

Contemporary Regional Issues in Sustainability: Prospective Application for Activation of Local Community and University Education from an International Seminar

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Abstract

Employment of the education for sustainable development (ESD) is one of the important issues for the innovation of university education. ESD includes key sustainable development issues such as poverty, social design, commercialization, community participation and livelihood from the global standpoint of view. An international sustainable seminar was held in Malaysia to share the concept for sustainability in 2016. As the result, the concept for sustainability or sustainable society was shown to have diversity. It is suggested that a practical study for the diversity of the idea for sustainability has a potential to consider the concurrent global issues from the historical point of view. Such an international collaboration sharing the concept for sustainability will be an effective way for surveying the new field of a research for sustainability in the regional society and an innovation of University education employing ESD.

Key words: *sustainability, regional society, university education, international seminar, international collaboration, diversity*

1. Introduction

Education for sustainable development (ESD) was noted at the United Nations conference on environment and development, held in Rio de Janeiro in 1992¹⁾. Definition of sustainable development is generally taken as the "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". Now ESD is growing international recognition of as an integral element of quality education and generally considered to play a key role for sustainable development. ESD is closely tied into the international discussions on sustainable development, which have grown in scale and importance.

Agenda 21 was the first international document that identified education as an essential tool for achieving sustainable development and highlighted areas of action for education¹⁾. However, understanding of the method and procedure for it is still unknown. To date, university education has been focused on the knowledge, skills and competencies related to the economic growth, whereas few subjects have focused on the philosophy of the sustainable development.

The recent the Sustainability Seminar 2016 in Kota Kinabalu, Malaysia highlighted the sustainability issues, which is the ongoing of the current academic of global concerns discourse. This seminar featured papers by

academicians of various departments from universities in Malaysia and Japan. In general, the issues forwarded by the academicians divulge on the field of sustainability that tied with a spectrum of issues such as poverty, social design, commercialization, community participation and livelihood from both Malaysian and Japanese perspectives. These ideas and research outputs link between sciences and humanities especially in the application to the society at-large.

2. Sustainable social design

The issues of sustainability discussed in the seminar started by looking into programmes that tied in with the social issues²⁾. The economic transformation programs (ETP) were highlighted where the objective of the programme is to reduce poverty in a sustainable manner. In the past 50 years or so various economic programmes had been taken to reduce the incidences of poverty. Using Sabah, as one of the states in Malaysia as an example, it is suggested that there was 58.3 percent of poverty in 1976 that gradually dropped to 19.2 and 8.2 percent in 2009 and 2012 respectively. It was stated that the current poverty level in the state is at 3.2 percent level, which is above the national average of 2 percent. The ETP implemented in the state was discussed, which included the analysis of the socio-economic indicator recorded in the past years in forming the prospect and the sustainability of Sabah economic development in eradicating the poverty level.

The discussion of the ETP led to the idea of collaborative effort of the whole society. The subject of sustainable social design under the collaboration with university and local community was discussed to a certain depth. The discussion started with the re-emphasis of a number of global issues exist in the environmental matters, including food, energy, and health. Thus, the establishment of sustainable society was one of the most important global problems. At present, unsustainable consumption and production

patterns that have evolved in developed countries. This resulted in huge economic and social costs. Some developing countries are increasingly showing similar pattern of social costs, whereas more than 1 billion people are still living in extreme poverty, and income inequality. The major part of this problem seems to be related to the global scale of economy. Under such a rapid economic growth, social wisdom for independent people's life has been lost from the local communities. Universities should contribute on the change of people's mind to the sustainable society under the historical point of view. Collaboration between universities and local community has potentials to innovate university education and lifelong learning in the community.

3. Peer learning of students with lifelong learner

The discussion rotates based on previous work that people who are interested in the university education from the local community group³⁾. It is believed the integration between university and local community promotes innovation of the cultural education in the university such as developing new style of lectures with mutual study group and a roundtable for group discussion. In this particular lecture class, global social problems that are mainly discussed include economy, agriculture, medical care system, social problems and energy issues in order to clarify the possible methods for establishment of sustainable society. The result of this work is the change of mindset from economic growth to economic improvement. Local community with similar concept could be connected to other community at the global level. The discussion suggests that the university plays important role for supporting the network formation of sustainable society beyond the generation and geographical gaps.

4. EcoCampus initiative

This brings to a point of the important role of a university as part of advancing sustainability issues⁴⁾ A university campus itself can be considered as a community on its own and some towns or cities flourish due the large population of universities. Therefore, the environmental impact of a university campus can be significant as compared to other communities. The discussion rotates around the sustainability initiative called EcoCampus, which is an environmental management system (EMS) that has been specifically designed for universities. The discussion highlighted that some universities would implement EMS by phases, while some would implement EMS by departments or faculties. It is suggested that a very crucial element that could determine whether the implementation of EMS would become successful or not, lies with the perception of the campus community towards environmental issues. The support of the campus community is considered to be an important factor to ensure the successful of EMS. The current work indicated that the level of awareness of environmental issues in a selected campus is high among the communities and therefore the level of acceptance of environmental acceptance in the campus is also high among the communities.

5. Holistic education

The university role discussion is further advanced in the issue of re-thinking about holistic economy through holistic education⁵⁾ as a path for a sustainable society. The concept of happiness is re-looked in the perspective of economic growth. It is suggested that different society with different culture have different way of seeing happiness. Until today, economic growth has been the most important governmental politics in Japan and many people still believe that economic growth creates job and increase of their income, hence becoming wealthy and happy. In order to keep the continuous growth of GDP (Gross domestic product), some government has to support the new investment of big companies through

increasing national debt every year. If the domestic market is almost saturated, most of the new investment will be focused on outside the country. The discussion hypothesizes that certain countries do not need to have economic growth and investment should be diverted into the innovation of social system that lead to the establishment of sustainable society. The current economic system has the potential to destroy traditional life style and environment of any country.

6. Ecotourism activity

The sustainability issues discussion stem from many successful applications of sustainable practices⁶⁾. The practices may come from the traditional customs such as *Tagal* whereby the indigenous people in the state of Sabah manage the conservation of their area. This system has been adopted by the Sabah state's Department of Fisheries through demarcation of riverine territorial for the benefit of the villages within the vicinity of a river. It has gained recognition for its ability to enhance the environmental sustainability, in particular, with regard to river purity and riverine fish population. There are several villages around Sabah that incorporates the *tagal* practices into ecotourism activities such as fish feeding and fish massage as primary attractions, while jungle trekking and homestay as secondary attractions. The recent work in *tagal* suggested that there was a strong image of ecotourism in all sites with visible contribution to the environmental sustainability of the village.

7. Sustainable livelihoods

Traditional societies do benefit on the reinforcement of sustainability practices that integrates to their livelihood⁷⁾. The discussion centers on a programme i.e. Knowledge Transfer Programme (KTP) that employed a sustainable livelihoods approach or sustainable livelihoods principles with the addition of measurable

effects of poverty reduction. Such programme that runs in a village in Sabah set to establishing adequate number of sustainable livelihood (SL) principles for it to be considered sufficiently ‘sustainable livelihoods-related’. The programme in this village showed that the KTP project demonstrated evidence of increases in some/all five forms of assets: 1) Human asset development took the form of technical, vocational and organizational capacity-building provided to individuals, vulnerable/disadvantaged groups (poor, landless, women, female household heads, elderly, destitute), producer groups, community development associations, and local and national NGO’s and governmental institutions. 2) Social assets were built through the formation, training, cohesion and capacity building of community groups, committees, farmer groups, and local. 3) Financial assets were enhanced through income generation and savings as well as access to community development funds or community banks. Physical assets were built through infrastructural support related to sanitation, water supply, roads, and shelter and storage facilities, and/or the provision of farming tools. Natural assets or stocks were addressed in a variety of ways, including: the incorporation of productive resources, such as the planting of organic mulberry trees; managing lands to mimic natural ecosystems; promoting improved farming and land use practices, and promoting sustainable resources management through the man and biosphere reserves programme.

8. Economic transformation programme

In a bigger scale, sustainability practices could be applied industry-wide. In the particular discussion, the seaweed industry in Sabah has been studied as the production has declined throughout the years nationwide in spite of multiple aids by the government⁷⁾. Similar to the KTP mentioned earlier, seaweed farming was promoted to be one of the tools to eradicate poverty. A project on seaweed farming was funded under the

Malaysia’s Economic Transformation Programme: Entry Points Projects, known as EPPs and driven by the Department of Fisheries (DoF) to transform the seaweed farming industry into a high yielding commercial scale business by clustering farms under the seaweed mini-estate initiative. The total production of seaweed is expected to increase from 13,500 metric tons in 2010 to 150,000 metric tons in 2020. This particular work highlighted several sustainability issues facing the seaweed farming industry in Sabah, which are the impairment of seaweed quality to seaweed market price, the enquiry status and determinants of illegal migrants in seaweed farming, and the trustworthiness towards middlemen in the seaweed industry. This research paper provides insights on the issues and entails the factors that lead to the sustainability of seaweed farming industry.

9. CO₂ emissions

The discussion of sustainable issues is rounded with a more scientific approach to sustainability⁹⁾. One big part of promoting sustainability is the measurement and the management of CO₂ emissions. Certifications such as Green Globes and Leadership in Energy and Environmental Design (LEED) for sustainable construction signify the importance of the CO₂ emissions measurement for every construction project in the world. Rapid urbanization demand propagates the strategic stakeholders of the project to play challenging roles in combating the CO₂. Green Globes and LEED research are typically covered green building; the research highlighted unique approach by investigating the CO₂ emissions in bore piling concrete structure construction. It is suggested that the volume of concrete is not the significant factor of CO₂ emissions, but amount of combustions from machineries and transportation contributes to the CO₂ emissions. Environmental planning is agreed as an approach to reduce the CO₂ emissions that were ground from the construction activities.

10. Concept for sustainability

The concept of sustainability is still evolving to address the changing time¹⁰⁾. Sustainability needs to be adapted to any environment, hence the fluidity of the concept is thought to be essential here. It could be used to address basic needs such as eradicating poverty or solving a self-actualization of society such as achieving happiness. Looking ahead, there is a need to start an honest conversation about what sustainability between sciences and humanities that actually relevant in day-to-day life today and in the future.

11. Application for the activation of the local community and university education as the international collaboration

Development of human resources for local community is one of the important issues for innovating university education. Employment of education for sustainable development will contribute on the human development for local community as well as global society¹¹⁾. Thus, the concept of the sustainability will play the key role for the both local community and global society near future. Therefore, it is essential for the concept of sustainability to be shared with not only the neighboring countries but also other countries in the world by international collaboration. International seminar for sharing and discussing the concept sustainability such as this one will be one the effective way to share the new idea for innovating local community in the global age.

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