Geography Education as a Key in Maritime Education in Indonesia

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Abstract. Humans basically are the type of creatures who live in land, so it is reasonable if their attention was almost entirely focused on exploiting natural resources on land. But it needs to be realized that most of the Earth’s surface consists of water. Especially for Indonesia that its territorial was mostly consists of waters which is the ocean, then it is reasonable, or even if this nation should pay particular attention of the excavation, utilization and maintenance of marine resources. Based on these considerations, it is necessary to outlined the efforts of increasing awareness and utilization of marine resources, but it must remain in rational and responsive to increase prosperity for the present and next generation by Maritime Education. Geography Education have a role as an important instrument in Maritime Education.

1. Introduction

Human beings in environmental systems, is simply is one of the components. However, the Lord has given more capabilities to the mankind compared to other creatures. The ability to develop science and technology, then human beings play an important role in the mechanism of environmental systems. Current human behaviour affects the balance of environmental systems. Human behaviour is currently very influential towards the balance of environmental systems in the future. Therefore, if we want an environment that does not support decreased carrying capacity, then one of the strategies need to be outlined is handling and construction of human behaviour to conform with the norms of environment.

Asset utilization of Malay Archipelago, especially the land area is already done intensively for ages, both for biological resources and biodiversity so that the exploitation was almost saturated, meanwhile, utilization and concession the waters of sea with all its resources is still very limited. In fact, its longest shores reached 80,000 km, equals to twice of Earth’s circumference (40,075 km). Based on history of people triumph in wading through the sea of Indonesia, our ancestors has long been known as a nation of seafarers, as described in one of Indonesian childhood song. Long before European colonists came to the Asian archipelago, residents were able to sail to the island of Madagascar in southern Africa and Melanesian Islands in Pacific Ocean. The golden period of archipelago marine triumph began the era of Kingdoms of Sriwijaya and Majapahit in the eight century to 14th century ago, followed by the Islamic Kingdoms such as Bone, Ternate, Makassar, Cirebon, in the century of 15 to 18.

At first, non-human lake were used for centuries only as hunting areas to catch fish for the fulfilment of needs of animal protein and or used as a medium of cruise traffic. However, the sea currently is considered not only as transportation instruments inter-continenal and inter-ocean. But, its botanical and animal resources is also fulfil the necessity of life, and also the US renewable and non-renewable energy resources, mineral resources and water resources (due to the pollution of land and deflation water resources) [1]. Furthermore, the sea acts as fortress against outer theatres.

Science and technology that human currently owned, makes them hear that the blue of sea water is everything. It turns out that touchable parts of sea still not utilized optimally by humans. Humans still go along to complete themselves with science and technology that necessary to utilize marine resources potential. This time, there was a strong urge to explore and exploit the area of sea. Including the water body of sea, as well as the ocean floor and the layers below with the aim to fulfil the needs of present and future or for the importance and goals. Then, on the 21st century certainly will be a race among nations for control and exploit the oceans for a better life.

2. Methods

This article was not a result of research, but as results of thought based on references sources. Author looking for books, research results and relevant journals. By default, in factual, Indonesia as a maritime
country, and by theories of environmental education, especially maritime education. Indonesian actual condition is compared with the other concept, theories and relevant research results. Based on analysis of Indonesian factual condition with the others concept, theory and research, then finally made the conclusion. Information is analyzed with descriptive analysis.

3. Results and Discussion

Indonesia, has assets of extensive marine territory which promising natural resources potential in the future, but on the other hand the soul and spirit of maritime were lose ground. Seeing that reality, the demands to the nation of Indonesia is not only to proud of the triumph of the past as a nautical nation, but how the attitudes and behaviors in loving marine life can be sustained even driven by failed accomplishment if compared with other countries.

The song “Mari Beramai-ramai ke Laut” by Ibu Sud was famous in the past, nowadays it is almost unheard in school students, and a lot of people might not be remember anymore. Current conditions of Indonesian Maritime is like a huge park that becomes the object of foreign fishermen and give benefit for foreign transportation companies. The condition of Indonesia Marine is more like that of a big garden which becomes an object for foreign fishermen and which is profitable to foreign transportation companies. And last but not least, the Indonesian marine has become a scientific laboratory for foreign expert in finding/trying new methods in maritime sector, but unfortunately it was not for Indonesian's benefit [1].

To revive long-buried marine culture of Indonesian people needs a relatively long time. To realize the above required a strategy that is ripe and appropriate-accurate. In realizing it, needs a proper, appropriate-accurate strategies. To foster awareness of marine culture, at least there are three factors which need to be strengthened, it is environmental factors, including factor social cultural community that is currently still in the countryside, the socio-cultural should immediately be converted to maritime culture, including from the Government and the legislative. Now there are still many people who think that the sea is just another factor connecting the existing Islands in the archipelago. Second: additional service institutions, such as the program of studies and the institute of fisheries and marine science, it would be nice if marine education for younger generation starting from elementary education. Third, the behavior of a society that will damage the potential of marine should immediately be warned and according to the applicable law rules.

Stated that in order to resurrect the spirit of maritime, Indonesian people must be able to understand the values contained in maritime culture which is about: cultivate the notion that the sea is a unifying vehicle of nation, cultivate the notion that the sea is biological resources that are able to fulfill protein needs, foster a love of marine science and technology culture, developing marine tourism that affordable by all people through the institutions of formal education, mass media, civic organizations, organizations of the profession and other social activities [1].

History has provided a lesson to us, that many of the countries experiencing setbacks even destruction due to the loss of mastery over a certain sea area. Austria-Hungarian emporium which lost its regions in Adriatic and Ionia in World War I [1]. Another example is France under napoleon which declined because the surrounding sea was controlled by British Emporium. And the defeated of Germany-Italy-Japan were also caused by the controlling department of the seven oceans by the allies. The above fact all supporting Themistocles statement.

Indonesia, as a country made up of thousands of Islands, it also has waters territorial surrounded by oceans, such as the Indian and Pacific oceans, as well as a second large continent is flanked by Asia and Australia. Indonesia, with all of its waters, is seen as a unified whole, not separated. These viewpoints have long lived so that this archipelago is often called Earth's homeland because the area that we live in, not only the area of land but also the sea area. That position mentioned located in a cross in the middle of traffic regulations in a very lively world. Geographic factors, such as location and a large number of Islands, can give two possibilities, namely, integration in the sense of entity and unity is not an easy thing, but disintegration tendencies will seem easier [2].

In order to keep Indonesia has tendency in integration, it should be assisted by sharing efforts such as through the education of geography to provide basic knowledge and awareness to the nation from an early age. Therefore, the education of geography should be introduced since elementary schools with the good reason. The system of teaching of geography teacher and materials delivery should also be good, for example, the statement that Indonesia is rich of natural resources, it also should be given the
examples that show the wealth of our nature to students by rational assessment and assisted with remote sensing. Achievements and spirit of maritime, has been manifested for a long time, but now it was felt fading. The decreased of maritime spirit among Indonesian was caused by colonialist of United Kingdom and Netherlands which changes its spirit into farming and plantations. Considering the opportunity, potential and challenges at sea of Nusantara is still very open, then need for serious efforts of “consciousness of love maritime”, especially among the younger generation. One of the vehicles that are expected to play a role in developing consciousness of love marine in geography education is through a regional strategy to apply insights of “National View” or “Wawasan Nusantara” by social studies, then “education of geography should get attention”. To reinforce the importance of maritime education which developed in Indonesia states that: (1) Indonesia is the largest archipelago in the world, even some refers it as the maritime continents, which is two-thirds of its territory consists of the sea, (2) total population of Indonesia utilize the sea as employment and business field. It is still very limited. This is indicated by data that from 67,439 villages in Indonesia, more or less 9,261 are categorized as coastal village, (3) limitations of supervision and care of the sea area, the fish resources can be stolen by foreign fishermen that not utilized by our country, (4) the sea waters have extensive opportunities to develop the economy of maritime, which covers maritime industry, processing marine resources and tourism, (5) movement of ocean water, rising currents or waves, tidal, is the sources of alternative energy in resolving more depletion of oil reserves and natural gas, (6) ocean waters development opportunities as communications transport infrastructure is relatively cheaper than air, and (7) employment opportunities in land area will be more narrower than in the area of the oceans in the future [3].

Geography Education is one of the key or tools to give knowledge, cultivation of attitude and ability to love the nation. It was based on the reality of one of material object of geography which is hydrosphere. In geography education, there is a system which consists of many different subsystems, curriculum, quality of geography teachers, learning strategies and methods used as well as the support of the school environment. Education curriculum implemented in the elementary and middle levels, certainly needs to be re-examined, whether it has been accommodating marine material clearly, assertive, and comprehensive. The world of education, especially social studies, more specifically the geography education that mentioned to develop and raise awareness of love maritime among the younger generation. Marine subjects in Middle Schools integrated with the material characteristics of the physical area of the archipelago. Subjects were divided into two large sections, namely Indonesia as an area of land and maritime territory as Indonesia. However, in the realization of the teaching-learning activities in the classroom discussion, surely maritime material is not as rigid as in curriculum, but geography teachers are required to develop the material of geography. For the school in mountainous area, and the territory was not bordered with the sea, teachers of geography are expected to explain not only theoretically, but can be more creative, for example, by visiting the sea area. Particularly that related with marine material in high school, there are some skills that can be packed with material of marine in geography education, contribution by maritime biennial national that education-oriented which are: (1) skills of map making related to sea currents such as maps of salinity spread, and ocean currents map, ocean depth map and map of zoning relief areas of the sea, (2) activities that lead to social skills related with marine, among other is interview with fishermen, the ship's skipper, the child of a salt farmer, and nautical tourists, (3) making skills report on maritime, such as reporting the results of the observation from the beach, the tide rises and ebbs, waves and currents the sea, the color of seawater and so on, (4) direct skills are done in the sea such as diving, paddling a boat, taking the pearls and deep-sea fishing. In the curriculum of education, especially for the middle level until the elementary marine education was not explicitly exists, but it was only the subject of water. While the subject of water found on the field of geography study. Further in the curriculum of primary and secondary education, the subject of the water is divided on two parts, that is territory land water and sea. Clearly mentioned of marine environmental education. Marine environmental education according to the purpose of education are: Knowledge: helping students to understand the basic of how people control marine environment, marine function, how marine environment interact with population, and how the issues and concern regarding marine environment which arising as well as how it can be solved. Awareness: helping students to master the awareness and sensitivity of entire marine environment and its problems, develop the ability to observe and differentiate the various stimuli, processing, remark and expand the perception and using their new abilities in a variety of contexts. Affective : helping students to set value and to participate in the maintenance and development of marine environment. Skills: helping students to explore the
necessary skills to identify and repeat the issues and problems of marine environment that damaged [4]. If we pay attention to a long over purpose, presumably could be taken a red thread that marine environmental education must reach concrete targets i.e. students become citizens who have a knowledge of attitude and skills and want to work both individually and in group to achieve a state of dynamic balance between the quality of marine environment with the quality of life. Through early cultivating the dynamics and marine archipelago to the younger generation especially High School students not only the triumph of Indonesian Maritime being bounced back, but in the future of our nation will become the nations a prosperous marine in the world. This result has significance to present-day warfare studies and to search theory [5]. Sea and Indonesian marine needs to be researched, developed to improve Indonesian people welfare, and marine education and geography education is the most important instrument. Although Indonesian sea and oceans have very high wealth, but many of fishermen in Indonesia was still poor. Poverty is marked with the absence of education and health, and some of youngsters were began to move professions [6]. Sea and ocean of Indonesia and other countries need to be monitored continuously. For example, the Moroccan Phycotoxins monitoring is part of safety coastal monitoring network [7]. Geography Education and also social studies are expected to be the important tools in presenting various issue related with people, places and environments [8]. People, places and environments, global links, culture and heritage were determined as three learning areas within the scope of the new social studies for 4th grade in social studies textbook. Geography Education, is endeavored to give inspiration for students with displaying any factual data about sea environment in the form of maps, graphics and tables. It does not seem possible to expect secondary students to attain the achievements related to the map skills in the Geography Course Secondary Education Curriculum with the existing maps [9]. Transformation of marine materials for student, was also expected to utilize the advancement of information technology, in the form of Geographical Information Systems. Geographical Information Systems that changes should involve education stakeholders in all levels of education and curriculum quality, regional and international cooperation through exchange programs [10]. Maritime Education in Indonesia very important, because Indonesia as archipelago state.

4. Conclusion

The behavior of students will be formed by their views and assessment of environment. While this assessment is based on the views, knowledge, attitudes and expectations toward the utilization of environment for welfare and improvement of life qualities. The final product that we expect from the high school student was the awareness of the importance of existence natural resources, including marine resources. When there has been a kind of awareness, then it will appeared to be a sense of responsibility to always consider the influence of their action so it will not disturb the mechanism of environmental systems. The high school students have the attitude and behavior that would get along with environmental systems. It needs to be improved in human as one of the components of environment, and the aspects are awareness, knowledge, attitudes, and behavior. One of the way to deal with these aspects is through educational programs. Considering that this is talking about maritime education programs that need to be built is the marine environment education. In the implementation in school, marine environmental education program does not have to be a separate subject, it would be but can be integrated to some areas of study that are relevant and substantial. High School teachers whose fields of study related to maritime, are expected to have academic competence, awareness and building students behavior who are responsible for marine environment. To realize the goals above, surely it will not easy, but we should start from now, for establishing the attitude and behavior of wisdom on the environment must not interfere with the broken first, because prevention is far better than treatment.

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