The role of academy in increasing generation awareness on environmental function

R S Wijaya¹, M Ulf¹, W O Husnia³, S Syamsuri⁴, A M Ali², S Yahya², L Hanifa³, D Mahmuda³, I W Sujana³, R Abdullah³, L M H Adan³, A Sadat⁴, A A M Wijaya⁴, H F Maulana⁶, C Nuryadin⁶, N Nazriani⁶, E Nurcahyo⁷, L O D Abdullah⁷, I K Dewi⁷, H Hardin⁸, and W Wardana⁸

¹ Department of Guidance and Counseling, Faculty of Teacher Training and Education, Universitas Muhammadiyah Buton. Indonesia.
² Department of Primary Teacher Education, Faculty of Teacher Training and Education, Universitas Muhammadiyah Buton. Indonesia.
³ Department of Accounting, Faculty of Economic, Universitas Muhammadiyah Buton.
⁴ Department of Public Administration, Faculty of Social Science and Political Science Universitas Muhammadiyah Buton. Indonesia.
⁵ Department of Communication, Faculty of Social Science and Political Science Universitas Muhammadiyah Buton. Indonesia.
⁶ Department of Linguistics, Faculty of Teacher Training and Education, Universitas Muhammadiyah Buton. Indonesia.
⁷ Department of Legal studies, Faculty of Law Universitas Muhammadiyah Buton. Indonesia.
⁸ Department of Agribusiness, Faculty of Agriculture, Universitas Muhammadiyah Buton. Indonesia.

E-mail: rasman.sastra@umbuton.ac.id

Abstract. Difficulty in building human awareness on environmental impacts makes some academics must take concrete steps and actions for the generation's knowledge on the importance of the environment from an early age. Much involvement of elements or elements in increasing environmental awareness makes the final results less efficient/optimal and unsatisfactory. For this reason, the participation of academics in providing this awareness regarding the environmental management needs to be specific to communities that are directly influential and related. The method used was survey research with 376 research samples consisting of students, students and the community (parents) who have a generation awareness of environmental functions. Survey research collected data from respondents by measuring or estimating as a way of conducting observations where indicators about variables are answers to questions given to respondents both verbally and in writing. Academics role in improving understanding of self-awareness will colour all instruments of education level in order to prepare young people who are aware of environmental impacts. Awareness raising of the environment becomes values that internalized in everyday life. Thus, the young generation that has the conscious ability to protect the earth that we inhabit must be developed to face various technological and industry challenges. The conclusions of the study can provide valuable data and information on shared responsibility for managing, utilizing, and tackling the impacts caused by the environment for generations to survive.
1. Introduction

The main factors causing environmental damage are mostly human device actions due to lack of awareness on the impact of environmental dispensation. Other factors that exist in space, whether it be in the form of objects or a situation in which humans are in complete with various behaviors and among them will occur mutual relations and influence each other. The environment is a unity of space with all objects, power, circumstances, and living things, including humans and their behavior, which affect the survival of the life and welfare of humans and other living things [1].

Various disturbances or shocks that occur on one earth sub-system, will have an impact on other systems. Environmental damage can be traced by the relationships of these sub-systems, where humans have taken on the role of actors of damage to the system, and by themselves will damage long-term human life [2]. The emergence of environmental degradation cannot be separated from environmental management, which in its implementation involves many stakeholders (various parties) and decision-makers, especially in the utilization of natural resources with various objectives, so that a multidisciplinary approach is essential [3].

The earth is a place of life for all living things including humans. Our survival depends on the sustainability of the earth itself. Directly or indirectly, all humans living on earth must be responsible for the damage that occurred during the development of human history. The emergence of technological developments and the progress of mining processing have caused environmental damage, such as the existence of global warming, el Nino, and various disasters that originated in the motion of human history.

Activities in environmental management must involve government institutions from various fields or sectors and various community groups [4]. But too much involvement of elements or elements in planning and decision making makes the end result less efficient or less satisfactory. Academic participation in providing awareness regarding environmental management needs to be limited to communities that are directly influential and related. The national development system that has been regulated in the legislation system can refer to the basis of the preparation of environmental management planning, namely by involving various institutional elements efficiently.

One of the roles of academics in serving the community is by building the identity of the young generation to care for the environment. Efforts in preparing the younger generation to be able to solve various problems of the nation and to keep them away from the danger of being contaminated by the environment must be increased so that it does not have a long term impacts. If this cannot be implemented from now on, then indifferent behavior towards environmental functions can undermine the nation's mentality from the negative things of the young generation. To filter the various influences of globalization, in the world of education, it is necessary to develop concepts and implementation of attitudes based on character values on environmental functions [2]. Therefore, it is an academic role to improve understanding of self-awareness that will color all instruments of education level to prepare young people who are aware of environmental impacts. Awareness raising of the environment becomes values that internalized in everyday life. Thus the young generation that has the conscious ability to protect the earth that we inhabit must be developed to face various technological and industry challenges.

Generation awareness will be able to filter everything from the negative influence of globalization. In addition, it can raise awareness of the younger generation to have positive awareness and habits in fostering an attitude of environmental preservation by doing various things that should be done both within the family, educational institutions, and the community. Directing and awakening young people to things and the negative dangers of mistakes caused by human hands is the main form in everything. Education with an approach to maintaining cleanliness and planting trees in schools is served as a base to emphasize values to live together in thousands of years. For that culture must be the view of life of the young generation. The view of life contains the basic concepts of life that are aspired by the nation, including the deepest thoughts and ideas of a nation about the future form of human life.

Some academic roles both directly and indirectly applied by Universitas Muhammadiyah Buton lecturers to the students in schools and communities were to explain environmental conservation efforts to prevent environmental damage; to give examples of daily actions that do not pollute the educative
To conduct preservation, prevention and mitigation are carried out in an administrative way to the parties related to the intensive management of the environment by the government through the forestry service, the agriculture service, and the public works, energy and mineral resources services. Administratively, binding rules and laws are required. Therefore, various arrangements regarding the environment must be properly implemented. More clearly, matters regarding the maintenance and guidance of the environment are disclosed in the Basic Provisions of Environmental Management in the Law of the Republic of Indonesia Number 4 of 1982 and is valid since March, 11 which explains the environmental management based on the preservation of sustainable and balanced capabilities to support sustainable development for improving human welfare. Likewise, the Government of the Republic of Indonesia number 29 of 1986 concerning Environmental Impact Analysis, which was set on June 5, 1986, and entered into force on June 5, 1987, must be taken seriously. From that provision, it is expected that the community realizes that a good and healthy environment has great benefits for the community itself.

Results from field studies show that no land preparation after herbicide non-selective applications such as paraquat (Gramoxone SL200) or sulfosate (Touchdown SL480) can significantly reduce methane emissions from Indonesian rice fields. The reduction is higher during the dry season than the rainy season. Methane emissions are reduced when no-tillage is combined with intermittent or saturated irrigation. The main objective of this research is to increase awareness of the generation of environmental functions to reduce the impact of environmental handling on generation.

2. Methods

The research was conducted using a quantitative descriptive research approach, using survey research methods that do not give any treatment to respondents, only collects data using standardized instruments, such as questionnaires, tests and so on. The research was conducted in a pure survey, that is by taking data from respondents without giving treatment and the variables studied could still be changed (changed as the treatment experienced later), and the data produced were ratio/interval type data and taken using a questionnaire. The act of measuring or estimating means as a way of observing where indicators of variables are answers to questions given to respondents both verbally and in writing.

The study population consisted of 4 sub-districts of Baubau City, namely Wolio, Murhum, Betoambari, and Kokalukuna sub-districts with 3,765 people. Sample were determined by 10% of the population resulted in a total of 376 people who were given questions to every student, student, and society in general. Research started based on one's perception of a problem, the determination of research focus can limit what you want to study because the phenomena that occur are holistic, the research focus serves to meet the criteria of a respondent obtained in the field, research focus it is still tentative or temporary and will be used as a reference to improve the research to be a larger-scale research.

3. Results and Discussion

The research results obtained through this study from each level of the generation of students, students and the community (parents) of each of the short questions about increasing awareness of the importance of maintaining the environment and the impact of our environmental damage were processed statistically. The resulting data is data with ratio/interval type (1-5) and was taken using a questionnaire through an interview. The questionnaire was processed with a categorization model with a score ranged from 5 to 1 for the answer of "Strongly Agree", "Agree", "Do not Have Opinion", "Disagree", and "Strongly Disagree", respectively. Development of research assessment instruments was carried out through focus group discussions, panel studies, and lectures.
Our first treatment was to work in distributing questionnaires and conducting interviews to obtain samples that matched the measurement criteria. There were no interventions to answer correctly enough to know "agree, strongly agree, do not have opinion, disagree, strongly agree" opinions. Furthermore, in order to meet a sample of 376 people, through lectures, academics provide questions that will be answered according to both open and closed answers. To get maximum results the results of the research will be seminal at international and national seminars.

The variable indicators which are important topics in the implementation of research are (a) Explanation of environmental conservation efforts regarding prevention of environmental damage; (b) Give examples of daily actions that do not pollute the environment education; (c) Explain environmental ethics; (d) Provide several examples of actions that are in accordance with environmental ethics; (e) Explain 3 of 5 environmental management objectives; (f) Explain the management of mineral natural resources and non-conventional energy; (g) Explain the management of water resources and land. Data was tabulated through the categories and frequencies shown in table 1.

| No | Interval   | Frequency | Answer          |
|----|------------|-----------|-----------------|
| 1  | 10 -32     | 56        | Strongly disagree |
| 2  | 33 - 55    | 72        | Disagree        |
| 3  | 56 - 78    | 63        | Do not have opinions |
| 4  | 79 – 101   | 85        | Agree           |
| 5  | 102 - 124  | 100       | Strongly agree  |

Amount 376

Examples of categorizing generation awareness on the environment

Data processing results will be used as the main reference to map the amount and risk that will be predicted to be a potential risk for at least the next 10 years. Statistical data will be submitted to related agencies and national seminar for further research consideration. The results of the research are very meaningful for all elements responsible for the existence of the environment and nature as well as the impact or environmental risk in its management and its mitigation.

4. Conclusion

Based on the results of this study it can be concluded that the data and information obtained can provide enlightenment to increase generation awareness, especially the generation. The use of the environment with an academic approach at each generation level will get long-term results in order to save the environment for future generations.

References

[1] Yunus M 2017 Etika Pengelolaan Lingkungan Hidup di Perguruan Tinggi: Kritik terhadap Ilmu Pengetahuan dan Implementasinya Working Paper doi 10.13140/RG.2.2.23326.02882.
[2] Widyosiswoyo S 1999 Ilmu Alamiah Dasar (Jakarta: Galia Indonesia).
[3] Taum Y Y 2017 Sounds of the margins: Peran akademisi dalam membangun peradaban bangsa J. Fak. Sastra Universitas Sanata Dharma 2 8-9.
[4] Zakaria M 2015 Peran akademisi dalam mem bendung pengaruh budaya negatif generasi muda penerus bangsa J. Lentera 15 87-93.
[5] Lesmanawati I R 2012 Analisis rona lingkungan kampus IAIN Syekh Nurjati Cirebon dalam mewujudkan kampus berbasis konsep green campus J. Holistik 13 75-94.
[6] Roosita H 2010 Undang-Undang No 32 Tahun 2009 tentang Perlindungan & Pengelolaan Lingkungan Hidup (Jakarta: Kementerian Lingkungan Hidup Bidang Tata Lingkungan).
[7] Roscoe J T 1975 Fundamental Research Statistics for the Behavioral Science, International
Series in Decision Process, 2nd Edition (New York: Holt, Rinehart and Winston, Inc.).

[8] Sulastrī S E and Dilastri N 2015 Peran Pemerintah dan Akademisi dalam Memajukan Industri Kreatif Kasus pada UKM Kerajinan Sulaman di Kota Pariaman, Pros. Seminar Nasional Ekonomi Manajemen Dan Akuntansi (SNEMA) 10th October 2015 Padang Indonesia.

[9] Naharia O, Setyanto P, Arsyad M, Burhan H and Aswad M 2018 The effect of water regime and soil management on methane (CH4) emission of rice field IOP Conf. Series: Earth and Environmental Science 157 012012.

[10] Creswell J W 2012 Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research 4th Ed. (Boston: Pearson Education Inc.) 345-456.

[11] Gay L R, Mills G E and Airasian P W 2009 Educational Research: Competencies for Analysis and Applications 9th Ed. (New Jersey: Pearson Education, Inc.) 456-467.