrollees can be attracted, and income can be generated. The advantages of using technology-aided applications can be very useful, which can make any transaction faster and easier. Ace Adrian (2011) explained that the lack of the enrolment system in schools and institutions can lead to chaos and troubles in the end, as customers would be confused about what to do next. Thus, it is important to integrate the enrolment system, clear process, and procedures.

Nowadays, a number of developing nations have adopted the rapid technological advancement of technology, which has changed a lot, especially in many areas. It changed the working styles and ways of living in society. In the 20th century, the rise of the industrial revolution with steam-powered machines expanded human productive power and, in the 21st century, machine-powered light was born, as well as broadcasting and computer technologies (Tinio, 2002).

On the other hand, Bacala & Reanno (2009) explained that the emergence of technology in the enrolment transaction had greatly helped many institutions to make the process easy and fast. Through the use of computer-aided equipment with internet access, transactions can be done in a faster way without delay. The web-based enrolment system is used in most institutions today. Some applications include grade management, enrolment processes, and modules.

### **Objective of the study**

The purposes of this study were to identify (a) the factors affecting the Bachelor of Science in Agriculture Education enrolment rates at Tawi-Tawi Regional Agricultural College in terms of tuition or miscellaneous fee, curriculum faculty members, physical facilities and equipment, and parent support; and (b) the significant difference in the factors affecting the Bachelor of Science in Agriculture Education enrolment rates at Tawi-Tawi Regional Agricultural College when respondents are grouped according to their profile variables.



## **Methodology**

The study employed the descriptive method of research and mainly focused on the situation as it existed (Bermudo, et al. 2013). This research study made use of quantitative descriptive research design and specified the prime purpose to determine the factors affecting the Bachelor of Science in Agriculture Education enrolment rates at Tawi-Tawi Regional Agricultural College.

Tawi-Tawi is a melting pot of multi-ethnic groups. People speaking with different forms of language and using it in different ways are valuable in the social affairs of society. Thus, this study was conducted within two tertiary schools in Tawi-Tawi, Bongao, namely: Mindanao State University-Sulu College of Technology and Oceanography (MSU-TCTO), and Tawi-Tawi Regional Agricultural College (TRAC).

By virtue of Republic Act number 6060, Sulu College of Technology and Oceanography (SCTO) was established as a unit of Mindanao State University. Hence, the name MSU-TCTO. Its existence in the locality, moreover, aims at extending educational services to Muslims and other minority groups. Nonetheless, by virtue of Batas Pambansa Bilang 197 PB number 201, the name MSU-TCTO was changed to Tawi-Tawi College of Technology and Oceanography (MSU-TCTO) in order to further promote the social and economic development of the people in the area.

TRAC (formerly Sulu National Regional Agricultural School was founded in 1963), on the other hand, obtained its name by virtue of Batas Pambansa Blg. 384, which sought to provide the people in the area professional, technical, and special training in agriculture. Likewise, the school was also envisioned in terms of progressive leadership in the fields of Agriculture and Home Technology (qtd. In Asaali 1998).

Respondents of the study were randomly selected from the College of Agriculture Education to make sure that there would be a good representation of those students. A total of one hundred (100) respondents were used in the study. Quota-Convenience sampling was used in the study. It is a non-probability sampling design in which respondents are selected in an identified sample of the population who are conveniently available to participate in the study.

## **Results and Discussion**

Findings of the study were organized based on the objectives of the study. The data was statistically treated and presented in a tabular form.

*What are the factors affecting the Bachelor of Science in Agriculture Education enrolment rate at Tawi-Tawi Regional Agricultural College?*

**Table 1:** Factors affecting the Bachelor of Science in Agriculture Education enrolment rate at Tawi-Tawi Regional Agricultural College

<b>Factors</b>	<b>Mean response</b>	<b>Verbal interpretation</b>
1. Tuition or Miscellaneous Fee	3.48	Agree
2. Curriculum	3.47	Agree
3. Faculty Members	3.30	Agree
4. Physical Facilities and Equipment	3.33	Agree
5. Parent Support	3.46	Agree
<b>Grand mean</b>	<b>3.46</b>	<b>Agree</b>

Table 1 shows a summary of responses to the factors affecting the Bachelor of Science in Agriculture Education (BSAgEd) enrolment rate at Tawi-Tawi Regional Agricultural College. There are five factors affecting the BSAgEd enrolment rate and these are tuition or miscellaneous fees ( $M=3.48$ ), curriculum ( $M=3.47$ ), faculty members ( $M=3.30$ ), physical facilities and equipment ( $M=3.33$ ), and parent support ( $M=3.46$ ). A grand mean of 3.46 reveals that the factors affecting the BSAgEd enrolment rate at Tawi-Tawi Regional Agricultural College are high as agreed by the respondents.

The results of the study were supported by the study authored by Tlou Mpho Joyce Matsolo (2018), who, based on the results, noted that in the South American, higher education has faced a number of challenges, chief among them the financial difficulties of prospective students, which lead to a decrease in the enrolment rate. Moreover, students can be able to integrate and find ways despite the increase in tuition in the school. The school itself provides proper procedures and the participation of parents whenever an increase in the tuition is planned.

The study conducted by Luciano, J. (2017) noted that, in the past two decades, the American curriculum has gone through a series of revisions to guide and educate the students well. The need to establish a relationship among various subjects arises from the need to create coherence and align courses with the trends of the century. Avoiding any gaps in the curriculum is a must. The design and development of the curriculum plays a critical role in the learner's experiences.

Kochlar (2010) indicated in his study on the Factors Affecting Dropout and Enrolment Rates that proper guidance among students is necessary to help students in terms of academic performance. The role of teachers is crucial in the integration of knowledge and skills for the student's success in their respective career.

Also, the study of McGowen, R.S. (2013) revealed that the slow development of school facilities and maintenance not only postpones the needed improvement but accelerates the deterioration of the enrolment rates of the students.

A study authored by Wapaisi Onyango Festus Ouma (2012) emphasized that the participation parent serves a crucial role in the academic achievements of the students.

*Is there a significant difference on the factors affecting the Bachelor of Science in Agriculture Education (BSAgEd) enrolment rate at Tawi-Tawi Regional Agricultural College when respondents are grouped according to their profile variables?*

**Table 2:** The result of the significant difference on the factors affecting the Bachelor of Science in Agriculture Education (BSAgEd) enrolment rate at Tawi-Tawi Regional Agricultural College when respondents are grouped according to their profile variables

Sex	Mean Response	t value	p value	Remarks	Decision on H <sub>0</sub>
Male	3.461	0.765	0.446	Not Significant	Accept H <sub>0</sub>
Female	3.377				
Age		F value			
18y/o & below	3.131	7.054	0.000	Significant	Reject H <sub>0</sub>
19-21 y/o	3.207				
22-24 y/o	3.606				
25 y/o & above	3.648				
Year level					
1 <sup>st</sup> year	3.018	9.348	0.000	Significant	Reject H <sub>0</sub>
2 <sup>nd</sup> year	3.437				
3 <sup>rd</sup> year	3.489				
4 <sup>th</sup> year	3.733				
Monthly Income					
P10,000 & below	3.434	0.737	0.532	Not Significant	Accept H <sub>0</sub>
P11,000-P20,000	3.448				
P21,000-P30,000	3.283				
P31,000 & above	3.180				

Table 2 shows the results of a significant difference in the factors affecting the Bachelor of Science in Agriculture Education (BSAgEd) enrolment rate at Tawi-Tawi Regional Agricultural College when respondents are grouped according to sex, age, year level, and the monthly income. The sex variable has two variances which are male ( $M=3.461$ ), and female ( $M=3.377$ ), and have a computed t value of 0.765 and a p value of 0.446, which is higher than

the alpha level of significance 0.05. This means the null hypothesis of no significant difference is accepted. Therefore, the two variances are equal and comparable.

As to the age variable, the alpha level of significance is 0.05, the computed F value is 7.054, and the p value is 0.000 lower than 0.05. The variances are grouped between 18 years old and below ( $M=3.131$ ), 19 to 21 years old ( $M=3.207$ ), 22 to 24 years old ( $M=3.606$ ), and 25 years old and above ( $M=3.648$ ) respectively. The researchers rejected the null hypothesis of significant difference and concluded that the variances are not equal.

Likewise, the year level has four (4) variances, which are the 1st year level ( $M=3.018$ ), 2nd year level ( $M=3.437$ ), 3rd year level ( $M=3.489$ ), and the 4th year level ( $M=3.733$ ). The variances have a computed F value of 9.348 and a p value of 0.000 lower than 0.05, which explains that the null hypothesis of significant difference is rejected. Therefore, the four variances are not identical.

Moreover, the monthly income has three (3) variances which are grouped to P10,000 and below ( $M=3.434$ ), P11,000 to P20,000 ( $M=3.448$ ), P21,000 to P30,000 ( $M=3.283$ ), and P31,000 and above ( $M=3.180$ ). The variances have a computed F value of 0.737 and a p value of 0.532 higher than 0.05, which explains that the null hypothesis of no significant difference is accepted. Therefore, the four variances are similar.

The results of the study were supported by Kochlar (2010) in his study on the Factors Affecting Dropout and Enrolment Rates, in which he concludes that several factors could affect enrolment such as financial constraints, facilities available, the kind of instructions, personal factors, among others. He also emphasized that demographic variables can also affect the enrolment rates.

## **Conclusions**

Based on the findings of the study, the researchers concluded the following;

The factors affecting the Bachelor of Science in Agriculture Education (BSAgEd) enrolment rate at Tawi-Tawi Regional Agricultural College were tuition or miscellaneous fees, the curriculum, the faculty members, physical facilities and equipment, and parent support. It was also concluded that affordable fees, a relevant curriculum, competent teachers, sufficient and complete facilities, and good student-parent relationships could attract students to enrol and increase the population of the Bachelor of Science in Agriculture Education in the College of Agriculture Education.



The results of the significant difference on the factors affecting the Bachelor of Science in Agriculture Education (BSAgEd) enrolment rate at Tawi-Tawi Regional Agricultural College when respondents are grouped according to sex and monthly income are not significant, and the null hypothesis is accepted. Thus, the variances of the variables are the same and comparable. On the other hand, age and year level variables are significant and the hypothesis is rejected. Hence, the variances of the two variables are not similar.



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