

# TRACER STUDY ON THE GRADUATES OF MASTER OF SCIENCE IN DISASTER RISK MANAGEMENT OF CENTRAL BICOL STATE UNIVERSITY OF AGRICULTURE: INPUT TO CURRICULUM PROGRAM

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## ABSTRACT

This study aimed to determine the employability of the Master of Science in Disaster Risk Management (MSDRM) graduates to provide input to curriculum innovation. Descriptive research design was utilized to describe the demographic profile, skills/competency learned, and suggestions to improve the program. Online Survey Questionnaire and Key Informant Interview were employed. The study revealed that most of the graduates are employed in government institutions. It was also found that the foremost considerations of the MSDRM graduates for choosing and staying in the job are salaries and benefits. In addition, the foremost competency learned from the program critical thinking skills, human relations skills, and problem-solving skills. It was also noted that employment rate of MSDRM graduates is high. It was recommended that there must be alignment of the course to the mandated program on agriculture; offering of specialization; integration of subject on ecosystems-based climate change adaptation; addition of multidisciplinary faculty to existing pool; learning visit for exposure to the new trends in the field; and improvement of the program through open and distance modality.

**Keywords:** curriculum program, disaster risk management graduates, employability, Central Bicol State University of Agriculture, tracer study.

## INTRODUCTION

Amidst the growing demands on higher education brought by the global standards, every academic institution's goal is geared towards producing highly competent graduates armed with the necessary knowledge, skills and competence in embracing the 4<sup>th</sup> Industrial Revolution. A graduate tracer study has been proven effective tool that can provide feedback on the performance of the graduates.

The RA 10121 also known as The Disaster Risk Reduction and Management Act requires the Department of Education (DepEd), Commission on Higher Education (CHED), and Technical Education Skills and Development Authority (TESDA) to integrate disaster risk reduction in school curricula. In response to the mandate of the foregoing law, the Central Bicol State University of Agriculture started offering the Master of Science in Disaster Risk Management in 2008. From 2010-2019, the CBSUA graduate school had produced a total of 44 graduates.

For the past 11 years of producing Master of Science in Disaster Risk Management (MSDRM) graduates, no study has been conducted yet to determine their employability. Thus, this study is conducted to look into the graduates of the program and to identify which skills these graduates have learned in the university that they consider very useful in their job. According to Garcia (2003) as cited by Gines (2004), tracer study is an important source of information about what happened to the graduates of higher education institutions (HEI) programs.

This study will serve as feedback mechanisms for the CBSUA Graduate School to improve the Disaster Risk Reduction and Management, and Climate Change Adaptation curricular program per Accrediting Agency of Chartered Colleges and Universities in the Philippines (AACCUP), Inc. recommendation.

This will also ensure that the curriculum is important to the needs of stakeholders and will assess the consistency of its implementation (Aquino, et. al., 2015).

## OBJECTIVES OF THE STUDY

This study aimed to gather information on the employability of the MSDRM graduates from 2014-2019. Specifically, it intended to attain the following specific objectives: to determine the profile of the respondents in terms of: age, sex, civil status, monthly income, professional eligibility, and location of the respondents; to document the respondents' employment data in line with employment rate, job information, reasons for accepting the first job, reasons for choosing the job, and reasons of staying in their job, to identify the skills/competency learned from the program that is useful in the respondents job; and to recommend suggestions to further improve the MSDRM program.

## METHOD

The study used the descriptive research design wherein according to Shuttleworth (2008), it is a scientific method that involves observing and explaining the actions of a subject without affecting it in any way. The descriptive research design was used to describe the employment related information of the respondents. The survey was conducted in a nationwide and international scope using the Graduate Tracer Study (GTS) online. The data gathering was intensified through the assistance of the enrolled MSDRM graduate students who have relatives and friends who are also MSDRM graduates of Central Bicol State University of Agriculture. The questionnaire was adopted from the CHED Tracer Questionnaire but was modified to fit with the respondents. The official list of the graduates was taken from the records of the Dean of the Graduate School. A total enumeration of 44 graduates was targeted. However, only 22 participated in the survey. The respondents included are those MSDRM graduates of CBSUA from April 2014 to April 2019.

## RESULTS

### Profile of the Respondents

#### A. Age

Table shows that 36. 4% respondents belong to 41-50-year-old age bracket. On the other hand, 4.5% ages from 36-40. It can be inferred from the findings that most of the MSDRM graduates are at their adulthood stage. This supports the claim of Vassilev (2019) that some people realize that their current jobs are unsuitable and that they want something more from life. They should not be discouraged from gaining new skills, changing careers, or simply regaining belief in their abilities. Others just enjoy learning for learning's sake.

Table 1. Respondents' Age

| Age (Range) | frequency | Percentage |
|-------------|-----------|------------|
| 25-30       | 4         | 18.2%      |
| 31-35       | 6         | 27.3%      |
| 36-40       | 1         | 4.5%       |
| 41-50       | 8         | 36.4%      |
| 51 & above  | 3         | 13.6%      |

#### B. Sex

It can be gleaned from figure 2 that 64% of the respondents are male and the remaining 36% are female. The result asserts that the number of male graduates is far above than the graduates of the opposite sex. This result is contradictory to the claim of Bilton (2018) that women outnumber men at universities – and it is a trend which is accelerating year upon year in the majority of countries. However, she noted that men are not totally being left behind when it comes to academia.

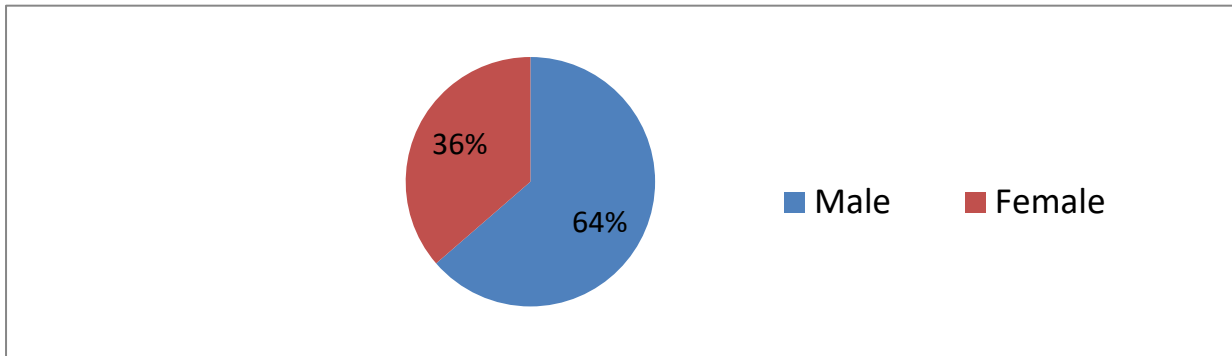


Fig. 2. Respondents' Sex

*C. Civil Status.*

It can be noted that most of the respondents (73%) are married and the remaining 27% are single. The data presented indicated that most of the MSDRM graduates are married. This can be associated to the variable age since majority of the respondents are in their adulthood stage. This finding debunks the claim of Durso, S. D., Alves, J. V., Neves, P. A. & Vilaça, J. D. (2016) that it is expected that single individuals had greater intrinsic motivation to pursue a Master's degree since single individuals have a lifestyle with less financial and social obligations, something which might make it easier to pursue a Master's degree.

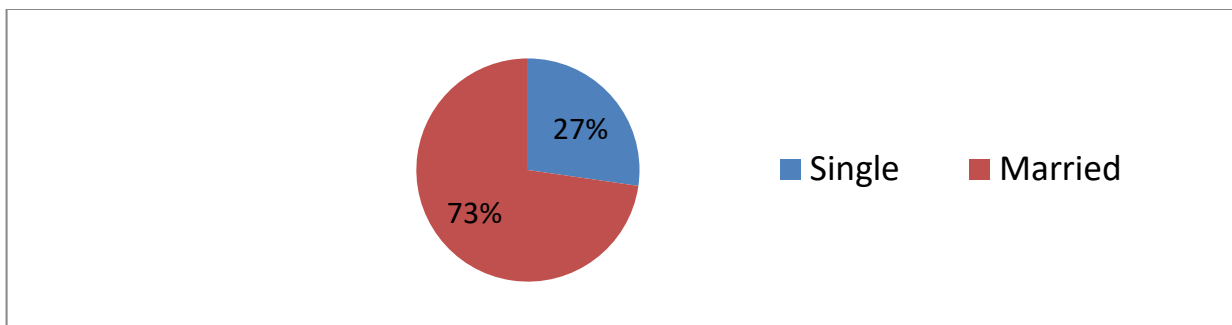


Fig. 3. Civil Status

*D. Gross Monthly Income*

Data shows that majority of the respondents receive P30,000 or above monthly earnings. Considering that all of the respondents are working in the government sectors and majority are uniformed personnel, they are receiving the aforementioned basic salary. Whereas, under the Joint Resolution NO. 01 s. 2018, an entry-level uniformed officer - Police/Fire/Jail Officer 1, a Private, an Apprentice Seaman, or a Seaman Third Class- who used to receive a base pay of P14,834 shall receive P29,668 this year.

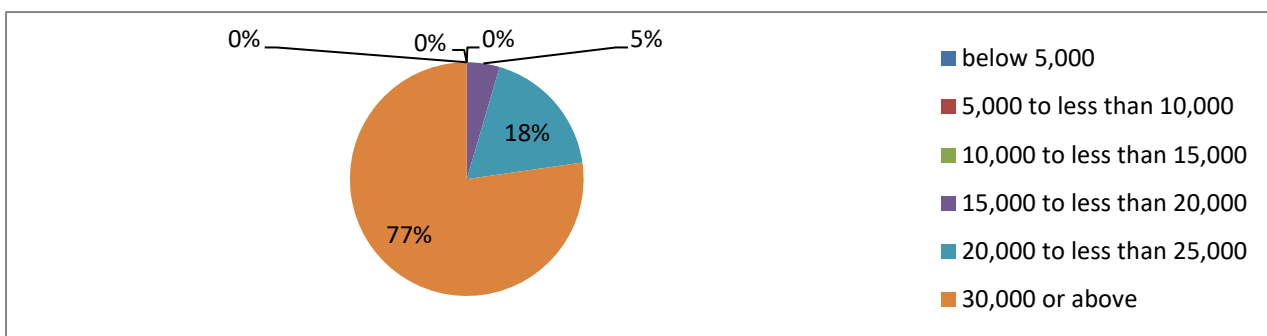


Fig. 4. Gross Monthly Income

E. Professional Eligibility

As presented in figure 5, it is found that both Licensure Examination for Teachers and Nursing Licensure Examination have the highest percentage of 27.27%. Conversely, the lowest percentage of 4.55% goes to Licensure Examination for Agriculturists, Career Service Sub-professional, and Licensure Examination for Criminologist. This is in the light of the initiative of the Armed Forces of the Philippines in hiring licensed nurse and license teachers (TheSummitExpress,2019).

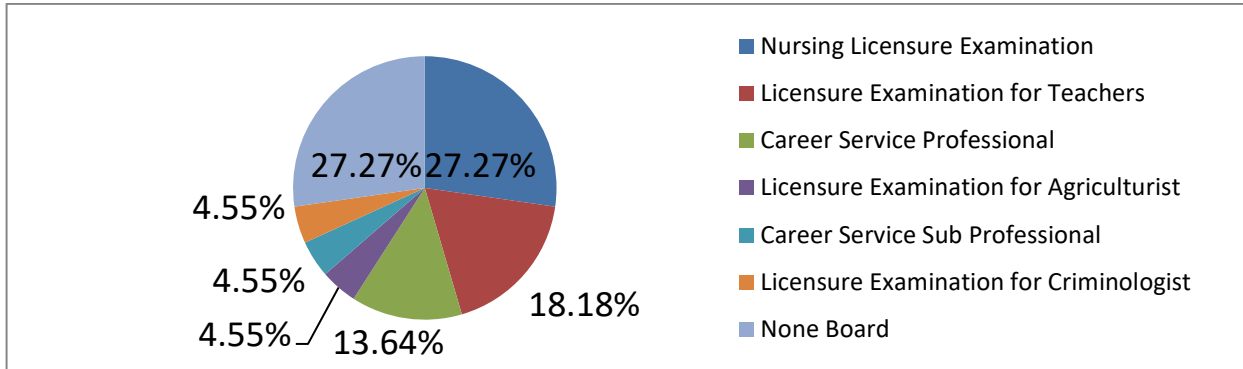


Fig. 5. Professional Eligibility

F. Location of the Respondents

Figure 6 shows that 54.55% of the respondents come from the province of Camarines Sur followed by 36.36% respondents from Camarines Norte. The least number of respondents (4.55%) come from Albay and Sorsogon while no respondent comes from Catanduanes and Masbate. This result can be associated to the proximity of residence of the respondents to the University where they took their graduate studies. This is supported by the study of **Delaware Valley College** (2015) which claimed that location is a crucial consideration in choosing a college, as this will determine how often a student is able to travel home and the expense of doing so.

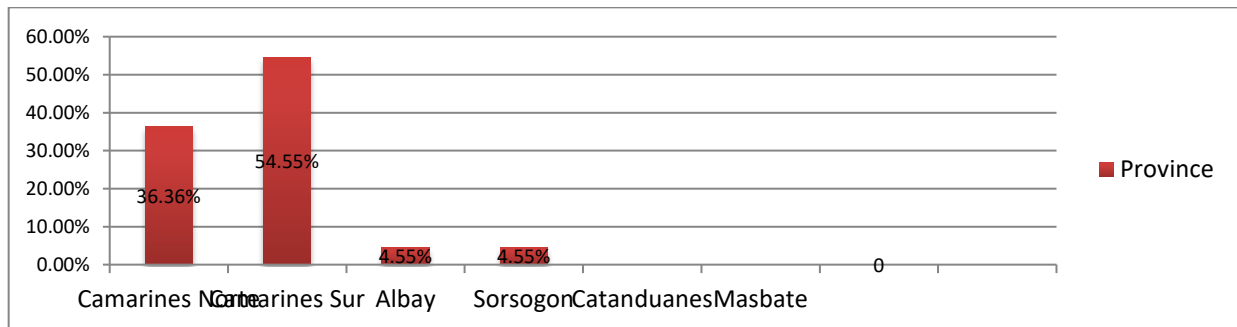


Fig. 6. Location of the Respondents

G. Employment Rate

Figure 7 shows that 95.5% of the respondents are employed while the remaining 4.5% is not. The employability of the graduates is one of the factors that determine the effectiveness of the delivery of services of an academic institution and its effort of providing quality in all its endeavors (Orence & Laguador, 2013). This result is on consonance to the survey of the Philippine Statistics Authority 2019 on the Employment Rate in January 2019 that is estimated at 94.8%.

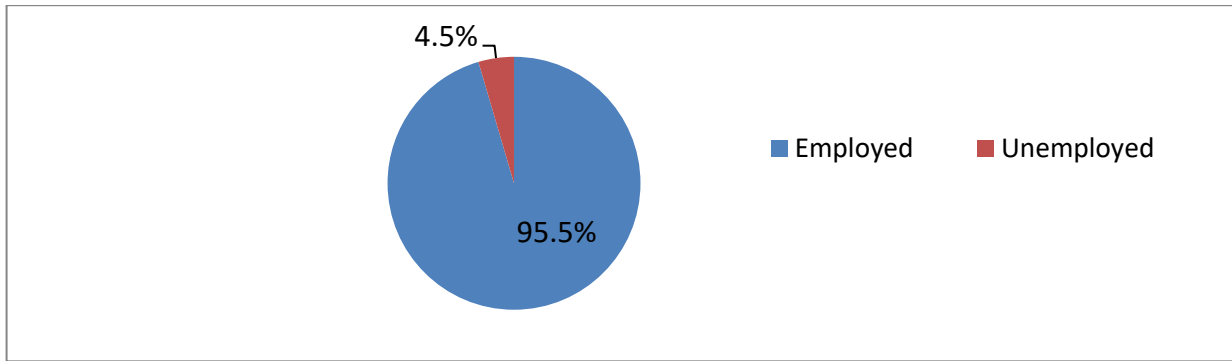


Fig. 7. Employment Rate

*H. Employment Information*

Data reveals that 45.5% of the respondents belong to Public Administration and Defense. It is followed by education, agriculture, and government employee with 9.1%. The least number of respondents come from health and social work, meteorology/atmospheric science, safety and security, and humanitarian services with 4.5%.

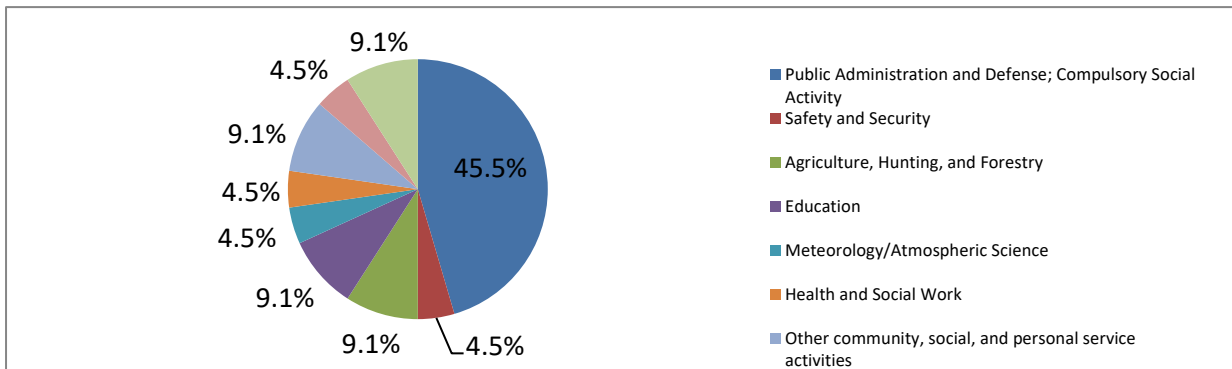


Fig. 8. Employment Information

This is relative to the nature of work of the respondents in which most of them are uniformed personnel. It supports the report of JobsFit 2022 that the Services Sector, specifically on Public Administration and Defense; and Compulsory Social Security with 5.41%, was the biggest contributor to the economic performance in 2016, contributing 3.9 percentage points of the 5.7 percent growth.

*I. Reasons for choosing the Job*

It can be gleaned from figure 9 that salaries and benefits is mostly considered (31%) in choosing a job. According to Glassdoor’s 2015 Employment Confidence Survey, about 60% of people report that benefits and perks are a major factor in considering whether to accept a job offer. The survey also found that 80% of employees would choose additional benefits over a pay raise. A new survey conducted by my team at Fractl (2017) found that, after health insurance, employees place the highest value on benefits that are relatively low-cost to employers.

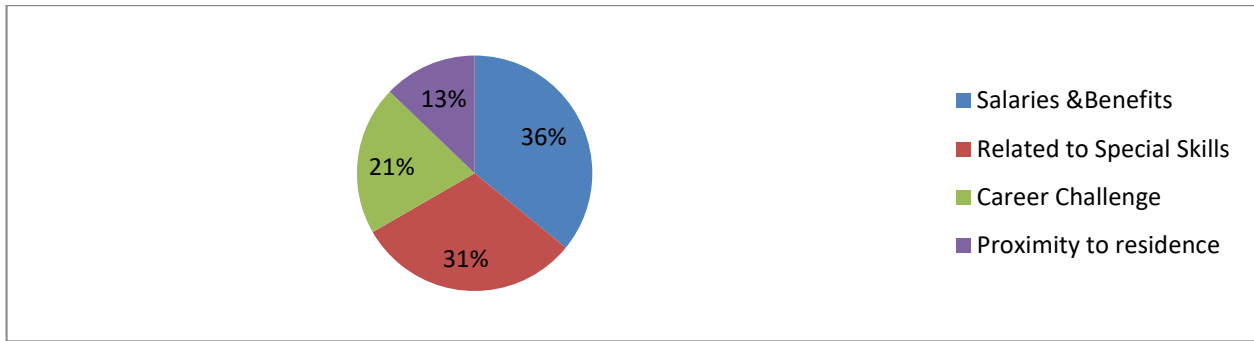


Fig. 9. Reasons for Choosing the Job

*J. Reasons for staying on the Job*

The figure shows that salaries and benefits, career challenge, and proximity to residence are the mostly considered factors in staying the job. According to the graduates, they accepted the job offer because of salaries and benefits. They also claimed that they would further stay until they get promoted for the same reason. Similar to the report of *Emerging Workforce Study (2005)* it was found that offering incentive pay, retention bonuses, compensation after long projects, a creative benefits plan and flexible work schedules were considered to be the prime factor in staying on the job.

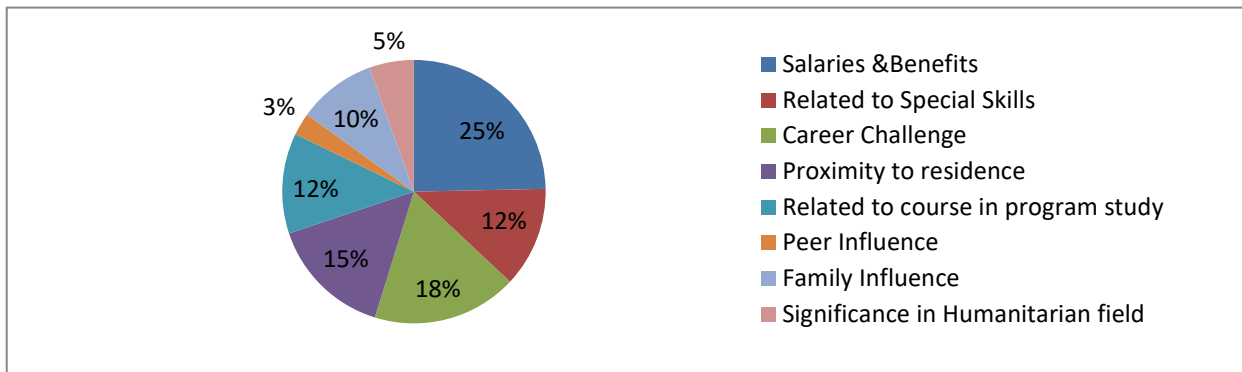


Fig. 10. Reason for Staying on the Job

*K. Competencies learned from the Program*

Figure 11 indicates that critical thinking skills, human relations skills, and problem-solving skills are the top most skills learned from the program. This result addresses problem among graduate students who lack of critical thinking, initiative, and effective communication skills as reported by the People Management Association of the Philippines (PMAP) 2019.

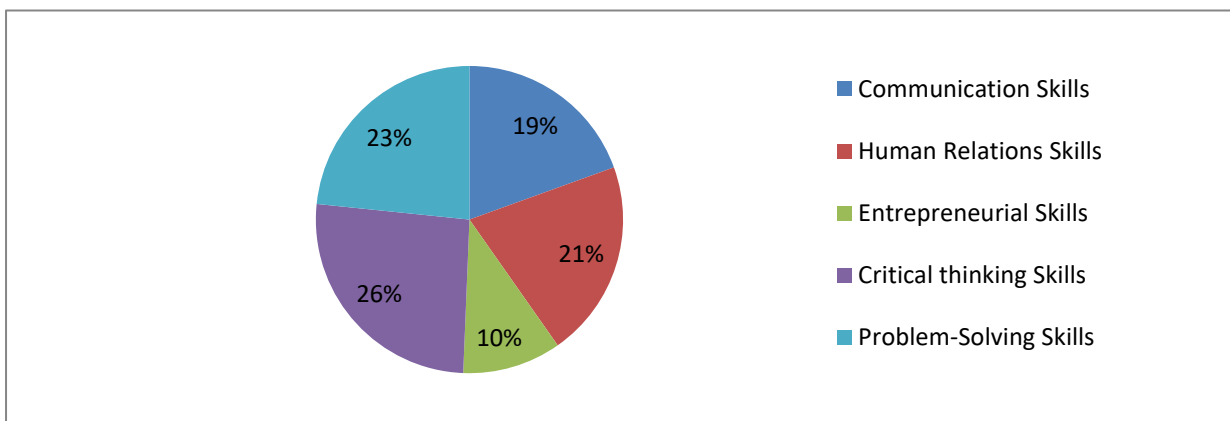


Fig. 11. Skills/Competencies Learned from the Program

## CONCLUSIONS

The study found that there were ninety five percent (95%) employed MSDRM graduates from 2014 to 2019 with regular status working in government sectors. It was also revealed that salaries and benefits, career challenge, related to special skills, related to course/program of the study and proximity of residence are the foremost considerations of the MSDRM graduates for choosing and staying in the job. It is also noted that majority of the respondents were receiving Php. 30, 000.00 and above monthly earnings. Critical thinking skills, human relations skills, and problem-solving skills are the top most skills learned from the program and are found useful to their present job. The employment rate of MSDRM graduates from 2014 – 2019 of Central Bicol State University of Agriculture is considered high.

## RECOMMENDATIONS

On the bases of the respondents' suggestions, the following actions are hereby recommended: Alignment of the course to the mandated program of the University on agriculture; Offering a major field of specialization (Food Security, Health Emergency, Land Use Planning, Business Resiliency, Emergency Planning Resilience and Response, Intelligence and Security Management, Human Security, Risk Communication); Integration or inclusion of a subject on ecosystems-based Climate Change and DRR as relevant to the mandated program of the University of Agriculture; Addition of multidisciplinary faculty to the existing pool in terms of specialization in the fields of Meteorology, Climatology, Data Science, Geology, Volcanology that will strengthen the curricular program; Immersion/OJT/learning visit in local, national and international to be more exposed to the new trends in DRR and CCA; Revision of the program to be able to cope with the 4th Industrial Revolution; and Revision of the existing modular program and improvement of the program through open and distance learning modality.

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