

## Environmental Knowledge and Politics in Sarawak

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### Abstract

The objective of this study is to examine environmental knowledge and awareness amongst the students of Higher education in Malaysia and to understand their views on environmental security issues. The main method of collecting data is by Questionnaires that involved 948 respondents randomly selected. The data was then analyzed using Statistical Package for Social Sciences (SPSS). The results show that the respondent are well informed, knowledgeable and aware of environmental security issues as the pattern is fairly consistent by sex, age, and ethnic grouping. Findings from this study provide insight into the importance of awareness in generating environmental consciousness and public response towards policy and practices related to the environment. Furthermore, the study captures what it means by environmental security for the respondents. It is important for future analyses to look into this question and to enhance more study related to understanding of environmental security.

**Keywords:** Environmental Knowledge-Awareness –Environmental Security.

## Introduction

Awareness of environmental issues is a global phenomenon. People began to understand their role in environmental degradation and various policies and pressure groups have been emerging during the course of the nineteenth and twentieth centuries. These gave birth to environmentalism. George Perkins Marsh in *Man and Nature* warned of the ecological consequences of the destruction of grass cover and waste of resources occurring on the American frontier, Europe, China and North Africa (Marsh, 1965). As a result of his efforts forest reserves were established in 1873 to protect dwindling supplies of timber and endangered species. People started to develop a pragmatic, utilitarian conservation approach towards environment. - Resources should be used for the greatest good, for the greater number of people for the longest time. However, it was only in the late 1960s and early 1970s that worries about accelerating damage to the environment started to articulate. Environmentalism was again brought to consciousness by Rachel Carson who pointed out the threats of pollution and toxic waste to humans and other organisms (Carson, 1962). This includes resources and pollution problems. As a result, various international environmental conventions appeared in the 1960s and 1970s. Environmental agenda has expanded to include global concerns: human population growth, atomic weapons, recycling, fossil fuel dependency, biodiversity, etc.

Concern on environmental security was much greater than before and the first United Nations Conference on Environment was held in Stockholm in 1972. Numerous conferences were held since then and the idea of linking environment and both national and international security began to emerge. Environment is identified as a threat to our safety and UN Security Council announced on January 31, 1992 that the threat to international peace can come from non-military sources of instability due to environmental and ecological problems such as hurricane or tsunami. Environmental security at that time was divided into two types: (i) the safety from the invasion of natural events (earthquakes, volcanic eruptions, etc.) and (ii) safety from the effects of environmental destruction due to human actions such as global warming and ozone depletion (Sheehan, 2006). Environment was referred to as a security issue by several scholars but, as it was argued such literature could only be equated to environmental protection and not much more (Levy, 1995). Analysis of environmental threat is important in addressing the question of what threats we are talking about and what policies need to be formulated. Ultimately, these questions involve what sort of policy we want to formulate in keeping the environment sustainable and reliable. Shellenberger and Nordhaus (Shellenberger, 2013) contend that modern environmentalism rests upon "unexamined assumptions, outdated concepts, and exhausted strategies".

This study starts with a premise that environmental security is not simply a concern for the preservation, restoration, or improvement of the natural environment. It is about knowledge, awareness and understanding of a quality of life. It tries to see a bigger picture beyond the details of one's own life. From a movement point of view, environmentalism uses the power of state laws to regulate individual economic choice to the diminishment of human values and life or a political movement that uses the state as its primary means of action (Rowell, 1996). This interpretation of environmental security is deliberately all-embracing and it includes, activity associated with governmental or political organizations, business organizations and environmental pressure groups. As environmental threats create fear and anxiety, knowledge and awareness of such threat might also instigate political cooperation in order to enhance environmental security. The concept of environmental security may help us to explore issues and problems of the study. Environmental security is always been defined

as the preservation of the biosphere (referring to any form of biological environment such as forests, fields of grass, ocean, freshwater lakes, etc.) locally and the planet as a needed support system where people depend on it (Buzan, 1991).

However, environmental security also means freedom and access to resources such as water supply, clean air and a non-degraded environment and it is human that determine this freedom. Broadly defined, this issue affects humankind and its institutions and organizations anywhere and at any time. This definition of environmental security follows definitions by scholars such as Ullman (1983); Myers (1989); Mathews (1989); Dixon (1991); Dabelko (1996) and Gleick (1989) (1991) and Rizal Yaakop (2009). The objective of this study is to examine knowledge and environmental awareness amongst students of High Education and their views in relation to environmental security.

## **Methodology**

### **Questionnaires**

This study used a questionnaire as an instrument for obtaining data. The questionnaire consisted of two sections: Part A: Personal information of respondents. This part contains the personal information that aims to help researchers find and understand the background of research subjects. This section contains seven items intended to obtain information relating to gender, nationality, age, occupation, income, tenure, and ethnicity.

Section B: Understanding of environmental security issues. This part consists of 10 items to assess aspects of understanding on environmental security issues namely (a) environmental threat is a serious problem in Malaysia. (b) The environment threat is also a global problem (c) Problems such as flood was burdening the community (d) The problem of ozone is due to uncontrolled forest fires (e) Environmental problems cannot be avoided (f) Problems arise because of human greed itself (g) This problem arises because of natural aging (h) The problem arises because there is no cooperation in addressing environmental issues (i) Problems arise due to the economic development (j) Problems arise because of different beliefs in addressing environmental issues. All respondents were provided with five options based on the following Likert scale: 1. Strongly Disagree. 2. Disagree. 3. Not Sure. 4. Agree. 5. Strongly Agree

### **Population and Sample**

The study population is of Malaysian students of high education. In order to represent the entire Malaysian students, the study involved only near to a thousand respondents in seeking views on aspects of awareness and political cooperation in addressing environmental issues. The study involved 948 respondents randomly selected from several states, namely states of Sarawak, Johor and Kota Tinggi (Johor), Kedah and Perak. The samples were made up of all walks of life that represent the population. By disregarding data that cannot be analyzed, then the sample was about 948.

### **Data Analysis**

The data obtained from questionnaires were processed using Statistical Packages for The Social Science (SPSS) software. Descriptive statistics were used for percentages and frequencies. Descriptive analysis is a comprehensive technical description of the status of the survey which aims to provide an initial overview of the demographic profile. In analyzing the data, researchers are concerned with the complete answers of the respondents. Thus, incomplete questionnaires would be misleading and will be deducted from the analysis.

## Results and Discussion

**Awareness of Environmental Security Issues:** A total of 57.3 % of respondents felt that the latest information on environmental threats such as floods or haze was well received and meet their expectations. Further, only about 25.2 % are not satisfied and find the latest information on environmental threats such as floods or haze is not acceptable, as expected. 16.5 % respondents are very satisfied and felt the information received is exceeding their expectations. Majority of respondents or 94.84 % stated that problems such as floods are burdening themselves and their families. Meanwhile, 16.5 % said it is not a burden. A total of 385 or 50.3 % of respondents said that the best way to manage the problem of flood is through the restoration of drainage systems. This is because if the drainage system failed and the drain clogged, it will cause flash flooding, particularly in urban areas. Therefore, some respondents suggested that the quality of the system can be improved and enhanced. Apart from flood, a total of 18.14 % of respondents believe that the way out is to avoid the rampant deforestation to tackle the problem of flooding. A total of 10.32 % of respondents suggested that the government should monitor the development projects and urbanization. This is because development projects and urbanization contributed to a variety of symptoms and environmental crises, such as air pollution, water and soil. Furthermore, there are 9.14 % of respondents said that awareness campaigns and education are also able to overcome the problem of flood as it can enlighten the public about the importance of good environmental stewardship.

This study found that majority of respondents tends to agree that environmental problems are due to human rather than ecological factor. While the opinion is almost equally divided on whether the problems is due to ecological factor such as natural aging, more tend to agree with human factors such as greediness, low political cooperation, economic development and difference in believes on how to handle the problem. It was found that a total of 26.2 % or 248 respondents did not agree that environmental problems cannot be avoided. This is followed by 25.4 % or 241 respondents agreed with this statement. Meanwhile, a total of 17.9 % or 170 respondents said strongly agree. Next, a total of 16 % and 14 % respectively said not sure and was not successful. Therefore, opinion on whether environmental problem is avoidable is almost equally divided into two. It is obvious that majority of respondents agreed that environmental problems is due to human greediness. The data shows that 59.7 % or 566 respondents strongly agree that the problem arises because the greed of man himself. This is followed by 32.6 % of respondents agreed with this statement. Meanwhile, a total of 4.5 % or 43 respondents said that not sure. Next, a total of 1.3 % and 1.5 % respectively disagree and strongly disagree.

On a statement that environmental problem is due to aging, more respondent tend not to agree. A total of 186 (19.6 %) of respondents strongly not agree with this statement. 209 (22.0 %) respondents said not agree. Meanwhile, 19 % or 180 respondents said that they are agree and 177 respondents (18.6 %) said strongly agree. Next, a total of 22 % and 12.3 % respectively saying do not agree and strongly agree. While, large number of respondents, 26.6 % or 252 respondents did not sure with the fact that these problems arise because of natural aging.

With regard to political cooperation to address environmental problems, it was found that a total of 37.7 % or 357 respondents agreed with the statement that the problem arises because there is no political cooperation in addressing environmental issues. This was followed by a total of 30.6 of the respondents strongly agree with this statement. Meanwhile,

a total of 23 % or 218 respondents said that not sure. Next, a total of 6.5 % and 1.7 % respectively disagree and say was not successful.

. In addition, a total of 41.8 % or 396 respondents that problems arise because the problem arises of economic development. This was followed by a total of 37.4 % or 355 respondents strongly agree with this statement. Meanwhile, a total of 11.5 % or 109 respondents said that not sure. Next, a total of 6.8 % and 2 % respectively saying do not agree and strongly agree

Finally, it was also noted that a total of 37 % or 351 respondents agreed with the statement that the problem arises because different understanding and belief in dealing with environmental issues. This was followed by a total of 24.5 % of respondents strongly agree with this statement. Meanwhile, a total of 24.2 % or 229 respondents said not sure. Next, a total of 9.5 % and 4.2 % respectively saying do not agree and very strongly agree.

Based on the result of this study, it can be summarised that human factor is equally or probably more dominant in determining environmental problems. Despite ecological based disasters such as tsunami or eruption of volcano, human attitude towards environmental problems is more important in order to determine whether the notion of environmental security is more prone to conflict or not. Thus, rather than looking at the causal linkage between environmental problems and conflict, analysts are primarily concerned with the environmental problems themselves. Sea level rise, crop shifts and other predicted consequences of global warming are considered threats. The sources of these threats are multidimensional and include reliance on fossil fuels and energy inefficiency. The threats are not military. They are indiscrete, long-term and very difficult to combat. They are difficult to combat because they have economic, political and social (Smith, 2001).

It is fair to say, be ecological nature as it is, the way human nurture its environment is still major determinant of environmental change and conflict. It may be helpful to visualize the relationship of environmental change to various sorts of conflict in three ways, two rather obvious and the third less so.

- 1) The Temporal Dimension- Historical cases, current examples and more speculatively, forecasts of future troubles
- 2) The Internal-External Dimension- Conflicts or tensions limited to a single country versus those with demonstrable international ramifications
- 3) The Violent-Nonviolent Dimension- War, rebellion and violent instability versus tensions short of war or systematic violence (McNeil, 2001).

It is important to note that awareness on global environmental problem such as climate change is now worldwide. Climate change has global effects and it can only be tackled effectively through national and international agreement. Other environmental issues such as haze or flood or the disposal of growing volumes of waste in landfill or by incineration have more local effects in the first instance and they can be dealt with at the national level. However, because of their cumulative impact around the world, they also require international action. Action is certainly required where international trade shifts impacts around the world- for example, through trade in hazardous and other wastes (Taylor, 1994).

This research on environmental security, while limited to how the respondents aware and understand the issue, has brought attention to the growing salience of non-conventional security threats. It has also stimulated discussion on issues of environment and human security. It appears that this latter discussion may provide a useful framework within which to address development issues.

### **Conclusion**

The analysis shows that the respondents are knowledgeable and aware of the environmental issues. Most of them are aware of the threat of flood and haze as well as deforestation. In addition, the knowledge on environmental security is more influence by the idea that it is human nurture rather than nature as the main cause of the problem. Their understanding only reflects the idea of environmental security as preservation of environment. The more they aware of the environmental problems the more actions could be taken to secure the environment. Knowledge and awareness and of the importance to preserve the environment will lead to movements and reactions. It is important for future analyses to examine more on the issue of awareness on environmental security issue.

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