

INTEGRATION EDUCATION FOR SUSTAINABLE DEVELOPMENT IN INDONESIA

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A B S T R A C T

Education for Sustainable Development (ESD) became the recent issue around the world. A lot of research conduct about initiation activity in higher education institution to integrated ESD. Sustainability also became issue of higher education in Indonesia. This research will provide some review about practice to integrate ESD in HEI recent trends in the world and the opportunity of Indonesian HEI to practice implementation of ESD. The research method used literature review approach from international journal and relevant national policy. Findings of this research is recent trends of implementation of ESD related to curriculum development, government role, research, partnerships, and finance. The opportunity to implement ESD in Indonesian Higher Education related to the national policy. National policy in Indonesia relevant to the goals of ESD. The point of implementing ESD in higher education way to shape the college student's habits. College students became the agent of change in the society. When they get the understanding about the importance of the sustainability, they will make change the society environment for better future.

KEYWORDS : higher education, sustainable development, Indonesia

I N T R O D U C T I O N

The world development have a lot of challenge, the different interest between economic principal and ecofriendly became one of them. Supply and demand of the human utility today and in the future need more attention. This became the background of sustainable development concept. Sustainable development related to multidisciplinary background. This is also need to be integrated in education. Sustainable development needs the role of higher education to think innovation to solve some multidisciplinary problem (Chokkar, 2010)

ESD became main priority since Earth Summit in Rio, 1992. UNESCO have important role for implementation of Education for Sustainable

Development (Andenberg, 2009). Education for Sustainable Development (ESD) is important to make sure the future about the environment sustainability. This issue related to some topic not only about the balance of environment and economic advantages. Integration of Education for Sustainable Development shown by most international higher education around the world (Anand, 2015). Issue about ESD responded by a lot of higher education institution around the world. The practice of ESD in HEI in some country research written by some researcher from China, Taiwan, Brazil, USA, UK, India, Vietnam, Canada, Japan, and others.

Background

Indonesian higher education also need to starts to concern about issue of ESD. Indonesia have big national resource but we also need to think about sustainability of them for better future. Although in the world, ESD in higher education research is complex, but the case of integrating ESD in Indonesia still limit. This research aims is to provide review about practice of integrating ESD around the world and the opportunity of implementation ESD in Indonesian higher education.

Methodology

The research method used literature review approach from international journal (Emerald, ScienceDirect, Springer, etc.) and relevant national policy. To integrate ESD to the Indonesian higher education institution, all of the categories should be related and or match with the national standard. So, the result categories will be arrange by national standard in Indonesian higher education accreditation from BAN-PT. The standards include (1) Vision, (2) Governance, (3) Students and Alumnus, (4) Human Resource, (5) Curriculum and Teaching, (6) Finance and Facility Management and (7) Research and Community Development.

R E S U L T A N D D I S C U S S I O N

Integration ESD in higher education institution of Indonesia should do for some reason one of them is the aims of national policy about higher education from UU Number 12 Years 2012. The aims of higher education in UU Dikti Chapter I, section 5 about national importance, global competitiveness, national advancement, human prosperity. Implementation of education in Indonesia following some standard.

(1) Vision

Vision became the early step of higher education institution commitment about ESD. In Canada (Beringer, 2008), most of higher education commit ESD starts from change the vision. This research shown there are commitment of ESD in higher education of Canada.

Indonesian higher education institution mostly related to “Thidharma”. Tridharma include teaching and learning, research, and community service. Education for sustainable development vision not became the priority in most Indonesian higher education today. Despite, some of HEI start to commit with related issue such as green campus.

(2) Governance

In Japan (Nomura, 2010), government have significant role in education for sustainable development (ESD). That is different from Canada, the government not have significant role in ESD in higher education, all managed by institutional governance.

Kemenristekdikti is the ministry that manage Indonesian higher education and publish policy about national higher education. One of the policy is about autonomy in higher education. Integration ESD in higher education can developed by the institution because Indonesian higher education have autonomy principal. Higher education also can determine the policy to support the institution performance.

(3) Students and Alumnus

Extra-curricular advance ESD of HEI in UK (Lipscombe, 2008). There some type of extra-curricular ESD intervention for example sustainable development network, waste reduction, volunteering opportunities, festival, student conference etc.

Integrating ESD in Indonesia can be separated from the student’s activity including extra-curricular. There’s some students community form that concern about environment issues from multidiscipline and HEI background. For science major for example Biology, Forestry, environment topic became their focus. But, it is not enough because it needs social an economic view to more complete ESD integrated in higher education institution. The best way is make multidisciplinary discussion of the students. KKN also became an example activity that support ESD in HEI.

Alumnus role in ESD became as importance as students role. Alumnus can support integration of ESD in HEI by giving advice to curriculum development from market signal, financial support to HEI in research or develop ESD, or innovation related idea.

(4) Human Resource

Human resource became the important aspect to organize the higher education institution. This aspect became component that rule the successful of ESD in HEI. Human resource became the main actor of ESD in HEI. Lecturer, staff, researcher should understand and aware about related issue of ESD in HEI. All of them create academic atmosphere to the students. The intention of them will be influence the behavior of the students (Arbuthnott, 2009).

To integrate ESD in Indonesian higher education, the awareness from the human resource of the institution should realize the importance of HEI and understand how to influence the student's attitude toward sustainable development principle. Lecturer initiative to held multidisciplinary discussion also can help the implementation of ESD in Indonesian higher education. Value that added by ESD should became the academic atmosphere in the university. The principal of ESD should be understanding by all individual in higher education institution. This related not only environment aspect but might also from ethic, attitude, social, technic, culture, and history.

The multidisciplinary aspect of ESD in HEI will make more comprehensive solution from the HEI to solve the problems. It became advantages of institution that want to get solution with comprehensive perspective from the expert without add more expenses because the HEI lecturer should be more understand to solve the problem base on their own disciplinary focus.

(5) Curriculum and Teaching

Recent work in UK to support ESD in HEI focusing in curriculum change (Lipsombe, 2008). But until 2011, just small knowledge to understanding how this integrated into the curriculum (Savelyeva, 2011). Development of ESD plan to reinforce through some specific activity such as curriculum planning and material in Chinese higher education (Niu, 2010). Curriculum is an instrument pack that conclude course in a study major. Curriculum arranged by instructional activity for teach the matter with purposing conceptually can build interaction between lecturer, student, and the learning material. Curriculum also should be developed based on the higher education institution. Higher education institution related each other (Latuca, 2007).

In Canada (Beringer, 2008), most of HEI develop ESD related to curriculum development. In Saudi Arabia, development of curriculum to support ESD by including the eco-friendly learning material in science, technic and applied science, social, physic, art, humanity, medical and health (Alshuwaikat, 2016).

Curriculum design to support implementation of ESD not only related to environment issue, today it is also related to the social and economic issue (Wu, 2016). Integrating ESD not only about natural resource, saving energy, but also ethic, CSR and also peace issue.

The scope of ESD is wide, not only about environment make more opportunity of higher education integrate ESD in their curriculum. Every major have role to solve the problems that related to sustainable development.

Integration of ESD by the curriculum in Indonesia by design curriculum that related issue about environment, social, and economic aspect. Curriculum development by market signal that became one of steps in planning curriculum development. This regulation is step to arrange new curriculum in a study major became an example to integrate ESD. The integration should include about economic, environment, and social value of a major that can support the society development.

(6) Finance and Facility Operational Management

Funding became the main concentration in most of thing include initiative to develop Education for Sustainable Development (Velazques, 2005). Finance became the vital aspect to perform the policy that support the implementation of ESD. In Saudi Arabia, one constrain to implement ESD is finance (Alshuwaikat, 2016). Finance influence to the infrastructure procurement that support related higher education institution.

Implementation of ESD concept can be articulated if all campus operational should be complete the sustainability concept (Alshuwaikat, 2016). Higher education should think about technologies that support the sustainability but not interrupt the higher education operational in teaching learning. The focus is how higher education support how to more efficient using the energy, waste management, eco-friendly building. The other example of ESD in campus operational about waste management, equity, facility for disability, and energy effectively (Lozano, 2014).

Indonesian HEI also facing constrain about the funding when implement ESD. But, the concept of ESD not only about build new facility that need a lot of funding. It can do by simple thing to make awareness of environment. This can be make eco-friendly culture. Manage the funding also can be increasing the HEI in Indonesia capacity to equip some utility that related to the ESD concept in HEI. Integrating ESD in Facility Operational Management in Indonesia can do following using LED lamp, using AC that eco-friendly, build eco-friendly building or vertical building to improve the free land, manage waste, recycle the waste, separated the waste based on the type, and need assessment before build.

(7) Research and Community Development

India (Chokkar, 2010) realize that sustainable development needs the role of higher education to think new and innovative step to solve the multidisciplinary problems. Research related to sustainability generally not only involve one or two knowledge disciplinary, because the issue related to sustainable development is complex multidisciplinary.

Integration of ESD will be shown from the type of research and community service that conduct related to the sustainability. Higher education institution should plan programs that support ESD such as make partnership with the community (Beringer, 2008). The partnership can do by collaborative research, discussion about academician research result, or multidisciplinary discussion. In Philippines, implementation of education for sustainable development in higher education will be more effective through partnership. The role of HEI is define, evaluate, and promoting to build the success operational model (Segovia, 2002).

HEI that have cooperation with the community can increasing the advantage of higher education. Higher education as agent of change can start the action by share the knowledge to the society or community. The knowledge from university must be more useful and the sustainable development concept can be advance in the society.

C O N C L U S I O N

Findings of this research of implementation of ESD related to curriculum development, government role, research, partnerships, and finance. This also related to the national standard of higher education in Indonesia about vision, governance, students and alumnus, human resource, curriculum and teaching method, finance and facility operational management, and research and community service. The opportunity to implement ESD in Indonesian Higher Education related to the national policy. Some of the learning activity that support ESD in Indonesian HEI is KKN.

The point of implementing ESD in higher education way to shape the college student's habits. As we know that college students became the agent of change in the society. When they get the understanding about the importance of the sustainability, they will make change the society environment for better future.

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