

Environment Knowledge Implementation to Senior High School and Collage Students Activities

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Abstract - Al Qur'an is the word of Allah SWT as the rules and guidance to get harmony and success life in here and after. The explanation and ways how to implement command of Al Qur'an are found in Al Hadist Muhammad SAW. Al Qur'an teaches may aspect of life and one of them is how using and managing the natural resources and conserve of environment, using the source of energy, water, health and sanitation. In the other hand the people of the world included Indonesia facing environment problem. Sustainable Development Goals (SDGs) from United nation are collected of 17 global goal or agenda 2030 for transforming our world 2030 and containing strategy to solve environment problem. Base on the fact, the problem is how awareness the senior high school and higher education (university) students specially Islamic students to contribute conserve the environment?. The goals of the research were to know how environment awareness and action performance of students from senior high school and university. Methodology of the research was survey and observation concerning in 320 student from 4 senior high schools and in 1 university. The result of the research showed 41,5% of natural and 40.35% social science students from Islamic values senior high schools (SMAI IPA and IPS) showed the awareness action to environment. In SMAN IPA students showed their awareness 51.1% and SMAN IPS 20.6% Based on observation students from university with Islamic values showed low awareness of environment.

Keyword - Al Qur'an, Awareness, Environment, Hadist, Students

INTRODUCTION

Indonesia is an archipelagic geographic country with 17.503 islands which lies in Pacific Ring of Fire along northeastern island adjacent to an including New Guinea and the Alpid belt along south and west from Sumatera, Java and the lesser Sunda, Bali, Flores and Timor by the consequences numerous active volcanoes releasing mineral giving benefit for supporting plant growth. The other hand Indonesia passed equator with tropical climate. This condition make Indonesia has many natural ecosystem such as costal 54.716 kilometer, estuarial, marine, sea grass, rain forest (225 million acre) it means 57% of the land, monsoon and huge biodiversity corral reef, mangrove, flora and fauna is a mixture Asia and Australia. The endanger animals such as Sumatera Tiger, Rhinoceros, Anoa, Orang Utan, endemic and endanger flora species such as *Aghatis labillardieri* plant from Papua with 2 meter diameter and 60 meters height, *Rafflesia arnoldi* is the largest individual flowering plant in the parasite

genus live in indonesia rain forest tropis. Indonesia has 8 UNESCO Heritage site and 3 of them have special ecosystem there are Komodo and Bunaken National Park and Raja Ampat Island having highest recorded level of diversity in marine life [1].

Growing the population in Indonesia and rapid industrial development make Indonesia facing 3 prominent problem related with environment. There are pollution in air, water and land, scarce of fresh water especially in the cities, and loss of biodiversity. Traffic congestion, illegal home industry and inadequate garbage management are source of dominant factors caused of air pollution. Air pollution show significant related with decreasing water and land quality. For the example acid rain from sulfur dioxide, nitrogen oxide, carbon dioxide there are industrial and transportation emission. Those molecules will make reaction with water in atmosphere and produce acid rain. It is the threat on food chain [2] in ecosystem and

biodiversity in forests, freshwaters, soil fertility, insect, bacterial and fungi in the soil, aquatic life, corrosion and weathering of the building. Source of land pollution also caused by not reasonable using of fertilizer chemical, herbicide and pesticide and give the impact to river. Illegal home industry also a threat of ecosystem because usually they throw away their waste to river. Scarcity of fresh water not only caused by pollution but also by lack of catchment area for water retention as consequences of so many the people housing area as impact on explosion of the population numbers.

To solve the problem of environmental degradation and natural resources Indonesia government has policy and agenda Long Term Development Plan 25 years 2005-2030 It is correlation with Sustainable Development Goals are collection 17 global goal or agenda 2030 for transforming Our World 2030. Implementation of agenda 2030 needs commitment, awareness and sense of belonging all the people with respect to natural resources and environment. There are important factors to build the nation with sustainable development paradigm. Education is one attempt to develop mind set and capacity building of the human resources.

METHOD

The research using survey and observation method to measure awareness about environment specially aspect knowledge and action/performance. Respondents were collected from Islamic and Government Senior High School wich consist of social and science group. Total respondents were 320 students. Teachers respondents who teach the natural and social science. In order to observe, its implementation among higher educated people, the research also conducted for Islamic College Students in Jakarta based on data collection from period 2018. Observed their action to protect schools environment. was conducted every days for 10 day. The parameter of environment knowledge and action to protect environment for students and teachers were air, water, pollution, waste, plant and soil such as on Table 1. Location the research was conducted in Jakarta and Bekasi on 2007

RESULT AND DISCUSSION

Environment education in 2 Islamic Senior High Schools students in Jakarta specially on knowledge

to environment the students showed good achievement. Based on data SMAI IPA students showed 79.02% and SMAI IPS 62.65% have known values existences of ecosystem and biodiversity for life, global warming effect and climate change, and also effect of pollution hazard. SMAN IPA students have known about environment knowledge 95.05% and SMAN IPS students 90.5%. There were evidence that all of the teachers have good knowledge and teach them about environment issue such global warming and climate change. In the fact of the research showed all teachers have known about environment issue. The teachers indicated awareness and good action to protect environment. Analysis result of national curriculum in Senior High School indicated loaded with environment issue. The application of implemented environment knowledge showed several action (Table 1 and 2).

Table 1. The material containing in senior high schools curriculum 2007 in Indonesia

No	Knowledge	Action
1	How to manage the fresh water	Efficient using the fresh water, make sure swich off the tap water after using
2	How to protect the air from pollution	No smoking
3	How to manage the waste and garbage	Reduce, reuse, recycle and composting
4	How to conserve the environment	Throw the garbage in the basket
5	Source of pollution	Not make noise and put the in the trash
6	Efective using electrical energy	Swich of the lamp and air condition when left the room

Survey about learning methodology in the class showed the teachers often discuss about sustainable development concept with many interesting topic such us about scarce of fresh water, deforestation, soil degradation, greenhouse gas effect on global warming, illegal logging. Beside that the teachers teach increasing impact of population and urbanization from social, economic and ecology perspective. Learning process not only in the class but also the students looking directly on the object when they field studied.

Table 2. Comparison of material containing between science and social science in senior high schools curriculum in Indonesia 2007

No	Knowledge Of Natural Science	Knowledge of Social Science
1	Ecology Aspect : water, land, air, energy, organisme, interaction	Ecology from geographyc aspect
2	Limimited of Natural Resources	Economic and social effect on limimited of natural resources
3	Renewable and Unrenewable Energy	Economic and social effect on renewable and unrenewable energy
4	Pollution effect on health	Polution effect on economic and social
5	Global warming effect on health	Global warming effect on social and economic

Contrary condition on action parameter to protect environment in SMAI IPA students. Only 44.65% of them showed action aware to environment and 40.03% for SMAI IPS students. SMAN IPA students showed their awareness 51.1% and SMAN IPS 20.6% (Figure 1). Data show significant difference between groups $0.001 < p < 0.05$. It means that totally students from SMAN IPA knowledge and action awareness about environment relatively more than SMAI IPA. Difference fact on SMAN IPS only 20.06% of students showed their action to conserve environment. SMAI students from social science more aware to environment compare SMAN students. It was influenced by implementation the Islamic teaching specially in surah Ar Rum 41 : Corruption has appeared through the land and sea by (reason of) what the hand of people have earned so He may let them taste part of the consequences of what they done that perhaps they will return to righteous.

Several action in daily action were the students throw away their garbage to the shelf, floor, and park and they did not aware the garbage surround of them. They did not warn their friends when put garbage in any place. The students also did not care to tap water when saw the water bailouts. They also did not care with energy and resources for the example put out

the light when left the room. Usually their activity using property which made wasteful.

Data analysis showed no correlation 0.153 between knowledge environment and the environment awareness action.

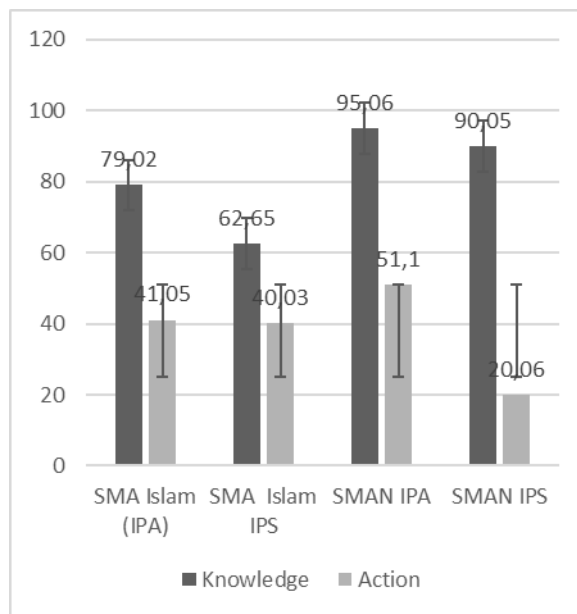


Figure 1. The students knowledge and action about environment awareness

All the situation indicated low of implementation application practice of environment knowledge in the students senior high school. This condition caused the schools did not seriously give attention implementation of environment awareness from elementary school. Generally the school did not apply punish and reward. The research found data that to enhance implementation awareness to environment in senior high school student influenced by school management. Principal dominantly influence to the school milieu awareness to environment. Principle whose concern, care, awareness to environment will support activity, make policy, rules, publication and collaboration with national and international institution for implementation environment education. On the other hand the research found 63.20% students from families in the middle social economic more aware compared high social economic. It caused in family in high social economic usually have maid. The action awareness students SMAI in 2007 is not different with students in an university with islamic values in 2018. Awareness and action to protect environment based on observation low implementation. For the example they throw away their garbage and the mineral water trace bottle in

the floor. It caused by community habit do not aware to protect environment.

Based on result of the research Islamic values university has to concern about this condition and educated the student and make them aware and show the performance attitude to environment in daily activities. University is finally formal of education to build human resources capacity as next generation who expected and as important factor in sustainable development. Many program applied environment attitude in daily activity namely ecocampus. This methodology offer connectivity many knowledge such as ecology, technology, social and economic. Interdisciplinary enhance students capacity to development new concept and perspective [4]. Several activity could increase awareness environment of the students for the example the students and lecturer minimal using lift. This activity built awareness of electric energy and exercising for health. Activity made biopori in the event to increasing awareness necessary to saved of fresh water.

Manage of garbage by separating an organic and organic garbage. An organic garbage usually mineral water bottle and convert to another function and organic garbage convert organic fertilizer. Planting the tree in the campus park to aware global warming and deforestation. No areal smoking in campus to built awareness hazard of air pollution. Public service by coaching village to build sensitivity of environment problem in community. Increasing research about species endanger to build awareness of loss biodiversity, alternative local. Recycle of water ablution to increase awareness scarce of fresh water. Research and study about biodiversity and their benefit in ecosystem such as the turtle, endemic species for the example Pisang Barangan specially banana is only find in North Sumatera Indonesia, alternative source nutrition and likes kinds tubers and micro algae. *Canna edulis* Kerr (local name Ganyong) has potency as alternative food substitute of wheat flour containing prebiotic and antioxidant. Publication all awareness environmental activity and collaboration with national and international institution which concern to environment.

Based on education environment we hope could build commitment, awareness and sense of belonging all the people on natural resources and conduct of SDGs program. Connecting social and natural ecologies in ones curriculum and implemented in practical in community could

increase young people contribute awareness [3]. Curriculum should integrate learning of fresh water to anticipate education agenda [5].

CONCLUSSION

Total students from senior high school Natural and social science showed awareness action to environment by their life style 38,60%. University as the higher education should to concern about this condition by educated the students in many activities with oriented to ecocampus and public service.

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