Sexual Victimization among College Students: Bases for Program Formulation

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ABSTRACT This study was conducted to determine the sexual victimization among college students at the Guimaras State College as bases for program formulation. A descriptive correlation research design was employed in this study. Participants size is 100, officially enrolled college students of Guimaras State College- Main Campus at Buenavista, Guimaras in all undergraduate programs in the Academic Year 2015-2016. A researcher revised questionnaire was utilized in this study which consists of personal profile Sexual victimization assessments using the Sexual Coercion Tactics Scale (SCTS). The statistical tools used were frequency count, percentage and Pearson's chi-square. The majority of the participants have ages ranging from 16 to 19 year old belong to the second-year college, 93% did not belong to any indigenous group mostly are Roman Catholic, female, heterosexual and belong to BSBA. Seventy-three percent of the participants were not victimized, and 27% were victimized sexually. Statistically, there was a significant difference in the victimization and profile when classified to sex and course at p= 0.05. Creation of program that provides awareness, education, prevention programs, and coordination with the community to respond to sexual victimization was recommended.

Keywords: *sexual victimization, college students*

INTRODUCTION

Background of the Study

National attention has recently turned to sexual violence and the problems it poses for the classroom, campus, and community. Actual or threatened sexual assault raises issues for colleges and universities that go beyond those of sexual harassment. Whereas the prevention and management of sexual- harassment incidents are generally considered to fall within the purview of campus policy and procedures, incidents of sexual violence and rape may constitute criminal offenses, require medical attention, and raise special concerns about reporting, record keeping, media attention, and police involvement. Women and girls are the vast majority of victims nearly 1 in 5 women or nearly 22 million have been raped in their lifetimes. Men and boys, however, are also at risk. 1 in 71 men – or almost 1.6 million have been raped during their lives. Women of all races are targeted, but some are more vulnerable than others. 33.5% of multiracial women have been raped, 27% of American Indian and Alaska Native women, compared to 15% of Hispanic, 22% of Black, and 19% of White women.

Victimization was defined as unwanted sexual contact, verbally coerced sex, rape or attempted rape. This may be in the form of sexual misconduct, rape sexual harassment, stalking, physical assault, battery, dating, relationship, domestic, violence, theft, and threat of harm. Campus sexual assault is a significant problem. Women in the traditional age range for college students – from eighteen to twenty- one – are four times more likely to be sexually assaulted than women in any other age group, and college-bound women are at greater risk than their non-college bound peers. Between 20 and 25 percent of college women and 4 percent of college men report having been sexually assaulted during their college years. The rate for gay, lesbian, bisexual, transgender, and queer students is estimated to be slightly higher. Studies of campus sexual assault indicate that many – perhaps most – assaults and attempted assaults are never reported or, if reported, not consistently counted as official. The fact that sexual assaults on campuses largely take place between acquaintances blurs understandings both of consent and of aggression and lessens the outcomes are not much better for cases handled by the criminal justice system. Despite of the progress over recent decades in public and professional understanding of sexual assault and sexual violence, recent research makes clear the persistence and influence of several entrenched myths: it is the victim's fault; most allegations of sexual assault and rape are false and typically motivated by revenge against particular men or against men in general; the presence of drugs or alcohol makes it difficult to investigate allegations or even establish whether an incident actually took place; acquaintance rape is not rape.Some colleges and universities choose to incorporate sexual assault into existing policies governing professional ethics, sexual harassment, or campus violence.

This study was conducted to determine the sexual victimization among college students at the Guimaras State College. Specifically, it sought to determine the: profile of college students according to course, year level, age, sex, ethnicity, religion, and sexual orientation; the severity of victimization among college students when grouped according to sexual victimization status: a.)novictimization.)unwanted sexual contact, c.)sexual coercion, and d.) rape; and significant difference in the severity of victimization when categorized according to profile.

This study was anchored on RA 7610 - An Act Providing for stronger deterrence and special protection against child abuse, exploitation, and discrimination, and for other purposes and RA 7877 or the "Anti-Sexual Harassment Act of 1995" - An Act declaring sexual harassment unlawful in the employment, education or training environment, and for other purposes, specifically describe Section 3 of RA 7877 -Work, education or training-related sexual harassment was committed by an employee, manager, supervisor, agent of the employer, teacher, instructor, professor, coach, trainer, or any other person who, having authority, influence or moral ascendancy over another in a work or training or education environment, demands, requests or otherwise requires any sexual favor from the other, regardless of whether the demand, request or requirement for submission is accepted by the object of said Act. As well as with RA 926the Anti-Violence Against Women and their Children Act of 2004. It seeks to address the prevalence of violence against women and children. (VAWC), abuses on women and their children by their intimate partners.

The primary goal of this study was to determine the severity of sexual victimization among college students broke sexual victimization status into four categories, no victimization unwanted sexual contact, sexual coercion, and rape.

This is also designed to provide information about the institutional program to prevent sexual victimization college students and to help victims overcome other issues among themselves. The independent variables in this study were the profile of college students categorized into course, year level, age, sex, ethnicity, religion, and sexual orientation. The dependent variable in the study was sexual victimization, and the output of this research will be proposed institutional program for college students.

METHODOLOGY

A descriptive correlation research design was employed in this study to describe the severity of sexual victimization among college students at the Guimaras State College and also to examine the relationship between relationships. The participants of this study were the officially enrolled college students of Guimaras State College-Main Campus at Buenavista, Guimaras in all undergraduate programs in the Academic Year 2015-2016. Participants size 100, which was calculated by using Sloven's formula classified into different courses. A researcher revised questionnaire was utilized in this study. It has two parts; the first part solicits the personal profile of college students according to course, year level, age, sex, ethnicity, religion, and sexual orientation while the second part will be the questionnaire proper which consist of Sexual victimization assessments using the Sexual Coercion Tactics Scale (SCTS), which assesses sexual coercion used by and used on both men and women since the age of 16 years (Struckman-Johnson et al., 2003). The surveys ask participants to indicate how many times they have either used coercive tactics to get someone to engage in sexual behaviors or how many times they engaged in sexual behaviors because someone used these tactics on them and the gender of the other person involved. 18 different tactics were listed for each of three types of sexual acts (sexual behavior, oral sex, and anal–vaginal sex) on both forms (whether they were the user or recipient of the tactics) of the survey. Victimization status was broken down into four categories, no victimization unwanted sexual contact, sexual coercion, and rape. In this study, the data was gathered using a researcher revised questionnaire through purposive sampling which was distributed personally upon the willingness of the participants and retrieved by the researchers. The data collected were treated highly confidential. The following statistical tools were used: the frequency count and percentage distribution were used to describe the profile of the respondents and the rate of sexual victimization; Chi-square was used to determine the significant difference in the severity of victimization as a whole and when categorized according to victimization status.

RESULTS AND DISCUSSION

Profile of the participants

The profile of the participants. Results revealed that 77 or 77% have ages ranging from 16 to 19 years old and 23 or 23% were 20 years old and above. Most of the participants were females (62 or 62%), while males were 38%. Most of the participants were 2nd year which was 56%, 21% were 1st year, 20 % coming from the 3rd year and 3% came from 4th year college.

The profile of the participants when categorized as to course, 41% were BSBA,15% came from InfoTech 10% from BSEd, 9% each both came from BEEd and BS Criminology, 6% from HRST and 5% each came from both BSHRM and BSIT. When categorized according to ethnicity, 93% belongs to Ati and 7% were not Ati. When grouped according to religion, 69% were Roman Catholic, 14% were Baptist, 13% were IFI, 2% were Born Again, 1% was Seventh Day Adventist and another 1% was UCCP. When grouped into sexual orientation, 86% were heterosexual, 13 % were homosexual and 1% was bisexual and all of them were single.

The severity of victimization among college students broke sexual victimization status.

When participants were placed in mutually exclusive group based on the most severe types of victimization reported, 73% (N=73) reported no victimization, 27% (N=27) reported unwanted sexual contact, 14% (N=14) experienced sexual coercion, and 8% (N=8) reported completed rape, as reflected in Table 3.

Table 1. Item used to Measure Sexual Victimization by type and Victimization Frequency.

No Victimization	Unwanted sexual contact	Sexual Coercion	Rape
Frequency = 73%	Frequency = 27%	Frequency = 14%	Frequency = 8%
	Engaged in unwanted sexual behavior (kissing, fondling, petting) but not sex with someone because he or she: Tried to talk you into it repeatedly Told a lie Questioned your sexuality Said there must be something wrong with you if you didn't Threatened to break up with you Threatened to blackmail you Threatened to harm themselves They used their authority or position Took advantage of you being drunk or high Purposely gave you drugs or alcohol Blocked your retreat Used physical restraint Tied you up Threatened to physically harm you Threatened you with a weapon	Engaged in unwanted oral, vaginal, or anal sex with someone because he or she: Tried to talk you into it repeatedly Told a lie Questioned your sexuality Said there must be something wrong with you if you didn't Threatened to break up with you Threatened to blackmail you Threatened to harm themselves They used their authority or position	Engaged in unwanted oral, vaginal, or anal sex with someone because he or she: Took advantage of you being drunk or high Purposely gave you drugs or alcohol Blocked your retreat Used physical restraint Tied you up Threatened to physically harm you Threatened you with a weapon

Significant difference in the severity of victimization when categorized according to profile

Statistically, there is a significant difference in the victimization, sex, and course at p=0.05. Findings further showed that victimization, when categorized according to unwanted sexual contact were found to be statistically significant with sex and course at p=0.05 when categorized according to sexual coercion were statistically significant with the course at p= 0.05 and no significant difference when categorized to rape. There is a positive correlation which means that the participants are mostly female who partici RECOMMENDATIONS

Table 3.Difference on victimization (Chi-Square).

	Value	Df	Sig.
Age	.179	1	.672
Year Level	6.544	3	.088
Ethnicity	.009	1	.923
Religion	6.288	5	.279
Sex	9.783	1	.002
Sexual Orientation	.507*	2	.776
Course	14.848*	7	.038

p<05 level of significance

Table 4. Difference in unwanted sexual contact (Pearson Chi-Square)

	Value	Df	Sig.
Age	9.345	6	.155
Year Level	18.551	12	.100
Ethnicity	1.890	6	.930
Religion	33.106*	18	.016
Sex	6.580	6	.361
Sexual Orientation	9.884	6	.130
Course	50.164	36	.059

p<05 level of significance

Table 5. Difference on sexual orientation (Pearson Chi-Square

	Value	Df	Sig.
Age	3.928	4	.416
Year Level	14.875	8	.062
Ethnicity	6.462	4	.167
Religion	2.121	12	.999
Sex	2.884	4	.577
Sexual Orientation	1.296	4	.862
Course	31.630*	20	.047

p<05 level of significance

Table 7. Difference on Rape (Pearson Chi-Square)

	Value	Df	Sig.
Age	1.600	2	.449
Year Level	.381	2	.827
Ethnicity	-	-	-
Religion	1.600	6	.953
Sex	2.311	2	.315
Sexual Orientation	3.556	2	.169
Course	11.333	6	.079

p<05 level of significance

CONCLUSIONS

Based on the results of the findings of the study, the following conclusions were made: the majority of the participants have ages ranging from 16 to 19 years old which belong to the second-year college, 93% did not belong to any indigenous group mostly are Roman Catholic, female, heterosexual and belong to BSBA; seventy-three percent of the participant were not victimized and 27% were victimized sexually and; statistically, there was a significant difference in the victimization and profile when classified to sex and course at p= 0.05.

RECOMMENDATIONS

Despite the limitation, the investigation provides some initial information about the variable that are related to sexual victimization among college students. These findings have important implication in sexual victimization and risk reduction programming further the following were recommended:

1. Creation of program that provides:
a. awareness and education on sexual victimization among college student especially given that to willing participants.
b. technical assistance, consulting, and training services on debriefing for willing participants especially willing victim;
c. prevention programs for all incoming students;
d. train campus law enforcement or security staff;
e. educate campus discipline committee on the unique dynamics of these crimes, and
f. a coordinated community response to enhance victim assistance and safety while holding offenders accountable.
2. Further study may be conducted in relation to other parameters such as substance use and health risk.

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Buddhist Teachings in Pranic Healing and Arhatic Yoga: Synthesis of Science and Spirituality

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ABSTRACT Pranic healing is an ancient science and art of healing that utilizes prana or ki or energy to heal the whole physical body. A way of life which addresses all aspects leading to a wholesome life.A prerequisite for the practice of Arhatic Yoga, a pathway to sainthood. Arhatic Yoga is a synthesis of yoga which consists of yogic techniques design to help us develop spiritually, prehistoric in origin and consist of techniques and energy that can be practiced by any religion. The Buddhist teachings are integrated into the Pranic healing' meditations such as mantra Om, Omani Padme Hum, Om Shanti Shanti Shanti Om; etc., healing techniques by practicing vegetarianism, and the law of Karma in character building. It was revealed in pranic healing that science sometimes seems to be incompatible with spirituality. What we call science is actually physical science. What we call spirituality is actually inner sciences or sciences not dealing with the physical world. The process of the union between science and spirituality is in progress. Pranic Healing and Arhatic Yoga, developed by Grand Master Choa Kok Sui (GMCKS), a Filipino –Chinese from the Philippines, are examples of the union between science and spirituality. spreading rapidly in more than 100 countries. Practitioners experienced healing on different levels, holistic transformation, grow and developed spiritually.

Keywords: Buddhism, Pranic Healing and Arhatic Yoga

INTRODUCTION

A time will come when science will make tremendous advances, not because of better instruments for discovering things, but because few people will have at their command, great spiritual powers, which at present seldom use. With a few centuries, the art of spiritual healing will be increasingly developed and universally used.

Pranic healing is an ancient science and art of healing that utilizes Prana or "ki" or life energy to heal the whole physical body. It also involves the manipulation of "ki" and bioplasmic matter of the patient's body. Modern Pranic Healing as a science was born in 1987. Pranic comes from the Sanskrit word "Prana" which means the life energy that keeps the body alive and healthy.

Pranic healing is a bridge to spirituality. It is the most advanced energy healing system using color Pranas. It uses laws of nature which people do not know or are not aware of. It also involves transference of life energy. It is not just knowledge, it is a skill. There are two basic laws in Pranic Healing: the law of self –recovery and the law of life energy. The law of self-recovery states that the body can heal itself. The law of life energy, states that by increasing the life energy level of the body, healing is accelerated. Pranic Healing accelerates the natural healing process of the body. Through pranic healing you have a deeper understanding of your own religion and the concepts of interconnectedness and oneness become clearer. It is easy to learn and can be applied in preventing, alleviating and treating psychological ailments.

As a science, Pranic healing is based on cleansing and energizing. By cleansing and removing the diseased energy from the affected chakra and organ, and energizing them with sufficient prana, healing takes place. Healing of the physical body, physical and psychological ailments, healing of relationships, finances, and spiritual emptiness.

Pranic healing teaches healing, character building which utilizes the law of karma and other universal laws that governs our life and meditation and other spiritual practices to accelerate spiritual evolution. The mission of Pranic Healing and arhatic yoga is to alleviate the pains and sufferings of humanity. The vision is heaven on earth.

Learning of Pranic Healing is composed of stages or category. As one advances on his/her learning, they can become an Arhatic Yogi, from the words "Arhatic Yoga" wherein Arhatic came from the word " Arhat" which means saint and "yoga" which in Sanskrit means union, referring "to yoke" or "to join." It is consist of yogic techniques designed to help an individual develop spirituality. It is pre historic in origin. It consists of techniques and energy. It is eclectic. People from any religion practiced arhatic techniques. It is not a religion; it is nonsectarian and simply leads you to the truth.

Arhatic Yoga is one of the most advanced spiritual technologies that accelerate the spiritual evolution of the soul and one of the greatest gifts given to humanity yet.

It is a synthesis of all yogas that include powerful meditations, purifications and breathing techniques integrated into a step-by-step system, providing a path to sainthood.

The purpose of Arhatic Yoga is basically "to produce intelligent, compassionate, good-hearted, powerful disciples who will become great divine servants."

Arhatic Yoga, therefore, brings out the greatness latent in every person by cleansing, activating, strengthening and transforming the chakras and the subtle bodies.

The teachings and techniques of Arhatic Yoga have been derived from ancient teachings and practices kept secret for centuries in Egypt, India, China, and Tibet. Being a path to sainthood, Arhatic Yoga aims at transcending man to a great person with much-increased intelligence, love, and power. Its secret relies on its holistic approach to life and evolution, as a balanced development of all the chakras, virtues and faculties. Therefore Arhatic Yoga is known as a way of life, not merely doing meditations:

Purified Aura- One of the greatest obstacles to success is negative and weakening thoughts and emotions and self-defeating attitudes. The origins of picking up such tendencies are in most of the cases from other people or past memories. The negative thoughts and emotions of the aura not only tend to attract negative incidents, as we all know that "like attracts like," but also clouds the perception and creates confusion. It further may lead to fear and low self-esteem.

Arhatic Yoga through simple yet very powerful cleansing techniques helps in purifying the aura. Another item that needs to be removed is the negative seeds, which exist in everyone and is the root of evil acts. Negative seeds are basically the negative tendencies that if matured, lead to unwanted attitudes and behaviors such as jealousy, anger, pride, maliciousness, etc. Without getting purified from such negative seeds, meditation may aggravate the problem and instead of making you a better person, it can bring you down. Meditation acts as a fertilizer, it magnifies everything; the good and the bad; the crops and the weed.

This study aimed to determine the existence and practice of Buddhist teachings in Pranic Healing and Arhatic Yoga, a synthesis of science and spirituality.

It likewise aimed to determine: people who practice Pranic Healing and Arhatic Yoga; the Pranic Healing and Arhatic Yoga teachings being practiced; the number practitioner of Pranic Healing and Arhatic Yoga in the Philippines; and the Buddhist teachings used in Pranic healing and Arhatic yoga.

METHODOLOGY

The Pranic Healing was founded in the Philippines. Despite this fact yet, not so many have recognized its unique practice. In order to come up with data on the Pranic Healing practitioner in the selected provinces of the Philippines and to determine the Buddhist teachings in Pranic Healing and Arhatic Yoga, research was done using a questionnaire and interviews among practitioners. Likewise, secondary data were also used. Interviews were made from among the Center Managers of the different Pranic Healing Centers in the country. The information on the different centers was nationwide but the rest of the data were gathered from the Western Visayas, Philippines Center. After the data were gathered, a thorough analysis was made and these became the bases used during the discussions in the study.

RESULTS AND DISCUSSIONS

The Origin and purpose of Pranic Healing and Arhatic Yoga practices in the Philippines

The founder of Pranic Healing in the Philippines which later on spread among the different countries in the world was Grand Master Choa Kok Sui(GMCKS). The purpose of Pranic Healing was "to alleviate the suffering of the people by complementing allopathic medicine with Pranic Energy Healing." On the other hand, the purpose of Arhatic Yoga was to "to accelerate the evolutionary development of the Soul so that the person can be of greater service to Mankind and the planet Earth and to produce intelligent, compassionate, good-hearted, powerful disciples who will become great Divine servants."

Organization

The organization of the Pranic Healing and Arhatic Yoga in the Philippines started with the establishment of the Institute for Inner Studies, Incorporated (IISI) on 27 April 1987 by Master Choa Kok Sui with the purpose of spreading Pranic Healing, Arhatic Yoga and the inner teachings globally. Other Pranic healing organization founded by GMCKS to help achieve its mission are: World Pranic Healing Foundation, Pranic Healing Foundation of the Philippines, Humanitarian Legal Assistance Foundation, Caring Heart Foundation, Meks Charitable Foundation, Clothe the Naked Foundation, Feed the Hungry Foundation. By early 2000, with the help of many dedicated 10 senior disciples, students, instructors, and foundations, Master Choa Kok Sui's Institute for Inner Studies were able to spread the works of the founder in major cities of over 80 countries, in all of the five continents.

Pranic Healing and Arhatic Yoga Teachings Being Practiced

Different teachings were being practiced such as the healing of self and other people's physical ailments through Basic Pranic Healing using white prana energy. While the Advance pranic healing uses color energy to heal severe physiological ailments and Pranic Psychotherapy for emotional relationship healing.

The different teachings in Pranic Healing and Arhatic Yoga being practiced were composed of the following: (a) GMCKs Super Brain Yoga- Grand Master Choa Kok Sui Reveals an ancient Indian technique of increasing your brain power by harnessing the body's primordial energies. SuperBrain Yoga is a scientifically validated method to help super-energize the brain and enhance its sharpness and clarity. This simple and easy to do technique develops and increases intellectual capacity and sharpens memory & concentration. Included in this book are preliminary scientific studies on the SuperBrain Yoga Exercise showing dramatic improvements in children diagnosed with Autism, ADD, and ADD/ADHD. SuperBrain Yoga can be a part of an effective routine to help people with Dyslexia, Autism, ADHD, Learning Difficulties, Alzheimer's and Poor Memory and Retention. (b) Character building through Inner reflection and firm resolution; (c) Meditation on Twin Hearts for peace and illumination. This meditation is truly special. It works on the physical, mental, and spiritual levels to open the heart chakra (the emotional heart) and the crown chakra (the spiritual heart), thereby enabling you to draw down a great amount of high-quality divine energy into the crown. The prana that this meditation produces greatly promotes physical and mental health as well as inner illumination. The Regular practice of Twin Hearts preditation reinforces the act of internal giving through blessing the Earth and all people. It makes you strong and gives you the ability to be centered within and to become more balance; (d)Pranic breathing techniques; and (e)Healing of places and Businesses using Pranic Psychotherapy and Practical Psychic Self- defense.

The practitioners of Pranic Healing and Arhatic Yoga

People from varied professions and walk of life joined Pranic Healing. In the Western Philippines particularly in Western Visayas from 2009 to present, the recorded number of Pranic Healer Graduates was 2,265. Looking into the individual religious affiliation this group, the majority were Roman Catholic (2,093), other Christian Sect numbered to 170 and an Islam. They came from different professions such as Employees in private firms 602), Teachers (444); Employees in government firms (350), students (275, Businessmen (132, Health and Medical Practitioners (79), Social Workers/Guidance Councillors (49), Housewives (45), Architects (40) Household help (39) Senior Citizens (35), Researchers/Scientist (35) Self Employed (34), Farmers/Labourers 31, Overseas Filipino Workers/Seafarers and Police (20 each), Religious (18) Drivers/Security Guards 15 and Lawyers (2).

However, not all Pranic Healers were entitled to be elevated to the Arhatic yoga. Out of the 2, 265 Pranic Healer graduates, only 72 were able to achieve the preparatory level and only 14 individuals were elevated to Level 1 and 2. The reason for this was many of the Pranic healers were not consistent in the practice.

Buddhism teachings found in Pranic Healing and Arhatic Yoga

In the learning of the different teachings and techniques in Pranic Healing several Buddhist teachings can be gleaned from it. These most common Buddhist teaching integrated in pranic healing/arhatic yoga are the Four (4) Noble Truths composed of the truth of suffering (Dukkha); the truth of the cause of suffering (Samudaya); the truth of the end of Suffering (Nirhodha); and the truth of the path that frees us from suffering (Magga).

The Eightfold path were also being practiced and introduced to the Pranic Healers and Arhatic Yoga practitioner because these are the universal truth that needs to be known among humanity in order that we will be able to attain "heaven on earth" such as the Right Understanding, Right Intent, Right Speech, Right Action, Right Livelihood, Right Effort, Right Mindfulness and Right Concentration.

The Buddhist' Mantras such as Om, Om Mani Padme Hum, Om Shanti Shanti Shanti Om are practiced by Pranic Healers and Arhatic Yoga practitioners. Mantras are sacred sounds or words that contain Divine energy or spiritual energy. These incantations are special utterances as they are the embodiment of divine vibrations. Master Choa Kok Sui stresses on the importance and the innate power of various mantras. The Power of "Om" was realized by the practitioners. "Om", "Amin" and "Amen" are all sacred universal sounds and are primitive in nature. It is interesting to note how similar they all are in sound and in their basic implications though they are used in different religions. These mantras seek to merge your individual consciousness with the Divine Consciousness. The energy generated through these chants help to disintegrate diseased and negative energies in the meditator as well as in the environment. The cleansing and energizing properties of the Om mantra and the sacred words of Amen and Amin help in de-stressing, elevating the consciousness and creating a spiritual environment that is clean and pure.

Moreover, Om Mani Padme Hum was also studied as the mantra. "Om Mani Padme Hum" is a very powerful mantra that is filled with immense Love, Mercy and Compassion. Master Choa Kok has unveiled the deeper meaning of this prayer and has explained the benefits and applications of this simple yet potent mantra. During meditations, mudras, mantras, and breathing techniques were practiced. Meditation on Twin Hearts Leads you to "becoming aware of one's true nature. The Lord Buddha Said: "Let us inspect our thoughts that we do not do unwholesome deeds; for as we sow, so shall we reap. Hatreds never cease by hatreds in this world. By the love alone they cease. This is an ancient law. Cherish in your hearts boundless goodwill to all that live. Go and do your duty: show kindness to thy brothers and free them from suffering."

The Law of Karma is always part of the teachings in Pranic Healing. "Each man, by the action of unerring karma, receives an exact measure all that is due, all that he deserves neither more nor less. Not one benevolent or evil action, trifling as it may be, as secretly as it be done, escapes precisely balanced scale of karma" (Helena Roerich, Foundation of Buddhism)."So long as an evil deed has not karmically matured, the fools think his deed to be sweet as honey. But, when his evil deed karmically matures, he falls into untold misery." Dhammapada, Wisdom of the Buddha.

The Golden Rule was also practiced and given great emphases during trainings and retreats. "Whatever thou likest not for thine own self, for any person else, too, like it not." Dhammapada, Wisdom of Buddha. Inner Purification and Character Building have Five Virtues based on the Law of Karma: (a) Loving-kindness and Non-Injury; (b) Generosity and Non- Stealing; (c) Honesty and Non -Lying ; (d) Industriousness and Non- Laziness, and (e) moderation/Non- Excessiveness.

Effects/ benefits of Practicing Pranic Healing and Arhatic Yoga

The aura or the Bioplasmic energy field becomes cleaner, wider, brighter and stronger. The different chackras or energy centers and the protective webs becomes cleaner, bigger, brighter and balance. Healing of Physiological, psychological/ emotional ailments.Healing of relationship. The character or behavior of the practitioner become refine. The different psychic faculties such as the different intelligences, creativity, instinct, Buddhic or Christ Consciousness, higher emotions, etc. are being activated or develop. Develops love for oneself, to God, to humanity and the entire creation of God. Increases spiritual magnetism, improves quality of life, achieve greater success, joy, and happiness, and achieve inner peace and oneness with God and oneness with all. Accelerate the spiritual evolution of the soul. The practitioner becomes highly intelligent, compassionate, loving, kind hearted and powerful

Frequently Asked Questions and Other Testimonies:

1. Are Pranic Healers allowed to make a medical diagnosis?
"No Pranic Healers should not make a medical diagnosis"

2. Is Pranic Healing going to replace conventional medicine?
"Pranic Healing is not intended to replace allophetic medicine, but rather to complement it. If symptoms persist or the ailment is severe, please immediately consult a medical doctor and certified Pranic Healer"

3. Is Pranic Healing part of the "New Age" movement? Is Pranic Healing a Religion?
"Pranic Healing is not part of the New Age Movement. New Age Movement started in Europe, Pranic Healing was developed by Grand Master Choa Kok Sui in the Philippines. New Age is a Religion, Pranic Healing is a Syntheisi/Union of Science and Spirituality. Pranic Healing and Arhatic Yoga are examples of the union between Science and spirituality. This trend as inevitable and will become stronger in the future."

5. What are Chakras?
"Chakras or Energy Centers are actually major acupuncture points. Chakras are very important parts of the energy body. The major chakras not only control and energize the vital organs of the body but also controls and affects a person's psychological and spiritual condition. Just a the visible physical body has vital and minor organs, the energy body has major, minor and mini chakras".

CONCLUSIONS

The founder of the Pranic Healing and Arhatic Yoga has prepared the Filipinos for a better way of life which meaningful and worth leaving for. The teachings in Pranic Healing and Arhatic Yoga are geared toward holistic development of man physically, mentally and emotionally anchored on different moral values worthy to be emulated. These practices are slowly gaining popularity among Filipino people in the different professions or field of works. Buddhist teachings are found among teachings of Pranic Healing and Arhatic Yoga because of the universality of these teachings that lead people in leaving a wholesome life with reverence to the Supreme Being and all the creations around him.

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Socio-Economic Status and Academic Performance of Scholars at Guimaras State College

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ABSTRACT This study was conducted to determine the socio-economic status and academic performance of scholars at Guimaras State College. A researchers-made questionnaire was personally administered to gather significant data. Total enumeration of the scholars for Academic Year 2014-2015 was taken as respondents. The socio-economic status revealed that 282 or 61.57% or most of them had a family monthly income of Php. 5,000.00 and below while 5 or 1.09% had Php. 20,000.00 to Php. 25, 000.00. It was also showed that 268 or 58.52% or most of them had 1 to 3 while only 5 or 1.09% had 7 to 9 family members. The academic performance of most of them was described to be "very good" at 289 or 63.10% while 4 or 0.87% were "passing". It was further showed that there were no significant differences in the scholarship programs of the college in terms of sex, civil status, home address, family monthly income and number of family dependents while there were significant differences in terms of age, course and year level. It was also revealed that there were no significant differences in the academic performance of the scholars when they were grouped according to age, civil status, and family monthly income while there were significant differences in terms of course, year level, home address and the number of family dependents. It was likewise shown that there was no significant relationship between scholarship programs and academic performance of the scholars which means that the scholarship programs did not affect the scholars' academic performance.

Keywords: academic performance, socio-economic status, status, and scholars

INTRODUCTION

Background of the Study

Students' academic achievements and educational attainment had been studied by various researchers within different frameworks. Many of them had focused on parents' education, occupation, or home background like family income, language at home, activities of the family and work methods while other studies looked at it from the teachers' variables like teacher's age, experience, education, gender, etc, school variables such as environment, structure, buildings, location or students' variables like attitude, self-concept, self-esteem, study habit, interest and parents' support like achievement motivation of rewards, parental attitudes towards education, the aspiration of parents, etc. There is evidence that parents' education will affect students. This was supported by Musgrave (2000) who said that a child that comes from an educated home would like to follow the steps of his or her family and by this, work actively in his or her studies. He said further that parents who have more than a minimum level of education are expected to have a favored attitude to the child's education and to encourage and help him or her with school work. (International Journal of Scientific and Research Publications, Volume 3, Issue 10, October 2013)

These observations were also observable in Guimaras State College as the only state college in the province of Guimaras which was supported by different government and private agencies in the province through scholarship programs. Likewise, it offers institutional scholarship programs to provide greater opportunity for the financially challenged but deserving students in the province. It has a Scholarship Committee duly appointed by the College President who handles the implementation of these scholarship programs. The screening of scholarship applicants was done by the scholarship benefactors for private and public scholarship programs while a duly appointed scholarship committee composed of the Guidance Counselor, College Registrar, Director of Student Affairs and Services and Vice President for Academic Affairs screened the applicants for the institutional scholarship programs.

There were a total of 458 registered scholars based on the Student Information and Accounting System (SIAS). They represented three campuses: Main (Salvador Campus) located in Mclain, Buenavista, Guimaras, Mosqueda Campus located in Alaguisoc, Jordan, Guimaras and Baterna Campus located in Constancia, San Lorenzo, Guimaras. They were enrolled in different colleges: College of Business Management (CBM) taking up Bachelor of Science in Business Administration & Bachelor of Science in Hotel and Restaurant Management (BSHRM) or Hotel and Restaurant Service Technology (HRST); College of Criminal Justice Education (CCJE)taking up Bachelor of Science in Criminal Justice Education; College of Teacher Education (CTE) taking up Bachelor of Secondary Education (BSED) major in English, Mathematics, Social Science and Filipino & Bachelor of Elementary Education (BEED; College of Science and Technology (CST) taking up Bachelor of Science in Information Technology (BSIT) and Bachelor in Industrial

Technology (BIT), College of Arts and Sciences (CAS taking up A.B. English, and College of Agricultural Sciences taking up Bachelor of Science in Agricultural Technology major in Organic Farming. They enjoyed study privileges like free tuition fees, miscellaneous fees, book allowance, and a monthly stipend. These privileges were expected to give the scholars bigger opportunities to attain quality and excellent education. Also, with these privileges, the scholars were expected to spend time on their studies without worrying too much about lack of financial assistance for their projects and other requirements.

However, with all these opportunities for achieving quality education, it was observed through interviews to randomly selected instructors and professors that many of the scholars still had scholastic deficiencies and claimed to meet several problems resulting to poor academic performances. With these observations, the researcher was inspired to investigate further the socio-economic status and academic performance of the scholars of Guimaras State College. Hence, this study was conducted.

This study aimed to determine the socio-economic status and academic performance of the scholars of Guimaras State College in three campuses for Academic Year 2014-2015. Specifically, this sought answers to the following questions: What is the socio-economic status of the respondents when grouped according to sex, age, course, year level, civil status, address, family monthly income, and number of family dependents; What is the academic performance of the respondents when grouped according to sex, age, course, year level, civil status, address, family income, and number of family dependents; Are there significant differences in the scholarship programs when grouped according to sex, age, curse, year level, civil status, address, family monthly income and number of family dependents; Are there significant differences in the academic performance of the respondents when classified according to sex, age, course, year level, civil status, address, family monthly income and number of family dependents; and Is there a significant relationship in the scholarship programs and academic performance when grouped according to sex, age, course, year level, civil status, address, family monthly income and number of family dependents?

This study was anchored on the Academic theory known as Mismatch Theory of Vikram David Amar which stresses the importance of scholarship programs. One reason that the mismatch case against affirmative action is a hard one to make in the difficulty in measuring the intangible benefits of attending one of the country's most selective institutions—such as access to powerful peer networks, the long-term prestige of a diploma, and the increased likelihood that one's children will aspire to and be able to attain the highest levels of educational accomplishment. For starters, even if students who attend more selective schools by virtue of affirmative action do currently tend to have more difficulty, and worse career outcomes, than they would if they attended less selective schools, it might be possible to remedy the problem with better academic support and related programs. Perhaps the flaw with affirmative action programs is not that less-prepared students are admitted, but that such students are not given the resources we might expect individuals with below-average levels of preparation and demonstrated the skill to need. In this regard, it might also be of help to allow such students to take a lighter course load over a longer period of time to acclimate to an environment of stiffer competition. It maintained that an admittee whose strong high school performance was not predicted by her standardized test scores and middle school grades might decide that, once again, she will "overachieve" in college—and enter the most selective school that accepts her. In contrast, an admittee who is highly sensitive to, and demoralized by, the risk of getting poor grades might realize she would prefer being a student with (a higher chance of) a better grade point average at a less-selective school. An admittee who knows his charm and public speaking finesse will help him prevail in moot court may not worry as much about low school grades, but a shy admittee who knows he does not interview especially well may want to go to a law school where his grades will likely be better. In establishing better academic performance, the above-mentioned theory was supported by Jean Piaget as she authored a theory based on the idea that a developing child builds cognitive structures, mental "maps", for understanding and responding to physical experiences within their environment. Piaget proposed that a child's cognitive structure increases in sophistication with development, moving from few innate reflexes such as crying and sucking to highly complex mental activities.

The researchers conceptualized that the academic performances of the scholars were influenced by both personal factors like sex, age, course, year level, and civil status and environmental factors like home address, family monthly income and number of family dependents. The possible differences among variables were set to focus in the research paradigm below.

METHODOLOGY

The descriptive research design was used in this study with 458 respondents who represent the total enumeration of scholars as reflected in the Students' Information and Accounting System (SIAS). Guimaras State College has a total population of 458 scholars for Academic Year 2014-2015. Since the number is manageable, a complete enumeration of scholars was employed in this investigation.

Table 1. Distribution of the Respondents by Course

Variables	Frequency Count	Percentage
Bachelor of Elementary Education (BEED)	44	9.61
Bachelor of Secondary Education (BSED)	97	21.18
Bachelor of Science in Business Administration (BSBA)	143	31.22
Bachelor of Science in Hotel & Restaurant Management (BSHRM)/ Hotel & Restaurant Service Technology (HRST)	7	1.53
Bachelor of Science in Criminal Justice Education (BSCJE)	45	9.82
Bachelor of Science in Information Technology (BSIT)	72	15.72
Bachelor of Industrial Technology (BIT)	31	6.77
Bachelor of Science in Agricultural Sciences (BSAS)	19	4.15
Total	458	100

The following statistical tools were used to interpret the gathered data: Frequency Count, Percentages, Mean, T-test, and ANOVA. The researchers made questionnaire was used in this study. This questionnaire was submitted to the panel of research experts for content validation. Part 1 determined the Profile of the Respondents. Part 2 determined the respondents' academic performance. These questionnaires were personally administered by the researchers to all scholars of the college during their vacant periods and the data were immediately gathered for encoding.

RESULTS AND DISCUSSION

Socio-Economic Status of the Respondents

Family Income. When the respondents were grouped according to family income, the result of the study showed that 282 or 61.57% of them had the family monthly income of Php. 5,000.00 and below, 141 or 30.79% of them were having a family monthly income of Php. 5,001.00 to Php. 10,000.00, 25 or 5.46% of them were having a family monthly income of Php. 10,001.00 to Php. 15,000.00, 5 or 1.09% of them were having a family monthly income of Php. 15,001.00 to Php. 20,000.00 and 5 or 1.09% of them were having a family monthly income of Php. 20,001.00 to Php. 25,000.00.

Number of Family Dependents. When the respondents were grouped according to the number of family dependents, the result of the study showed that 268 or 58.52% of them had 1 to 3 family dependents, 156 or 34.06% of them were having 4 to 6 family dependents, 29 or 6.33% of them were having 7 to 9 family dependents, and only 5 or 1.09% of them were having 10 and above family dependents. These data were shown in Table 2.

Table 2. Socio-Economic Status in terms of family monthly income and no. of family dependents.

VARIABLES	FREQUENCY	PERCENTAGE
Family monthly income		
Php. 5,000 and Below	282	61.57
Php. 5,001 to Php.10,000	141	30.79
Php. 10,001 to Php. 15,000	25	5.46
Php. 15,001 to Php. 20,000	5	1.09
Php. 20,001 to Php. 25,000	5	1.09
total	458	100
No. of family dependents		
1 to 3	268	58.52
4 to 6	156	34.06
7 to 9	29	6.33
10 and Above	5	1.09
total	458	100

Academic Performance of the Scholars

The result of the study showed that generally, 289 or 63.10% of the respondents had obtained a general weighted average (GPA) of 1.6 to 2.0 which was described to have "very good" academic performance, 75 or 16.38% of the respondents had gained a GPA of 1.0 to 1.5 which was described to be "superior", 90 or 19.65% of them had a GPA of 2.1 to 2.5 which was described to be "good" and only four (4) of them have obtained a GPA of 2.6 and below as shown in Table3 below.

Table 3Academic Performance of the Scholars for Academic Year 2014-2015

	General Percentage		
	Observed N	Percentage	Remarks
1.0 to 1.5	75	16.38	Superior
1.6 to 2.0	289	63.10	Very Good
2.1 to 2.5	90	19.65	Good
2.6 and below	4	0.87	Passing
Total	458		

Significant Differences in the Scholarship Programs

Sex. It was shown that there was no significant difference in the scholarship programs of the college when the respondents were grouped according to variable sex. The mean score of 1.7555 and 1.6048 yielded a p-value of 0.930 or 0.93 which was higher than 0.05 level of significance. Thus, the null hypothesis which stated "There is no significant difference in the scholarship program of the college when the respondents will be classified according to sex" was accepted.

Table 4.Significant Difference in the Scholarship Programs in terms of Sex

	Mean	N	Correlation	Significance
Pair 1 Sex & Scholarship Program	1.7555 1.6048	458	0.004	0.930

P>0.05 not significant at .05 alpha

Age. It was shown that there was a significant difference in the scholarship programs of the college when the respondents were grouped according to variable age. The mean score of 5.489 and 0.804 yielded a p-value of 0.000 which was lower than 0.05 level of significance. Thus, the null hypothesis which stated that "There is no significant difference in the scholarship program of the college when the respondents were classified according to age" was rejected.

Course. It was shown that there was a significant difference. The mean score of 4.338 and .780 yielded a p-value of 0.000 which was lower than 0.05 level of significance. Thus, the null hypothesis which stated that "There was no significant difference in the scholarship program of the college when the respondents were classified according to age" was rejected.

Year Level. It was shown that there was a significant difference in the scholarship programs of the college when the respondents were grouped according to variable year level. The mean score of 14.371 and .745 yielded a p-value of 0.000 which was lower than 0.05 level of significance. Thus, that the null hypothesis which stated that "There was no significant difference in the scholarship program of the college when the respondents were classified according to year level" was rejected.

Civil Status. It was shown that there was no significant difference in the scholarship programs of the college when the respondents were grouped according to variable civil status. The mean score of 1.476 and .833 yielded a p-value of 0.184 or 0.18 which was higher than 0.05 level of significance. Thus, the null hypothesis which stated "There was no significant difference in the scholarship program of the college when the respondents were classified according to civil status" was accepted.

Home Address. It was shown that there was no significant difference in the scholarship programs of the college when the respondents were grouped according to the variable home address. The mean score of 1.399 and .826 yielded a p-value of .108 or 0.11 which was higher than 0.05 level of significance. Thus, the null hypothesis which stated "There was no significant difference in the scholarship program of the college when the respondents were classified according to home address" was accepted.

Family Monthly Income. It was shown that there was no significant difference in the scholarship programs of the college when the respondents were grouped according to variable family monthly income. The mean score of 1.862 and .826 yielded a p-value of 0.62which was higher than 0.05 level of significance. Thus, the null hypothesis which stated "There was no significant difference in the scholarship program of the college when the respondents were classified according to family monthly income" was accepted.

Number of Family Dependents. It was shown that there was no significant difference in the scholarship programs of the college when the respondents were grouped according to variable no. of family dependents. The mean score of .504 and .837 yielded a p-value of 0.614 which was higher than 0.05 level of significance. Thus, that the null hypothesis which stated "There was no significant difference in the scholarship program of the college when the respondents were classified according to no. of family dependents" was accepted.

Table 5. Significant difference in the scholarship programs in terms of age, course, year level, civil status, home address, and family monthly income.

Variables	Sum of Squares	Df	Mean Square	F	Sig.
Age:					
between groups	16.468	3	5.489	6.828	.000
within groups	365.001	454	.804		
total	381.469	457			
Course:					
between groups	30.364	7	4.338	5.559	.000
within groups	351.106	450	.780		
total	381. 469	457			
year level:					
between groups	43.112	3	14.371	19.282	.000
within groups	338.357	454	.745		
total	381.469	457			
civil status:					
between groups	1.476	1	1.476	1.771	.184
within groups	379.993	456	.833		
total	381.469	457			
home address:					
between groups	9.795	7	1.399	1.694	.108
within groups	371.674	450	.826		
total	381.469	457			
Family monthly income:					
between groups	7.448	4	1.862	2.255	.062
within groups	374.021	453	.826		
total	381.469	457			
no. of family dependents:					
between groups	1.513	3	.504	.603	.614
within groups	379.956	454	.837		
total	381.469	457			

P>0.05 not significant at .05 alpha

Significant Differences in the Academic Performance

Sex. It was shown that there was a significant difference in academic performance when the respondents were grouped according to variable sex. The mean score of 1.7555 and 2.0502 yielded a p-value of 0.001 which was lower than 0.05 level of significance. Thus, the null hypothesis which stated "There was no significant difference in the academic performance when the respondents were classified according to sex" was rejected. As shown in Table 4.

Table 6. Significant difference in the academic performance in terms of sex

	Mean	N	Correlation	Sig
Pair 1 sex & academic Performance	1.7555 2.0502	458	-.149	.001

P>0.05 not significant at .05 alpha

Age. It was shown that there was no significant difference in the academic performance when the respondents were grouped according to variable age. The mean score of .470 and .393 yielded a p-value of 0.310 or 0.31 which was higher than 0.05 level of significance. Thus, the null hypothesis which stated "There was no significant difference in the academic performance when the respondents were classified according to Age" was accepted.

Course. It was shown that there was a significant difference in the academic performance when the respondents were grouped according to the variable course. The mean score of 3.501 and 0.345 yielded a p-value of 0.000 which was lower than 0.05 level of significance. Thus, the null hypothesis which stated "There was no significant difference in the academic performance when the respondents were classified according to the course" was rejected.

YearLevel. It was shown that there was a significant difference in the academic performance when the respondents were grouped according to variable year level. The mean score of 3.318 and 0.374 yielded a p-value of 0.000 which was lower than 0.05 level of significance. Thus, the null hypothesis which stated "There was no significant difference in the academic performance when the respondents were classified according to year level" was rejected.

Civil Status. It was shown that there was no significant difference in the academic performance when the respondents were grouped according to variable civil status. The mean score of 1.222 and 3.92 yielded a p-value of 0.078 which was higher than 0.05 level of significance. Thus, the null hypothesis which stated "There was no significant difference in the academic performance when the respondents were classified according to civil status" was accepted.

HomeAddress. It was shown that there was a significant difference in the academic performance when the respondents were grouped according to the variable home address. The mean score of 1.309 and 0.379 yielded a p-value of 0.001 was lower than 0.05 level of significance. Thus, the null hypothesis which stated "There was no significant difference in the academic performance when the respondents were classified according to home address" was rejected.

Monthly Income. It was shown that there was no significant difference in the academic performance when the respondents were grouped according to variable family monthly income. The mean square of 0.73 and 0.396 yielded a p-value of 0.946 which was higher than 0.05 level of significance. Thus, the null hypothesis which stated "There was no significant difference in the academic performance when the respondents were classified according to family monthly income" was accepted.

No. of Family Dependents. It was shown that there was a significant difference in the academic performance when the respondents were grouped according to variable no. of family dependents. The mean score of 1.129 and 0.389 yielded a p-value of 0.034 which was lower than 0.05 level of significance. Thus, the null hypothesis which stated "There was no significant difference in the academic performance when the respondents were classified according to no. of family dependents" was rejected.

Table 7.Significant Difference in Academic Performance in Terms of Age, Course, Year Level, Civil Status. Home Address and No. of Family Dependents

	Sum of Squares	df	Mean Square	f	Sig
age					
between groups	1.411	3	.470	1.197	.310
within groups	178.434	454	.393		
total	179.845	457			
course					
between groups	24.505	7	3.501	10.141	.000
within groups	155.340	450	.345		
total	179.845	457			
year level					
between groups	9.954	3	3.318	8.867	.000
within groups	169.891	454	.374		
total	179.845	457			
civil status					
between groups	1.222	1	1.222	3.119	.078
within groups	178.623	456	.392		
total	179. 845	457			
home address					
between groups	9.166	7	1.309	3.452	.001
within groups	170.679	450	.379		
total	179. 845	457			
family monthly income					
between groups	.294	4	.073	.185	.946
within groups	179.551	453	.396		
total	179. 845	457			
no. of family dependents					
between groups	3.388	3	1.129	2. 906	.034
within groups	176.456	454	.389		
total	179. 845	457			

P>0.05 not significant at .05 alpha

Significant Relationships Between Scholarship Programs and Academic Performance

The result of the study showed that there was no significant relationship between the academic performance and scholarship program of the college. The mean score of 1.0502 and 1.6048 yielded a p-value of 0.468 which was higher than 0.05 level of significance. Thus, this meant the null hypothesis which stated "There is no significant relationship between academic performance and scholarship programs" was accepted.

Table 8.Significant Relationship between Academic Performance and Scholarship Programs

	Mean	N	Correlation	Sig
academic performance &	1.0502	458	-.034	.468
scholarship programs	1.6048			

P>0.05 not significant at .05 alpha

CONCLUSIONS

Based on the aforementioned findings, the following conclusions were reached: most of the scholars were having a family monthly income of Php. 5,000.00 and below and had 1 to 3 family dependents; most of the scholars were described to have "very good" academic performance; there were no significant differences in the scholarship programs of the college in terms of sex, civil status, home address, family monthly income and number of family dependents while there only differences in terms of age, course and year level; there were no significant differences in the academic performance of the scholars in terms of age, civil status, and family monthly income while there were only differences in terms of sex, year level, home address, and the number of family dependents; and there was no significant relationship between academic performance and scholarship Programs.

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Revised GSC College Code of 2014, Book Three, Article 106Commission on Education Memorandum Order (CHED Memo) No. 9, series of 1013, Section 25 "Enhanced Policies and Guidelines on Student Affairs and Services

Revised GSC College Code of 2011, Chapter 19, Article 107, Section 1-7Board of Trustees Resolution No. 19, series of 2010 dated March 17, 2010. Board of Trustees Resolution No. 53, series of 2014Philippine Constitution, Article XIV, Section

Feasibility study for the Offering of Bachelor of Science in Mechanical Engineering (BSME), Bachelor of Science in Electrical Engineering (BSEE), Bachelor of Science in Food Technology (BSFT), Bachelor of Industrial Technology (BIT) Major in Food Packaging & Bachelor of Science in Fisheries (BSF) Programs in Guimaras State College

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ABSTRACT This study was conducted to look into the feasibility of offering the BS Mechanical Engineering, BS Electrical Engineering, BS Food Technology, BIT major in Food Packaging and BS Fisheries courses at Guimaras State College. The aspect of offering the course was evaluated and the financial capability of the project was analyzed so that minimum problems will be encountered. The researchers have identified competitors in offering the BS Mechanical Engineering, BS Electrical Engineering, BS Fisheries, BS Food Technology and BIT major in Food Packaging. The target market is the secondary schools' graduates in the province of Guimaras. The researchers conducted a survey with the use of a researcher-made questionnaire to 305 students. Purposive sampling was done to get the sample of the total secondary graduates of 2015. It was revealed in the study that the benefit cost ratio showed a positive result; this meant that the offering of BS Mechanical Engineering, BS Electrical Engineering, BS Fisheries, BS Food Technology and BIT major in Food Packaging was viable and feasible up to 20% share of enrollment. It was also recommended to offer these courses at Guimaras State College.

Keywords: Feasibility Study, Course Offering, BSEE, BSME. BSF, BIT, GSC

INTRODUCTION

Background of the Study

Institutions of higher learning are considered the primary sources of quality manpower, technology of knowledge of every nation in its attempt to achieve the desired level of development. Education is the need of the present and the demand of the future. The worlds need to offer educational programs that will prove to be beneficial to society. Not only is it important to offer educational programs that meet the needs of today and meet the predicted demands of tomorrow, but it is more important to ensure that the programs are of good quality.

The Colleges that handle the curricular programs like BS Mechanical Engineering, BS Electrical Engineering, BS Food Technology, BIT major in Food Packaging, and BS Fisheries are the homes of several nationally accredited undergraduate and graduate programs. Scientific inquiry and historical awareness, social relations, and general welfare are themes flowing through the curriculum, which are imagined, formulated and implemented by dedicated and accomplished faculty members who constantly seek regular updating, engaged in innovative research and artistically creative endeavors.

Colleges prepare students for professional careers and provide them with the foundation for lifelong learning. They also have the primary responsibility for the two-year general education curriculum required of all students of the university.

Steeped in proud tradition, but energized with an inspired focus on the future, the Colleges where BS Mechanical Engineering, BS Electrical Engineering, BS Fisheries, BS Food Technology, and Bit major in Food Packaging belong are institutions of opportunity. These vibrant learning communities are created by dedicated and inspired teaching faculty, some of whom are all recognized researchers. The Colleges are sustained by equally great accomplish students, who have proven to be some of the brightest not only in the local community but in the country as a whole whose expectations for intellectual achievement set the standard for academic performance. The continued evolvement of the alumni, who are making the curricular offerings more attuned with the current demands in the Philippines.

BS Mechanical Engineering, BS Electrical Engineering, BS Fisheries, BS Food technology and BIT major in Food Packaging are degree programs which center on the theoretical aspects and practical application of science and technology. Not only do these courses aim to furnish students with deep insights regarding the science and theories, but also with the application of the scientific theories as well.

Subjects covered include:

- General Education Subjects
- Foundation Subjects
- Professional Subjects
- Mandated Subjects
- Elective Subjects

The BS Mechanical Engineering, BS Electrical Engineering, BS Fisheries, BS Food Technology and BIT major in Food Packaging program are taught through classroom-based frontal instructions conducted by the teacher, as well as practical exercises, projects, and with Google application-based instructions.

A graduate in each of the following five new curricular programs will pursue careers in:

BS Mechanical Engineering

Power and Energy Engineering, Automotive Engineering, Manufacturing Engineering, Mechatronics & Engineering, and Instrumentation and Control.

BS Electrical Engineering

Power Engineering (e.g. Power System Operation, Power system Protection, Power system Economics and Power Plant), Design Engineer (e.g. Advance Power System, Advance Electrical Designer, Machine Automation and Process Control Designer), Illumination Engineer, Entrepreneur, Sales Engineer, Distribution Engineer, and Engineering Educators and Researcher.

BS Fisheries

Fisheries management, Fisheries research, Fisheries extension service, Fisheries Industries, and Fisheries instruction.

BS Food Technology

Food manufacturing and engineering, quality control/assurance, product development, food analysis, food microbiology, marketing, distribution and sales, Agencies and Bureaus of Government, Food and Drugs (BFAD), Department of Science and Technology (DOST), Department of Trade and Industry (DTI), Department of Health (DOH), Food Service Establishment, Academic Institutions and Entrepreneurs/ Food Business.

BIT Major in Food Packaging

Technical/ Skilled worker (e.g. can perform task independently without supervision and has the mastery of performance standards that are required in the Technician Competency Skills Assessment (TCSA), Industry supervision and managers (e.g. can perform management function in the industrial organizations and can contribute to the Total Quality Management (TQM) of industrial organizations) and industry consultant and technologies (e.g. can conduct research feasibility studies to solve problems in industry and can perform higher skills required by industries).

The Commission on Higher Education (CHED) required students under the BS Mechanical Engineering, BS Electrical Engineering, BS Fisheries, BS Food technology, and BIT Major in Food Packaging program to undergo an internship period. In addition, there is board examination for BS Mechanical Engineering, BS Electrical Engineering, BS Fisheries, BS Food technology. Further for BIT major in Food Packaging graduates, the CHED does not require graduates to take board exam but graduates are encouraged to pass NC2 or higher wherein assessment is done by the TESDA.

In order to have such programs in the Province of Guimaras, Guimaras State College, being the only state college in the province, should likewise offer these programs. However, there is a need to conduct a feasibility study about the offering of the five (5) proposed curricular programs namely: BS Mechanical Engineering, BS Electrical Engineering, BS Fisheries, BS Food technology, and BIT major in Food Packaging.

The primary objective of this study is to determine the feasibility of the offering the BS Mechanical Engineering, BS Electrical Engineering, BS Fisheries, BS Food technology and BIT major in Food Packaging focusing in the functional areas such as marketing aspect, technical aspect, organizational and management, financial aspect and socio-economic aspect.

1. Marketing Aspect
   a. To determine whether it is viable and economical to offer courses specifically BS Mechanical Engineering, BS Electrical Engineering, BS Fisheries, BS Food technology, and BIT major in Food Packaging.
2. Technical aspect
   a. To determine whether the college has available resources, facilities, and equipment for the offering of the course.
   3. Organizational aspect
   a. To determine the competence of the faculty and the administration.
   b. To identify the effective organizational structure for this program.
   c. To identify the number of faculty and staff needed in order to operate the program.
4. Financial aspect
   a. To determine the financial viability of the offering vis a vis input for the operation and maintenance of facilities.
5. Socio-economic aspect
   a. To determine the advantage of the program to the parents, students, and community as a whole.
   b. To identify the benefits and contributions of the program to the progress of the community.

Methodology

The researcher made a research proposal on the offering of the courses specifically BS Mechanical Engineering, BS Electrical Engineering, BS Fisheries, BS Food technology, and BIT major in Food Packaging. After the proposal had been presented and approved, the researcher conducted a survey through a researcher made questionnaire to 305 randomly selected students from different secondary school graduates in the division of Guimaras and from outside Guimaras secondary schools who intend to study in Guimaras Island. The questionnaire used is composed of two parts. The first part deals with the personal information of the respondents and the second part are the questions on the possibility of the offering of the different courses in Guimaras State College. After the data gathering, the responses were tallied and interpreted.

After gathering the data for market study using the survey conducted to the secondary schools' graduates, assessment for technical, organization and management, financial and socio-economic aspects was done.

MARKET STUDY

A. Project Description

This study was conducted to look into the feasibility of offering the BS Mechanical Engineering, BS Electrical Engineering, BS Fisheries, BS Food technology, and BIT major in Food Packaging courses at Guimaras State College. The aspect of offering the course was evaluated and the financial capability of the project was analyzed so that minimum problems will be encountered.

B. Competition

The researchers have identified competitors in offering the BS Mechanical Engineering, BS Electrical Engineering, BS Fisheries, BS Food technology, and BIT major in Food Packaging. Among the competitors of BS Fisheries are University of the Philippines-Visayas and Iloilo College of Fisheries-Barotac Nuevo. Competitors for BS Mechanical Engineering are Western Visayas College of Science and Technology, Western Institute of Technology, University of Iloilo-Phinma, and Central Philippine University. For BS Food Technology, University of the Visayas is the competitor. While for BIT major in Food Packaging, there is no school in the region offering it.

C. Target Market

The target market is the secondary schools graduates in the province of Guimaras. The researcher conducted a survey with the use of a researcher-made questionnaire to 305 students. Purposive sampling was done to get the sample of the total secondary graduates of 2015. Data are presented in table 1.

Table 1.Projected enrollment for the BS Mechanical Engineering, BS Electrical Engineering, BS Fisheries, BS Food technology, and BIT major in Food Packaging course at 50, 40, and 30 percent.

Courses to be offered	No. of students who intend to enroll in the proposed curricular programs	50%	40%	30%
Bachelor of Science in Fisheries (BSF)	32	16	13	10
Bachelor of Science in Food Technology (BSFT)	105	53	42	32
Bachelor of Industrial Technology major in Food Packaging (BIT food pack)	50	25	10	15
Bachelor of Science in Mechanical Engineering (BSME)	51	26	20	15
Bachelor of Science in Electrical Engineering	28	14	11	8
Total:	266	134	96	80

Data in table 2 shows the projected enrollment for the next five years assuming that there will be only 50, 40, and 30% of the total respondents who said yes they are interested to enroll in the course once offered. This will be safe enough in assuming that there are only 50, 40 and 30% who will enroll in these courses.

Table 2. Projected enrollment for the next five years at 50%, 40%, and 30%

	50%					40%					30%				
Course	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
BSF	16	33	51	70	90	14	19	35	52	70	11	23	36	50	65
BSFT	56	113	117	230	290	44	89	135	182	230	33	67	102	138	175
BIT (Food Pack…)	26	53	81	110	140	10	21	33	46	60	15	29	42	54	65
BSME	27	55	84	114	145	21	43	66	90	115	15	31	48	66	85
BSEE	15	31	48	66	85	11	23	36	50	65	8	17	27	38	50
Total	140	285	435	590	750	100	195	305	420	540	82	167	255	346	440

In order to come up with the projection on the money value or equivalence of the projected enrolment in the next five years, the data in table 2 were multiplied with the tuition per student. The resulting amount for per year for 50, 40 and 30% projections are shown in Table 3.

Table 3. Projected Gross income for the next 5 years categorized as to 50%, 40% and 30%

A. 50% (2 Semesters)

Course	Tuition Fee	No. of Studes/Sem	2015	No. of Studes/Sem	2016	No. of Studes/Sem	2017	No. of Studes/Sem	2018	No. of Studes/Sem	2019	Total
BSF	P 8,980	18	287,360	33	592,680	51	915,960	70	1,257,200	90	1,616,400	4,669,600
BSFT	P 8,980	56	1,005,760	113	2,029,480	171	3,071,160	230	4,130,800	290	5,208,400	15,445,600
BIT (Food Pack)	P 8,980	26	466,960	53	951,808	81	1,454,760	110	1,975,600	140	2,514,400	7,363,600
BSME	P 8,980	27	484,920	55	987,800	84	1,508,640	114	2,047,440	145	2,604,200	7,633,000
BSEE	P 8,980	15	269,400	31	556,706	48	862,080	66	1,185,360	85	1,526,600	4,400,200
Total	44,900	142	2,514,400	285	5,118,600	435	7,812,600	590	10,596,400	750	13,470,000	39,512,000

B. 40% (2 Semesters)

Course	Tuition Fee	No. of Studes/ Sem	2015	No. of Studes/Sem	2016	No. of Studes/Sem	2017	No. of Studes/Sem	2018	No. of Studes/Sem	2019	Total
BSF	P 8,980	14	251,440	19	341,240	35	628,600	52	933,920	70	1,257,200	3,412,400
BSFT	P 8,980	44	790,240	89	1,598,440	135	2,424,600	182	3,268,720	230	4,130,800	12,212,800
BIT (Food Pack)	P 8,980	10	179,600	21	377,160	33	592,680	46	826,160	60	1,077,600	3,053,200
BSME	P 8,980	21	377,160	43	772,280	66	1,185,360	90	1,616,400	115	2,065,400	6,016,600
BSEE	P 8,980	11	197,560	23	413,080	36	646,560	50	898,000	65	1,167,400	3,322,600
Total	44,900	100	1,796,000	195	3,502,200	305	5,477,800	420	7,543,200	520	9,698,400	28,017,600

C. 30% (2 Semesters)

Course	Tuition Fee	No. of Studes/Sem	2015	No. of Studes/Sem	2016	No. of Studes/Sem	2017	No. of Studes/Sem	2018	No. of Studes/Sem	2019	Total
BSF	P 8,980	11	197,560	23	413,080	36	646,560	50	898,000	65	1,167,400	3,322,600
BSFT	P 8,980	33	592,680	67	1,203,320	102	1,831,920	138	2,478,480	175	3,143,000	9,249,400
BIT (Food Pack)	P 8,980	15	269,400	29	520,840	42	754,320	54	968,840	65	1,167,400	3,680,800
BSME	P 8,980	15	269,400	31	556,760	48	862,080	66	1,185,360	85	1,526,600	4,400,200
BSEE	P 8,980	8	143,680	17	305,320	27	484,920	38	682,480	50	898,000	2,514,400
Total	44,900	82	1,472,720	167	2,999,320	255	4,579,800	346	6,213,160	440	7,902,400	23,167,400

D. Industry Trends

The BS Mechanical Engineering, BS Electrical Engineering, BS Fisheries, BS Food Technology and BIT major in Food Packaging graduates are expected to be spiritually and morally upright individuals, globally competent professionals, productive and environment-friendly, entrepreneurial and technologically innovative, goal oriented and service committed, sustainable development advocate. In this regard, they can also apply to jobs which are not related to these five courses such as government employee, call center agent, telesales representative, administrative staff and freelancer working online. They could be hired to train new workers or keep administrative records, to name a few duties.

With this trend, graduates of BS Mechanical Engineering, BS Electrical Engineering, BS Fisheries, BS Food Technology and BIT major in Food Packaging will have a big chance of getting employed since the industry calls for those who are experts in the field.

E. Services/Product

A. BS in Mechanical Engineering

The BS in Mechanical Engineering Program aims to develop graduates who have attained the following: an ability to apply knowledge of mathematics, science and engineering; an ability to design and conduct experiments, as well as to analyze and interpret data; an ability to design a system, component or process to meet desired needs within realistic constraints; an ability to function on multidisciplinary teams; an ability to identify, formulate and solving engineering problems; an understanding of professional and ethical responsibility; an ability to communicate

effectively in both Filipino & English languages; an understanding of the impact of engineering solutions in global and social context; and an ability to use techniques, skills and modern engineering tools necessary for mechanical engineering practice. BS in Mechanical Engineering Graduates can work because of the competencies they had developed.

Mechanical Engineering graduates can pursue careers in manufacturing firms, automotive companies, power generation, and utility plants. Since all manufactured products contain parts that transmit forces, mechanical engineering is considered vital in designing and selecting materials that will ensure the structural integrity of almost every product. Also, they can be academician (an instructor or a professor in a particular academic institution), which provides education under the field of engineering studies.

BSME program may now provide better career opportunities for students, even to those who may not be able to finish the full course. Technical-Vocational Education trainings (TVET) are embedded in the enriched ladderized curriculum and students will be awarded TESDA certifications for acquired competencies at certain levels.

B. BS in Electrical Engineering

The BS in Electrical Engineering Program aims to develop graduates who have attained the following: ability to apply knowledge of mathematics, physical, life and information sciences and engineering sciences appropriate to the field of practice; ability to design and experiments, as well as to analyze and interpret data; ability to design a system, component or process to meet desired needs within identified constraints; ability to work effectively in multi-disciplinary and multi-cultural teams; ability to recognize, formulate, and solve engineering problems; and recognition of professional, social and ethical responsibility.

C. BS in Food Technology

The BSFT program is designed to provide students with knowledge in the foundations of food technology associated with raw food materials and production management as well as food science. Students are also taught n how to create food products, ingredients, and processing equipment.

Graduates of BS Food Technology can be a Food Technician checking production processes and product quality. They are also responsible for monitoring the quality standards of products for ensuring whether it conforms to the specification and food safety practices.

Job opportunities such as Food Sales Representative who are responsible for selling food products and services to companies for distribution purposes; visits companies, deliver presentations; and takes orders; call center agent, Administrative Staff, and Freelancer working online which mainly depends on your skills.Several companies in the food industry have played a role in the development of food technology. These developments have contributed greatly to the food supply and have changed our world.

In the past, consumer attitude towards food technologies was not common talk and was not important in food development. Nowadays, the food chain is long and complicated, foods and food technologies are diverse; consequently, the consumers are uncertain about the food quality and safety and find it difficult to orient themselves to the subject. That is why consumer acceptance of food technologies is an important question. However, in these days acceptance of food products very often depends on potential benefits and risks associated with the food. This also includes the technology the food is processed with. Attributes like "uncertain", "unknown", or "unfamiliar" are associated with consumers' risk and consumer very likely will reject products linked to these attributes. Especially innovative food processing technologies are connected to these characteristics and are perceived as risky by consumers.

D. BS in Fisheries

The technical competency of the professional fisheries graduates makes them as successful Aqua Consultants. Most of them are working in this area. As an entrepreneur, after obtaining a professional degree in BS Fisheries candidate can start their own enterprise. The main areas in which fisheries enterprise can be developed are feed manufacturing, feed sales, ornamental fish culture and breeding, aquaculture, hatchery, and seed production, fish processing, and marketing, net making, the establishment of Agri clinics for fish disease diagnosis and for testing and supply of farm inputs. They can also be a staff or marine sanctuary, entrepreneur, assistant researcher, and researcher.

E. BIT major in Packaging Technology

Packaging engineering, also package engineering, packaging technology, and packaging science, is a broad topic ranging from design conceptualization to product placement. All steps along the manufacturing process and more must be taken into account in the design of the package for any given product. The package must sell and protect the product while maintaining an efficient, cost-effective process cycle. Students in a packaging program typically begin with generalized science, business, and engineering classes before progressing into industry-specific topics such as shell life stability, corrugated box design, cushioning, engineering design, labeling regulations, project management, food safety, robotics, RFID tags, quality management, packaging testing, packaging machinery, safety, robotics, RFID tamper-evident methods, recycling and computer-aided design.

F. Pricing Profile

Table 4 presents the payment of each student of their tuition and miscellaneous fee per semester. With 5% increase per year, the total miscellaneous and tuition fee ranges from Php 8,980 to Php 11, 461.02 at the end of the fifth year.

Table 4. Schedule of charges/payment in Guimaras State College per semester (per student) with 5% increase per year

Fees	Current Charge AY 2014	Year 1	Year 2	Year 3	Year 4	Year 5
Tuition	5,720	6,006	6,306.3	6,621.62	6,952.70	7,300.34
Miscellaneous	3, 260	3,423	3,594.15	3,773.86	3,962.55	4,160.68
Total	8,980	9,429	9,900.45	10,395.48	10,915.25	11,461.02

G. Publicity and Advertisement

Publicity is so important here since these are new curricular programs to be offered at Guimaras State College. The following are the plans for the publicity of the program.

1. Conduct a caravan to introduce the BS Mechanical Engineering, BS Electrical Engineering, BS Fisheries, BS Food Technology, and BIT Major in Food Packaging Program to the people in the community and encourage the students to enroll the course.
2. Give flyers to the people and post streamers in the different areas or places in Guimaras as part of advertising the BS Mechanical Engineering, BS Electrical Engineering, BS Fisheries, BS Food Technology and BIT Major in Food Packaging Program of Guimaras State College.
3. Conduct a Career Orientation program about the BS Mechanical Engineering, BS Electrical Engineering, BS Fisheries, BS Food Technology and BIT Major in Food Packaging course and how the students would become more competitive in the field of communication using English as a medium.

H. Strengths, Weaknesses, Opportunities and the Threats of the Proposed Project

- **Strengths**

1. Competent and Trainable Faculty and Staff

GSC generates its strengths from its competent and trainable faculty and staff. Its faculty is composed of 33 Master's Degree holders (32.038%), 13 Doctoral Degree holders (12.62%), and 57 Bachelor's Degree.

Faculty members with Doctoral Degrees have completed a Doctor of Philosophy in Educational Management and Doctor of Rural Development, those with Master's Degrees completed the Master of Arts in Educational Management, Master of Education majors in Educational Management, English, Filipino, Social Science and Mathematics, Master in Teaching Mathematics, Master of Science in Criminal Justice, Master of Science in Computer, Information Technology and Master in Public Administration. The Bachelor's Degree holders include Bachelor of Science in Elementary Education, Bachelor of Science in Secondary Education, Bachelor of Science in Industrial Education, Bachelor of Science in Information Technology, Bachelor of Science in Criminology and Bachelor of Science in Computer Science.

There are two non-teaching personnel with a degree, Doctor of Philosophy in Educational Management while four have Master's Degrees in Education major in Educational Management, Master in Public Administration, Master in Library Science, Master in Guidance and Counseling and the Bachelor's Degree Courses include Bachelor of Science in Commerce, Bachelor of Science in Business Administration, Bachelor of Science in Nursing, Bachelor of Science in Secondary Education/Bachelor in Elementary Education.

2. Available Equipment and Basic Facilities

The college has existing equipment and basic facilities to be used to support the performance of its mandate.

3. Strong Support of Faculty and Staff

With the competence and strong leadership of the current administration, the faculty and staff have shown strong support and enthusiasm to work and support the new administration in various activities. The school has also manifested its solid community spirit by actively participating in community activities not only in their host municipalities but also in the province.

- **Weaknesses**

1. Insufficient facilities and instructional devices for instruction and research in the 1st year of offering

It has an inadequate number of vehicle units for transportation that resulted in poor mobility of faculty and staff in the performance of their function.

2. Lack of manpower complement

The number of permanent needed for GSC to adequately perform its mandate is inadequate. For example, there is only one guidance counselor to serve the current 1,944 student population, which is far from the ideal ratio of 1 for every 1,000 students. Thus, on top of poor facilities, the lack of manpower has resulted to poor delivery of services to the students.

- **Opportunities**

1. Strong support from government officials and community stakeholders

The congressman, as well as the provincial and municipal executives, have shown full support to the GSC, being the only tertiary education in the province. Their continued support will facilitate assistance to GSC in performing its mandate.

2. Available funding for scholarships, research, and other development activities

With the presence of international and national development organizations in the province, e.g. SEAFDEC, National Mango Research and Development Center, University of the Philippines in the Visayas Marine reserve, etc., GSC has great opportunity to avail not only training and scholarship funds for its faculty and staff, but also funding support for its development projects.

- **Threats**

1. Competition from other SUCs and private Colleges and Universities near Guimaras Province

Though GSC is the only tertiary education institution in the province of Guimaras, many students in the province opted to go to more advanced SUCs and private tertiary education institutions in nearby major cities of the region, particularly in Iloilo City, which is accessible from the province.

2. Brain Drain of Professionals/New Graduates

The lure of higher salary abroad entices new graduates/professionals to opt for job opportunities abroad rather than seek employment locally, thus resulting to the dearth of qualified faculty applicants for the upcoming courses to be offered in GSC.

3. Limited regular position in the College

The Department of Budget and Management issued DBM Circular #13, S. 2002, stipulating a moratorium on the creation of new positions. This hinders the hiring of new faculty and staff that would facilitate the performance of the College's mandate.

TECHNICAL ASPECT

A. Enrollment Flow

For the incoming first-year students who would like to enroll, they should follow the flowchart. First, they should secure the Registration Form from the Registrar's Office. For those who were scholars, they should go first to the Office of the Student Affairs and Services for the validation, encoding, and confirmation of their scholarship before going to the Dean's Office to fill out the pre-registration form for the encoding of the subjects. Nonscholars shall proceed to the cashier's office for the payment of fees. After which, he/she shall go back to the Registrar's Office for the marking and validation of the form (Officially enrolled mark). This marked form together with the receipt for payment of ID will be presented to the ICT Office for picture taking for the school ID and then proceed to the school uniform Economic Development Center for the processing of the new School uniform.

Facilities and Requirements

The table shows the facilities and equipment of the BS Mechanical Engineering, BS Electrical Engineering, BS Fisheries, BS Food Technology and BIT major in Food Packaging program. Data showed that the needed facilities, building and speech laboratory are already available. On the other hand, multimedia equipment, laptop, and office furniture and fixtures are to be purchased.

Table 5. Facilities and Equipment requirements of the program

Facilities	Existing	To Be Purchased
1. Building	/	
2. Multimedia Equipment		/
3. Laptop		/
4. Office furniture and fixtures		/

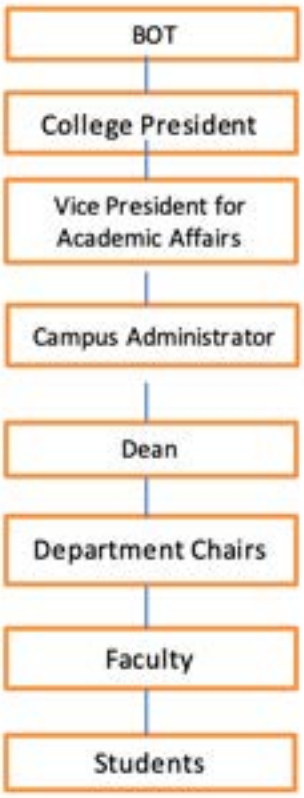
Table 6 presents the investment cost of the facilities to be purchased for the utilization of the BS Mechanical Engineering, BS Electrical Engineering, BS Fisheries, BS Food Technology and BIT major in Food Packaging for 5 years. Only the first year has an investment amount which is Php 900,000 since the materials to be purchased is durable enough to use for five years long.

Table 6. Investment Cost for the next five years

Facilities to be purchased	Year 1	Year 2	Year 3	Year 4	Year 5
Multimedia Equipment					
▪ Projector/Audio	250,000	250,000	250,000	250,000	250,000
▪ Laptop	200,000	200,000	200,000	200,000	200,000
Office Furniture and Fixtures	200,000	200,000	200,000	200,000	200,000
Lab Equipment/Chemicals	250,000	250,000	250,000	250,000	250,000
Total	900,000	900,000	900,000	900,000	900,000

Organizational set up of the New Programs to be offered

The BS, Mechanical Engineering, BS Electrical Engineering, BS Fisheries, BS Food Technology and BIT major in Food Packaging of Guimaras State College starts from the office of the Board of Trustees, down to the College President, Vice President for Academic Affairs, Campus Administrator, Dean, and the Faculty Members and Students.



Job Descriptions:

Board of Trustees

General Powers and Duties

Section 1. The College shall have the general powers of a corporation as set forth in the Corporation Law. The administration of the College and the exercise of its powers shall be vested exclusively in the Board of Trustees and the President of the College insofar as authorized by the Board.

Specific Powers and Duties

The Board shall have the following specific powers and duties in addition to its general powers of administration and the exercise of all the powers granted to the Board of Directors of a corporation under Section 36 of Batas Pambansa Blg. 68, otherwise known as the Corporation Code of the Philippines.

a. To enact rules and regulations, not contrary to law, as may be necessary to carry out the purposes and functions of the College;

b. To receive and appropriate all sums as may be provided, for the support of the College in the manners it may determine, in its discretion, to carry out the purposes and functions of the College; c. To receive in trust legacies, gifts and donations of real and personal properties of all kinds and to administer and dispose of the same when necessary for the benefit of the College, subject to limitations, discretions, and instructions of the donor, if any. Such donations shall be exempted from all taxes and shall be considered as deductible items from the income tax of the donor; and

d. To fix the tuition fees and other necessary school fees and charges, such as, but not limited to, matriculation fees, graduation fees, as it may deem proper and reasonable to impose after consultations with the involved sectors.

Such fees charges, including government subsidies and other income generated by the College, shall constitute special trust funds and shall be deposited in any authorized government depository bank, and all interests that shall accrue therefrom shall form part of the same funds for the use of the College.

Any provision of existing laws, rules and regulations to the contrary notwithstanding, any income generated by the college from tuition fees and other charges, as well as from the operation of auxiliary services and land grants, shall be retained by the college and may be disbursed by the Board of instruction, research, extension or other programs/projects of the College: Provided that all fiduciary fees shall be disbursed for the specific purposes for which they are collected.

If, for reasons beyond its control, the College shall not be able to pursue any project for which funds have been appropriated and allocated under its approved program of expenditures, the Board may authorize the use of said funds for any reasonable purpose which, in its discretion, may be necessary and urgent for the attainment of the objectives and goals of the College:

a. To adopt and implement a socialized scheme of tuition and school fees for greater access to poor but deserving students;

b. To authorize the construction or repair of its buildings, machinery, equipment and other facilities and the purchase and acquisition of real and personal properties, including necessary supplies, materials and equipment. Purchases and other transactions entered into by the College through the board shall be exempt from all taxes and duties;

c. To appoint, upon the recommendation of the President of the College, vice-presidents, deans, directors, and heads of departments, faculty members and other officials and employees of the College;

d. To fix and adjust salaries of faculty members and administrative officials and employees subject to the provisions of the Revised Compensation and Position Classification System and other pertinent budget and compensation laws governing hours of service, and such other duties and conditions as it may deem proper: to grant them, at its discretion, leaves of absence under such regulations as it may promulgate, any provisions of existing law to the contrary notwithstanding, and to remove them for cause in accordance with the requirements of due process of law;

e. To approve the curricula, institutional programs and rules of discipline drawn by the administrative and academic councils as herein provided;

f. To set policies on admission and graduation of students;

g. To award honorary degrees upon persons in recognition of outstanding contribution in the field of education, public service, arts, science, and technology or in any field of specialization within the academic competence of the College; and to authorize the award of certificates of completion for non-degree and non-traditional courses;

h. To establish and absorb non-chartered tertiary institutions within the Province of Guimaras as branches, centers, stations, etc., in accordance with the CHED and in consultation with the Department of Budget and Management (DBM), and to offer therein programs or courses to promote and carry out equal access to educational opportunities mandated by the constitution;

i. To establish research and extension centers of the College where such will promote the development of the latter;

j. To establish chairs in the College to provide fellowship for qualified faculty members and scholarships to deserving students;

k. To delegate any of its powers and duties provided for hereinabove to the president and/or other officials of the College as it may deem appropriate so as to expedite the administration of the affairs of the College;

l. To authorize an external management audit of the institution, to be financed by CHED, and to institute reforms, including academic and structural changes, on the basis of audit results and recommendations;

m. To collaborate with other governing boards of state universities and colleges within the Province of Guimaras and the region, under the supervision of the CHED in consultation with the DBM, the restructuring of the College to become more efficient, relevant, productive, and competitive;

n. To enter into joint ventures with business and industry for the profitable development and management of the economic assets of the College, the proceeds from which shall be used for the development and strengthening of the same;

o. To develop consortia and other forms of linkages with local government units, institutions and agencies, both public and private, local and foreign, in furtherance of the purposes and objectives of the college;

p. To develop academic arrangements for instruction capability building with appropriate institutions and agencies, public or private, local or foreign, and to appoint experts/specialists as consultants, or visiting or exchange professors, scholars, researchers, as the case may be;

q. To set up the adoption of modern and innovative modes of transmitting knowledge such as the use of information technology, the dual system, open-learning, community laboratory, etc., for the promotion of greater access to higher education;

r. To establish policy guidelines and procedures for participative decision-making and transparency within the College;

s. To privatize, where most advantageous to the College, management of non-academic services such as health, food, building, grounds or property maintenance and similar such other activities; and

t. To extend the term of the President of the College beyond the age of retirement but not later than the age of seventy (70), whose performance has been unanimously rated as outstanding and upon the unanimous recommendation of the search committee for the president of the college

President

The president is the chief executive officer of the College. The president is the Board of Trustee's official link with the operating organization. The president is accountable to the Board acting as a body. The board will instruct the president through written policies delegating implementation to the president. The president's job performance will be considered synonymous with the organization's performance as a whole and Organizational accomplishment of the Board's policies on College outcomes. He should be involved in Organizational operation within the boundaries established in Board policies on Executive Limitations. The president shall also develop a working job description in concert with the Board.

Vice President for Academic Affairs

Assists the College President in overseeing a single campus or institution. She/he handles student inquiries and problems related to the education program entrance, eligibility requirements, and curriculum and academic standards. He/she requires a bachelor's degree in the area of specialty and at least 7 years of experience in the field or in a related area. He/she should be familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of tasks. Leads and directs the work of others. A wide degree of creativity and latitude is expected.

Campus Administrator

The campus administrator has the following functions

A. To supervise the following areas
1. Student Development
2. Physical Plant Facilities
3. Research and Extension
4. Curriculum and Instruction
5. Faculty Development
6. Laboratory Facilities
7. Library
8. Administration

B. To prepare reports on the progress of the above mentioned areas to the College President.

C. To perform other functions that may be required by the College President.

Dean

The college Dean exercises control and general supervision and coordination of the professors/instructors and academic activities of the college. To formulate, develop and evaluate educational policies, plans, programs and standards of the department and recommend these through the administrative and academic counsels for the approval of the board. To take leadership in the development of curriculum materials and the promotion of research and studies for the advancement of education. To review and evaluate faculty, performance, request for study permission to transfer and to recommend appropriate action.

Faculty

Professors must formulate and teach from a course syllabus/outline from which lecture notes are devised to dispense the required information to students in a systematic and sequential format. Additionally, professors must develop evaluative measures to determine the students' level comprehension and conceptualization, usually through scheduled periodic exams, the dreaded mid-term, and finals.

Student

A person engaged in study; one who is devoted to learning; a learner; a pupil; a scholar, especially one who attends a school, or who seeks knowledge from professional teachers or from books; as, the students of an academy, a college, or a university; a medical student; a hard student. One who studies or examines in any manner; an attentive and systematic observer; as a student of human nature, or of physical nature.

FINANCIAL ASPECT

The financial study for the proposed projects included the start-up capital needed sources of the capital return or investment, and other capital financial computation. It looks at how much cash/capital is needed, where it will come from, and how it will be spent. It is an assessment of the financial aspects of something. It has considered many things including start-up, capital, expenses, revenues, investor, income and disbursement.

Salaries and Wages with a 10% increase per year*

Table 7 shows the estimated salaries and wages of faculty and staff with the amount of 390/day for the Specialized Teacher and General Education Teacher and 280/day for the Clerk for 11 months.

In table no. 7 it shows the salaries and wages of the five curricular programs to be offered at GSC. We show the salaries of the clerk and faculty in the specialized field course. The five courses will have the total salaries and wages amounting to 210,800 per month and was increased by 10% per year.

Table 7. Schedule of payment for Salaries and wages

Position	No. of Persons	Basic Monthly	Year 1	Year 2	Year 3	Year 4	Year 5
Clerk	1	(280/day x 22)=6,160 x 1 = 6,160	73,920	81,312	89,443.2	98,387.52	108,226.27
Specialized Field	2	18,000 x 2 = 36,000 per month	432,000	475,200	522,720	574,992	632,491.2
Total			505,920	556,512	612,632.2	673,379.52	740,717.47

Operating Expenses

Table 8 shows the total operating expenses of one course for the next five years increased by 10% per year. These expenses will be true to all courses.

Table 8. Schedule of Operating expenses for one course with 10% increase per year

Operating Expenses	Per Month	Year 1	Year 2	Year 3	Year 4	Year 5
Office Supplies	2,000.00	24,000.00	26,400.00	29,040.00	31,944.00	35,138.00
Traveling	3,000.00	36,000.00	39,600.00	43,560.00	47,916.00	52,708.00
Miscellaneous	3,000.00	36,000.00	39,600.00	43,560.00	47,916.00	52,708.00
Faculty Training	3,000.00	36,000.00	39,600.00	43,560.00	47,916.00	52,708.00
Utilities (Light & Power)	5,000.00	60,000.00	66,000.00	72,600.00	79,860.00	87,846.00
Repairs and Maintenance	10,000.00	120,000.00	132,000.00	145,200.00	159,720.00	175,692.00
Total	26,000.00	312,000.00	343,000.00	377,520.00	415,272.00	456,799.00

Projected Cash Flow Statement

At 50% projection, the result showed for a positive cash balance ending from the first up to the fifth year. At the end of the fifth year, the cash balances ending amounted to P21,774,190.08. This simply shows that if only 50% of those high school graduates who answered yes they are going to enroll in one of the courses to be offered by GSC, the programs can survive and the income derived from the program can fund its own expenses.

A. 50%

Activities	Year 1	Year 2	Year 3	Year 4	Year 5
Cash Inflow: (50%)					
Cash Balance Beginning	0	916,480.00	1,342,984.00	4,377,495.00	10,226,015.55
Income from Tuition	2,514,400.00	5,118,600.00	7,812,600.00	10,596,400.00	13,470,000.00
Total	2,514,400.00	6,035,080.00	9,155,584.00	14,974,375.00	23,696,015.55
Cash Outflow					
Investment Cost	900,000.00	900,000.00	900,000.00	900,000.00	900,000.00
Subtotal	900,000.00	900,000.00	900,000.00	900,000.00	900,000.00
Operating Expenses:					
Salaries and wages	505,920.00	556,512.00	612,632.20	673,379.52	740,717.47
Office Supplies	24,000.00	26,400.00	29,040.00	31,944.00	35,138.00
Traveling	36,000.00	39,600.00	43,560.00	47,916.00	52,708.00
Miscellaneous	36,000.00	39,600.00	43,560.00	47,916.00	52,708.00
Faculty Training	36,000.00	39,600.00	43,560.00	47,916.00	52,708.00
Utilities (Light & Power)	60,000.00	66,000.00	72,600.00	79,860.00	87,846.00
Subtotal	697,920.00	767,712.00	844,952.20	928,931.52	1,021,825.47
Total Outflow	1,597,920.00	1,667,712.00	1,744,952.20	1,828,931.52	1,921,825.47
Net Inflow	916,480.00	4,376,368.00	7,410,631.80	13,145,443.48	21,774,190.08
Cash Balance Ending	916,480.00	4,376,368.00	7,410,631.80	13,145,443.48	21,774,190.08

B. 40%

At 40% projection, the result showed for a positive cash balance ending from the first up to the fifth year of offering the course. In the fifth year, the cash balance ending amounted to 6, 847,431.40

Activities	Year 1	Year 2	Year 3	Year 4	Year 5
Cash Inflow: (40%)					
Cash Balance Beginning	0	(2,593,600.00)	(3,783,496.00)	(3,083,304.95)	-288,464.40
Income from Tuition	1,796,000.00	3,502,200.00	5,477,800.00	7,543,200.00	9,698,400.00
Total	1,796,000.00	908,600.00	1,694,304.00	4,459,895.05	9,409,935.60
Cash Outflow					
Investment Cost	900,000.00	900,000.00	900,000.00	900,000.00	900,000.00
Subtotal	900,000.00	900,000.00	900,000.00	900,000.00	900,000.00
Operating Expenses:					
Salaries and wages	2,529,600.00	2,782,560.00	3,060,816.00	3,336.897.60	3,703,587.36
Office Supplies	120,000.00	132,000.00	145,200.00	159,720.00	175,692.00
Traveling	180,000.00	198,000.00	217,800.00	239,580.00	263,538.00
Miscellaneous	180,000.00	198,000.00	217,800.00	239,580.00	263,538.00
Faculty Training	180,000.00	198,000.00	217,800.00	239,580.00	263,538.00
Utilities (Light & Power)	300,000.00	330,000.00	363,000.00	399,300.00	439,230.00
Subtotal	3,489,600.00	3,883,560.00	4,222,416.00	4,644,657.60	5,109,123.36
Total Outflow	4,389,600.00	4,692,096.00	4,777,608.95	4,748,359.45	2,562,504.20
Net Inflow	(2,593,600.00)	(3,783,496.00)	(3,083,304.95)	(288,464.40)	6,847,431.40
Cash Balance Ending	(2,593,600.00)	(3,783,496.00)	(3,083,304.95)	(288,464.40)	6,847,431.40

C. 30%

The cash balance ending at 30% projection showed a positive result only from the second to the fifth year. It amounted to 20,772,761.3

Activities	Year 1	Year 2	Year 3	Year 4	Year 5
Cash Inflow: (30%)					
Cash Balance Beginning	0	(2,916,880.00)	(4,609,656.00)	(13,967,064.95)	15,432,865.5
Income from Tuition	1,472,720.00	2,999,320.00	4,579,800.00	6,214,160.00	7,902,400.00
Total	1,472,720.00	82,440.00	(9,189,456.00)	20,181,224.95	23,335,265.5
Cash Outflow					
Investment Cost	900,000.00	900,000.00	900,000.00	900,000.00	900,000.00
Subtotal	900,000.00	900,000.00	900,000.00	900,000.00	900,000.00
Operating Expenses:					
Salaries and wages	2,529,600.00	2,782,560.00	3,060,816.00	3,336.897.60	3,703,587.36
Office Supplies	120,000.00	132,000.00	145,200.00	159,720.00	175,692.00
Traveling	180,000.00	198,000.00	217,800.00	239,580.00	263,538.00
Miscellaneous	180,000.00	198,000.00	217,800.00	239,580.00	263,538.00
Faculty Training	180,000.00	198,000.00	217,800.00	239,580.00	263,538.00
Utilities (Light & Power)	300,000.00	330,000.00	363,000.00	399,300.00	439,230.00
Subtotal	3,489,600.00	3,883,560.00	4,222,416.00	4,644,657.60	5,109,123.36
Total Outflow	4,389,600.00	4,692,096.00	4,777,608.95	4,748,359.45	2,562,504.20
Net Inflow	(2,916,880.00)	(4,609,656.00)	(13,967,064.95)	15,432,865.5	20,772,631.3
Cash Balance Ending	(2,916,880.00)	(4,609,656.00)	(13,967,064.95)	15,432,865.5	20,772,631.3

Net Present Value 50%

Year	Investment Outlay	Gross Sales (Projected Income)	Gross Operational Expenses	Net Benefit	Discount Factor	Present Value
0	900,000.00					
1		2,514,400.00	312,000.00	2,202,400.00	0.8	1,761,920.00
2		5,118,600.00	343,200.00	4,775,400.00	.64	3,056,256.00
3		7,812,600.00	377,520.00	7,435,080.00	.51	3,791,890.80
4		10,596,400.00	415,272.00	10,181,128.00	.41	4,174,262.48
5		13,470,000.00	456,799.00	13,013,201.00	.33	4,294,356.33
Total		39,512,000.00	1,904,791.00	37,625,209.00		17,078,685.51

NPV= PV-Investment Outlay
Gross sale or income – gross operational expenses = Net Benefit
Net Benefit x discount factor = Present Value

Net Present Value 40%

Year	Investment Outlay	Gross Sales (Projected Income)	Gross Operational Expenses	Net Benefit	Discount Factor	Present Value
0	900,000.00					
1		1,796,000.00	312,000.00	1,484,000.00	0.8	1,187,200.00
2		3,502,000.00	343,200.00	3,158,800.00	.64	2,021,632.00
3		5,477,800.00	377,520.00	5,100,280.00	.51	2,601,142.80
4		7,543,200.00	415,272.00	7,037,928.00	.41	2,885,550.48
5		9,698,400.00	456,799.00	9,241,601.00	.33	3,049,728.33
Total		28,017,400.00	1,904,791.00	26,022,609.00		11,745,253.61

Net Present Value 30%

Year	Investment Outlay	Gross Sales (Projected Income)	Gross Operational Expenses	Net Benefit	Discount Factor	Present Value
0	900,000.00					
1		1,472,720.00	312,000.00	1,160,720.00	0.8	928,576.00
2		2,999,320.00	343,200.00	2,656,120.00	.64	1,669,916.80
3		4,579,800.00	377,520.00	4,202,280.00	.51	2,143,162.80
4		6,214,160.00	415,272.00	5,798,888.00	.41	811,844.32
5		7,902,400.00	456,799.00	7,445,601.00	.33	2,457,048.33
Total		23,168,400.00	1,904,791.00	21,263,609.00		8,040,548.25

SOCIO-ECONOMIC BENEFIT

A. GSC Community

The offering of additional curricular offerings like BS Mechanical Engineering, BS Electrical Engineering, BS Food Technology, BIT major in Food Packaging, and BS Fisheries is Beneficial to the GSC Community in the sense that it will increase its enrolment plus the fact that its profile as a State College will elevate.

B. Community People

The proposed project will be beneficial to the secondary school graduating students and to their parents since they need do not to go to the city to enroll the course because it will be offered in Guimaras State College.

C. Industry

The curricular programs like BS Mechanical Engineering, BS Electrical Engineering, BS Food Technology, BIT major in Food Packaging, and BS Fisheries will produce graduates who are competent in their own fields and values-oriented; thus, providing the industry with employees who are contributors for sustainable development.

Conclusions

Based on the results of the study, the benefit cost ratio showed a positive result. This means that the offering of BS Mechanical Engineering, BS Electrical Engineering, BS Food Technology, BIT major in Food Packaging, and BS Fisheries is viable and feasible up to 20% share of enrollment.

Guimaras State College Quality Assurance Status: An Evaluation

Mona Liza H. Sollano

ABSTRACT This study aimed to determine the Guimaras State College Quality Assurance Status for 2015 as the basis for performance improvement. This study was conducted at Guimaras State College, Guimaras. A descriptive research design was used in this study utilizing 268 respondents. A research-made questionnaire was employed in gathering the data needed. It was found out that Guimaras State College through the office of Quality Assurance has conducted programs/activities towards quality assurance. The needed facilities and equipment are insufficient. The level of capability of the internal accreditors and internal auditors in performing their respective tasks is excellent while that of the accreditation task force is above average. The level of performance of the conducted programs/ activities towards quality assurance is above average. The institution in the conduct of the different quality assurance related programs and activities have met problems where the most are in the insufficiency of supplies, materials, equipment and limited budget particularly for food and least is on the minimum participation of employees in the conducted programs and activities.

Keywords: Quality Assurance status, performance improvement, Guimaras State College, descriptive method, Philippines

INTRODUCTION

Guimaras State College was established in 1968 as a vocational high school. It was converted into a State College only in June 2001. Being a very young State College, the school has so many challenges to face in order to deliver quality and excellent education among its constituents.

As this small State College envisions to be the center of excellence in education and green technology generation and has a commitment for continual improvement of the system for greater client satisfaction, several reforms in the institution were made and one of these is the change in the organizational structure where the Office of Quality Assurance has been created on October 1, 2013. This is to assure that there are mechanisms, procedures, and processes in place to ensure that the desired quality, however, defined and measured is delivered to the clients.

The institution in its quest for quality has submitted all programs to accreditation, ISO certification, and started the mechanism of the CHED's Institutional Sustainability Assessment. All of these tasks are given to the Office of Quality Assurance which looks into the sustainability of all these mechanisms as the institution develops the culture of quality, sustainability in the aspect of manpower's capability to do the procedures in the institutional level to meet the quality standards of the accrediting agencies.

Quality is the keyword in the higher education which is rapidly expanding where Guimaras State College despite its size and the meager budget has to adapt to these changes.The external assessment bodies have taken initiatives and interventions in upgrading their standards and instruments used in assessment to attune them to CHED's change of paradigm from the existing parameters of quality to the Outcomes- Based Approach. There are programs designed for the improvement of quality assurance in the institution. However, no basis yet as to what or how these programs will be implemented. Thus, this study will be conducted.

This study aimed to determine the Guimaras State College quality Assurance Status as the basis for performance improvement for the year 2015. Specifically, it sought to answer the following questions: 1. What are the programs/ activities towards quality assurance conducted at Guimaras State College; 2. What are the facilities and equipment used in the delivery of quality assurance; 3. What is the level of capability of the internal accreditors, internal auditors and accreditation task force in performing their respective tasks as perceived by the respondents; 4. What is the level of performance of the conducted programs/activities towards quality assurance; 5. What are the problems met in the conduct of the different quality assurance related programs and activities; 6. Is there a significant difference in the level of capability of the internal accreditors, internal auditors and accreditation task force in performing their respective tasks as perceived by the respondents; and 7. Is there a significant difference in the perception of the respondents of the level of performance of the conducted programs/activities towards quality assurance?

This study was anchored to "Quality Trilogy" of Joseph Juran. The quality trilogy is made up of quality planning, quality improvement, and quality control. If a quality improvement project is to be successful, then all quality improvement actions must be carefully planned out and controlled.Juran believed there were ten steps to quality improvement. These steps are: an awareness of the opportunities and needs for improvement must be created;

improvement goals must be determined; organization is required for reaching the goals; training needs to be provided; initialize projects; monitor progress; recognize performance; report on results; track achievement of improvements; repeat.(www.brighthubpm.com/methods-strategies/72443-theories-in-total-quality-management-tqm.)

The researcher conceptualized that the assessment of the Quality Assurance Status of Guimaras State College in terms of the level of capability of the internal accreditors, internal auditors, accreditation task force, level of performance of the conducted programs and activities towards quality assurance, facilities and equipment used and the problems met in the conduct programs and activities would be the basis of performance improvement of the Office of Quality Assurance.

As stated by Joseph Juran in his Quality Trilogy theory, which is made up of quality planning, quality improvement, and quality control. It further states that "if a quality improvement project is to be successful, then all quality improvement actions must be carefully planned out and controlled."

METHODOLOGY

The study was conducted to determine the Guimaras State College Quality Assurance status for the year 2015 as the basis for performance improvement of the different programs and activities conducted towards quality assurance. The descriptive research was used in this study. It is a design that is appropriate for studies which aim to find out what prevails in the present conditions or relationships, held opinions and beliefs, processes and effects, and developing trends (Ardales, 2001). The respondents of the study were the 268 composing of 17 administrators where the total population was taken and the 251 composed of faculty, staff, and students who were selected through random sampling by lottery using Slovin's formula

Table 1 presents the data for the distribution of the faculty, staff and student respondents.For the faculty, the respondents were the 41 of the total 111 faculties, for the staff, were the 27 out of the total of 73 and for the students, 184 were the respondents out of the 494 third year and fourth-year students at the main campus.

Table 1. Distribution of Respondents

Category	N_i	n_i	Percent %
Faculty	111	41	16.33
Staff	73	27	10.76
Students	494	183	72.91
Total	678	251	100

The independent variable in this study was the position of the respondents at Guimaras State College as administrators, faculty, staff, and students and the dependent variable was the Quality Assurance status measured in terms of level of capability of the internal accreditors, internal auditors, and accreditation task force, the level of performance of the conducted programs/activities towards quality assurance, the facilities, and equipment used and the problems met in the conduct of quality assurance related programs/activities. This study was conducted at Guimaras State College for the year 2015.

A researcher-made questionnaire was used in the study in determining the level of capability, level of performance and the problems met while the data for the facilities and equipment were taken from the actual inventory based on the standard requirement in the accreditation survey instrument and those which are actually used in the conduct of quality assurance related programs and activities. Upon retrieval of the accomplished questionnaires, the data were tallied, computer-processed using the Statistical Packages for the Social Science (SPSS) software, tabulated, analyzed, presented and interpreted using the following statistical tools.

Frequency Count. The frequency count was used for the distribution of respondents, facilities and equipment used and in the problems met during the conduct of quality assurance related programs and activities.

Percent. The percent was used in the distribution of respondents.

Ranking. The ranking was used in the problems met in the conduct of the different quality assurance related programs and activities.

Mean. The mean was used in the level of capability of the internal accreditors, internal auditors, an accreditation task force in performing their respective tasks and in the level of performance of the conducted programs/activities towards quality assurance.

Standard Deviation. The standard deviation which determines the dispersion of the means was used in the level of capability and level of performance.

One-Way ANOVA. The One-way ANOVA was used in determining the difference in the level of capability of the internal accreditors, internal auditors and accreditation task force and in the difference in the level of perception of faculty, staff and students on the level of performance of the conducted programs and activities.

Programs/Activities towards Quality Assurance Conducted at Guimaras State College

The results of the study reveal that programs/activities towards quality assurance conducted at GSC are classified into: Improvement of the Capability of internal accreditors, accreditation task force, internal quality auditors and auditees and Institutional Sustainability Assessment (ISA) team members; upgrading of Quality Assurance Facilities; Development of Quality Assurance Research-based Performance Evaluation; and Development of a Culture of Quality in GSC through accreditation, ISO audit and ISA.

For the improvement of the capability of internal accreditors, they are sent to the Accrediting Agency of Chartered Universities and Colleges in the Philippine (AACCUP) conferences, training/workshops and in actual survey visit in other State Universities and College (SUCs), the internal auditors to ISO trainings/seminars and conferences, CHED's ISA related programs/activities. In the institutional level, activities like Quality Assurance Awareness conducted to all personnel, training/workshop on the use of accreditation instrument, on the use of ISO 900:2008 standard by the internal quality auditors and orientation on ISA to the team members.

In the upgrading of the quality assurance facilities, the office of quality assurance has developed a proposal for funding on Quality Assurance Development Program where one of the areas of development is facilities to meet the required standard especially the Accreditation Center and requests for the procurement of other Quality Assurance facilities.

For the development of Quality Assurance research-based performance evaluation, the office of Quality Assurance is coming with a research study "Guimaras State College Quality Assurance Status: Basis for Performance Improvement where findings of the study will be the basis of recommendations for the improvement of the performance of Quality Assurance Services.

In the last category of programs/activities towards quality which is the development of the culture of quality assurance at GSC, the institution is submitting its programs to external accreditation by the Accrediting Agency and Chartered Colleges and Universities in the Philippines (AACCUP). However, to ensure the best preparation for the actual visit, in the institution an internal accreditation is conducted by the trained internal accreditors, the institution is ISO certified, which requires periodic conduct of internal audit which at GSC it is done once every semester and conducted by the trained internal auditors. For ISA, an orientation program is done to the ISA team members. The preliminary step through the filling-up of self-evaluation document has been done and submitted to CHED for scrutiny as well as their basis for granting the schedule for actual assessment.

Level of Capability of Internal Accreditors, Internal Auditors and Accreditation Task Force in Performing their Respective Tasks as Perceived by the Respondents

Table 2 shows the level of capability of internal accreditors in the conduct of internal accreditation. Data revealed that for the area of professionalism the internal accreditors are excellent with a mean of 4.36, ±0.631, for the knowledge/skills capability, the internal accreditors are excellent also with a mean of 4.50, ±0.672 and in the decorum capability, the mean is 4.36, interpreted as excellent and ±0.590. For the level of capability of internal accreditors, the overall mean is 4.40, ± 0.590 and interpreted as excellent.

This implies that the internal accreditors are excellent enough to conduct internal accreditation as outcomes of training them through their attendance in ACCUP conferences, trainings/workshops and acting as actual accreditors in other State Universities and Colleges thereby developing their accreditation skills and become excellent accreditors.

Table 2. Level of Capability of Internal Accreditors in the Conduct of Internal Accreditation

	Mean	Sd	Interpretation
Professionalism			
Discharge duties with integrity and competence	4.60	±0.516	Excellent
Perform duties intelligently	4.50	±0.527	Excellent
Do work responsibly	4.00	±0.816	Above Average
Are competent in handling assigned task	4.40	±0.699	Excellent
Complete work promptly and efficiently	4.30	±0.823	Excellent
Sub-Mean	4.36	±0.631	Excellent
	Mean	Sd	Interpretation
Knowledge/Skills			
Have appreciation of the current status of the work involved	4.50	±0.707	Excellent
Thorough understand the educational standards being used	4.50	±0.850	Excellent
Have sufficient background of the program/area under review	4.50	±0.707	Excellent
Are skilled in interviewing, in interpersonal communication	4.50	±0.527	Excellent
Write good reports	4.50	±0.527	Excellent
Sub-Mean	4.50	±0.583	Excellent
Decorum			
Maintain cordial relationship with fellow evaluators and the constituents of the program/area under evaluation	4.40	±0.516	Excellent
Tactful using appropriate language in dealing with anyone	4.30	±0.823	Excellent
Manage time very well	4.40	±0.699	Excellent
Maintain good grooming and proper decorum	4.30	±0.823	Excellent
Discreet in handling sensitive matters	4.40	±0.699	Excellent
Sub-Mean	4.36	±0.672	Excellent
Overall Mean	4.40	±0.590	Excellent

Legend: 4.20 – 5:00 Excellent; 3.40 – 4.19 Above Average; 2.60 – 3.39 Average; 1.80 – 2.59 Below Average; 1.00 – 1.79 Poor

Table 3 shows the level of capability of internal auditors in the conduct of the internal audit. Data show that for the areas of professionalism, the mean is 4.36, ±0.631 interpreted as excellent, in the knowledge/skills, the level of capability of internal auditors is excellent as shown in the mean 4.38, ±0.640 and for decorum mean is 4.27, is ±0.640 interpreted as excellent. The overall mean for the level of capability of internal auditors is 4.32, ±0.565 interpreted as excellent. This means that the internal auditors are excellent in the conduct internal audit as they are well equipped with necessary knowledge and skills through the training/workshops extended to them to be capable in the job assigned to them.

Table 3. Level of Capability of Internal Auditors in the Conduct of Internal Auditor

	Mean	Sd	Interpretation
Professionalism			
Discharge duties with integrity and competence	4.60	±0.516	Excellent
Perform duties intelligently	4.50	±0.527	Excellent
Do work responsibly	4.00	±0.816	Excellent
Are competent in handling assigned task	4.40	±0.699	Excellent
Complete work promptly and efficiently	4.30	±0.823	Excellent
Sub-Mean	4.36	±0.631	Excellent
Knowledge/Skills			
Have appreciation of the current status of the work involved	4.45	±0.688	Excellent
Thorough understand the educational standards being used	4.36	±0.809	Excellent
Have sufficient background of the program/area under review	4.36	±0.674	Excellent
Are skilled in interviewing, in interpersonal communication	4.36	±0.674	Excellent
Write good reports	4.36	±0.505	Excellent
Sub-Mean	4.38	±0.569	Excellent
Decorum			
Maintain cordial relationship with fellow evaluators and the constituents of the program/area under evaluation	4.36	±0.674	Excellent
Tactful using appropriate language in dealing with anyone	4.27	±0.786	Excellent
Manage time very well	3.91	±0.944	Excellent
Maintain good grooming and proper decorum	4.55	±0.688	Excellent
Discreet in handling sensitive matters	4.27	±0.647	Excellent
Sub-Mean	4.27	±0.640	Excellent

	Mean	Sd	Interpretation
Overall Mean	4.32	±0.565	Excellent

Legend: 4.20 – 5:00 Excellent; 3.40 – 4.19 Above Average; 2.60 – 3.39 Average;1.80 – 2.59 Below Average; 1.00 – 1.79 Poor

Table 4 shows the level of capability of the accreditations task force in the preparation of documents for the accreditation survey visit. Data revealed that for the category of professionalism, the mean is 4.05, ±0.743 interpreted as above average, in knowledge/skills capability is above average as shown in the mean of 4.07, ± I0.743 interpreted as above average, in knowledge/skills capability is above average as shown in the mean of 4.07, ±0.801, and for decorum, the level of capability is above average, with a mean of 4.16, ±0.747. The overall mean is 4.07, ±0.754 which is interpreted as above average.

The results imply that the development of the capability of the accreditation task force is difficult to sustain due to the changing in the member composition particularly the casual faculty members who lack trainings about accreditation but are in the task force.

Table 4. Level of Capability of Accreditation Task Force in doing Task during Accreditation

	Mean	Sd	Interpretation
Professionalism			
Discharge duties with integrity and competence	4.18	±0.751	Above Average
Perform duties intelligently	4.09	±0.831	Above Average
Do work responsibly	4.27	±0.647	Excellent
Are competent in handling assigned task	3.91	±0.831	Above Average
Complete work promptly and efficiently	3.82	±0.982	Above Average
Sub-Mean	4.05	±0.743	Above Average
Knowledge/Skills			
Have appreciation of the current status of the work involved	4.09	±0.831	Above Average
Thoeough understand the educational standards being used	4.18	±0.874	Above Average
Have sufficient background of the program/area under review	4.00	±0.894	Above Average
Are skilled in interviewing, in interpersonal communication	4.00	±0.894	Above Average
Write good reports	4.09	±0.831	Above Average
Sub-Mean	4.07	±0.801	Above Average
Decorum			
Maintain cordial relationship with fellow evaluators and the constituents of the program/area under evaluation	4.27	±0.786	Excellent
Tactful using appeopriate language in dealing with anyone	4.27	±0.786	Excellent
Manage time very well	3.82	±1.079	Above Average
Maintain good grooming and proper decorum	4.45	±0.688	Excellent
Discreet in handling sensitive matters	4.00	±0.775	Above Average
Sub- Mean	4.16	±0.747	Above Average
Overall Mean	4.09	±0.754	Above Average

Legend: 4.20 – 5:00 Excellent; 3.40 – 4.19 Above Average; 2.60 – 3.39 Average; 1.80 – 2.59 Below Average; 1.00 – 1.79 Poor

Level of Performance of the Conducted Programs/Activities Towards Quality Assurance

Table 5 shows the level of performance of the conducted programs/activities towards quality assurance like accreditation, ISO audit, awareness/orientation, trainings/workshops. Results revealed that for the content of programs/ activities the mean is 4.36, ± 0.554 which is interpreted as excellent, in management the level of performance is above average with the mean of 4.02 and ± 0.686. For the venue, where the programs/activities are held, the level of performance is above average, with mean 4.08 and ± 0.682. As to the aspect of facilities/equipment, the mean is 4.15, ± 0.708 which is interpreted as above average and for the foods served, the performance is above average with mean 4.15, ± 0.567. The overall mean for the level of performance of the conducted programs/activities towards quality assurance is above average.

This implies that improvement in the aspect of management, venue, facilities/equipment and foods served is to be considered in the conduct of quality assurance programs/activities.

Table 5: Level of Performance of the Conducted Programs/Activities towards Quality Assurance

	Mean	Sd	Interpretation
Content			
Consistency with the institution's vision, mission and quality policy	4.45	±0.640	Excellent
Relevance, significance to quality assurance	4.33	±0.629	Excellent
Achievement of objectives	4.29	±0.638	Excellent
Sub-Mean	4.36	±0.554	Excellent
Management			
Time Management	3.90	±0.818	Above Average
Organization of the program/activity	4.15	±0.764	Above Average
Involvement of participants	4.02	±0.766	Above Average
Sub-Total	4.02	±0.686	Above Average
Mean			
Appropriateness	4.19	±0.766	Above Average
Convenience day and time	3.98	±0.716	Above Average
Arrangement of fixture	4.06	±0.780	Above Average
Sub- Mean	4.08	±0.682	Above Average
Facilities/Equipment			
Adequacy	4.11	±0.737	Above Average
Effectiveness	4.12	±0.776	Above Average
Usefulness	4.21	±0.757	Excellent
Sub- Mean	4.15	±0.708	Above Average
Foods Served (If applicable)			
Quality	4.12	±0.732	Above Average
Sufficiency	4.11	±0.712	Above Average
Cleanliness	4.18	±0.687	Above Average
Sub- Mean	4.14	±0.636	Above Average
Overall Mean	4.15	±0.567	Above Average

Legend: 4.20 – 5:00 Excellent; 3.40 – 4.19 Above Average; 2.60 – 3.39 Average; 1.80 – 2.59 Below Average; 1.00 – 1.79 Poor

Table 6 shows the significant difference in the level of capability of internal accreditors, internal auditors and accreditation task force. Results revealed a significant difference in the level of capability of internal accreditors, internal auditors and accreditation task force in performing their respective tasks as perceived by the respondents as shown in F= 13.93, P = .000. The probability value is less than .05, hence significant. This means that the level of capability of the internal accreditors, internal auditors and accreditation task force varies.

This implies that internal accreditors and internal auditors are more capable than the accreditation task force for the reason that their composition is not varied unlike that of the accreditation task force, therefore, the capability development is sustained

Table 6. Difference in the Perception of Respondents on the Level of Capability of Internal Auditors, Internal Accreditors, and Accreditation Task Force

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.797	2	0.398	13.93*	.000
Within Groups	1.201	42	0.029		
Total	1.998	44			

**p<.05 level of significance*

Table 7 shows a no significant difference in the perception of the respondents in the level of performance of the conducted program/activities towards quality assurance. This is supported with F = 1.701 and p = .186 which is greater than .05. it implies that the perception of faculty, staff, and students on the level of performance of the programs/activities conducted towards quality assurance is the same. This means that the faculty, staff, and students at the institution are aware of what are the quality assurance programs and activities and how these are conducted.

Table 7. The difference of the Level of Performance of the conducted programs/activities toward quality assurance as perceived by the respondents

	Sum of Squares	Df	Mean Square	f	Sig.
Between Groups	1.083	2	.542	1.701	.186
Within Groups	50.937	160	.318		
Total	52.020	162			

**p<.05 level of significance*

CONCLUSIONS

Based on the findings revealed in the study, the following conclusions were drawn:Guimaras State College through the Office of Quality Assurance has conducted programs/activities towards quality assurance; the facilities and equipment necessary in delivering quality assurance need to be improved to meet the standard requirement; the level of capability of the internal accreditors and internal auditors in performing their respective tasks is excellent while that of the accreditation task force is above average; the level of performance of the conducted programs/ activities towards quality assurance is above average; Guimaras State College in the conduct of the different quality assurance related programs and activities have meet problems where most are in the insufficiency supplies, materials, facilities and equipment and limited budget particularly for food and the least is on the minimum participation of employees in the conducted programs and activities; and there is a significant difference in the level of capability of the internal accreditation, internal auditors and accreditation task force.

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GSC-TAREC Partnership: An Initiative towards Community Development and Sustainability

Nenita G. Morada

INTRODUCTION

Guimaras State College (GSC) being the center of Higher Education in the Province of Guimaras has a role in making a difference in the lives of the people living within the portals of the community. As a center for higher education, GSC has the responsibility of helping the people in the community to become productive citizens in the country.

TRANS-ASIA Renewable Energy Corporation (TAREC) currently implemented the construction of the 54MW San Lorenzo Wind Project, the first of its kind in the Visayas Region. The wind project with an area covering four barangays of San Lorenzo is expected to bring not only a sustainable source of energy but also new opportunities for the community and people of Guimaras.

There are many prospective ways the wind farm help the community. First, the wind farm increases the Local Government Funds that may be used for services and development of its locality. A portion of the income from power generation is allotted for the province and the host communities as stated under Renewable Energy Act of 2008 and EPIRA Law. Second, the wind farm is expected to boost Local Tourism and stimulate the local economy by creating livelihood opportunities not only in San Lorenzo but in the entire province. Lastly, the construction of wind farm generated local jobs through contracting of manpower. Individuals from the community were hired if they are equipped with the right skills and qualified for the jobs.

Because of the positive impact brought by the wind farm, TAREC harnessed these opportunities by providing programs relevant to their lives and realities. Hence, they collaborated/tapped Guimaras State College (GSC) Extension Services for a partnership

As part of the continuing commitment to make life better for partner communities, Guimaras State College (GSC) and TRANS ASIA Renewable Energy Corporation (TAREC) who are now partners for development, conducted the program, "GSC-TAREC Partnership An Initiative Towards Community Development and Sustainability".

The GSC-TAREC Partnership used the Participatory Resource Appraisal (PRA) approach to enable local people to share, enhance and analyze their knowledge of life and conditions, and to plan, act, monitor and evaluate. Its extensive and growing menu of methods includes designing visuals such as mapping and diagramming with the community and its stakeholders. Practical applications of PRA have proliferated, especially in resources management, agriculture, health and nutrition, poverty alleviation and livelihood program and urban contexts. PRA is deemed to be a powerful tool in developing communities and helping them help their selves.

The Partnership aimed to provide opportunities for local people in the community to participate in the planning process by sharing their culture and identify their own needs. Specifically, the partnership intends to achieve the following goals:

1. To strengthen community organizations and self-management of the various communities.

The basic goal of the partnership and the PRA is to help the community address their own opportunities by encouraging every sector of the community to participate in the data gathering and planning out their projects. A sense of accountability is also promoted during PRA and the community is viewed as partners rather than beneficiaries. This set-up can boost their confidence and strengthen their organization.

2. To support people's initiatives towards community development and sustainability.

PRA gives the community a sense of ownership by integrating their own ideas and actions. Community members have the tendency to take care of what they built rather than what they received. Ownership ensures the sustainability of future projects. The processes involved are also empowering the community members because it promotes awareness, enhances observation skills and develops critical thinking leading to the development of their community

3. To facilitate the social integration of the company to the communities.

The PRA approach can provide a venue for the company and Guimaras State College to know the plight, success, history and everyday life of the community. Through PRA, the partners (GSC & TAREC) would know the habits, beliefs, and culture of the community that may help them during the implementation proper. The workshop can also help develop trust between the parties knowing that both are willing to listen and collaborate.

4. To provide livelihood skills training to the beneficiaries to prepare them for more challenges and opportunities the wind project could offer.

By providing skills training, the beneficiaries would be able to find other sources of income that could augment their daily needs. In this way, they will be equipped with skills they could utilize to welcome any opportunities and privileges that may arise in the implementation of this wind project.

5. To increase the income of the beneficiaries at least 10-20% per month.

This is to provide an additional source of income especially for affected families of the wind project so that they could still cope with the changes and the real situation they are facing

PROJECT DESCRIPTION: (Situation before the conduct of Intervention)

When the Wind project was implemented, some land areas and properties of the four barangays namely Cabano, Cabungahan, M Chavez and Suclaran, all in San Lorenzo (which were beneficiaries of the installation of the project) were paid and purchased by TRANS ASIA in big amounts. Because of this, some farmers had to look for other alternative sources of income for their living. Some of them were hired and some engage in other businesses. But of course, TRANS ASIA did not just ignore them but facilitated what they need, the reason why TAREC collaborated with GSC. The partnership is focused on empowering the people by providing skills training, livelihood projects after knowing the real need of the communities. So the Participatory Resource Appraisal (PRA) approach which uses tools like resource map, reasonability diagram, Historical map, and stream analysis were conducted after the workshop and were presented to each barangays; with the following participants and results.

Participants:

1. Barangay Captains
2. 8 Barangay councilmen/women
3. 2-3 representatives from the youth sector
4. 2-3 representatives from the women sector
5. 2-3 representatives from the elderly sector
6. 2-3 representatives from the farmers' sector
7. 2-3 representatives from the fisher folks sector
8. 20-25 local leaders from each barangays

Analysis:

1. Cabano

The strongest point for Cabano is its agricultural system. Compared to other barangays, Cabano is capable of aligning its tourism projects to the agritourism plans of the province of Guimaras. Organic rice and products are sought-after products in the tourism market, and the presence of water irrigation can make it possible for Cabano to implement the farming system. The barangay can also make a partnership with Guimaras State College in their community extension project to learn new agricultural technologies as well as assist the students in their learning process. Aside from the Lover's Mountain of M Chavez, Cabano also offers a good location for sightseeing of the TAREC's wind turbine generators in all four barangays.

2. Cabungahan

Cabungahann is rich in natural raw materials that can be developed into handicrafts and tourism-related products. Likewise, to prepare for the influx of tourist in the area, Cabungahan is planning to complement it by showcasing their culture and history, particularly the significance of betel nut in their community. This is one of the priority areas of the Tourism Committee of the barangay. The challenge for Cabungahan is to create something unique and different to attract the attention of tourist to their barangay.

3. M Chavez

Among the four barangays, M Chavez is one of the more suitable spots for tourism center and viewing area. The Lover's Mountain, the highest point of M Chavez which houses one of the turbines, offers the best viewing spot for all the wind turbines of San Lorenzo. It is also situated at the center of the four barangays and has a quick access for all areas. Coincidentally, the municipal market is also located in the barangay so the issue for infrastructure may not be a problem. Based on the PRA the community is interested to explore new opportunities through alternative livelihood.

4. Suclaran

Like the four other barangays, Suclaran is an agricultural community with rice farming, fishing and salt industry being the top industries existing at the barangay. The farmers in the barangay practices rain-fed agriculture and harvest rice in two cropping seasons. For the salt industry, Suclaran is one of the better producers in San Lorenzo producing finer salt than most barangays. And the most progressive in terms of creating opportunities for its constituents.

In answering the objectives the following activities were conducted:

1. After the presentation of the results, the barangays were asked by GSC and TAREC what they really want to do to make them more productive. They agreed to have a training which would prepare them once the tourism industry would improve.
2. Planning of activities for the training was conducted and each barangays sent their selected participants.
3. The training on Photographic Silk Screen Printing was conducted wherein TAREC provided all the materials needed for the training.
4. The training on Hospitality skills like table skirting, table napkin folding, table setting were also conducted with financial assistance from TAREC for the materials for 4 barangays.
5. The training on cooking and baking were also conducted with a focus on mango products for four barangays. Materials and equipment were also provided.
6. Workshop on Financial management and simple bookkeeping was also conducted for the participants of the 4 barangays.
7. A skills training on Macrame weaving that is on making bags, wallets and belts were also conducted but for Suclaran only, since they were the first group to request, others will just follow.

Results of the interventions

After training, the participants were asked to prepare their own action plan and were provided with all the materials they need with a startup capital to ensure they have really utilized what they have learned. In cooking and baking, Each barangay was provided with oven, utensils, ingredients and a start-up capital too. A monitoring and evaluation are being done to know the progress of the project, and to know who among them have really succeeded. As a result, we have learned that Cabano excels in Photographic silk screen printing for their products are displayed in the pasalubong center and during their Harvest festival. Each participantis wearing their printed T-shirts. During one of the interviews, it came out that some beneficiaries of the training on hospitality skills are being hired during weddings, fiestas or if there are special occasions to do the skirting & table setting.

In cooking and baking, since each barangays were provided with oven, utensils, ingredients and a start-up capital, each group regrouped themselves and take a turn on their cooking and baking. They are doing their activities at their barangay hall where electric power is being provided by the barangay free of charge. They are selling their products in schools, market, the workplace of the TAREC and earning at least Php 300.00 or more per day and every week they divide equally among themselves their profits with consideration to those who rendered more time than the rest. Their Macrame products are being sold also in any offices in the province, to their friends and relatives and by guests who visit the wind turbines. More trainings will still be conducted.

Lessons Learned:

1. Once the needs are really felt by the people/beneficiaries and the solution also emanates from them they would really strive to achieve it.
2. Tapping the right people, agencies or institutions at the right time could make some things possible.
3. If the stakeholders are involved in the planning process and they really understand their roles on it, all you got to do is ask and they would give.
4. Continuous monitoring and evaluation are very essential in every projects/programs being undertaken to ensure the sustainability of the program.

Recommendations:

1. The use of the Participatory Resource Appraisal tool in identifying problems, needs, and resources of the community is very useful in the conduct of any programs/activities in a community.
2. The activities to be conducted must be in line with the curriculum/program of the college so that it would be useful to the community and the institution.
3. The target of the program must not focus on the number of accomplishments but on the impact and services it could give to the clienteles/beneficiaries of the program.
4. Follow up and feedback are important to know how and why the project succeeded or failed and learn from it.

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The Impact of Mangrove Rehabilitation Project: A Community-Based Conservation

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ABSTRACT In 2012, The Philippine National Aquasilviculture Project (PNAP) was forged and formally launched by the Department of Agriculture - Bureau of Fisheries and Aquatic Resources (DA-BFAR). To implement the PNAP, a Memorandum of Agreement (MOA) was executed by and between BFAR and the Commission on Higher Education (CHED) on December 16, 2011. The study was conducted to assess the impact of mangrove rehabilitation project implemented in the Municipality of Buenavista, Guimaras covering the seven (7) barangays with a total of 177 beneficiaries as participants. The collaborative mangrove rehabilitation project of Guimaras State College (GSC) and Bureau of Fisheries and Aquatic Resources (BFAR) accomplished about 430,695 planted mangrove propagules at 96.8 hectares area with 85.17% survival rate. The contribution of the projects to fisher folks to ease their financial woes may be represented by an appreciation of a beneficiary of the amount he/she signed in payroll. The Local Government Officials and the beneficiaries have been appreciating the BFAR-PNAP implementation; for them, the projects can be trusted to help their constituents. The projects have never been reneged ever since to pay all direct beneficiaries. The project commensurate a positive impact in terms of Economic, Environmental and Social aspects and the beneficiaries have a high satisfaction on the Mangrove Rehabilitation Project implemented by GSC and BFAR.

Keywords: PNAP, Mangrove Rehabilitation

INTRODUCTION

Mangrove forests are composed of several species having great economic potentialities, which inspire people to exploit the mangrove forests in an unplanned manner to meet their needs (Panda, Mardaraj, Subudhi, and Sahu, 2013). These anthropogenic and natural processes pressures call for immediate conservation of the mangrove forests – the need of the hour. Realizing these, the Philippine Government through the Bureau of Fisheries and Aquatic Resources (BFAR) now emphasizes over the conservation of mangrove vegetation in almost all regions and provinces of the country. The aims of the community-based mangrove conservation project under the Philippine National Aquasilviculture Program (PNAP) are the restoration, rehabilitation, and conservation of the unique and priceless mangrove ecosystems of the coastal regions in the Philippines through large-scale mangrove plantations. However, the question on the attitude of the participating peoples' organization (PO) comes into account towards sustaining the project at the termination phase after 5 years of its implementation. While most terminal reports highlight the socio-economic and ecological dimensions of the project, this study attempts to emphasize the community-based mangrove conservation.

In 2012, The Philippine National Aquasilviculture Project (PNAP) was forged and formally launched by the Department of Agriculture - Bureau of Fisheries and Aquatic Resources (DA-BFAR). To implement the PNAP, a Memorandum of Agreement (MOA) was executed by and between BFAR and the Commission on Higher Education (CHED) on December 16, 2011. The program concept is primarily mangrove resource rehabilitation and livelihood provision to help address climate change, food security, and poverty among municipal or artisanal coastal fisherfolk.

The project was started last July 2013 and Guimaras State College as one of the granted School to implement the program.

The aim of this study is to assess the status and development of the Mangrove Rehabilitation program implemented by Guimaras State College. Specifically, this study will:

1. Determine the number of beneficiaries in the mangrove rehabilitation project implemented in the Municipality of Buenavista.
2. Determine the cost of the project implemented in the Municipality of Buenavista when grouped according to barangay.
3. Determine the status and development of the project implemented in the Municipality of Buenavista when grouped according to barangay.
4. Determine the impact of the mangrove rehabilitation project.
5. Determine the Satisfaction of beneficiaries

METHODOLOGY

A Descriptive Research design will be used to elicit information about the "THE IMPACT OF MANGROVE REHABILITATION PROJECT: A COMMUNITY-BASED CONSERVATION" it will focus on the historical data of the project, impact assessment, and beneficiary's satisfaction.

According to Librero (1996), a survey research design allows to study "natural occurring phenomena." Furthermore, a researcher collects data from a part of the population to assess the interrelationship of the variables in his/her study. Survey research is the most efficient method in gathering data that will be used to describe a very large population (Babbie, 1986).

The GSC Mangrove Rehabilitation Project was implemented in the Municipality of Buenavista, Province of Guimaras covering the different barangays namely: Umilig, Tanag, Avila, San Miguel, Getulio, Bajao and Tanag.

For this study, surveys will be done from selected purposeful sampled sub-units. The respondents represented by all PO members was served as participants in whom they have direct engagement with the mangrove rehabilitation project implemented in the Municipality of Buenavista, Guimaras.

Focus group discussion and survey instrument were facilitated to gather data from the respondents concerning the benefits gained from the project.To answer the stated objectives, descriptive statistics specifically frequency and percentage distribution were used for objectives 1, 2 and 3, while in objective 4 and 5, mean was used.

RESULTS AND DISCUSSIONS

The collaborative mangrove rehabilitation project of Guimaras State College and Bureau of Fisheries and Aquatic Resources accomplished about 85.17% survival rate of mangrove plantation with 177 total beneficiaries in seven (7) Barangay's of Municipality of Buenavista, Guimaras.

Coastal habitat rehabilitation targeted the planting of 430,695 mangrove propagules in Municipality of Buenavista, Guimaras. Of that, 250,100 propagules were planted in Brgy Umilig; 47,831 in Brgy Tang; 26,665 in Brgy Avila; 24,999 in Brgy San Miguel; 51,400 in Brgy Getulio; 12,500 in Brgy Taminla and 17,200 in Brgy Bacjao. A total of Php 2,674,154.00 was paid to 177 total fisherfolk and farmer beneficiaries. The phase-1 and phase 2 targeted to plant mangroves in a land area of 96.8 hectares. The project was on-going, and the implementer and the funding agency continues on monitoring and evaluation to ensure the success of this project which was really benefits community.

Table 1. The Distribution of Beneficiaries, Number of Propagules and Cost of payments

Barangay	Beneficiaries	Area (Ha.)	Propagules (Pcs.)	Payments (PhP)
Umilig	61	55.12	250,100	1,633,642.00
Tanag	19	11.9	47,831	467,969.00
Avila	26	8	26,665	178,947.00
San Miguel	7	6	24,999	101,500.00
Getulio	29	10.28	51,400	115,000.00
Taminla	20	2.5	12,500	62,500
Bacjao	15	3	17,200	114,596.00
Grand Total	177	96.8	430,695	2,674,154.00

The impact of the Mangrove Rehabilitation project was evaluated by 177 total number of beneficiaries. As shown in the table above, beneficiaries strongly agreed that the project has Economic, Environmental and Social Impacts. On the economic impact, beneficiaries strongly agreed that, the project augmented the income of marginalized fisher folks, enhanced coastal fisheries livelihood by supporting fish habitat, paved the way for more funding or financial assistance from other agencies, opened opportunities to other projects like eco-park, eco-tourism and internalized by the whole family; all joined in planting and keeping the projects. While on Environmental impact, they believed, the greatest benefit from mangroves is not the tree but fish, contributing to carbon sequestration, ensured coastal integrity: mangroves protect against soil erosion, encourages accretion, windbreak, a buffer for big waves, supported the enhancement of marine ecosystem and biodiversity, mangrove planting is a rightful atonement to the mistake committed in the past - to rehabilitate neglected, abandoned, and unproductive fishponds under FLAs and recognizes for protection and management of coastal ecosystem. Moreover, the social impacts of this project were; the project was gender-sensitive: no inhibition based on gender or sex; increased the sense of community belongingness, social integration, camaraderie; because organized, the beneficiaries have bargaining power and voice in the LGUs decisions and policy-making; empowerment of the POs to chart their own course; increased community awareness on coastal resource rehabilitation and conservation; enhanced the beneficiaries' knowledge about coastal environmental

laws and mangrove biology and because of their involvement and participation in coastal rehabilitation.

One modality by which the BFAR supports to this nationally-initiated mangrove CBC action is to provide a modest funding support to complement the conservation and the research agenda of the implementers and the communities. In addition, training workshops were provided.

Mangrove Forests contribute significantly to the livelihoods of forest adjacent communities (Musyoki, Mugwe, Mutundu, and Muchiri, 2013). Scientific reports in 2011 detailed the destruction of the world's mangrove forests. The destruction went up to four times faster than the world's land-based forests and one fifth (around 35,500 square kilometers) of the world's mangroves have been lost since 1980 (Baral and Stern, 2011). The rapid growth in population, industrialization, and urbanization contributed primarily to the diminished mangrove forests. The global existing forests disappeared at an annual rate of over 2% (Motamedi, Hashim, Zakaria, Ki-Il Song, and Sofawi, 2014).

Table 2.The impact of the mangrove rehabilitation project.

ECONOMIC	Mean	Interpretation
Augmented the income of marginalized fisher folks.	4.56	Strongly Agree
Enhanced coastal fisheries livelihood by supporting fish habitat.	4.53	Strongly Agree
The projects paved the way for more funding or financial assistance from other agencies.	4.69	Strongly Agree
The projects opened opportunities to other projects like eco-park, eco-tourism.	4.53	Strongly Agree
Internalized by the whole family; all joined in planting and keeping the projects.	4.70	Strongly Agree
ENVIRONMENTAL	**Mean**	**Interpretation**
The greatest benefit from mangroves is not tree but fish.	4.66	Strongly Agree
Contributed to carbon sequestration.	4.53	Strongly Agree
Ensured coastal integrity: mangroves protect against soil erosion, encourages accretion, windbreak, a buffer for big waves.	4.37	Strongly Agree
Supported the enhancement of marine ecosystem and biodiversity.	4.43	Strongly Agree
Mangrove planting is a rightful atonement to the mistake committed in the past - to rehabilitate neglected, abandoned, and unproductive fishponds under FLAs.	4.49	Strongly Agree
Recognized contribution of POs as volunteers for protection and management of coastal ecosystem.	4.23	Strongly Agree
SOCIAL	**Mean**	**Interpretation**
The project was gender-sensitive: no inhibition based on gender or sex.	4.50	Strongly Agree
Increased the sense of community belongingness, social integration, camaraderie.	4.29	Strongly Agree
Because organized, the beneficiaries have bargaining power and voice in the LGUs decisions and policy making.	4.50	Strongly Agree
Empowerment of the POs to chart their own course.	4.24	Strongly Agree
Increased community awareness on coastal resource rehabilitation and conservation.	4.44	Strongly Agree
Enhanced the beneficiaries' knowledge about coastal environmental laws and mangrove biology.	4.34	Strongly Agree
Because of their involvement and participation in coastal rehabilitation.	4.37	Strongly Agree

The 177 total beneficiaries rated "Best (Napakahusay)" in all aspects of program implementation in which the harmonious relation of implementers with beneficiaries gained the highest rating, followed by project responsiveness to the needs of beneficiaries, timely release of funding for the project and project contribution to the improvement of living while transparency in all aspects of project implementation rated the lowest. The five (5) aspects of program implementation were important factors of service delivery to the community and the response of beneficiaries were a heart touching to note that they really appreciated the efforts made by Guimaras State College as an accountable implementer.

Table 3. Beneficiaries Satisfaction

Statements	Mean	Interpretation
1. Project responsiveness to the needs of beneficiaries	4.68	Best (napakahusay)
2. Timely release of funding for the project	4.67	Best (napakahusay)
3. Harmonious relation of implementers with beneficiaries	4.73	Best (napakahusay)
4. Project contribution to the improvement of living	4.65	Best (napakahusay)
5. Transparency in all aspects of project implementation	4.51	Best (napakahusay)
Total	4.65	Best (napakahusay)

Note: 177 total respondents participated in the surve

CONCLUSIONS

The collaborative mangrove rehabilitation project of Guimaras State College and Bureau of Fisheries and Aquatic Resources accomplished about 430,695 planted mangrove propagules at 96.8 hectares area with 85.17% survival rate with 177 total beneficiaries in seven (7) Barangay's of the Municipality of Buenavista, Guimaras.

The contribution of the projects to fisherfolks to ease their financial woes may be represented by an appreciation of a beneficiary of the amount he/she signed in payroll. The Local Government Officials and the beneficiaries have been appreciating the BFAR-PNAP implementation; for them, the projects can be trusted to help their constituents. The projects have never been reneged ever since to pay all direct beneficiaries.The project commensurate a positive impact in terms of Economic, Environmental and Social aspects. The beneficiaries have a high satisfaction with the Mangrove Rehabilitation Project implemented by Guimaras State College.

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Anthelmintic Efficacy of Jackfruit (Artocarpus Heterophyllus) and Ampalaya (Momordica Charantia) Leaves Decoction Against Intestinal Roundworms of Goat

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ABSTRACT The study on "Anthelmintic Efficacy of Jackfruit(Artocarpus Heterophyllus) and Ampalaya (Momordica Charantia) leaves decoction Against Intestinal Roundworms of Goat" was conducted on February 07, 2016 to March 17, 2016 in the Municipality of San Lorenzo, Province of Guimaras with the following objectives: (1) To determine different parasites present and the percentage of roundworms in the fecal samples of goat.(2)To evaluate the anthelmintic efficacy of jackfruit and ampalaya leaves decoction against intestinal roundworms of goat. (3)To determine the differences on the levels of decoctions in the reduction of intestinal parasites. (4) To determine the mean effective dose of the different concentrations against intestinal roundworms in goats. Based on the analysis of variance there was no significant effect of the different treatments to the reduction of the eggs of the nematodes after the administration. This implies that different concentrations of jackfruit, ampalaya and combined decoctions have similar effect in the reduction of eggs per gram of the fecal samples of goats. The effective dose of jackfruit leaves decoction is 64.29 using probit analysis. Therefore lethality of the dose can be reached using 64.29 concentration jackfruit decoction. The effective dose of ampalaya leaves decoction is 20.27 using probit analysis. This implies that only 20.27 concentration of ampalaya leaves is needed to attain the lethality of the herbal dewormer preparation. The effective dose of using different combinations of jackfruit and ampalaya decoctions can be attained in 60:40 ratio of concentration. This implies that the lethality of the dose can be attained using 60:40 concentration of jackfruit and ampalaya combinations of decoctions. Analysis of Variance showed significant effect of the different concentrations of jackfruit and ampalaya to the larval development of intestinal nematodes of goats. The concentration of both jackfruit and ampalaya decoctions will increase, number of larval that will be killed in the culture will increase also.

Keywords: Anthelmintic, Jackfruit, Ampalaya Decoction, Intestinal Roundworms, and Goat.

INTRODUCTION

Background of the Study

Goats are considered as a rural asset. The contributions of goats to rural farming communities are well recognized. Goats have the potential for increased production in a relatively short period of time. They require little capital investments, can utilize local feed resources, and provide opportunities for women and children to participate in building a sustainable livestock enterprise while ensuring food security for the family.

Comparative baseline data on goats' technical performance indicate that major problems in goat production are high mortality rates, due to parasitism and diseases, slow growth of kids resulting to goats getting smaller, which result in marketing problems. (Nayga et.al.,2010). Chemical dewormers are currently being used to decrease these effects but there have been increasing reports of anthelmintic resistance to these chemical dewormers in Southeast Asia particularly in the Philippines, where studies in different regions e.g. Luzon, Visayas, and Mindanao confirmed that resistance of different roundworms to different chemical dewormers among sheep and goats farms with possible widespread distribution (Venturina, 2003).

Jackfruit (Artocarpus heterophyllus L.) leaves are being used as alternative anthelminthic in ruminants. However, the anthelmintic efficacy has not been extensively evaluated against nematodes in goats. (Hurtada, Divina and Ducusin, UPLB, 2012). Bitter Melon is a Tropical vegetable, is a common food in Indian cuisine and has been used extensively in folk medicine as a remedy for diabetes. The fruit juice and/or a leaf tea is employed for the treatments of diabetes, malaria, colic, sores and wounds, infections, worms, and parasites, as an emmenagogue, and for measles, hepatitis, and fevers (Kumar et.al., 2010). Thus, this study was conducted to develop an alternative of chemical dewormers using jackfruit and ampalaya decoctions. This is helpful in controlling intestinal roundworms of goat without developing anthelmintic resistance and at a lesser expense.

Objectives of the Study

1. To determine different parasites present and the percentage of roundworms in the fecal samples of the goat.
2. To evaluate the anthelmintic efficacy of jackfruit and ampalaya leaves decoction against intestinal roundworms of the goat.
3. To determine the differences in the levels of decoctions in the reduction of intestinal parasites.
4. To determine the mean effective dose of the different concentrations against intestinal roundworms in goats.

MATERIALS AND METHODS

STUDY 1: "IN VIVO ADMINISTRATION OF JACKFRUIT AND AMPALAYA LEAVES DECOCTION AGAINST INTESTINAL ROUNDWORMS OF GOAT."

Materials

The following are the materials were used in the conduct of the study. The following are as follows: ice candy wrapper, surgical gloves, ice pop stick, tissue paper, rubbing alcohol, ice, ice box, ink marker, bond paper, and notebook were used during the collection of fecal samples.

Plastic bags, beakers or plastic containers, tea strainer(preferably nylon) or double layer cheesecloth, measuring cylinder or other container graded by volume, fork, tongue blades or other type of stirring rod, test tube, test tube rack or a stand, microscope, slides, coverslips, balance or teaspoon and floatation fluid were used in conducting fecal examination or fecalysis.

Fresh leaves of jackfruit and ampalaya, gas stove, knife, disposable syringe, beaker, empty plastic bottles and cooking utensils for decoction.

Methods

Source of Experimental Samples and Procedure

Fresh and mature leaves from jackfruit and ampalaya were obtained from Brgy. M. Chavez, San Lorenzo, Guimaras. The leaves were washed with tap water. One (1) kilogram leaves (Jackfruit or Ampalaya) were chopped finely and allowed to boil in one (1) liter of water for 15-20 minutes from the time the water started to boil and until the original volume was reduced to half. The decoction allowed to cool, then strained using cheesecloth and was placed in a container. Separate containers were provided for different mixtures of jackfruit and ampalaya decoctions.

Dosage and Administration of Decoction

Before the start of the study, experimental goats were dewormed with a commercial anthelmintic (levamisole HCL) and were allowed to graze in the pasture area for one (1) month to allow reinfestation of intestinal parasites.

Fecal samples were collected from the experimental goats (disregarding the sex, age, and breed) for fecalysis after one (1) month from the date of administration of levamisole. This is to identify the roundworms present and the estimated parasitic population as to the number of egg that will be seen under the microscope per animal.

After taking those data the decoction was administered orally with the following concentrations: T1- 100% jackfruit decoction; T2- 80% jackfruit decoction + 20% water; T3- 60% jackfruit decoction + 40% water; T4- 40% jackfruit decoction + 60% water; T5- 20% jackfruit decoction + 80% water; T6- 100% ampalaya decoction; T7- 80% ampalaya decoction + 20% water; T8- 60% ampalaya decoction + 40% waterT9- 40% ampalaya decoction + 60% water; T10- 20% ampalaya decoction + 80% water; T11- 80% jackfruit decoction + 20% ampalaya decoction; T12- 60% jackfruit decoction + 40% ampalaya decoction; T13- 40% jackfruit decoction + 60% ampalaya decoction; and T14- 20% jackfruit decoction + 80% ampalaya decoction.

Fecal samples were collected for fecalysis after one (1) week of administration to take data for record purposes.

Collection of Fecal Samples

Fecal samples for parasitological examination were collected from the rectum of goats from Brgy. Constancia, Cabano, Sebario, and Igcawayan of San Lorenzo, Guimaras. Some of the fresh fecal samples were collected from the pasture.

After the collection, samples were dispatched immediately to the Regional Animal Disease Diagnostic Laboratory of DA RFU 6 in Parola Iloilo City. Each sample was placed inside an ice candy wrapper labeled with animal identification. Samples were placed inside an icebox to cool them and to avoid the eggs to develop and hatch.

Fecal Testing

Fecal samples were submitted to the Regional Animal Disease Diagnostic Laboratory (RADDL) of the Department of Agriculture Regional Field Unit 6 (DA-RFU 6) for fecalysis. Fecal sample obtained before and after the administration was tested using the floatation method and was conducted by the laboratory clinician of the said laboratory. Different types of nematodes were identified through the presence of parasitic eggs in the samples. Eggs were counted per gram of the fecal matter.

Experimental Design and Treatments

A Completely Randomized Design (CRD) will be used in the study. There will be fourteen (14) treatments to be replicated three (3) times with a total of forty-two (42) variates. One goat will represent each variate. A total of forty-two (42) goats of varying sex, ages and breed were utilized in the study as experimental animals.

The following treatments are as follows: T1- 100% jackfruit decoction; T2- 80% jackfruit decoction + 20% water; T3- 60% jackfruit decoction + 40% water; T4- 40% jackfruit decoction + 60% water; T5- 20% jackfruit decoction + 80% water; T6- 100% ampalaya decoction; T7- 80% ampalaya decoction + 20% water; T8- 60% ampalaya decoction + 40% water

T9- 40% ampalaya decoction + 60% water; T10- 20% ampalaya decoction + 80% water; T11- 80% jackfruit decoction + 20% ampalaya decoction; T12- 60% jackfruit decoction + 40% ampalaya decoction; T13- 40% jackfruit decoction + 60% ampalaya decoction; and T14- 20% jackfruit decoction + 80% ampalaya decoction.

Table 3.Experimental Layout.

T2	T14	T6
T12	T4	T12
T7	T13	T8
T14	T9	T1
T5	T2	T11
T13	T7	T6
T1	T14	T12
T10	T11	T13
T3	T3	T2
T8	T9	T5
T11	T9	T8
T10	T5	T7
T1	T10	T4
T6	T3	T4

Statistical Analysis

The results were analyzed using Analysis of Variance (ANOVA). Data were subjected to 5% and 1% level of significance to determine the difference between means using Duncan's Multiple Range Test (DMRT). Identification of effective dose was analyzed using probit analysis.

STUDY 2: "IN VITRO ADMINISTRATION OF JACKFRUIT AND AMPALAYA LEAVES DECOCTION AGAINST INTESTINAL ROUNDWORMS OF GOAT."

Materials

The following are the materials were used in the conduct of the study. The following are as follows: ice candy wrapper, surgical gloves, ice pop stick, tissue paper, rubbing alcohol, ice, ice box, ink marker, bond paper, and notebook were used during the collection of fecal sample

Plastic bags, beakers or plastic containers, tea strainer(preferably nylon) or double layer cheesecloth, measuring

cylinder or other container graded by volume, fork, tongue blades or other type of stirring rod, test tube, test tube rack or a stand, microscope, slides, coverslips, balance or teaspoon and floatation fluid were used in conducting fecal examination or fecalysis. Fresh leaves of jackfruit and ampalaya, gas stove, knife, disposable syringe, beaker, empty plastic bottles and cooking utensils for decoction.

Methods

Source of Experimental Samples and Procedures

Fresh and mature leaves from jackfruit and ampalaya were obtained from Brgy. M. Chavez, San Lorenzo, Guimaras. The leaves were washed with tap water. One (1) kilogram leaves (Jackfruit or Ampalaya) were chopped finely and allowed to boil in one (1) liter of water for 15-20 minutes from the time the water started to boil and until the original volume was reduced to half. The decoction allowed to cool, then strained using cheesecloth and was placed in a container. Separate containers were provided for different mixtures of jackfruit and ampalaya decoctions.

Collection of eggs of intestinal roundworms of goats

Eggs were collected from fecal samples after the fecalysis conducted in study 1. Each of the treatment has ten (10) eggs for larval culture. There were four hundred twenty (420) eggs utilized in the study.

Larval culture

Eggs collected from the fecal samples were utilized for larval culture. The culture was conducted in the Regional Animal Disease Diagnostic Laboratory (RADDL) of the Department of Agriculture Regional Field Unit 6 (DA-RFU 6) located at Parola, Iloilo City.

The collected eggs of roundworms were incubated for seven (7) days inside the test tube. The types and the number of larval worms present after incubation period was counted, from each of the treatment and data was kept for record purposes.

Treatments and Experimental Layout

There were ten (10) ml of the following treatments will be added to a fecal slurry during the larval culture: T1- 100% jackfruit decoction; T2- 80% jackfruit decoction + 20% water; T3- 60% jackfruit decoction + 40% water; T4- 40% jackfruit decoction + 60% water; T5- 20% jackfruit decoction + 80% water; T6- 100% ampalaya decoction; T7- 80% ampalaya decoction + 20% water; T8- 60% ampalaya decoction + 40% water

T9- 40% ampalaya decoction + 60% water; T10- 20% ampalaya decoction + 80% water; T11- 80% jackfruit decoction + 20% ampalaya decoction; T12- 60% jackfruit decoction + 40% ampalaya decoction; T13- 40% jackfruit decoction + 60% ampalaya decoction; and T14- 20% jackfruit decoction + 80% ampalaya decoction.

Table 4.Layout/Arrangement of Test tubes.

T2	T14	T6
T12	T4	T12
T7	T13	T8
T14	T9	T1
T5	T2	T11
T13	T7	T6
T1	T14	T12
T10	T11	T13
T3	T3	T2
T8	T9	T5
T11	T9	T8
T10	T5	T7
T1	T10	T4
T6	T3	T4

Statistical Analysis

The results were analyzed using Analysis of Variance (ANOVA). Data were subjected to 5% and 1% level of significance to determine the difference between means using Duncan's Multiple Range Test (DMRT).

RESULTS AND DISCUSSION

STUDY 1: "IN VIVO ADMINISTRATION OF JACKFRUIT AND AMPALAYA LEAVES DECOCTION AGAINST INTESTINAL ROUNDWORMS OF GOAT."

Table 5 shows the reduction of eggs per gram (epg) of the fecal samples after the administration of the decoctions. Among the means Treatment 4(40% jackfruit decoction + 60% water) got the highest mean of 1478.67 epg, followed by Treatment 1 (100% jackfruit decoction) with 1263.33 epg, Treatment 14 (20% jackfruit decoction + 80% ampalaya decoction) 670 epg, and Treatment 10 (20% ampalaya decoction + 80% water) with 385 epg. Next are Treatment 13 (40% jackfruit decoction + 60% ampalaya decoction) with a mean of 378 epg, Treatment 3 (60% jackfruit decoction + 40% water) with 163 epg, Treatment 12 (60% jackfruit decoction + 40% ampalaya decoction) with 151.67 epg, Treatment 7 (80% ampalaya decoction + 20% water) with 135 epg, Treatment 6 (100% ampalaya decoction) with 118.33 epg, Treatment 9 (40% ampalaya decoction + 60% water) with 111.67, Treatment 2 (80% jackfruit decoction + 20% water) with 78.33 epg, Treatment 5 (20% jackfruit decoction + 80% water) and Treatment 11 (80% jackfruit decoction + 20% ampalaya decoction) both have 73.33 epg and the lowest mean is Treatment 8(60% ampalaya decoction + 40% water T9- 40% ampalaya decoction + 60% water) with a mean of 45.00 epg respectively.

Based on the analysis of variance there was no significant effect of the different treatments on the reduction of the eggs of the nematodes after the administration.

This implies that different concentrations of jackfruit, ampalaya and combined decoctions have a similar effect in the reduction of eggs per gram of the fecal samples of goats.

Table 5.Egg reduction (epg) on fecal samples after deworming.

Treatments	r1	r2	r3	Total	Mean
T1	50	2200	1540	3790	1263.3
T2	150	50	35	235	78.33
T3	150	200	140	490	163.33
T4	50	2580	1806	4436	1478.7
T5	50	100	70	220	73.33
T6	100	150	105	355	118.33
T7	150	150	105	405	135
T8	50	50	35	135	45
T9	250	50	35	335	11.67
T10	50	650	455	1155	385
T11	50	100	70	220	73.33
T12	200	150	105	455	151.67
T13	200	550	385	1135	378.33
T14	1500	300	210	2010	670
Grand total					15376
Grand mean					366.1

Table 6 shows the effective dose of jackfruit leaves decoction is 64.29 using probit analysis. Therefore lethality of the dose can be reached using 64.29 concentration jackfruit decoction. This implies that using pure jackfruit leaves decoction can be useful in the reduction of the parasitic nematode infestation of goats as indicated by the number of eggs per gram of the fecal samples after the administration of decoctions. The effective dose is 20.27 using probit analysis. This implies that only 20.27 concentration of ampalaya leaves are needed to attain the lethality of the herbal dewormer preparation.

The probit analysis of the reduction of parasitic eggs of roundworms in the fecal samples using combinations of jackfruit and ampalaya leaves decoctions. Based on the analysis, the effective dose can be attained in 60:40 ratio of concentration. This implies that the lethality of the dose can be attained using 60:40 concentration of jackfruit and ampalaya combinations of decoctions.

Table 6. Probit Analysis on the reduction of eggs in the fecal samples using jackfruit, ampalaya, and combination of jackfruit and ampalaya leaves decoction.

Treatment	Lethal Dose 99 (LD99)
Jackfruit leaves	64.29
Ampalaya leaves	72.03
Jackfruit and Amplaya	60:40

STUDY 2: "IN VITRO ADMINISTRATION OF JACKFRUIT AND AMPALAYA LEAVES DECOCTION AGAINST INTESTINAL ROUNDWORMS OF GOAT."

Table 7 reveals the number of larvae developed in a slurry during the culture. For the different concentrations of jackfruit decoctions least larval counts was observed in Treatment 1 (100%) with a mean of 0.33, followed by treatment 2 (80%) with a mean of 1.00, next is Treatment 3 (60%) with 2.33 larval count, followed by Treatment 4 (40%) with a mean of 2.67 and Treatment 5 (20%) with a mean of 3.00 larval counts respectively.

For different concentrations of ampalaya least larval count was also observed in Treatment 6 (100%) with a mean of 0.33, next is treatment Treatment 7 (80%) with 1.00 larval count, followed by Treatment 8 (60%) and Treatment 9 (40%) with 1.67, and Treatment 10 (20%) with 2.67 larval counts.

For the combination of jackfruit and ampalaya concentrations, least larval count was observed in Treatment 12 (60% J + 40% A) with a mean of 1.67, followed by Treatment 14 (20% J + 80% A) with a mean of 2.00 larval counts, and next were treatments 11 (80% J + 20% A) and 13 (40% J + 60 A) with a mean of 3.00 respectively.

Analysis of Variance showed a significant effect of the different concentrations of jackfruit and ampalaya to the larval development of intestinal nematodes of goats.

DMRT shows that the pure concentrations of jackfruit and ampalaya have an effect on the larval development compared to combinations of the two stated decoctions. The R square value is 0.303 0r 30.3%. The larval development was affected by the different level of concentration at 30.3%.

The result implies that as the concentration of both jackfruit and ampalaya decoctions will increase, the number of larval that will be killed in the culture will increase also.

CONCLUSION

1. Twenty-one percent (21%) of the fecal samples of goats have eggs of Fasciola species (trematodes), seven percent (7%) were found to have eggs of monieza species (cestodes), but one hundred percent (100%) of the fecal samples with eggs of intestinal nematodes such as trichuris and strongyles species.
2. There was no significant effect of the different treatments on the reduction of the eggs of the nematodes after the administration of decoctions to goats.
3. The effective dose of jackfruit leaves decoction is 64.29 using probit analysis. Therefore lethality of the dose can be reached using 64.29 concentration jackfruit decoction.
4. The effective dose of ampalaya leaves decoction is 20.27 using probit analysis. This implies that only 20.27 concentration of ampalaya leaves are needed to attain the lethality of the herbal dewormer preparation.
5. The effective dose of using different combinations of jackfruit and ampalaya decoctions can be attained in 60:40 ratio of concentration. This implies that the lethality of the dose can be attained using 60:40 concentration of jackfruit and ampalaya combinations of decoctions.
6. The pure concentrations of jackfruit and ampalaya have an effect on the larval development compared to combinations of the two stated decoctions. As the concentration of both jackfruit and ampalaya decoctions will increase, the number of larval that will be killed in the culture will increase also.
7. Jackfruit and ampalaya decoctions can be separately used with the same results, but it will depend on the availability of the leaves that will be used for decoctions.

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Managerial Capabilities of the Resort Managers in the Province Of Guimaras

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ABSTRACT This study aimed to determine the managerial capabilities of resort managers in the province of Guimaras. The descriptive research design especially the survey method was applied in this study. This was conducted among the registered and actively operating resorts found in five different Municipalities in the Province of Guimaras. The respondents were 18 resort managers. The list of the respondents was taken from the records of the Department of Trade and Industry. The gathering data instrument used was a researcher-made Checklist. Results showed that the resort managers in the province of Guimaras were mostly female, with bachelors' degree and having business experience ranging from one (1) year to five (5) years. They have workers ranging from five (5) and below. Majority of them have investments ranging from Php 300,000.00 to 400,000.00. The managers were very capable of managing a business resort in terms of accounting management, financial management, and marketing management. Both or a combination of autocratic management style and democratic management styles were given emphasis by the resort managers when dealing with their employees. In all areas, no significant difference existed in the level of managerial capabilities of resort managers when categorized according to their profile.

Keywords: Resort Managers, Managerial Capability, Province of Guimaras

INTRODUCTION

Background of the Study

To understand where the resort industry today it is important to consider how resorts have evolved through the ages. A historical perspective leads to a picture of modern types of the resort.

Nowadays, business ventures are confronted with the problems of allocating limited resources among different alternatives while reaching the general objectives and goal of the firm.

The level of management must be in a tough stage hitting the primary goal of the firm. It must be equipped with efficient and effective tools that may serve as a weapon and asset in reaching the targeted purpose for an organized, strong, and profitable business.

An active business firm should fulfill the different kinds of management; Accounting management, Financial management, Marketing management, (Henry Fayol 1841-1925).The styles of Management that will be used depending upon the manager. Some kinds of management styles are Autocratic, Democratic, Laissez-faire, and Paternalistic.

A business capability is what a company needs to be able to execute its business strategies. It is another way of collecting people process and technology that is addressable for a specific purpose. It is the expression or the articulation of the capacity, materials and expertise and organization needs in order to perform core functions. Capability management is an approach that uses the organization's customer value proposition to establish performance goals for capabilities based on value contribution. It helps drive out efficiencies in areas with high financial leverage while preserving or investing in capabilities for growth. Due to this reasons, the researchers were motivated to conduct the study.

Statement of the Problem

This study aimed to determine the managerial capability of resort managers in the province of Guimaras. Specifically, this study sought answers to the following questions:

What is the profile of the respondents when categorized according to Sex, Educational Attainment, Business Experience, and Number of workers?

1. What is the level of capabilities in the Profile of the organization as categorized according to Capitalization, Facilities and Amenities and Number of workers?

2. What is the level of the managerial capabilities of the respondents as categorized according to the variables such as Financial management, Marketing management, Accounting management, and Management style?
3. What are the problems encountered by the resort managers in running the business?
4. Is there a significant difference in the managerial capabilities of the managers in managing their business when they are grouped according to sex, educational attainment, business experience, and a number of workers?

METHODOLOGY

The most common means to acquire information is with the use of the Checklist/Questionnaire. The descriptive research design especially the survey method was applied in this study. Descriptive design describes the nature of a situation as it exists at the time of the study and to explore the causes of a particular phenomenon. The survey method was used in this study to know the general picture of the population under investigation towards social and economic characteristic, opinion and idea about a certain phenomenon. The descriptive design and survey method were both appropriate in the conduct of this study (Ferrer, 2011).

The most common means to acquire information is with the use of the checklist/questionnaire. The descriptive research design especially the survey method was applied in this study. Descriptive design describes the nature of a situation as it exists at the time of the study and to explore the causes of a particular phenomenon. The survey method was used in this study to know the general picture of the population under investigation towards the social and economic characteristic, opinion and idea about a certain phenomenon. The descriptive design and survey method were both appropriate in the conduct of this study to know the management capability of the owners or managers of the different resorts (Ferrer, 2011)

This study was conducted among the registered and operating resorts found in five different Municipalities in the Province of Guimaras. The respondents of this study were 18 resort managers in the province of Guimaras. The list of the respondents will be taken from the records of the Department of Trade and Industry. The primary instrument to be used in gathering data will be a researcher-made Checklist-questionnaire. A questionnaire is intended to obtain information about the conditions or practice of which the respondents are presumed to have knowledge (Good and Scats 2002).

RESULTS AND DISCUSSIONS

Profile of the Respondents

The profile of the respondents was determined in terms of sex, educational attainment, business experience, no. of workers and capitalization. There were 18 respondents were identified to answer the research questionnaire. Out of 18 respondents, there were 15 or 83.3% were female and only 3 or 16.7% were male. It means that the majority of the resort owners who answer back to the researchers' questionnaires during the conduct of the study were female. In terms of their educational background, most of them were college graduate with 13 or 72.2% of them, both with 2 or 11.1% in college level and postgraduate degree respectively and 1 or 5.6% were high school graduate. This means that majority of the respondents were college graduate. Though no degree is required to become a resort manager, the experience and education gained during college years were beneficial. A college graduate even the course is not inclined to business still can do simple hospitality management which a primarily needed in a resort. As to business experience, data shows that majority of the respondents have experienced business ranging from 1 to 5 years with 11 or 61.1% of them. 3 or 16.7% have business experience ranging from 6 to 10 years and below 1 year. Only 1 or 5.6% have business experienced with more than 10 years. Since majority were young in the business, there were a lot of circumstances might happen which they need to have skills to resist it or to overcome the barriers to the success of a resort. In running a resort, partners were needed because not only goods were offered but also services. Likewise, resort business is impossible without employees/workers. In the data gathered, 9 or 50% have worker ranging from 5 and below, 7 or 38.9% have workers ranging from 6 to 10, and 1 or 5.6% that resort who have worker ranging from 11 to 15 years and more.

In terms of capitalization, the capital was very essential to a business. Regardless of the scale, without capital business were difficult. The amount to invest will depend on the goods and services offered. For a resort, it needs higher capital because of landscaping and construction expenses. In this study, the data gathered shows that among 18 resorts only 5 or 27.8% were invested with the majority amount of 300, 001 to 400, 000, 4 or 22.2% resort owners have capital of 200, 001 to 300,000 and as well as above 500, 000, and 2 or 11.1% have capital of 100, 000 to 200, 000. Data found in table 1.

Table 2 presents the facilities and amenities found in the resort in Guimaras. The top five are cottages (18 or 100%), video bar (17 or 94.4%), venues for a special occasion (14 or 77.8%, restaurant, and function hall (12 or 66.7%), resort lobby, swimming pool, & picnic groove (11 or 61.1%). These were commonly found in every resort of Guimaras to ensure quality leisure experience of the customers. Although some of the resort was not completely on a wide range of amenities and recreation it is only one factor to be considered. The researcher also noted the amenities and recreation facilities were the resort less seen are volleyball playing court, horseback riding, and bike rentals (1 or 5.6%), island hopping, meditation area, and Wi-Fi connectivity (2 or 11.1%), and lastly medical clinic (4 or 22.2%). Data are shown in table 2.

Table 2. Resort Facilities and Amenities*

	f	%
Resort Lobby	11	61.1
Restaurant	12	66.7
Cottages	18	100.0
Function Hall	12	66.7
Swimming Pool	11	61.1
Videoke Bar	17	94.4
Wi-fi connectivity	2	11.1
Medical Clinic	4	22.2
Venues for special occasions	14	77.8
Meditation Area	2	11.1
Picnic Groove	11	61.1
Island hopping	2	11.1
Volley Ball Playing Court	1	5.6
Horseback riding	1	5.6
Bike Rentals	1	5.6
Total	18	100.0

*Multiple Responses

Data in table 3 presents the level of managerial capabilities of resort managers as a whole. It reveals that the level of managerial capabilities of resort managers have mean of 3.99 and a standard deviation of .655 interpreted as "very capable". Which means that the managers of the resort when rated as a whole was very capable of managing a resort throughout in all categories such as accounting management, financial management, and marketing management. Likewise, the descriptive rating obtained was fallen in second to the highest. This may imply that a little experience, trainings, and seminars were necessary or needs consideration in order to reach the goal of very much capable.

Table 3. Level of Managerial Capabilities As a whole

	Mean	Sd	Interpretation
Accounting Management	3.91	0.67	Very Capable
Financial Management	3.97	0.69	Very Capable
Marketing Management	4.08	0.75	Very Capable
Total	3.99	.655	Very Capable

Scale: 1.00 – 1.79 (Not Capable), 1.80 – 2.59 (Slightly Capable), 2.60 – 3.39 (Capable), 3.40 – 4.19 (Very Capable), 4.20 – 5.00 (Very Much Capable)

The managerial capabilities were divided into three categories to further determine the strength and weaknesses in every aspect. In terms of accounting management categories, the mean score was (3.91, sd = .67) interpreted as "very capable". It was noted that there's no big issue with regard to the basic accounting since almost of the items associated with was rated good but it needs a little improvement. It also appeared that the lowest mean obtained in this categories was on an item that state "provides training and seminar to its employees in order to be updated on the latest trends in the area of accounting". The most vital part of the business was managing the account because it tells the direction of the business. Knowledge of basic accounting was not enough but rather it should be positioned to the utmost trend in the market and always went into the right decision. Hence, it is necessary that every people/ partners in the business must update their knowledge and skills when it comes to accounting management for the business to stay. Data are shown in table 4.

Table 4. Level of Managerial Capabilities as to Accounting Management

	Mean	Sd	Interpretation
1. Prepares the current and historical financial data	3.78	1.35	Very Capable
2. Records the current debts, sales revenue and inventories	3.78	1.17	Very Capable
3. Estimates the status of accounts receivables and payables	3.83	1.15	Very Capable
4. Supports the day to day accounts of its customers	4.06	0.73	Very Capable
5. Make use of the data in forecasting and preparing annual budget	3.72	1.07	Very Capable
6. Prepare reports to ensure that the company is realizing a profit	3.89	1.02	Very Capable
7. Maintains sound and effective security of internal controls	3.72	1.07	Very Capable
8. Protects confidential information	4.33	0.77	Very Much Capable
9. Provides training and seminar to its employees in order to be updated on the latest trends in the area of accounting	3.67	1.08	Very Capable
10. Prepares accurate and timely financial reports as a sound basis for decision making	4.06	0.80	Very Capable
Total	3.91	0.67	Very Capable

Scale: 1.00 – 1.79 (Not Capable), 1.80 – 2.59 (Slightly Capable), 2.60 – 3.39 (Capable), 3.40 – 4.19 (Very Capable), 4.20 – 5:00 (Very Much Capable)

In terms of financial management, data reveals that it has obtained the mean of (3.97, sd = .69) interpreted as "very capable". This means that the managers were very capable in handling the financial aspect of the business. Financial stability was the ultimate goal of every business. In a resort, it is a must because it serves as the fuel of the business. As to the data, the resort financial aspect was stable as they rated higher the statement "ensure that sufficient funds are available to meet the day to day financial requirements" compared to other statements. They have managed it wisely as they underwent resourcing out funds and globally competitive financial activities. Data are shown in table 5.

Table 5. Level of Managerial Capabilities as to Financial Management

	Mean	Sd	Interpretation
1. Plans and controls financial resources	3.89	0.90	Very Capable
2. Prepares budgets and financial statements	3.61	1.20	Very Capable
3. Ensure that sufficient funds are available to meet the day to day financial requirements	4.17	0.99	Very Capable
4. Coordinates projects and activities in order to increase its income	4.11	0.96	Very Capable
5. Maintain relationships to other financial institutions	3.94	1.21	Very Capable
6. Has the ability to procure funds needed in the operation	4.06	0.80	Very Capable
7. Engage in bench marking studies in order to gain knowledge and experiences of their best practices	3.89	1.08	Very Capable
8. Has the ability to compete with other competitors	4.11	0.96	Very Capable
9. Invest the profit for projects and other improvements	4.00	1.03	Very Capable
10. Has a sound knowledge in financial management	3.89	1.02	Very Capable
Total	3.97	0.69	Very Capable

Scale: 1.00 – 1.79 (Not Capable), 1.80 – 2.59 (Slightly Capable), 2.60 – 3.39 (Capable), 3.40 – 4.19 (Very Capable), 4.20 – 5:00 (Very Much Capable)

As to marketing management, in this categories, it was rated higher (M=4.08, sd = .75) compared to other categories. This category was interpreted as "very capable". This means that the managerial capability of resort managers was very capable in terms of their marketing management. This simply shows that the managers excel in this category because they were knowledgeable and skillful enough to perform their duty. It was observed that the highest items rated were "develop strong customer relationships" and "maximizes revenues by developing programs that can attract more clients" which were commonly needed in every business resort. The less rated was on the item "review the results of customer satisfaction surveys to enhance standards of customer care". Hence, the resort needs to maintain a harmonious relationship with the customer and include an assessment of customers' satisfaction to have the bases of improving the business toward success. Data are shown in table 6.

Table 6. Managerial Capabilities as to Marketing Management

		Mean	Sd	Interpeetation
1.	Maximizes revenues by developing programs that can attract more clients	4.17	0.79	Very Capable
2.	Maintains a suggestion/feedback mechanism in order to provide effective and efficient management	4.00	0.91	Very Capable
3.	Responsible for coordinating marketing and promotional activities to meet customer needs, working closely with other staff to ensure customers are satisfied with the facilities and there time there	4.11	0.90	Very Capable
4.	Develop promotional activities to attract more customers	4.06	1.00	Very Capable
5.	Develop strong customer relationships	4.17	0.99	Very Capable
6.	Provides good amenities to customers	4.33	0.59	Very Much Capable
7.	Cooperates with other members of the resort management team to identify marketing priorities	4.00	1.14	Very Capable
8.	Review future booking levels to plan dates for promotions to increase occupancy rates	4.06	1.00	Very Capable
9.	Work with the event management team to schedule marketing to attract additional conferences and events	4.11	1.18	Very Capable
10.	Review the results of customer satisfaction surveys to enhance standards of customer care	3.83	0.92	Very Capable
Total		**4.08**	**0.75**	**Very Capable**

Scale: 1.00 – 1.79 (Not Capable), 1.80 – 2.59 (Slightly Capable), 2.60 – 3.39 (Capable), 3.40 – 4.19 (Very Capable), 4.20 – 5.00 (Very Much Capable)

Table 7 presents the management style practiced by the resort managers and it was found out that they were practicing both autocratic management style (9 or 50%) and democratic management style (9 or 50%). In every business, these two main style has its own advantage and disadvantages. Hence, applying those styles should be flexible because in an organization is only as good as the person running it. Managers deal with their employees in different ways. Some are strict with their staff and like to be in complete control, while others are more relaxed and allow workers the freedom to run their own working lives. This may imply that whatever approach is predominately used it will be vital to the success of the business.

Table 7. Management Style Used by the Respondents

	f	%
Autocratic Management Style	9	50.0
Democratic Management Style	9	50.0
Total	18	100.0

Table 8 presents the difference of managerial capabilities when group according to sex. T-test results indicate that there is no significant difference existed on the managerial capabilities when respondents group according to sex (t = -.998, sig. = .387) set at .05 level of significance. This means that the managerial capabilities between male and female in managing a resort does not differ. Even though female managers got higher means score than the male manager, it doesn't mean that females were better manager than male. There some researches tell that female surpass male in different aspects of management but in this study, it was a lack of evidence. This may imply that managers both males and female were somewhat more adept and purposeful in using their natural talents to engage their teams because they need to exceed expectations to advance in their organization.

Table 8. Difference in the Level of Managerial Capabilities when Group According to Sex

	t	df	Sig. (2-tailed)
Equal variances assumed	-.889	16	.387

*p<.05 level of significance

ANOVA table indicates that there is no significant difference existed in the managerial capabilities among respondents when group according to their educational attainment (F=.826, - sig. = .501) set at .05 level of significance. This means that the level of managerial capabilities among respondents educational attainment does not differ. In this study, managing a resort does not require what degree you attain but it suggests and preferred at least a bachelors' degree as indicated in the result that most of the respondents were college graduate. In some cases, a high school diploma or associate degree may be enough. This may imply a manager should consider that they were at least academically good and has equipped of potential skills in terms of management to become successful in the business. Data are shown in table 9.

Table 9. Difference in the Level of Managerial Capabilities when Group According to Educational Attainment

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.096	3	.365	.826	.501
Within Groups	6.198	14	.443		
Total	7.295	17			

*p<.05 level of significance

In terms of business experience, ANOVA results revealed that there is no significant difference existed in the level of managerial capabilities of resort managers when they were grouped according to their business experience (F= .724, sig. = .554). Which means whether it belonged to categories of business experience such as below 1 year, 1 – 5 years, 6 – 10 years and above 10 years the level of managerial capabilities were the same as described "very capable".

This may imply that in the resort industry a managerial position requires more than a degree. Most of the cases the applicants were sent to the industrial training but wasn't enough. Even those who were good academically still not enough. Hence, work experience was very important among all because when making the right decisions it needs enough experiences specifically business experience. Data are shown in table 10

Table 10. Difference in the Level of Managerial Capabilities when Group According to Business Experience

	Sum of Squares	df	Mean Square	f	Sig.
Between Groups	.979	3	.326	.724	.554
Within Groups	6.315	14	.451		
Total	7.295	17			

*p<.05 level of significance

Data in table 11 shows that there is no significant difference existed in the level of managerial capabilities of the respondents when grouped according to their number of workers in the resort (F=1.900, Sig. = .176) set the .05 level of significance. Even though the mean score obtained by each grouped of numbers of workers varied but it doesn't mean that the capabilities of manger also differ. In this study, it was found out that having more number of workers were just the same of having fewer workers in terms of the level of managerial capabilities as described as "very capable". This may imply that the organizations' success depends on the employees' performance, not on the number of employees. The objective of the business is profitability and can be attained through the performance or every worker, poor performance is detrimental to the company's' success.

Table 11. Difference in the Level of Managerial Capabilities when Group According to Number of Workers

	Sum of Squares	df	Mean Square	f	Sig.
Between Groups	2.110	3	.703	1.900	.176
Within Groups	5.184	14	.370		
Total	7.295	17			

*p<.05 level of significance

Table 12 presents the results of the difference in the level of managerial capabilities when grouped according to capital. Results shows that there is no significant difference existed in the level of managerial capabilities of resort managers when grouped according to their capital (F=.268, sig. = .893) set at .05 level of significance. All the categories of capital were the same and described as "very capable". This means that the fund of the business was not the determinants on the capabilities of the managers in managing a resort. Perhaps, management of funding the business by enabling the flow of money in a strategic way for the business to become profitable

Table 12. Difference in the Level of Managerial Capabilities when GroupAccording to Capital

	Sum of Squares	df	Mean Square	f	Sig.
Between Groups	.556	4	.139	.268	.893
Within Groups	6.739	13	.518		
Total	7.295	17			

*p<.05 level of significance

Table 13 was the results of the difference in the level of managerial capabilities when grouped according to management style. Results revealed that there is no significant difference existed between autocratic and democratic management style in the level of managerial capabilities of the resort managers (t= -.471, sig. - .644) set at .05 level of significance. Which means, the level of managerial capabilities of resort managers described as "very capable were the same regardless of the management style they were used. This may imply that in every business it was necessary to have a quality leader with good effective leadership that can drive their workgroup to achieve all the critical aspects of the company's goals/objectives.

Table 13. Difference in the Level of Managerial Capabilities when Group Management Style

	t	df	Sig. (2-tailed)
Equal variances assumed	-.471	16	.644

*p<.05 level of significance

Conclusions

In view of the foregoing findings, these conclusions were drawn:

1. The resort managers in the province of Guimaras were mostly female, with bachelors' degree and having business experience ranging from 1 year to 5 years. They were having workers ranging from 5 and below. Majority of them invested amounting to 300, 000 – 400, 000 for the business.
2. The manager was very capable in managing business resort as a whole and also very capable when categorized in terms of accounting management, financial management, and marketing management.
3. Both or a combination autocratic management style and democratic management styles were given emphasis by the resort managers in dealing with their employees.
4. There is no significant difference existed in the level of managerial capabilities of resort managers all throughout when categorized according to their profile sex, educational attainment, business experience, number of workers, and capitalization.

Recommendations

Based on the conclusions made, the following recommendations were suggested:

1. The resort owners of Guimaras should organize an association to promote, support and inform managers of the current trends, problems faced opportunities, support programs and other key areas of concern for resort management.
2. The government of the Province of Guimaras should align some of its funds and budget to support resort business especially those that exhibit a strong capability to grow and eventually develop into the globally competitive resort to attract more tourist to visit the island.
3. The Guimaras State College institution together with School of Business Administration can help in the improvement of resort operations by educating the managers of these resorts through the conduct of seminars
and training about managing businesses specifically on the management styles and strategies, capital budgeting and other business-related topics. This can be the community extension service of the School, looking and helping these resorts especially those that needs assistance.
4. The Department of Trade and Industry should focus on developing the owners of resort in Guimaras. Support from the local government should also be encouraged. Such support can be in the form of financial and technical aspects. Tax exemptions and lowering of license fees are also ways on how to support the resort owners. On the technical side, the local government should sponsor some business venturing seminars and training and it should be well advertised and the prospective participants be well informed. A similar research should be undertaken to determine what specific assistance and support needed of every resort.

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EMPLOYMENT STATUS OF CRIMINOLOGY GRADUATES (2011-2013) OF GUIMARAS STATE COLLEGE

Kert D. Pillora, MSCJ-Crim.

ABSTRACT Most Universities and Colleges find it to be essential to trace back the roots and the present condition of their old graduates because of many important reasons most basically for the benefits and the prestige of the Universities and Colleges that they have produced quality graduates. They can also trace their graduates if they have been providing economic benefits in the society through employment or business activities and another social impact, the success of their graduates can reflect the quality education that they have provided. This study was conducted to determine the employment status of Criminology graduates (2011-2013) of Guimaras State College. Specifically, this study would like to determine the respondents' personal profile, educational profile and employment data of the respondents. The instrument used in the study was the standardized one formulated by the Commission on Higher education in doing tracer studies for the higher education institution. Results of the study showed that the majority of the graduates were male and single. They came from the family with a big household size and with an annual family income of less than 50,000.00. Most of the graduates did not take further studies. They find somewhat extreme in terms of the knowledge and skills they have acquired from their course. Majority of the respondents were already employed and most of them are on a contractual basis. Most of them are still looking for another job and their reason is to get a higher salary.

INTRODUCTION

Background of the Study

Most Universities and Colleges find it to be essential to trace back the roots and the present condition of their old graduates because of many important reasons most basically for the benefits and the prestige of the Universities and Colleges that they have produced quality graduates. They can also trace their graduates if they have been providing economic benefits in the society through employment or business activities and other social impacts, the success of their graduates can reflect the quality education that they have provided. Most importantly, they want to find out if the actual standard that they have used in their curriculum needs an update or changes in their subject. They also need to adjust the learning curves, values formation and other curriculum updates in their universities that are actually needed by the economy so their new graduates could stand a chance in the present job market.

In addition, as provided in Section 23. of Republic Act No. 6506 otherwise known as an act creating the board of examiners in the Philippines and known as Criminology Law in the Philippines which took effect July 1, 1972. Criminology employment may deem any of the following capacities: as professor, instructor, teacher in criminology in any university or college and duly recognized by the government to teach any of the following subjects: Law Enforcement Administration; Criminalistics; Correctional Administration; Criminal Sociology and other Allied Subjects; Other technical and specialized subjects in criminology curriculum provided by the Department of Education; as law enforcement administrator, executive, adviser consultant or agent in any government or private agency; as technician in dactyloscopy, ballistics, questioned document, police photography, lie detection, forensic chemistry and other scientific aspect of crime detection; as correctional administrator, executive supervisor, worker or officer in any correction and penal institution; as counselor, expert adviser, researcher in any government or private agency.

During the 34th board of trustees meeting of the Guimaras State College held at the Holiday Plaza Hotel, F Ramos St., Cebu City on March 9, 2007. Resolution no. 10-2007 resolve as it is hereby resolved, that after full deliberation on the matter, the board approved the proposal to offer the Bachelor of Science in Criminology by June 2007. Through the motion of Hon. Martir, seconded and unanimously carried; and this resolution was adopted by the board of trustees.

On June 9, 2010 CHEDRO 6 Memorandum no. 71 series of 2010 stated that in accordance with the pertinent provisions of Republic Act (R.A) no. 7722, otherwise known as the "Higher Education Act of 1994", this office reiterates the attached CHED-PRC circular no. 01. Series of 2010 requiring SUC's and LUC's to secure government security from the Commission on Higher Education to operate board programs. In addition, on May 14, 2010 CHED-PRC circular no. 01 series of 2010 to all heads of State Universities and Colleges and Local Colleges and universities also states that pursuant to sec. 3 of Republic Act no. 7722, otherwise known as the "Higher Education Act of 1994" CMO no. 30, series of 2009 entitled Applicability of the Manual Regulations for Private Higher Education [MORPHE] of 2008 to State Universities and Colleges [SUC] and Local Colleges and universities [LCU], DILG circular no. 2009-67, Republic Act no. 8981, otherwise known as the PRC Modernization Act of 2000" the CHED and the PRC hereby jointly declare

that all SUC's and LCU's shall secure an authority from the CHED to operate board programs particularly nursing, accountancy, engineering, education and such other programs as provided in the attached list.

A joint CHED, PRC, DILG (in case of LGU's) team will be dispatched to conduct an evaluation of SUC's/LCU's board programs offering to determine the compliance with the CHED policies standards and guidelines governing the operation of these programs.

A criminology degree provides students with coursework in public policy, criminology and an introduction to law. Some individuals choose to pursue employment in business and non-profit organizations. Other criminology job options include self-employment or obtaining a position in a government agency.

The following are the prepared job that you could land if you are a graduate of criminology course:

Police officer; Criminologist or crime sociologist law enforcement administrator; Forensic experts such as photography, dactyloscopy, ballistics, polygraphy, questioned document examination; Correctional administrator and Intelligence Officer.

Job opportunities are, to large extent a function of organizational structures. For criminology graduates, opportunities lean towards organizations which are linked to the criminal justice system. This system is a network of interdependent organizations which despite the requirement for correction facilities, maintains an underlying emphasis on the prevention of crime rather than its punishment.

In addition, as provided in Section 23 of Republic Act No. 6506 otherwise known as an act creating the board of examiners in the Philippines which took effect on July 01, 1972. Criminology employment may deem any of the following capacities: as professor, instructor, teacher in Criminology in any university or college and duly recognized by the government to teach any of the following subjects: Law Enforcement Administration; Criminalistics; Correctional Administration; Criminal Sociology and other Allied Subjects; Other technical and specialized subjects in criminology curriculum provided by the Department of Education; as law enforcement administrator, executive, adviser consultant or agent and government or private agency; as technician in dactyloscopy, ballistics, questioned document, police photography, lie detection, forensic chemistry and other scientific aspect of crime detection; as correctional administrator, executive supervisor, worker or officer in any correction and penal institution; as counselor, expert adviser, researcher in any government or private agency.

This study will be conducted to know and determine the Employment Status of Criminology Graduates of Guimaras State College whether those graduates produced at this college were able to land a job or not, commensurate of what they studied upon during their stay in the college during the Academic Year 2011-2013.

Statement of the Problem

This study will determine the employment status of Criminology Graduates of Guimaras State College from Academic Year 2011-2013.

Specifically, this study sought to answer the following questions:

1. What is the profile of the Criminology graduates?
a. Sex
b. Civil status
c. Province of Origin
d. Average annual income
e. Household size

2. What is the educational profile of the graduates in terms of?
a. Highest educational attainment
b. Knowledge and skills acquired from the course/degree program
c. Further Studies
3. What is the employment data of the respondents in terms of?
a. No. of graduates who were employed/unemployed
b. Present Employment Status
c. Looking for another job
d. Reason for looking for another job

METHODOLOGY

The descriptive method of research was used in this study to determine the employment status of the graduates of Criminology from AY 2011- 2013. The study was conducted in the province of Guimaras. The respondents of the study are composed of the Criminology graduates of Guimaras State College from Academic Year 2011-2013. The lists of the respondents with corresponding addresses were taken from the record of the Registrar's Office after a letter request was approved by the Vice President for Academic Affairs. The data needed in the study were gathered using the Standardized Instrument of the Commission on Higher Education (CHED). Accordingly, information that responded to the objectives of the study was considered as input in the data analysis. In the process of collecting the data, student enumerator's were hired last summer 2014. They underwent orientation prior to actual data gathering. The said standardized instrument was being distributed to each of the respondents. The gathered data were analyzed using the Statistical Package for Social Sciences (SPSS) program. Interpretation of results was done using frequency, percentages, and rank.

RESULTS AND DISCUSSIONS

Profile of the Respondents

Based on the data above, the result showed that out of the 180 respondents, 133 were male, 45 were female and 1 did not indicate. This simply shows that Criminology is dominated by male rather than female. In terms of civil status, most of the respondents are single which represents 152 or 84.4% while only 26 or 14.4% are married, only 1 is separated and did not indicate which represents 1 or .6% respectively.

Table 1. Profile of the Respondents

Categories	f	%
Sex		
Male	133	73.9
Female	45	25
Did not indicate	1	.6
Total	180	100
Civil Status		
Single	152	84.4
Married	26	14.4
Separated	1	.6
Did not indicate	1	.6
Total	180	100

Province of Origin

Majority of the graduates are coming from the island of Guimaras as reflected in the data which represents 171 or 95% and only 1 or .6% came from the province of Antique, Coronadal, Passi City. There were 4 or 2.2% from the province of Iloilo and 2 or 1.1% did not indicate. The result showed that respondents preferred to enroll BS Criminology here in Guimaras rather than other State Colleges and Universities or even private schools.

Table 2. Province of Origin

Location	f	%
Antique	1	0.6
Coronadal	1	0.6
Guimaras	171	95
Iloilo	4	2.2
Maguindanao	1	0.6
Passi City	1	0.6
Did not indicate	2	1.1
Total	180	100

Average Annual Income

In terms of annual family income, most of the respondents have a less than 50,000 annual income or 46.7% of the total respondents; 10,001-100,000 it comprises 33.9%; more than 250,000 only 6.7%, 100,001-150,000 it is 5% of the total respondents while for the annual income of 150,001-200,000 and 200,001-250,000.00 got the same percentage of 3.3% of the total respondents and only 1.1% did not indicate their annual family income. This simply shows that most of the students who took up BS Criminology belongs to the low-income family yet they were able to finish their degree.

Table 3. Average Annual Imcome

Categories	f	%
Average Annual Family Income		
Less than 50,000	84	46.7
50,001-100,000	61	33.9
100,001-150,000	9	5.0
150,001-200,000	6	3.3
200,001-250,000	6	3.3
More than 250,000	12	6.7
Did not indicate	2	1.1
Total	180	100

Household Size

For the category of household size, majority of the respondents have more than 5 family members which constitute 33.9% of the respondents followed by only 3 household size or 22.8%, then 5 members which are 22.2%, then 4 family members or 14.4%, next is 2 household size which id 6.1 % and only 1 for only 1 household size of .6 % of the total respondents. The data simply shows that most of the respondents have a big family size.

Table 4. Household Size

Categories	f	%
Household Size		
1	1	.6
2	11	6.1
3	41	22.8
4	26	14.4
5	40	22.2
More than 5	61	33.9
Total	180	100

Highest Educational Attainment

In terms of Highest Educational Attainment 94.4% of the respondents graduated a Baccalaureate (four-year degree course) followed by a graduate of diploma or certificate which represents 3.3%, then 1.1% for an associate degree (two-year degree, only one graduated a master's degree and only 1 did not indicate.

Table 5. Highest Educational Attainment

Categories	f	%
Household Size		
1	1	.6
2	11	6.1
3	41	22.8
4	26	14.4
5	40	22.2
More than 5	61	33.9
Total	180	100

Knowledge and skills Acquired from the course/degree program

The result showed that in terms of Knowledge/skills acquire from course/degree program the overall mean is 2.61 of somewhat extreme. The category of proficiency in written Filipino, proficiency in spoken Filipino, analytical skills, team work/ working with others in a group, and exposure to general knowledge and current issues got the mean of 2.42, 2.45, 2.59, 2.47 and 2.49 respectively which are all interpreted as very extreme. This implies that graduates of Criminology are proficient in written and spoken Filipino, they are trained in terms of analytical thinking, to work as a team and exposure to general knowledge and current issues. These are all essential in the exercise of their profession.

Meanwhile, Proficiency in written English, IT Skills, proficiency in written and spoken English, interpersonal communication skills, creative and critical thinking skill, and problem-solving skills got the mean of 2.65, 3.08, 2.68, 2.71, 2.61,2.61, and 2.62 which are all interpreted as somewhat extreme.

Table 6. Knowledge and Skills acquired from the course/degree program

	Categories	Mean	SD	Interpretation
a.	Specialized knowledge in the course	2.65	0.674	SE
b.	Specialized knowledge in ICT	3.08	0.873	SE
c.	Speaking and writing and skills	2.68	0.666	SE
d.	Proficiency in written English	2.71	1.010	SE
e.	Proficiency in spoken English	2.42	0.740	VE
f.	Proficiency in written Filipino	2.45	0.683	VE
g.	Proficiency in spoken Filipino	2.61	0.831	SE
h.	Interpersonal communication skills	2.61	0.768	SE
i.	Creative and critical thinking skills	2.59	0.717	VE
j.	Analytical skills	2.62	0.698	SE
k.	Problem solving skills	2.47	0.775	VE
l.	Team work/working with others in a group	2.49	0.811	VE
Total		2.61	0.616	SE

Scale: - 1.00 – 1.79 – (Extremely), 1.80 –2.59 (Very Extreme), 2.60 – 3.39 (somewhat extreme), 3.40-4.19 (not very extreme), 4.20-5.00 (not at all extreme)

Enroll for Further Studies

In terms of pursuing further studies, only 3 out of the 180 respondents enrolled for further studies after earning their baccalaureate degree which is only 1.7% of the total respondents. Out of the 180 respondents 173 of 96.1% did not enroll for further studies and 4 or 2.2% did not indicate. This implies that taking further studies is not a priority of the Criminology maybe in the future if promotion requires them to earn such.

Table 7. Enroll for Further Studies

	f	%
Yes	3	1.7
No	173	96.1
Did not indicate	4	2.2
Total	180	100

No. of Graduates who were employed/unemployed

In terms of employment, the result of the study revealed that 51.7% of the Criminology graduates are employed or 93 out of 180 respondents, 46 or 25.6 of them are not employed, 40 or 22.2% were never employed and 1 or .6% did not indicate.

Table 8. No of Graduates who were employed/unemployed

	f	%
Yes	93	51.7
No	46	25.6
Never employed	40	22.2
Did not indicate	1	.6
Total	180	100

Present Employment Status

Out of the employed Criminology graduates 44 or 24.4% of them are on a contractual basis, 30 or 16.7% are already in a permanent status, 12 or 6.7% of them are casual , 5 or 2.8% are temporary, 4or 2.2% are self-employed and 85 or 47.2% of them did not indicate. It somehow good to know that out of the Criminology graduates from Academic Year 2011-2013 there are already permanent or regular. Or at least half of the Criminology graduates already landed a job.

Table 9. Present Employment Status

	F	%
Regular/ Permanent	30	16.7
Temporary	5	2.8
Casual	12	6.7
Contractual	44	24.4
Self-Employed	4	2.2
Did Not Indicate	85	47.2
Total	180	100

Looking for another job

Data in terms of looking for another job showed that out of the 180 respondents, 105 or 58.39% said that they are still looking for another job, 54 or 30% of them said that they are no longer looking for another job maybe because they are already permanent or they find their job stable, they are already receiving salaries commensurate with the services they are rendering. And 21 or 11.7% of them did not indicate.

Reason for looking for another job

In terms of reasons for looking for another majority of the respondents did not indicate while 35 of them or 19.4% states that their reason for looking another job is to get higher salary in order to support that daily needs, 34 of them or 18.9% are looking for a job relevant to their field of study, 19 or 10.6% are looking for job compatible with their qualification, 10 or 5.6% of them are looking for permanent job and 3 or 1.7% are looking for a challenging job.

Table 10. Looking for another job

	f	%
Yes	105	58.3
No	54	30
Did not indicate	21	11.7
Total	180	100

CONCLUSION

The main objective of the study was to determine the employment status of the Criminology graduates from AY 2011-2013. Based on the study, the following are the conclusions:

1. Most of the respondents are male since Criminology is a male-dominated course and most of them are single. Around 95% of the respondents came from the Province of Guimaras.
2. Majority of the respondents' annual income is less than 50,000 and in terms of household size, most of the respondents have more than 5 family members.
3. The respondents are almost a graduate of Baccalaureate degree and only a few enrolled for further studies, almost half of the respondents were already employed but still they are looking for another job in order to get a higher salary and relevant to their field of study to name some.

RECOMMENDATIONS

The following are the recommendations based on the results of the study conducted:

1. Encourage students to take civil service examination/NAPOLCOM Exam and enroll further studies for professional growth and promotion.
2. Establish more linkages among the graduates and a prospective employer to help students land a better job relevant to their degree.
3. Students should improve their skills and competencies to become effective and efficient workers/employees
4. Encourage students to perform well to avail scholarship programs of government and other benefactors so that they could be given the opportunity to continue their higher education and eventually become competitive to land a job.

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THE STATUS OF MANGROVES AMONG COASTAL BARANGAYS IN BUENAVISTA, GUIMARAS

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ABSTRACT This study was conducted to determine the condition of the mangrove resources in the coastal barangays of Buenavista, Guimaras. Mangrove resources were assessed using the transect plot technique established by English et al., (1994). The data gathered were regeneration rate per meter square, crown cover, average tree height and disturbances/cuttings of mangrove noted during the data gathering. Common species of mangrove per barangay were also recorded using the Field Guide to Philippine Mangroves (Primavera and RDB Dianala, 2009). For categorizing the overall health of Mangrove, the PCRA Training Guide, 2004 was used. Among the seven (7) locations, the overall health of the six (6) locations of mangrove resources ranges from excellent to good and only one (1) location showed poor performance. This shows that the mangroves in the coastal barangays of Buenavista, Guimaras are still in good conditions. But there should be intervention to be done by the concerned government agencies for the areas with excellent to good regeneration data so that these saplings/regenerated mangroves will grow into a full grown mangrove tree.

Keywords: Mangrove resources, Transect Plot method, Buenavista, Guimaras,

INTRODUCTION

Background of the Study

People mostly have thought that mangroves are noxious impenetrable swamps full of diseases, and they used to be destroyed as a public health measure. But now we know better. Mangroves are very productive coastal resources that are useful in many ways. The coastal ecosystems in the Asia -Pacific region are perhaps among the most threatened (Adeel and King, 2002). In South Asia, coastal populations are vulnerable to extreme weather events and survive on diminishing coastal resources. In the western Pacific region, small islands are threatened by the encroaching pressures of development and climate change.

The mangroves are a characteristic forest biotope in tropical river estuaries and tidal zones. They constitute an incredible adaptation to the environmental conditions of entering salt, sea water and escaping sweet, riverine water. The forests are highly productive areas and in many place an underdeveloped resource. They are also widespread along the coast of Guimaras Island. Generally, mangroves play a variety of important economic as well as ecological services particularly to communities around them. They serve as breeding grounds and nursery of marine organisms. Commercial seafood species depend for part of their life cycle in mangrove ecosystems. Mangroves support vast varieties of marine species through complicated food web part of it coming from detritus they generate. They are also sources of raw materials for construction, furniture production as well as for energy (fuelwood and charcoal) (Ellis, 2010). As well as providing a buffer for the land, mangroves also interact with the sea.

Sediment trapped by roots prevents silting of adjacent marine habitats where cloudy water might kill corals or smother seagrass meadows. In addition, mangrove plants and sediments have been shown to absorb pollution, including heavy metals. Mangroves are also very effective at storing carbon. Another benefit is soil nutrient replenishment as soil nutrients (NPK) are recharged by litter-fall of the mangrove forest. They also provide habitat for the number of wildlife and serve as a resting place for migratory birds. House Bill. No. 841, introduced by the Honorable Angelo Palmones, an act promoting the "National Strategy for the Sustainable Development, Management and Protection of Mangrove Resources in the Philippines" otherwise known as "Mangroves Resources Act" of 2010 states that it is the policy of the State to promote equitable access to natural resources and ensure the success of broad-based community participation in the development, management and protection of the country's mangrove forests. In line with this, it is the policy of the State to ensure the success of rehabilitating degraded mangrove areas and its sustainable development as well as the management and protection of all natural mangrove forests and associated ecosystems therein. Sustainable utilization of mangrove resources is encouraged to serve as an incentive to develop more areas within the framework of community-based and other socially-responsive approaches.

Based on Geographical Information System (GIS) latest survey data, (Buenavista-LGU, July 2002) the total

mangrove cover of Province of Guimaras is about 516.41 has. of which, only 49.56 has or 9.56 % of the total mangrove area comes from the mangrove cover of Buenavista.

Given these data, a confirmation study must be conducted after 11 years in order to determine whether there are changes in the mangrove density and other characteristics of the mangrove resources in the municipality in order to plan for development works to conserve, rehabilitate and reforest the coastal areas of the municipality.

Objectives:

General:

This study determined the status of mangrove resources in the coastal Barangays of Buenavista, Guimaras.

Specific:

1. Determine the mangrove species found in the coastal barangays of Buenavista, Guimaras;
2. Measure and compute the average height and percent crown cover of mangroves in the coastal barangays of Buenavista, Guimaras;
3. List the average number of seedlings and saplings in each area under study;
4. Determine the overall condition of mangroves found along coastal barangays of Buenavista, Guimaras;
5. List any additional observations on the disturbances/ presence of foreign objects noted during data gathering.
6. Come up with a mangrove scorecard per area evaluated

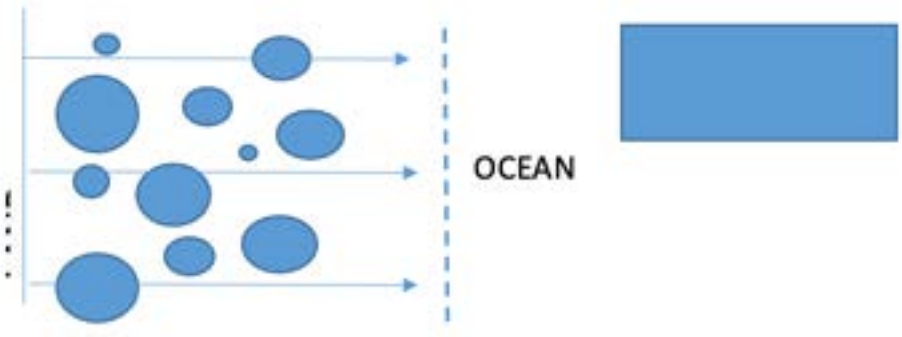
METHODOLOGY

Study Area:

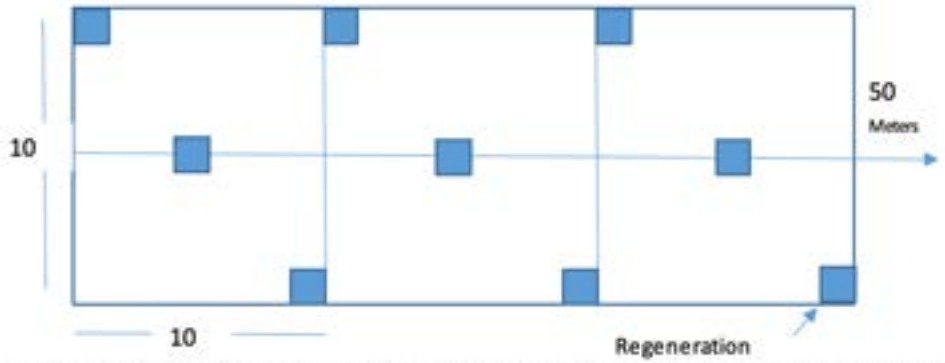
The study area covered the different coastal barangays of Buenavista, Guimaras identified to have mangrove vegetation. The map below showed the area covered by the study.

`Mangrove diversity, abundance, and regeneration assessments were conducted within the predominant Mangrove forest locations in the municipality. These locations were identified through satellite imagery and through community consultation / participatory community mapping. After the sites were identified, mangroves were assessed using the transect plot technique established by English et al., (1994).

1. First, a 50-meter transect line was laid from the landward margin of the forest at the right angle to the edge of the mangrove forest.

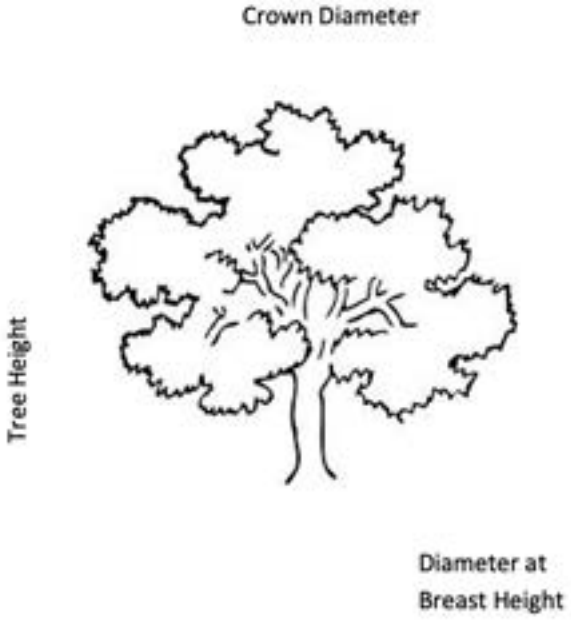


2. Each quadrat/ plot measuring 10m x 10m every 10m of the transect line was set. GPS locations were recorded



3. In these plots (10 X10 meter quadrants), the total number of mature trees was identified. Identified mature trees are those having a height greater than one (1) meter and greater than 4 cm in circumference at chest height (~1.5 m).

4. For each mature tree, the species, substrate, total height, diameter at breast height, and crown diameter were recorded. Based on this data, the researchers calculated the total percent cover along the transects (Equation 1).



5. Also in these plots, the dominant species were noted, their abundance/count Additional notes may include the substrate type and other observations such as associated flora and fauna.

6. In each quadrant, three 1 X 1 Meter regeneration plots were sampled, one in the very center of each larger quadrat and in two opposite/diagonal of the four corners (See diagram above).
Regeneration plots were used as an indicator to determine the number of seedlings and saplings in a 1 x 1 Meter subsection of the transect so that an estimated value for the forest regeneration can be calculated (equation 3).

7. Post survey, the overall condition, and health of the mangroves can be determined, including the degree of regeneration or growth of new trees and total percent cover within the area. These parameters were calculated as follows:

Eq. 1 Percent crown cover = total crown cover of all trees / total area sampled

Eq. 2 Average height = total height of all trees recorded / total number of all trees recorded

Eq. 3 Regeneration per M^2 = total regeneration count / total no. of regeneration plots

8. The condition of a mangrove area can now be classified as excellent, good, fair, or poor, based on the criteria in the table below:

Criteria used for categorizing the health of a mangrove forest (Source: PCRA Training Guide, 2004)

Condition	Criteria
Excellent	76% and above in % crown cover
	1 regeneration per m^2
	Above 5 meters in average tree height
	Undisturbed to negligible disturbance
Good	51-75 % crown cover
	<1-0.76% regeneration per m^2
	<5m-3m average height of trees
	Slight disturbance and few cuttings
Fair	26-50% crown cover
	0.50-0.75 regeneration per m^2
	<3m-2m average height of trees
	Moderate disturbance and noticeable cuttings
Poor	0-25% crown cover
	<0.50 regeneration per m^2
	<2m average height of trees
	Heavy disturbance/cuttings/pollution, rampant conversion to other uses, nearly destroyed

RESULTS AND DISCUSSIONS

The assessment of the mangroves based on qualitative description ranges from fair to excellent with the majority of the locations having a qualitative description of good. The location with mangrove growth described as excellent was Umilig area 2 while two locations where mangrove growth was fair are found in barangays Avila and East Valencia. These findings show that even there are some disturbances but mangrove growth in the different coastal barangays are still good (Table 1).

Table 1. Summary table for the conditions of the mangrove resources in Buenavista, Guimaras

Area/ location	# of Parameters rated as "excellent"	Description
Getulio	2	Good
Umilig- Area 1	2	Good
Umilig- Area 2	3	Excellent
Avila	1	Fair
East Valencia- Pagatpat	2	Good
East Valencia- Mampay	1	Fair
Taminla	2	Good
Montpiller	2	Good

Scale: Excellent- 3 and above parameters having conditions rated as "excellent"; Good- 2 parameters having conditions rated as "excellent"; Fair – 1 parameter having conditions rated as "excellent"; Poor- no parameter having conditions rated as "excellent"

The growth of any mangrove species is site-specific because there are some mangroves which cannot thrive in the environmental conditions of other places. The maximum number of different mangroves thriving along coastal barangays of Buenavista was seven (7) composed of Pagatpat, Baras-baras, Bakhaw, Bungalon, Bakhawanbabae, Bakhawanlalaki, nipa, tawalis, and tabigi. The local name was used because the study did not focus on identifying the genus of each mangrove based on the established guides (Primavera et.al, 2010). The distinct identifying factors such as flowers and fruits were absent during the time of the study, hence, the complete scientific name cannot be determined if identification will be based solely on leaf characteristics. The barangay with the most varied species of mangrove was Montpiller followed by Umilig area 2. This may imply that only these mangrove species can thrive along coastal areas of Buenavista, Guimaras. Data are presented in Table 2.

Table 2. Mangrove species growing along coastal barangays of Buenavista

Area/ location	Number of species /area	Rank	Mangrove local name
Getulio	5	4.5	Pagatpat, Bakhaw, Bungalon, Bakhawanbabae, Bakhawanlalaki
Umilig- Area 1	2	8	Pagatpat, Bungalon
Umilig- Area 2	5	4.5	Pagatpat, Bakhaw, Bungalon, Bakhawanbabae, Bakhawanlalaki
Avila	5	4.5	Pagatpat, Bakhaw, Bungalon, Bakhawanbabae, Bakhawanlalaki
East Valencia- Pagatpat	5	4.5	Pagatpat, Bakhaw, Bungalon, Bakhawanbabae, Bakhawanlalaki
East Valencia- Mampay	4	7	Pagatpat, Bungalon, Bakhawanbabae, Bakhawanlalaki
Taminla	7	2	Pagatpat, Bakhaw, Bungalon, Bakhawanbabae, Bakhawanlalaki, Tabigi, Barasbaras
Montpiller	8	1	Pagatpat, Baras-baras, Bakhaw, Bungalon, Bakhawanbabae, Bakhawanlalaki, nipa, tawalis

The data on the average height of the mangrove trees across different areas when evaluated showed that the height ranges from 5.05 to 8.43meters and the overall average height was six (6) meters. All of the tree heights were all described as excellent. Area two in Umilig got the lowest mean height of 5.05 meters while the highest mean height of 8.43 meters was found in Pagatpat, East Valencia, Buenavista. The height of mangroves may also imply the age of the mangrove plantation. The higher the heights of the mangrove the older may be the trees and vice- versa. It was observed that the area in Pagatpat showed less regeneration while in Umilig regeneration was very evident. This low tree heights in Umilig area 2 can be attributed to active regeneration that upon data gathering, within a sampling quadrant there might be some young trees as a result of high regeneration rate in previous years while Pagatpat although trees were very tall it showed poor regeneration and the tendency during sampling was that all the matured trees were counted and parameters were taken attributing to tall trees within the sampling quadrant. The Data are presented in table 3 below.

Table 3. Average height of matured trees

Area/ location	Height (m)	Description
Getulio	6.17 m	Excellent
Umilig- Area 1	5.43 m	Excellent
Umilig- Area 2	5.05 m	Excellent
Avila	5.25 m	Excellent
East Valencia- Pagatpat	8.43 m	Excellent
East Valencia- Mampay	6.34 m	Excellent
Taminla	5.35 m	Excellent
Montpiller	5.82 m	Excellent
Mean	6 m	Excellent

The barangays with excellent regeneration rate were Umilig, Avila, Taminla and Montpiller having 10, 1.49, 5.2 and 1.78, average number of regenerated trees per square meter, respectively while East Valencia got poor regeneration rate. Getulio and part of Umilighad fair regeneration rate.

Table 4.Mangrove regeneration per square meter

Area/ location	Mangrove Regeneration/sq. m	Description
Getulio	0.667	Fair
Umilig- Area 1	0.6	Fair
Umilig- Area 2	10	Excellent
Avila	1.49	Excellent
East Valencia- Pagatpat	0.47	Poor
East Valencia- Mampay	0.42	Poor
Taminla	5.2	Excellent
Montpiller	1.78	Excellent

The percent forest cover for matured trees ranges from 57% to 143% described as good and excellent. The results further showed that out of 8 areas evaluated, 4(50%) showed excellent percent forest cover and another 4(50%) showed good excellent forest cover

Table 5. Percent cover for mature trees

Area/ location	Percent Cover for Mature Trees	Description
Getulio	95 %	Excellent
Umilig- Area 1	76%	Excellent
Umilig- Area 2	76%	Excellent
Avila	57%	Good
East Valencia- Pagatpat	143%	Excellent
East Valencia- Mampay	59%	Good
Taminla	70%	Good
Montpiller	68%	Good
Mean	80.5%	Excellent

The overall degree of disturbance with garbage for all areas was 21.9 described as moderately disturbed. On the other hand, the disturbance due to cuttings of mangrove trees was 20.4 described as heavily disturbed. The barangay with heavy disturbance due to both garbage and cuttings was Getulio. Umilig also showed heavy disturbance due to garbage. In terms of disturbance due to cuttings of mangrove trees beside Getulio, Umilig and East Valencia also showed heavy disturbance.

Table 6. Disturbance

Area/ location	Garbage		Cutting	
	Disturbance	Despcription	Disturbance	Description
Getulio	47	Heavy Disturbance	31	Heavy Disturbance
Umilig- Area 1	4	Slight Disturbance	9	Slight Disturbance
Umilig- Area 2	33	Heavy Disturbance	26	Heavy Disturbance
Avila	15	Slight Disturbance	12	Moderate Disturbance
East Valencia- Pagatpat	17	Moderate Disturbance	22	Heavy Disturbance
East Valencia- Mampay	19	Moderate Disturbance	24	Heavy Disturbance
Taminla	17	Moderate Disturbance	19	Moderate Disturbance
Montpiller	23	Moderate Disturbance	20	Moderate Disturbance
Mean	21.9		20.4	

B. Analysis per Location:

Barangay :Getulio

The overall mangrove condition for barangay Getulio over the five quadrants sampled across three replications were rated as good. the average height for mature trees were 6.17 meters while the percent crown cover for these trees was 95% and all were rated as excellent. However, the area has a slow regeneration and was rated as fair which may imply that because of the excellent forest cover regeneration was hampered because the sun cannot penetrate the ground and cannot provide enough sunlight for the photosynthesis process to take place for the samplings and newly regenerated mangrove resources. In addition, Getulio mangrove area has heavy disturbances in terms of proliferation of garbage and cutting of mangroves by the people in the community.

Table 7. Assessment of the mangrove condition in Getulio

Particular	Rating	Description
Average Height for mature trees	6.17 m	Excellent
Percent Cover for mature trees	95%	Excellent
Mangrove Regeneration per m2	0.667	Fair
Disturbances :Garbage	47	Heavy disturbances
Cuttings	31	Heavy disturbances
Overall Conditions	2 parameters rated as "excellent	Good

Among the five (5) species of mangrove present in Getulio, only Pagatpat (Sonneratia sp.) does not have regeneration or re-growth, the rest of the mangrove species composed of Bakhaw (Rhizophora sp.) and Bunagalon (Avicennia sp.), have re-growth. The species found in Getulo are listed in Table 8.

Table 8. List of Mangrove species found in Getulio, Buenavista, Guimaras

Regeneration		Mature Trees	
Local Name	Scientific Name	Local Name	Scientific Name
1.Bakhaw	*Rhizophora sp.*	1.Pagatpat	*Sonneratia sp.*
2. Bungalon	*Avicenniasp*	2. Bakhaw	*Rhizophora sp.*
3.Bakhawan babae	*Rhizophora sp.*	3.Bungalon	*Avicenniasp*
4.Bakhawan lalaki	*Rhizophora sp.*	4.Bakhawan babae	*Rhizophora sp.*
		5. Bakhawanlalaki	*Rhizophora sp.*

Barangay: Umilig (Area 1)

For Barangay Umilig, 2 areas were identified as the study area. The first area, the overall condition of the mangroves was classified as good. Theaverage height for each tree was 5.43m. The percent crown cover was 76%, interpreted as "excellent". On the other hand, the area's regeneration per m2 was 0/6 which mean that the area's regeneration of mangrove species was rated as "fair". As to the disturbances in terms of garbage found in the area and the observable cuttings on mangrove trees, the area is said to be as slightly disturbed. Data are shown in Table 10.

Table 9.Assessment of the mangrove condition in Umilig area 1

Particular	Rating/Data	Description
Average height for mature trees	5.43 m	Excellent
Percent crown cover for mature trees	76%	Excellent
Mangrove Regeneration per M2	0.6	Fair
Disturbances		
Garbage	4	Slight disturbances
Cuttings	9	Slight disturbances
Overall Conditions	2 parameters rated as "excellent	Good

As to the species of mangrove found in the area, only Bungalon (Avicennia sp) and Pagatpat (Sonneratia sp.) are present in the observed area.

Table 10.Mangrove species found in Umilig, area 1

Regeneration		Mature Trees	
Local Name	Scientific Name	Local Name	Scientific Name
1.Bungalon	Avicennia sp.	1.Pagatpat	Sonneratia sp.
2.Pagatpat	Sonneratia sp.	2.Bungalon	Avicenniasp.

Barangay : Umilig (Area 2)

The second area being observed showed an overall condition of mangroves described as excellent. The area was excellent. The area was excellent in terms of average height for matured trees (5.05m); crown cover for mature trees (76%); and regenerated per m2 (10). On the other hand, heavy disturbances were observed in terms of garbage found in the trees and cutting of the mangroves observed

Table 11.Assessment of the mangrove condition in Umilig area 2

Particular	Rating/Data	Description
Average height for mature trees	5.05 m	Excellent
Percent crown cover for mature trees	76%	Excellent
Mangrove Regeneration per M^2	10	Excellent
Disturbances		
Garbage	33	Heavy disturbances
Cuttings	26	Heavy disturbances
Overall Conditions	3 parameters rated as "excellent"	Excellent

The species of regenerated mangroves present in the second area being observed were Bungaln (Aviennia Marina); Bakhawan babae (Rhizophorasp.); Bakhawan lalaki (Rhizophora sp.) and Pagatpat (Sonneratia sp.). As to the matured trees bakhaw (Rhizophora sp.) added the group.

Table 12.Mangrove species found in Umilig area 2.

Regeneration		Mature Trees	
Local Name	Scientific Name	Local Name	Scientific Name
1.Bungalon	Avicennia sp.	1.Pagatpat	Sonneratia sp.
2.Bakhawan babae	Rhizophora sp.	2.Bakhaw	Rhizophora sp.
3.Bakhawan lalaki	Rhizophora sp.	3.Bungalon	Avicenniasp
4.Pagatpat	Sonneratia sp.	4.Bakhawan babae	Rhizophora sp.
		5.Bakhawan lalaki	Rhizophora sp.

Barangay : Avila

The third coastal barangay was Barangay Avila which is just next and adjacent to barangay Umilig. The overall mangrove conmdition was "fair"/ The only parameter having a condition described as excellent was the average heigt for matured trees (5.25m). The percent crown cover for matured trees was 57% described as fair. In terms of disturbances, the area was slightly disturbed with the presence of garbage, the area was slightly disturbed with the presence of garbage and was moderately disturbed by the observed cuttings, both in the regenerated and matured mangroves.

Table 13. Assessment of the mangrove condition in Avila

Particular	Rating/Data	Description
Average height for mature trees	5.25 m	Excellent
Percent crown cover for mature trees	57%	good
Mangrove Regeneration per M2	1.49	Fair
Disturbances		
Garbage	15	Slight disturbances
Cuttings	12	Moderate disturbances
Overall Conditions	1 parameter rated as "excellent"	Fair

The species of mangrove present in the barangay Avila were bakhaw, bungalon, bakhaw babae bakhaw lalaki, and pagatpat. Only bakhaw was not part of the matured trees.

Table 14.Mangrove Species found in Avila

Regeneration		Mature Trees	
Local Name	Scientific Name	Local Name	Scientific Name
1.Bakhaw	Rhizophora sp.	1.Pagatpat	Sonneratia sp.
2.Bungalon	Avicennia sp.	2.Bungalon	Avicennia sp.
3.Bakhawan babae	Rhizophora sp.	3.Bakhawan babae	Rhizophora sp.
4.Bakhawan lalaki	Rhizophora sp.	4.Bakhawan lalaki	Rhizophora sp.
5.Pagatpat	Sonneratia sp.		

Figure 1. Pictures during the data gathering

Barangay: East Valencia

The overall condition for the mangroves in Pagatpat, a portion in Barangay East Valencia, was good. The parameters on average height for mature trees and crown cover obtained a rating of 8.43m and 143% respectively described as excellent. The mangrove regeneration was poor (0.47) and the area was moderately disturbed by garbage and was heavily disturbed in terms of cuttings.

Table 15.Assessment of the mangrove condition in East Valencia

Particular	Rating/Data	Description
Average height for mature trees	8.43 m	Excellent
Percent crown cover for mature trees	143%	Excellent
Mangrove Regeneration per M^2	0.47	Poor
Disturbances		
Garbage	17	Moderate disturbances
Cuttings	22	Heavy disturbances
Overall Conditions	2 parameters rated as "excellent"	Good

Just like in some other areas being observed, the species present in regenerated mangroves were bakhaw, bungalon, bakhaw lalaki, bakhaw babae while for matured mangroves, the species found were pagatpat, bungalon, and bakhaw babae.

Table 15.List of mangrove species found in East Valencia

Regeneration		Mature Trees	
Local Name	**Scientific Name**	**Local Name**	**Scientific Name**
1.Bakhaw	*Rhizophora sp.*	1.Pagatpat	*Sonneratia sp.*
2.Bungalon	*Avicenniasp*	2.Bungalon	*Avicenniasp*
3.Bakhawan babae	*Rhizophora sp.*	3.Bakhawan babae	*Rhizophora sp.*
4. Bakhawanlalaki	*Rhizophora sp.*		

Barangay: East Valencia (Mampay)

Mampay has an overall mangrove condition of fair. The Average height for mature trees was 6.34m described as excellent as excellent, the present crown cover was good (59%) and the regeneration per m2 was poor (0.42). As to the disturbances, the area was moderately disturbed by garbage and while cutting of trees were described as heavily disturbed

Table 16.Assessment of the mangrove condition in Mampay (East Valencia)

Particular	Rating/Data	Description
Average height for mature trees	6.34 m	Excellent
Percent crown cover for mature trees	59%	Good
Mangrove Regeneration per M^2	0.42	Poor
Disturbances		
Garbage	19	Moderate disturbances
Cuttings	24	Heavy disturbances
Overall Conditions	1 parameter rated as "excellent"	Fair

The species present there are just the same as with the species present in pagatpat in terms of regeneration and matured trees.

Table 17.List of Mangrove species found in Mampay, East Valencia

Regeneration		Mature Trees	
Local Name	Scientific Name	Local Name	Scientific Name
1.Pagatpat	*Sonneratia sp.*	1.Pagatpat	*Sonneratia sp.*
2.Bungalon	*Avicenniasp*	2.Bungalon	*Avicenniasp*
3.Bakhawan babae	*Rhizophora sp.*	3.Bakhawan babae	*Rhizophora sp.*
4.Bakhawan lalaki	*Rhizophora sp.*		

Barangay: Taminla

The overall condition for the mangroves present in the observed areas in Taminla was good. The area has an excellent condition in terms of the average height for mature trees (5.35m) and in terms of regeneration per m2 (5.2). The area was good in terms of crown cover for mature trees (70%). As to the disturbances present, the area exhibited moderate disturbances.

Table 18.Assessment of the mangrove condition in Taminla

Particular	Rating/Data	Description
Average height for mature trees	5.35 m	Excellent
Percent crown cover for mature trees	70%	Good
Mangrove Regeneration per M^2	5.2	Excellent
Disturbances		
Garbage	17	Moderate disturbances
Cuttings	19	Moderate disturbances
Overall Conditions	2 parameters rated as "excellent"	Good

As to the areas, almost the same species of mangrove can be found in Taminla as presented in Table 19.

Table 19.of Mangrove Species present:

Regeneration		Mature Trees	
Local Name	Scientific Name	Local Name	Scientific Name
1.Bakhaw	*Rhizophora sp.*	1.Pagatpat	*Sonneratia sp.*
2.Bungalon	*Avicenniasp*	2.Bakhaw	*Rhizophora sp.*
3.Bakhawan babae	*Rhizophora sp.*	3.Bungalon	*Avicenniasp*
4.Bakhawan lalaki	*Rhizophora sp.*	4.Bakhawan babae	*Rhizophora sp.*
		5.Balhawan lalaki	*Rhizophora sp.*
		6.Tabigi	*Xylocarpus sp.*
		7.Baras baras	------

Barangay : Montpiller

The overall conditions of mangroves in the observed areas in brgy Montpiller was good. The area has an excellent condition interms of the average height formature trees (5.82m) and in terms of regeneration per m2 (1.78). The area was excellent in terms of crown cover for mature trees (70%). As to the disturbances presents, the area exhibited moderate disturbances.

Table 20.Assessment of the mangrove condition in Montpiller

Particular	Rating/Data	Description
Average height for mature trees	5.82m	Excellent
Percent crown cover for mature trees	68%	Good
Mangrove Regeneration per M^2	1.78	Excellent
Disturbances		
Garbage	23	Moderate disturbances
Cuttings	20	Moderate disturbances
Overall Conditions		Good

On top of the five common species found in the previous areas In Buenavista, Guimaras, other species such as Nipa, baras-baras and tawalis were found to be thriving in the mangrove area along the coast of Brgy. Montpiller showed more variation. It simply shows that the condition of the area is suitable of these additional mangrove species.

Table 21.List of mangroves species found in Montpiller

Regeneration		Mature Trees	
Local Name	Scientific Name	Local Name	Scientific Name
1.Bakhaw	*Rhizophora sp.*	1.Pagatpat	*Sonneratiasp.*
2.Bungalon	*Avicenniasp.*	2.Bakhaw	*Rhizophora sp.*
3.Bakhawan babae	*Rhizophora sp.*	3.Bungalon	*Avicenniasp*
4.Bakhawan lalaki	*Rhizophora sp.*	4.Bakhawan babae	*Rhizophora sp.*
5.Baras baras	*Ceriops sp.*	5.Bakhawan lalaki	*Rhizophora sp.*
		6.nipa	*Nypa sp.*
		7.tawalis	*Osbornia sp.*

CONCLUSIONS

Based on the results of the study, the following conclusions are made:

1. The mangrove species in the 6 sampling areas are the same and only two areas showed higher species diversity when compared to the rest of the area;
2. The average height of mangroves in each area for matured trees showed excellent rating;
3. Only 50% of the areas evaluated have excellent forest cover and the rest have good forest cover only.
4. The overall regeneration across areas is excellent.
5. Getulio got high disturbance for both the presence of garbage and cutting of mangrove trees.

RECOMMENDATIONS

Based on the aforementioned conclusions, the following recommendations were made:

1. The mangrove resources in Buenavista will be continually monitored for its status/condition in order to maintain its good condition. The values of the people in the different localities and other man-made activities pose as a threat to the maintenance of the good condition of the trees;
2. Areas with excellent regeneration must be acted upon by the people in the community by protecting the saplings/seedlings by making some barriers against tidal actin and garbage strangulation.
3. Coastal clean-up drive will be done periodically in the different localities to avoid strangulation of the saplings /seedlings from the garbage;
4. Continuous education campaign among the localities will be done to educate people that mangroves are important in the fish life cycle and for the protection of the coastal areas against climate change.
5. Community police must be established in order to apprehend illegal loggers cutting matured mangrove trees.
6. A follow-up study for the other four municipalities in the province is done in order that LGUs will have data on the status of their mangrove resources.

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The Rise of Christianity in Guimaras Island, Philippines

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ABSTRACT The rise of Christianization in Guimaras happened simultaneously with the different islands in the Philippine archipelago. This research uses historical approach utilizing primary data, i.e., one on one in-depth interview among elders of the municipality as key informants to established validity of the secondary data gathered. Findings showed that the Christianization of the island was brought first by the Agustinian Friars followed by the Jesuits. The Agustinians influenced their expression of faith until the Jesuits took control of the island. A controversy between these two groups of missionaries broke out and there was a time that only a few faithful remained due to lack of priests to guide them who eventually affiliated themselves in several religious sects that established churches in the province. The spread of Christianity in the island goes hand in hand with the establishments of the municipalities in the Province.

Keywords: Christianity, Guimaras, Augustinians, Jesuit

INTRODUCTION

Background of the study

Guimaras is an island province in the Philippines located in the region of Western Visayas. Among the smallest provinces, its capital is Jordan. The province is situated in the Panay Gulf, between the islands of Panay and Negros.

About 1581, Gonzalo Ronquillo de Peñalosa, Spanish governor and Captain-General of the Philippine Islands, established a settlement in Guimaras for the purpose of the Christianising the island's natives. He and his subordinates organized the pueblicitos or villages of Nayup under the patronage of Saint Peter the Apostle, and Igang with Saint Anne as patroness.

Evangelization of Guimaras occurred around the same time the friars were making inroads in Panay. The Augustinians established the visitas (chapelries) of Nayup and Igang as subordinate to Oton, Iloilo. Gómez Pérez Dasmariñas, the 7th Spanish Governor-General, noted in a 20 June 1591 report to King Philip II that the friars of Oton made regular visits to the island.

In 1742, the island came under the jurisdiction of Dumangas – now known as Iloilo, until 1751 when the Augustinian Order was replaced by the Jesuits, after which the Dominican order took over Guimaras. The Jesuits, who had established a school in Iloilo and had missions in Molo and Arevalo, took charge of the island. By 1755, it was organized into a regular parish. When the population increased considerably, the island was given its municipal status with a seat of government at Tilad (today Buenavista).

The Christian faith in the island cannot be separated from its historical and political beginnings. Knowing how the different Christian Religion rise into being in the island needs thorough study so that many of the younger generations may have the ideas on how their respective religions came in the island of Guimaras.

Objective of the Study

This research work aimed to determine how the different Christian Religions began their journey in the island of Guimaras, Philippines.

The Growth of the Catholic Parishes of Buenavista, Guimaras

Since the establishment of the government in Buenavista, Catholicism was also considered as its first religion. The political government in the municipality existed hand-in-hand with the religious because during the Spanish period there was no separation between the church and the state.

Looking back into the history of Buenavista, the old Roman Catholic Church was founded in Navalas and was followed by the construction of the Old Poblacion Church in Old Poblacion, Buenavista in 1844.

a. The Parish of St. Isidore in Navalas, Buenavista

Fr. Juan Fernandez, in his "Apuntes Historicos de la Isla de Panay" wrote a brief descriptive account or background of Guimaras and its topography. This account is also contained in the Archivo Historico Hispano Agustino y Boletin Official". Fr. Fernandez wrote that since the early days of evangelization of the island of Panay, small villages were formed in Himal-us (Guimaras). These consisted of Nayup with St. Peter the Apostle as Titular Head/Saint, Nabilhan, with St. John the Baptist as patron saint and Igang with St. Anne as patron saint. These small villages were included in the pastoral visits of "Ogtong (Oton) until the 18th century when they were annexed to Irong-Irong (Iloilo).

In years (1772 to 1778) Fr. Benito Lamas and Fr. Diego Maza (1731) were mentioned by Fr. Juan Fernandez as the two Agustinian priests who served the church in Guimaras. In 1742 Guimaras was placed under the jurisdiction of Dumangas until 1751 when the Augustinian ceded it to the Jesuits. In 1768, the Dominican took over until 1775 when it was formed into a parish with Iloilo. In 1776, the religious had departed from all villages for reason that the Bishop of Cebu had no secular priest capable of replacing the Jesuits who are administering the island of Negros and the province of Iloilo. Subsequently, the Dominican religious begun to administer in the villages of Iloilo, Himaras, Mandurriao, and Molog in the island of Panay. The bishop of Cebu undertook the transfer of their administration to the secular priest. When the Island had a minister of its own, the three settlements (namely: Nayup, Nabilhan, and Igang) formed themselves into one parish. In 1854, the town became independent as it was formed by the ministers into two parishes: Buenavista with 5,007 inhabitants and Nagaba with 5,964 inhabitants. Buenavista's coast is full of coral reefs, sandy, and battered by waves especially in the part which is embraced by the visita of Navalas.

Furthermore, according to de la Cavada Mendez, the Muslims"Sali and Silungan, leaders of the expedition against Panay, combined their forces at 1,600 until they reached 6,000 strong and throw their strength against the island of Panay. They stated that the neighboring island of Guimaras became the Muslim refugee after the forces of Arevalo Mayor Juan Garcia Sierra succeeded in driving the Muslims from the island of Panay. Old folks (now deceased), recall that a temporary church preceded the present site of the coral belfry and the ancient acacia trees. It was mentioned that a former priest of the church was captured and enslaved by the Moro (Muslims) raiders. As a punishment hot rice gruel was poured over his palm before he was carried away to Mindanao. Most of his church members/followers fled from the Muslim pirates to the nearby Mt. Kasarig which could be viewed on the Western part of the present church site. It is a sad recollection among the old folks, that the desertion of the faithful of the church in his hour of need, the priest reportedly cursed the incident and struck his hand on the wall of the church which is said to have left its mark.

A Muslim pirate named Dallan Bakang made Guimaras his base and made a habit to invade Dumangas every Friday. In 1763, a courageous woman named Petra or Pitay engaged the Muslim pirate in battle and won, forcing the survivors to sail back to Guimaras. Dallan Bakang and his pirates raided the town again but were defeated. In 1825, the Muslim raided the town again and failed and there were no more attempts made since then.

Built as early as 17th century, the Navalas Church was made of wooden materials with nipa shingles as roofing where Catholics gathered during Sundays to attend the Holy Mass and a weeklong Holy Week celebration bringing with them sufficient provisions especially for those faithful coming from distant barangays. One of the proofs that the Navalas Church was built as early as the 17th century was the inscription "El Fundador/ Para Mayor honor y Gloria de Dios edifice/ a su cota Don Miguel Jayme el Nuevo de Julio del año 1880 y termino en 1885". The other physical evidence is the bell which was kept at the archbishop palace for safekeeping bears the following inscription: "D Miguel Jayme/ Nueva Descubierta/ 1882" (New Discovery). The third physical evidence is the appearance of the front wall made of coral rocks which is a testimonial of the age of the church.

The permanent Catholic church of Navalas was constructed sometime during the year 1880 – 1885 under the guidance of Miguel Jayme, a prosperous merchant of Navalas at that time for the great honor and glory of God. The present church was constructed by the village people through "bayanihan" system. Miguel Jayme and his wife Agapita Javelona was the prime benefactor in the construction of the church. He was also the one who chose the patron saint of the church who is St. Isidore the Worker.

According to some stories, the church called its faithful through a bell reportedly made of silver and gold alloy with a diameter of one meter long. This bell rang so loud and clear that it can be heard in far-flung barangays which signaled them to attend to their religious duties. The bell was used to warn the inhabitants of the approaching pirates such that they made every effort to take away the bell. The bell that served its purpose for the faithful to listen to the word of God and as a warning for the coming of the enemies was forcibly grabbed by the Muslim pirates sailing for Mindanao. Since it was too heavy and inconvenient for them, they threw the bell to the sea, near the vicinity of seven islands (Islas Siete de Pecados).

b. The Most Holy Name of Jesus and Holy Rosary Parish, Buenavista,Guimaras

The church in Buenavista was established in 1854 when the town was established in Old Poblacion. The ruins of the church can still be seen in the place just adjacent to the Old Poblacion Elementary School. However, the church was damaged during the revolution of the Filipinos against the Spanish rule and subsequently during the Second World War.

Catholicism in Buenavista, except for the parish of Navalas, had its dark period. Buenavista was without a parish priest for quite a long period of time. No records were available as to the exact period for other religious sects to preach their doctrine and to cater to the spiritual needs of the populace. There came a time when only a small percentage of the population remained in the Catholic faith, a great majority satisfied their spiritual hunger through other means of worship prevailing at that time.

The property of the Roman Catholic Church was recorded in a survey of 1928 which reflected two parcels of land. On one of these lots stood the Spanish era church and the other lot was the Old Catholic cemetery.

It was sometime in the 1940s when Rev. Ireneo Jontillano was assigned in Buenavista. He had no parish church then because the old church at the old Poblacion was too big to be repaired by a handful of Catholic parishioners. What remained was no longer complete and no longer fit to be called the house of the Lord. Before and during World War II the seat of the parish was in Barangay Supang. A chapel made from local materials was built there but the parish priest had to live with his parishioners.

After the war, there was still no permanent place for worship. For a brief period in 1947, the Ortiz family of Sto. Rosario offered their place for a temporary chapel. This was located at the mountainside of the Ortiz residence. Catholic churchgoers at this time could be counted through the fingers. This was really a hard time for the priest. With very few parishioners who were left impoverished by the war, finances for church construction were difficult to put up.

In 1948, a church made from war-damaged materials was built on a lot at the back of the Sto. Rosario public market. This was big enough to accommodate churchgoers at that time and for the first time, the parish priest had his official residence. Later, this lot by which the church stood was sold by the owner and so there was a need again to look for another site on which to build a church.

During this time the Catholic populace of the town was at a dilemma. Barangay Sto. Rosario was fast becoming a commercial center and it seemed as if there was nowhere to build a church. Parish priests came and go. It was during Rev. Fr. Mansueto Calasara's time that a lot was donated on the top of a mountain. Through his able leadership and initiative, the first Catholic Church was built in 1967. This was realized with the efforts and assistance of the church leaders. Rev. Fr. Quirino Palma improved the rectory and made it livable.

c. Mclain Catholic Church (The Most Holy Name of Jesus Parish)

The Catholic Parish in Buenavista at present is composed of two churches, the Sto. Rosario Church in Sto.Rosario and the Most Holy Name of Jesus in Mclain. However, prior to the construction of the old church, the Catholics used as a chapel the shed of cattle and horses in McLain owned by Atty. Juan Salvador, owner of the vast tracks of land in Mclain, Supang, and part of New Poblacion. This is where they hold holy masses attended by more or less five (5) to 10 churchgoers. The people did not mind that the church was a shed of cattle because they just wanted to form a community of believers. Sometimes in 1968-1969, Atty. Juan Salvador constructed a permanent building made of galvanized iron sheets, concrete, and wood. Durable benches were also made. The total land area where the church was constructed was 1,800 square meters found at Las Palmas Subdivision.

Sometime in 1987, the parish priest of Buenavista transferred his residence at Barangay McLain where Atty. Juan Salvador and his family constructed a church building. The image of the Risen Christ was requested by the family Salvador to be given colorful celebration during the feast day. As a manifestation of gratefulness of the people, the image was placed at the altar in Mclain church. This image was engraved by Mr. Juanito Castro.

In the same year, a kindergarten school was established under the direction of Fr. Rolando Haguisan and was continued by Fr. Rabindranath Catalan when Fr. Haguisan was transferred to other parishes in Panay. The school operated with the technical assistance provided by the then Dep. Ed. Supervisor Adoracion Alzate. The school provided Christian education to the children of Buenavista during their formative years which enabled them to excel during their elementary years. This was the forerunner school of now Sto. Niño Catholic School in Mclain.

SeventhDay Adventist

The pioneer work of the Seventh Day Adventist (A Protestant Religion) was started in Iloilo province in 1912 by Elder E. Adams who was succeeded by Pastor Fausto Jornada in 1914. The first Adventist church was also established about this time. This was followed by the formal organization of the West Visayan Mission with headquarters in La Paz, Iloilo City. Parochial education was started with the establishment of the West Visayan Academy situated in Guimaras, in 1928 – 1930, until it was transferred to its present location in Bongco, Pototan.

The church started with only three (3) members in 1912; in 1967, its members had reached 7,489. The Seventh Day Adventist headquarters in Iloilo City reported a yearly average baptism of 600 persons and a total annual collection from tithes was close to Php 200,000.00, directly obtained from the income of the individual members. The Adventists consistently ranked near the top of all church denominations in per capita contribution to the church.

East Valencia Fundamental Baptist Church

The oldest Baptist Church in Buenavista is found in East Valencia. It was founded in 1928 by Pastor Salvador Gaitano. The lot of the church was primarily donated by the family of Pastor Salvador Gaitano with the small portion donated by the Javellana Family. This church is under the Western Visayas Fellowship of Fundamental Baptist Churches (WVFFBC). At present, the church has no regular pastor instead there are visiting pastors coming from Doanne Baptist Church in Iloilo City.

The church offered the preschool program to the kids of East Valencia and the surrounding communities with Ms. Catalina Gabayeron as a program facilitator. There are more or less 35 pupils enrolled in the school.

Iglesia Filipina Independiente (IFI)

In the year 1904, in Sto. Rosario, Buenavista was popularly known as Gibuangan, Alejandro Damian saw an image along the seashore of the Virgin Mary holding a child. He was so happy and amazed in finding such image of the Virgin with the Child. Then he gave the image to Mr. Federico "Tiyo Ikong" Zaragosa known as the founder of the Iglesia Filipina Independiente in Buenavista, Guimaras.

Tiyo Ikong erected a chapel adjacent to the old market at the left of the road when going to Old Poblacion which already marked its 100 years of existence. Pedro Zaldivar (1904 – 1905), was the gobernadorcillo at that time. Tiyo Ikong financed the construction of the chapel. After nine (9) days of prayer (Novena) the first mass was held on October 23, 1904, with the first IFI Parish Priest Fr. Francisco Obsiana of Antique who celebrated the Holy Mass in honor of Sto. Rosario as Patron Saint. With the charisma and spiritual gift and experiences of some residents of the

place who grew up as Catholics and of Tiyo Ikong, they were able to influence and convert more than 50% of the Catholic faithful in Sto. Rosario to become their members.

The families of former gobernadorcillo Pablo Gabutin, Silverio, Consing, Timoteo, Dionecia Galecia and many others joined the IFI sect. With the spiritual knowledge of Fr. Francisco Obsiana, he was able to quench the spiritual hunger of the people for the word of God resulting in the rapid growth of the faithful. A church to accommodate a great number of worshippers was constructed in the lot donated by the Consing family. The first parish church was in old Poblacion close to the municipal hall which is more or less 100 meters away.

CONCLUSIONS

Based on the findings of the study, one can be gleaned that Christianity on the island goes hand in hand with the establishment of the political government. Roman Catholic was the first Christian religion to be established, followed by the Aglipayanism, and the Protestant group.

The Catholic religion has suffered some set back after it has suffered from the hands of the Japanese invaders during second world war but despite this, it was able to circumvent all the odds and was able to regain its glory and the multitude believers today showed the strength of the Catholic faith.

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