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RESEARCH ARTICLE

**AWARENESS, KNOWLEDGE & ATTITUDE ON CLIMATE CHANGE OF STUDENTS: INPUT FOR THE DEVELOPMENT OF ICM ON CLIMATE CHANGE**

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**ABSTRACT**

This investigation explored into the level of awareness and quality of knowledge regarding climate change among students enrolled in ESSU Salcedo campus, during the second semester of school year 2013-2014. The descriptive method of research was employed in this investigation utilizing survey questionnaires. There were three hundred twenty (320) students who served as respondents of the study chosen through stratified random sampling from among the officially enrolled students in the campus. The data collected were subjected to appropriate statistical treatment such as means and percentages and finally to statistical analysis and analysis. Based on the results and findings of the study the following conclusions were drawn: College students considered global warming to be extremely serious problem. Radio and television are the vital sources of student's information on climate change. Due to low level of awareness and knowledge regarding climate change, they tend to have unfavourable attitude towards the phenomenon. Thus the development of an information communication material may help improve their level of awareness and provide additional knowledge that will likely promote better attitude in them. Likewise, based on the findings revealed, the researchers recommend the following: Integrate climate change concepts in general education subjects in the undergraduate courses to increase the level of awareness, knowledge and attitude of students. Use the information communication material developed in this study as reference material in classroom discussions as well as extension activities of the institution to encourage positive actions to minimize the impact of climate change in people's lives. Conduct another study regarding practices of people to mitigate climate change.

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**INTRODUCTION**

Climate change is one of the most important environmental issues facing the world today (Ekpoh and Ekpoh, 2010), and has become a major concern for many citizens as it is considered to be one of the most serious problems ranking second after poverty (Eurobarometer, 2008). There is urgent need for a better understanding of the changing climate pattern and how they affect extreme weather events. Enhancing knowledge of climate forcing is critical for improving projections of future climate change. Adequate knowledge and awareness of the effects of climate change will help make communities to join forces in reducing the vulnerability of societies to climate-related risks both now and in the future. Today, there are over eighteen million Filipino youths (AP Youth Net Philippines 2011). In Eastern Samar, college undergraduate population is 23,014 (NSO Eastern Samar Quickstat, 2012) who are pursuing education in different tertiary institutions within and outside the province.

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These students can be empowered and be a strong group army for use in the climate change awareness movement. If properly enlightened, may lead the youths that are not in school in the climate change awareness crusade. Hence to be able to adapt to the problem of climate change effectively, there is need to understand the level of tertiary institution students' knowledge and perception of climate change, especially, the causes, effects and possible adaptation and mitigation measures. This will help greatly in policy formulation and planning that are geared toward controlling the impact of climate change in the study area and the country as a whole.

**Statement of the Problem**

Specifically, the study answered the following questions:

1. What is the profile of the respondents in terms of the following demographic variables?
  - 1.1. gender
  - 1.2. course
2. What is the level of awareness of the respondents regarding climate change?
3. What are the sources of information on climate change of the respondents?

4. What is the extent of respondents' knowledge on climate change?
5. What is the opinion of students on climate change?
6. What Information Communication Material maybe developed based on the result of the study?

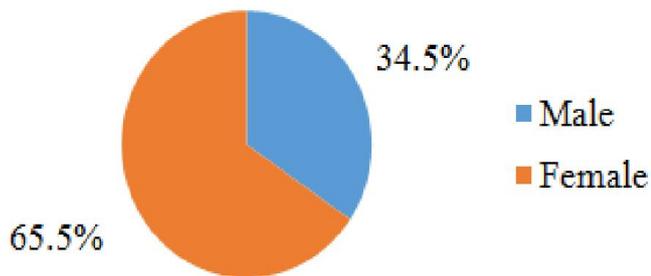
**MATERIALS AND METHODS**

This study utilized the descriptive method of research where survey questionnaires were employed to gather the data needed in this investigation. According to McMillan (2000), descriptive study simple describes phenomenon. The description is usually in the form of statistics such as frequencies or percentages, averages, and sometimes variability. This classification of research is usually used to present status of a subject matter or problem (Ariola, 2006). In this study, climate change awareness and attitude of students was assessed as input in the development of Information Communication Material on climate change. Respondents of this study were students from the undergraduate studies who were enrolled in any course offered in ESSU Salcedo Campus.

These students should were officially enrolled in the SY 2013-2014. Per record from the registrar office of ESSU Salcedo, there were 1,603 official enrolled college students during the second semester of SY 2013-2014, the sample size was known as 320 using the Sloven's formula. The respondents of the study were selected through stratified random technique. The first stratification was based on the college, then course and by section. A lottery method was employed to identify the respondents in every section which was proportionate to the number of students in each department.

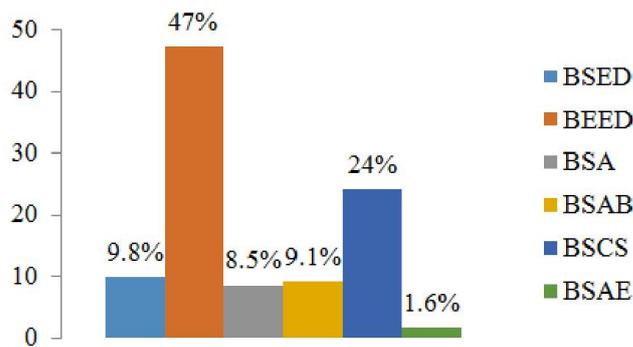
**RESULTS AND DISCUSSION**

Figure 1 shows that most of the respondents are female consisting of about 66% while their counterpart constitute only about one-third of the respondents.

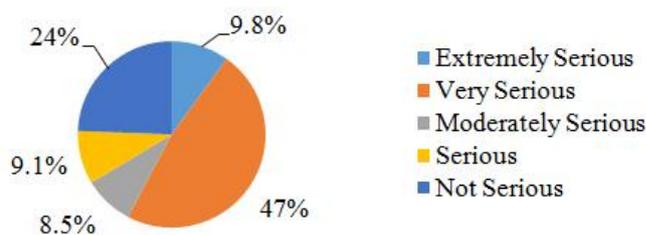


**Fig. 1. Gender of the Students in ESSU - Salcedo Campus during the School Year 2013 - 2014**

More than half of them are enrolled in teacher education course; about one-fourth are taking BSCS while the remaining one-fifth of the respondents were enrolled in agriculture related courses.

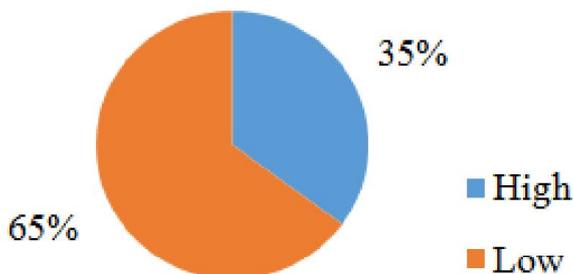


**Fig. 2. Course of the Students in ESSU - Salcedo Campus during the School Year 2013 - 2014**



**Fig. 3. Awareness on the Seriousness of Global Warming Affecting the World Today**

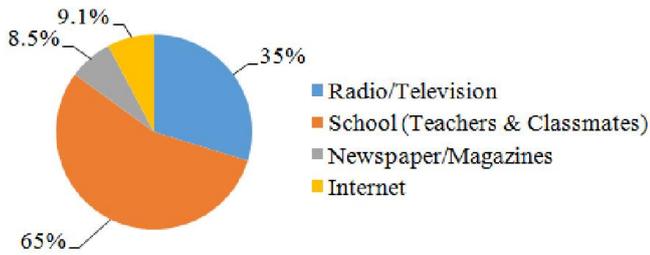
Based on Figure 3, the study revealed that almost seven out of ten respondents considered global warming to be an extremely serious problem of the world. This very high awareness level of respondents needs to be translated to action to mitigate climate change.



**Fig. 4. Level of Knowledge on Climate Change**

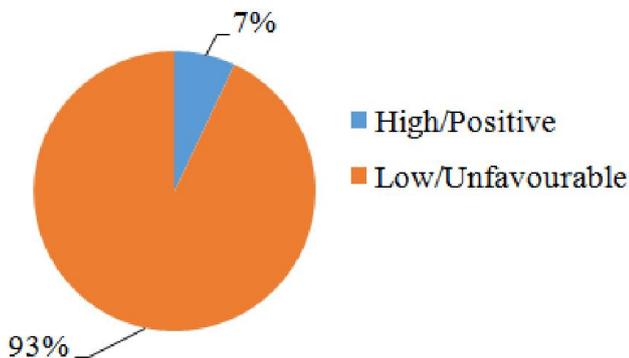
Figure 4 a clearly depicts the level of respondents' knowledge regarding climate change. It can be noted that about two-thirds of the respondents got a low score below 8 which implies low level of knowledge on climate change.

Popular media sources of respondents' knowledge on climate change came from radio or televisions. Nine in every ten students got their knowledge on climate change from these popular media. This means that climate change integration in the different subjects is still scant or inadequate. Curricular reinforce or emphasis in the different subjects may help students to be more sensitive towards nature by eradicating misconceptions and misunderstanding on climate change issues.



**Fig. 5. Sources of Information**

This will also help them develop personal adaptive measures or steps to counter-act the ill effects of climate change. This may lead them to take part in the climate change awareness crusade.



**Fig. 6. Opinions/Attitudes of Students on Climate Change**

This study discovered that respondents have low or unfavourable attitude towards climate change. Only seven students out of 100 respondents have a favourable attitude towards climate change. This unfavourable or negative attitude of students maybe explained due to poor information or low awareness regarding climate change because the more informed one is on the topic, the stronger is the attitude of the person. But people attitude change as they gain new information thus, the important role of education in improving attitude of students towards climate change.

Improving attitude of students towards climate change may lead to personal and social actions leading to environmental protection. Implementing simple habits that will make a difference such as recycling, waste segregation, tree planting, energy conservation like walking or using bike instead of car if the journey is short, turning off devices when not in use and others. These are important strides to protect and save our environment.

### Summary

On the basis of the data and results presented and discussed, the study revealed the following:

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Most of the respondents were female consisting of about 66% while their counterpart constituted only about one-third of the respondents. More than half of them are enrolled in teacher education course; about one-fourth are taking BSCS while the remaining one-fifth of the respondents was enrolled in agriculture related courses.

The study revealed that respondents considered global warming to be a prime and extremely serious problem besetting the world today. Two-thirds of the respondents have low level of knowledge on climate change. Popular media sources of respondents' knowledge on climate change came from radio or televisions. Nine in every ten students got their knowledge on climate change from these popular media. This study discovered that respondents have low or unfavorable attitude towards climate change. Only seven students out of 100 respondents have a favorable attitude towards climate change. On the basis of the results of the study, an information communication material was developed to increase the level of awareness among the students.

### Conclusion

Based on the results and findings of the study, the following conclusions were drawn:

College students considered global warming to be extremely serious problem. Radio and television are the vital sources of students information on climate change. Due to low level of awareness and knowledge regarding climate change, they tend to have unfavorable attitude towards the phenomenon. Thus the development of an information communication material may help improve their level of awareness and provide additional knowledge that will likely promote better attitude in them.

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