

I Heart Nature: Perspectives of University Students on Environmental Stewardship

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Abstract: As the environment confronts multitude of dilemmas which tend to beset the ecological equilibrium, environmental stewardship is being strengthened in the academe. Furthermore, the onset of ASEAN integration posed challenges for ASEAN colleges and universities to strengthen its environmental education. This study was conducted to look into the perspectives of tertiary students on environmental stewardship. A total of 20 sophomore university students of the President Ramon Magsaysay State University in Zambales, Philippines served as the participants of the study. The primary instrument used in data gathering was an open-ended questionnaire supplemented by one-one-one interviews and small group discussions. The study found out that strong collaboration and stewardship are the keys to resolve environmental problems. Furthermore, the students have positive perspectives on environmental conservation and intensely commit themselves to be stewards of the ailing environment. Thus, it was recommended that the perspectives of the students on environmental stewardship be incorporated in the curriculum to make environmental education in ASEAN higher education institutions (HEIs) be more learner-centered, research-based and comprehensive.

Keywords: Environmental stewardship, Environmental education, Environmental conservation

Introduction

The earth is now suffering from innumerable afflictions at present caused by egregious human activities that relentlessly denuding the environment. The challenge now for everybody is to take the wheel of action and move towards a common cause in preserving life on earth. The people should learn to translate environmental degradation to environmental stewardship which will lead to life preservation. Natural resources are depleted by excessive use. Fresh water scarcity on a global scale, deforestation, degradation of coastal and marine areas, soil depletion and loss of biodiversity, are some of the problems that have become a major concern. Air and water pollution have reached such levels that have already resulted in serious health problems, as well as negative impact on the environment, and inevitably influencing prospects for long-term economic growth (Krishnamarachary & Reddy, 2005).

As the Association of Southeast Asian Nations (ASEAN) Integration fully ushers in, the universities and colleges are also being challenged to develop learners who have strong and proactive environmental stewardship through its curriculum and instruction. According to Shobeiri, Omidvar and Prahallada (2007), world educators and environment specialists have repeatedly pointed out that a solution to environmental crisis will require an environmental awareness and its proper understanding which should be deeply rooted in the education system at all levels of school education. The existing curricula at primary, secondary and college levels provide a lot of opportunities to make the students aware of the environment.

Environmental stewardship must be developed in every student to globally make a difference towards the resolution of some, if not all, problems in the environment. Hence, this study was conducted to investigate and explore the perspectives of the university students of the President Ramon Magsaysay State University (RMTU) towards environmental stewardship. As the lone state university in the province, PRMSU has a pivotal role as a learning and resource center in molding environmentally-aware and ecologically-conscious youth who will later be the leaders of the society. Significantly, this research seeks to understand the views and commitment of the students towards environmental stewardship and preservation.

Objectives of the Study

The study generally aims to explore the perspectives of tertiary students on environmental stewardship. It has the following specific objectives:

1. To determine the general description of the respondents on the environmental condition at present.
2. To identify the most serious problem that the Philippine environment is facing as perceived by the respondents.
3. To survey the respondents' perception on the major solutions that could solve environmental problems.
4. To explore the general perception of the respondents to an ideal environment.
5. To look into the commitment of the respondents towards environmental stewardship and conservation.

Method

The research utilized a qualitative research design via the questionnaire method and supplemented by one-one-one interviews and small group discussions (SGDs). The study conveniently sampled a total of 20 sophomore university Education students of the President Ramon Magsaysay State University – San Marcelino Campus in Zambales, Philippines. A researcher-made questionnaire with open-ended questions was completed by the 20 respondents.

The responses in the questionnaire, supplemental interview and FGDs were subjected to thematic analysis wherein the underlying themes and ideas were identified. Questionnaire responses were content analyzed and coded individually by the researcher. The resulting coded responses were then categorized into themes and frequency count of the responses under each category was done.

Results and Discussion

Respondents' Description of the Present Environmental Condition

As gleaned from Table 1, most of the respondents perceived the current environmental condition as “dying and abused.” One respondent said that *“We have now a dying environment because of human doings. Our resources now are very limited, the surroundings are dirty and some are destroyed, and others are made industrialized.”*

Table 1. Most Common Themes among the Respondents' Description of the Present Environmental Condition

Theme	f*	Rank
Not good as before.	6	3
A garbage.	8	2
Faced with numerous dilemmas.	3	5
A catastrophe.	5	4
Neglected.	1	6
Dying and abused environment.	9	1

*multiple responses

The current environmental condition was also perceived as “a garbage” which ranked as second. One notable response pertaining to this is: *“Our environment nowadays is like garbage. The natural resources were too little compared in the past, the natural beauty of it was lost, and the green image of it was changed with the colorful plastics and wastes.”* Related to this is the perception of the respondents that the environment is not as good as before which ranked as third. One respondent said that *“Unlike the old days, our environment is still preserved but because of the great need of humans, the environment today is abused by the humans themselves.”*

The respondents also described the current situation of the environment as “a catastrophe.” One respondent stressed that *“The environment we have right now is intoxicated with different kinds of pollutions that continue to destroy the nature. Human's irresponsibility caused various dilemmas that threatens our planet.”*

In summary, it can be inferred that the respondents are very aware of the environment's current condition. Such awareness can lead to deeper and more proactive commitment towards environmental stewardship. This supports the statement of the United Nations Conference on Environment and Development (1992) that “education, including formal education, public awareness and training should be recognized as a process by which human being and societies can reach their fullest potential. Education is critical for promoting sustainable development and improving the capacity of people to address environment and development issues.”

Perceived Most Serious Problems of the Philippine Environment

A myriad of dilemmas confront the Philippine environment at present. Table 2 shows the most serious problems that the country's environment is facing as perceived by the respondents.

Table 2. Frequency Distribution and Ranking of the Most Serious Problems of the Philippine Environment

Problems	f	%	Rank
Illegal logging	1	5.00	6.5
Global warming/ Climate change	5	25.00	2
Philippine endangered species	2	10.00	4.5
Air and water pollution	6	30.00	1
Overpopulation	2	10.00	4.5
Garbage	3	15.00	3
Filipinos	1	5.00	6.5
Total	20	100.0	

Air and water pollution ranked first as the most serious problem of the Philippine environment as perceived by most of the respondents (30%). One respondent said *"I think pollution is the most serious problem in the Philippines. The air, water and land resources were polluted by chemicals, garbage and waste materials that people were using. They do pollute the environment without hesitation, without even thinking of the consequences which we will be faced."*

Global warming and climate change (25%) and garbage (15%) ranked second and third as the most serious environmental problem, respectively. The following statements from the respondents stress these problems:

1. *"The most serious problem is the continuous depletion of the ozone layer that causes global warming and climate change."*
2. *"The ozone layer will be gone, UV rays will destroy life on Earth. It will leave none, even a single organism."*
3. *"The improper garbage disposal is the most serious problem. It is the main source of pollution in the country."*
4. *"Garbage is everywhere. It causes floods, water pollution, air pollution and death of other organisms."*

The endangerment of Philippine endemic species (10%) and overpopulation (10%) came next as the country's most serious problem. One respondent said *"The extinction of our endemic species is very alarming. The shooting of "Pamana," a Philippine monkey-eating eagle, just recently shows how poor our law enforcement in protecting our wildlife and the natural environment as well."* On overpopulation, one respondent stressed *"Overpopulation is the most serious problem because as our population increases, needs and demands increase. As our demands increase, Filipinos will do everything – even destroying the environment – in order to survive."*

Illegal logging (5%) and the Filipinos (5%) are also perceived as the Philippine environment's most serious problems. A notable response along this facet is *"illegal logging causes landslides which can destroy animal habitat, cause human death and affect the ecological balance."* Another respondent said *"The Filipinos is the problem. There will be no problems like water pollution, improper waste disposal, etc. if we are responsible enough to take care of the environment we belong. We are stewards of nature and always remember that."*

The environmental problems mentioned by the respondents are actually happening in the Philippine environment. Harris (2006) cite that the nature's catastrophe had brought serious implications towards the earth such as choking air pollution, water pollution in the vast majority of rivers, water shortages throughout much of the country, ocean pollution, mountains of solid and toxic waste, acid deposition spoiling land and water, destruction of the remaining scattered habitats, near-total deforestation, rampant overfishing, depletion of agricultural land, and conspicuous consumption of even highly endangered species for food and traditional medicine.

The role of the people is indeed very critical in maintaining the ecological equilibrium. Environmental stewardship must be further strengthened starting with the youth in the academe and extend it to the people outside the schools.

Major Solutions to Solve Environmental Problems as Perceived by Respondents

When asked of the major solutions to the perceived environmental problems, the respondents answered various means (Table 3).

Table 3. Frequency Distribution and Ranking of the Major Solutions to Solve Environmental Problems

Major Solutions	f*	Rank
Plant more trees	11	1
Proper waste disposal	7	3
Stop using plastic	3	5
Discipline and unity of people	8	2
No to burning of garbage	5	4
Use of bicycle	2	7
Obey simple environmental rules	1	10
Sign up in environmental organizations	2	7
Push for green revolution	1	10
Recycle	2	7
Protect wild animals	1	10

*multiple responses

Based on the data in Table 3, planting more trees ranked first among the major solutions with 11 responses. One notable answer is: *“Planting more trees can give us more oxygen and will eventually mitigate, if not totally, remove, climate change.”* Discipline and unity of people ranked second with 8 responses. One noteworthy response along this facet is *“We need to have self-discipline in order to solve environmental problems. We should collaborate and work as one towards preserving the nature.”* Proper waste disposal was also perceived as a major solution with 7 responses. One respondent said *“Proper garbage disposal must be observed not only to avoid pollution but also to spare us from health problems.”*

Other environmental solutions given by the respondents include no to burning of garbage, stop using plastic, use of bicycle, sign up in environmental organizations, recycling, obeying of simple environmental rules, pushing for green revolution and protecting wild animals. Sample statements made by the respondents relative to these solutions follow:

1. *“We must engage in different movements and advocacies towards caring, securing and preserving the natural form of the environment.”*
2. *“Let us support the government programs on environment like the national greening program and solid waste management program.”*
3. *“Recycle things instead of throwing it everywhere.”*
4. *“In every 1 tree cut down, plant 21 in return. In every 1 garbage that was improperly disposed, dispose 30 waste materials properly.”*
5. *“Advocate green technology and push towards green industry.”*
6. *“Teach discipline among the children. They will carry it through and apply it to the environment.”*
7. *“Plant more trees and protect the animals. Love the world and not the material things in the world.”*

Based from the responses, it can be inferred that the university students suggested doable and feasible means of solving environmental problems in the country. Matched with greater awareness and sound motivation, the students can push for these solutions in order to resolve the environmental dilemmas. This is supported by the findings of Thapa (1999) that one of the best ways of preservation is by creating environmental awareness among society especially students as they are future leaders, future custodians, planners, policy makers, and educators of the environment and its issues.

Respondents' Perception of an Ideal Environment

The university students' perception of an ideal environment is presented in Table 4. It can be surmised that the respondents greatly believe that an ideal environment is a clean and green environment. One respondent reiterated that *“An ideal environment is an environment with clean and fresh air, has a rich variety of organisms, wild animals are living safe in their respective habitats, free from chemicals that can cause ozone*

depletion and with responsible human kind thinking not only for themselves but for every living and non-living entities of our planet.”

Table 4. Most Common Themes among Respondents’ Perception of an Ideal Environment

Theme	f*	Rank
Clean and green	15	1
Sufficient for man’s needs	2	5
Quiet and peaceful	4	3
Inhabited by disciplined and responsible humans	6	2
Where everything is natural	3	4

*multiple responses

Ranked second in the survey is the perception of an ideal environment as inhabited by disciplined and responsible humans. One notable response along this aspect is “An ideal environment is a home where people are responsible of their actions and aware of their duties as protectors of nature.”

The theme “a quiet and peaceful” ranks third while “where everything is natural’ ranks fourth. The following statements from the respondents stress these themes:

1. “... an environment that is suitable and comfortable to stay in.
2. “... is where plants and animals live together, interact with each other and follows the natural cycle without destruction or threat from humans because of their eagerness.”
3. “... is an environment where all are natural, no man-made technologies and very safe to live in.”
4. “... is an environment with many trees, colorful flowers, healthy animals around, no extinction of species, the ecosystem is balanced, no garbage, air is fresh and the people has initiative.

Notably, two respondents perceived an ideal environment as sufficient for man’s needs. One respondent said “An ideal environment is that one that provides adequate resources to satisfy man’s needs. Humans will not abuse the environment if their needs are being sustained. In return, humans should also satisfy the protection the environment needs.”

It can be inferred from the responses of the university students that an ideal environment reflects the good, the positive and the beautiful aspects. An environment, to be ideal, should possess characteristics that are favorable primarily to human’s survival and existence. It is supported by the preamble of the Earth Charter which states that “the decisions and choices humanity makes in response to the challenge of these critical problems will have major consequences for the future of life on Earth” (Earth Charter Commission, 2000).

Respondents’ Commitment towards Environmental Stewardship and Conservation

The awareness of the university students on the current environmental situation and the myriad of problems confronting the environment led them to commit towards environmental stewardship and conservation. The themes of their commitment is presented in Table 5.

Table 5. Most Common Themes among Respondents’ Commitment towards Environmental Stewardship and Conservation

Theme	f*	Rank
Become steward of the environment	8	2
Teach and inspire younger generation	10	1
Do simple things for the environment	7	3
Be responsible at all times	3	4

*multiple responses

Most of the respondents commit to “teach and inspire younger generation.” As prospective teachers, they would impart knowledge and motivate their students to push for a greener environment. The following statements stress this theme:

1. “I commit myself to teach my future students to be environment-friendly individuals. I will be an example in taking care of the environment.”

2. *"I promise to help the environment by pursuing my advocacies for a cleaner and greener environment. I will inspire the youth to the same."*
3. *"I will do my share by educating my fellow youth that the nature should be preserved and not be abused. I will ask their help and together, we will make a difference."*

To become the stewards of the environment ranked second with eight responses. The respondents perceive themselves as proactive movers in spearheading environmental endeavors in the community. The following statements from the respondents reiterate this theme.

1. *"I will advocate simple environmental programs which I know can help the environment. I will lead my fellow youth to start their own little projects, too."*
2. *"I will encourage the youth to fight for the environment and to stand against things that ruin our surrounding. I will encourage my folks not to use plastic, burn garbage and be respectful."*
3. *"I commit myself to become steward of the environment. I will help in the preservation and protection of plant and animal species and their habitats by doing things not really so big but can make a great change."*

The respondents also commit to "do simple things for the environment" and be responsible at all times." The following responses were made along this aspect:

1. *"I commit myself to do simple things for the benefits of the environment. If everyone will share little things. Altogether, it will have a big positive impact."*
2. *"I will be responsible with my trash, with my things and most importantly, with my actions."*
3. *"I will be a responsible member of the community and help in environmental programs being implemented by the government."*

It appears from the students' responses their intense commitment and staunch advocacies towards conserving and protecting the environment. They see themselves as responsible stewards of nature entailed with sense of accountability and obligation in making sure that the environment is in a good status. At this point, in our global history, there is no time to look backward with regrets to the mistakes; we have to look forward with hope, confidence and optimism in the future and pool the efforts as one world in responding to environmental degradation towards building a common cause in preserving life on earth.

Conclusions and Recommendations

The university students have high level of awareness on the current environmental condition. Their extent of awareness provides them a big picture of what kind of environment they have at present. The environmental problems that are happening served as eye-openers for them to realize that they have critical roles to play as protectors of the environment. The students have also given a myriad of simple yet doable means of resolving the environmental dilemmas towards achieving the ideal environment that they want to see. This ideal environment, as perceived by the students, is a place that is clean, green, quiet and peaceful inhabited by disciplined and responsible humans that supply sufficient needs for the people.

Moreover, the respondents have intense commitment and staunch advocacies towards environmental stewardship and conservation. They embrace the challenge to be stewards of the environment as they experience a multitude of problems confronting it. The results of the study have important implications. First, the perspectives of university students towards environmental stewardship can be an input for a more learner-centered, research-based and comprehensive environmental education curriculum for higher education institutions (HEIs) not only of the Philippines but also of the ASEAN countries. Thus, strengthening environmental stewardship in the schools could produce responsible and environmentally-aware students who would later become leaders of the society.

Second, the commitment of the students towards conservation and preservation of nature can be considered for possible environmental programs and projects to be implemented in an HEI. The students could translate their innovative ideas into doable projects and programs to be implemented in their respective schools or communities. The support of the universities and colleges to the students' environmental initiatives will surely make a big difference not only for the students' sense of stewardship but also for the environment.

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