INTRODUCING EDUCATION FOR SUSTAINABLE DEVELOPMENT (ESD) IN THE EDUCATIONAL INSTITUTIONS IN THE PHILIPPINES

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Abstract

Positioning the idea of Education for Sustainable Development (ESD) as a central issue for educational institutions in the Philippines, this article reports on various efforts recently made in the country in an attempt to institute ESD in various sectors, particularly in educational institutions. To this end, this article discusses the following major topics: the nature of ESD, genesis of ESD in the Philippines, integration of ESD in the schooling system in the Philippines, climate change and disaster risk reduction.

I. Introduction

The attainment of sustainable development is a burning and vital issue for many societies during the 21st century. This is synonymous to ensuring that people meet their aspirations, opportunities and needs without compromising the ability of future generations to meet theirs. It also necessitates the advancement of people's social, economic and environmental well being as a matter of right, guaranteeing a life of dignity.

A key factor in achieving sustainable development is education. The challenge is to educate and produce citizens who have the values which encourage sustainable practices, and enable learners to come up with choices and decisions that endorse sustainable development. This important role of education as a decisive component in realizing sustainable development has been further highlighted when the United Nations declared the period 2005 to 2014 as the Decade of Education for Sustainable Development (also known as the DESD, or Decade). The Decade's vision is to use education – formal, informal – as an important tool to effect change in values, attitudes, and lifestyles to warrant a sustainable future.

Education for sustainable development (ESD) has been prioritized and pursued by various countries worldwide, including the Philippines. With the United Nations Educational, Scientific and Cultural Office (UNESCO) as the lead agency for the DESD, coordinating bodies and networks have been set up across the globe to advance and encourage developing ESD in various contexts including the communities and the private sector. ESD has been recognized as an education relevant to meeting sustainable development issues and challenges.

Different sectors, especially the educational institutions, have thus undertaken laudable efforts to push for ESD. Higher education institutions (HEIs) have joined the fray in ESD discussions. The framework of ESD has permeated discourses on improving education for national development and as an empowering instrument to safeguard the uncertainties of the future (Ali 2014). Governments and education institutions use education to inculcate the principles of sustainable development into the learning experiences of students.

This study sought to examine the various efforts to institute ESD in various sectors, particularly in educational institutions in the Philippines. In so doing, it tackled the following: overview of sustainable development; nature of ESD, and genesis of ESD in the Philippines, and integration of ESD in Philippine schools.

II. Overview of Sustainable Development

The United Nations World Commission on Environment and Development (WCED) also known as the Brundtland Commission, highlights the concept sustainable development as development that "meets the needs of the present without compromising the ability of future generations to meet their own needs" (Ali 2014, Soriano, et.al. 1995, UNESCO 2002, United Nations 1987). In its report, the WCED affirms the link between development and the environment. It points out, however, that sustainable development is not environmental protection alone. It also deals with the achievement of social equity and the upholding of lifestyles, values and technologies that favor contemporary and future societies.

Sustainable development has been further underscored in numerous landmark events such as the Rio Earth Summit in 1992, the 1993 World Conference on Human Rights, the 1994

International Conference on Population and Development, and the 1994 World Summit for Social Development. In 2002, the Johannesburg World Summit on Sustainable Development (WSSD) declared its obligation to advance the pillars of sustainable development, namely, society, economy, and environment (Ali 2014, SEAMEO 2010, UNESCO 2002). Society pertains to understanding social institutions in regard to its roles in development and in supporting a participatory system. Economy points to awareness to the effect of economic growth on the society and the environment. Environment relates to consciousness of the impact of human activity on the physical environment. The Universal Declaration of Cultural Diversity also argues that cultural diversity is crucial to humans. Hence, another fundamental dimension of sustainable development is culture which refers to a way of being, relating, believing, and acting that differ according to context, history and tradition (Ali 2014, SEAMEO 2010). It is education that acknowledges the interdependence and intricacies of these four dimensions of sustainable development.

III. Nature of Education for Sustainable Development

Since 1987, the idea of sustainable development has gained popularity and made notable international headway. The United Nations has since then explored the parallel concept of education to shore up sustainable development. In 1992, Education for Sustainable Development (ESD) took the center stage at the United Nations Conference on Environment and Development (UNCED), otherwise known as the Rio Earth Summit. The pursuit of education that respects and nurtures the environment was stressed in this event.

After ten years, in 2002, the Johannesburg World Summit on Sustainable Development (WSSD) helped in promoting the pillars of sustainable development at all levels, from the local to the global. The WSSD proposed the Decade of Education for Sustainable Development (DESD), signaling that education and learning lie at the heart of approaches to sustainable development (UNESCO 2005). Its framework articulates the crucial role of education and life skills programs in facilitating communities to come up with local solutions to problems about poverty and vulnerability. The WSSD also endeavours to incorporate the principles, values and practices of sustainable development into all aspects of education and learning to take up the social, economic, cultural and environmental issues of the 21st century.

Different names have been used by policy makers and educators to acknowledge the shift towards sustainability. The term ESD is used synonymously with education for sustainability (EfS) as well as learning for sustainability (Tilbury and Cooke (2005). In view of the Decade, ESD is the widely recognized name to refer to a process that uses education to provide people with the skills necessary to be leaders and engagers in the change process towards sustainability (UNESCO 2005).

To be specific, different country offices of UNESCO have provided the following definitions of ESD:

According to UNESCO Paris (SEAMEO 2010), ESD represents a catalytic process for social change that seeks to foster – through education, training and public awareness – the values, behaviour and lifestyles required for a sustainable future. This suggests that ESD involves learning how to balance the economy, the environment and the well-being of communities, now and in the future.

For UNESCO Bangkok (SEAMEO 2010), ESD is a learning process based on the principles of sustainability and is concerned with all levels and types of learning to provide quality education and foster sustainable human development. It supports "learning to know, learning to be, learning to live together, learning to do and learning to transform oneself and society."

The Agenda 21: Programme of Action for Sustainable Development (SEAMEO 2010) underscores the crucial role of education in promoting sustainable development and improving people's capability to address environment and development issues. It also argues that education is important for the attainment of environmental and ethical awareness, values and attitudes, skills and behaviour in synch with sustainable development and for effective public participation in decision making.

With regards to UNESCO Paris (SEAMEO 2010), ESD is a visionary approach in taking up the complex and interdependent problems of "poverty, wasteful consumption, environmental degradation, urban decay, population growth, gender inequality, health, conflict and the violation of human rights."

Moreover, UNESCO (2004 in Quisumbing 2010) cites the following aims of ESD: 1) to promote and improve the quality of education to focus lifelong education on the acquisition of knowledge, skills and values needed by citizens to improve the quality of their lives; 2) re-orient, re-think and reform the curriculum to be a vehicle of knowledge, thought patterns and values necessary to build a sustainable world; 3) raise awareness, develop enlightened, responsible and committed citizens; and 4) create synergies with initiatives of other sectors to adopt sustainable and responsible modes of production and consumption, to work together towards a common vision: a peaceful and sustainable future for generations to come.

The foregoing aims and definitions (SEAMEO 2010) show that ESD is a dynamic concept and encompasses a novel vision in education. That is, an education that is integrated with the concept and principles of sustainable development to ensure a better world and future. Learners are not only taught about functional literacy but an education which is oriented towards creating socio-cultural, economic and environmental consciousness, and/ or about sustainable future.

IV. Genesis of Education for Sustainable Development in the Philippines

The Philippine government has been pursuing sustainable development long before the adoption of the Decade of Education for Sustainable Development (DESD). Its advocacy for sustainable development is connected with the emergence of education for sustainable development (ESD) in the country. In a report prepared for UNESCO, Tuazon and Reyes (2011) detailed the development of ESD in the Philippines.

Since the 1950s, various organizations had been pushing for the institutionalization of sustainable development in the Philippines. In 1952, the Philippine Rural Reconstruction Movement (PRRM) was established to improve the capacity of rural areas in carrying out sustainable development through the provision of "an integrated program of education and livelihood, health, habitat, environment and self-governance."

Then in 1987, the Department of Environment and Natural Resources (DENR) was reorganized to "become the driving force in the pursuit of sustainable development and enable stakeholder participation in protecting, conserving, and managing the nation's environmental and natural resources for the current and future generations." After which, the DENR initiated the creation of the Philippine Strategy for Sustainable Development (PSSD), which was officially adopted in 1989. The objective of the PSSD was "to achieve and maintain economic growth without depleting the country's stock of natural resources and without degrading environmental quality." Also in 1989, the Environmental Management Bureau (EMB) of the DENR came up with the National Strategy on Environmental Education. The document stipulated the Philippines' goals, strategies, and programs on environmental education. To further advance environmental education, the National Environmental Action Plan Framework (NEEAP) for 1992-2002 was prepared.

After the momentous adoption of Agenda 21 at the Earth Summit in Rio de Janeiro in 1992, the Philippine government created the inter-agency Philippine Council for Sustainable Development (PCSD). The body is mandated to provide the mechanism to realize the principles of sustainable development and to ensure its integration into the policies, plans, and programs of the country.

Four years later in 1996, the Philippine Agenda 21 (PA 21) - the nation's blueprint for sustainable development - was adopted. After 13 years in 2009, PA21 was eventually updated as the Enhanced Philippine Agenda 21 (EPA 21), and included more thematic programs on "eradicating poverty, managing globalization, attaining social equity, securing peace and solidarity, maintaining ecological integrity, and promoting empowerment and good governance."

V. Integration of Education for Sustainable Development (ESD) in Philippine Schools

In pursuit of Agenda 21, the Philippine government has all the more stepped up its efforts in order to advance education for sustainable development (ESD) in various sectors, including the educational institution. To realize this, Republic Act (RA) No. 9512 or the National Environmental Awareness and Education Act of 2008 has been enacted. This law directs all concerned agencies to integrate environmental education into public and private school curricula at all levels, including *barangay* day care, preschool, non-formal, technical vocational, professional, indigenous learning, and out-of-school youth (OSY) courses. To further

promote RA No. 9512 at the tertiary level, the National Service Training Program (NSTP) has been used as a medium for ESD in the academic programs in colleges and universities. The NSTP, institutionalized through Republic Act (RA) No. 9163 in 2001, has been created to serve as a "Civic welfare training service component required for all baccalaureate degree and vocational courses with at least two-year curriculum."

In 2009, the 35th session of the UNESCO General Conference approved the Philippine-based Southeast Asian Center for Lifelong Learning for Sustainable Development (SEA-CLLSD) as a Category 2 Center (Tuazon and Reyes 2011). The Center's goal is to act as provider of lifelong learning for sustainable development, institutionalize ESD standards, undertake research studies, and act as resource management center in Southeast Asia.

Further, the UNESCO National Commission of the Philippines (NatCom) conducted consultations with the Philippine Council for Sustainable Development (PCSD), the Environmental Management Bureau (EMB) of the Department of Environment and Natural Resources (DENR), and the Department of Education (DepEd) to revisit its approach in executing ESD in the country. The NatCom has acknowledged that EPA21 enshrines the priorities for sustainable development and serves as the framework for ESD policies and programs in the Philippines.

Generally, EPA21's direction involves promotion of sustainable lifestyles and responsible citizenship among Filipinos through the following (Tuazon and Reyes 2011): a) Ensure that education is geared toward developing full human potential. b) Direct curricular development in all levels to develop well-rounded and skilful citizens who know multiple disciplines as well as to promote systems thinking (i.e., each course should require understanding the link between the environmental, economic, political, and social dimensions); c) Conduct a comprehensive review of all curriculum to determine entry points for mainstreaming sustainable development principles particularly on climate change education (CCE), environmental education (EE) and disaster risk reduction (DRR) core values and concepts; d) Develop and integrate sustainable development modules into curricula in all levels and across fields of specialization to reorient value systems to recognize individuals' responsibilities in terms of sustainable development; and e) Create and implement innovative and non-traditional learning methods that will enhance hands-on exposure on sustainable development issues and integrate them with formal methods.

On 23 October 2009, landmark legislation was passed to help pursue ESD in the country. The Philippine government signed Republic Act (RA) No. 9729 entitled "An Act Mainstreaming Climate Change into Government Policy Formulations, Establishing the Framework Strategy and Program on Climate Change, Creating for this Purpose the Climate Change Commission," or the Climate Change Act of 2009. The law creates the Climate Change Commission (CCC) which is the policy-making body in charge of mainstreaming the government's policies, programs and action plans on climate change. It also orders the Department of Education (DepEd) to mainstream climate change into the basic education curricula.

Shortly after on 27 May 2010, the government enacted Republic Act (RA) No. 10121 entitled, "An Act Strengthening the Philippine Disaster Risk Reduction and Management System Providing for the National Disaster Risk Reduction and Management Framework and Institutionalizing the National Disaster Risk Reduction and Management Plan," otherwise known as the Philippine Disaster Risk Reduction and Management Act of 2010.

These twin laws endeavour to develop and enhance the resilience of vulnerable communities in the country, and to mitigate and reduce losses due to the occurrence of disasters. Specifically, RA No. 10121 aims to "adopt a disaster risk reduction and management approach that is holistic, comprehensive, integrated and proactive in lessening the socio - economic and environmental impact of disasters including climate change..." The directive also mandates the integration of DRR education into the school curricula of secondary and tertiary levels of education, including the NSTP covering all private or public, formal and non-formal, technical-vocational, indigenous learning and out-of-school youth courses and programs. The education agencies such as the Department of Education (DepEd), the Commission on Higher Education (CHED) and the Technical Education and Skills Development Authority (TESDA), and other relevant agencies have been responsible for this endeavour.

Another auspicious issuance in 2010 was the passage of Executive Order (EO) No. 88 or

"Strengthening Disaster Risk Reduction in the Philippines: Strategic National Action Plan [SNAP] 2009 – 2019. Functioning as the roadmap, this EO spells out the country's vision and strategic objectives with regard to DRR in the next 10 years. The document has also been instrumental for DRR education integration in the school curricula for all levels.

ESD integration in the higher education institutions (HEIs) is further articulated in various executive issuances such as the Commission on Higher Education's (CHED) Strategic Plan 2011-2016 (CHED 2012). The Plan aims to attain inclusive growth and sustainable development as well as enable the Philippine HEIs to streamline efforts and resources towards ESD implementation and integration. For HEIs, the attainment of the "principles of lasting human development" which is espoused by ESD (Granados 2011 in Balanay and Halog 2016), is a tough challenge considering the enormous environmental challenges experienced in the Philippines. As such, the overall strategic framework of the Plan is clustered into several development thrusts and includes, among others, integrity of the environment, and climate change mitigation and adaptation

VI. Climate Change and Disaster Risk Reduction as Prime Concerns of ESD

In support of the UN Decade of Education for Sustainable Development, environmental education programs have been implemented in various educational institutions. For its part, the Department of Education (DepEd) in 1995 carried out a "School Inside a Garden (SIGA) Program", which provided the students with opportunities to care for the environment (Tuazon and Reyes 2011). The Program included lessons in alternative gardening methods as well as solid waste management in science classes.

Other efforts to reorient the school curriculum and integrate ESD and disaster risk reduction has been done by UNESCO National Commission of the Philippines (NatCom). As reported by Tuazon and Reyes (2011), NatCom funded the "Curriculum Mapping and Integration of Lifelong Learning for Sustainable Development in the Preschool Level".

The DepEd has also passed numerous memoranda and department orders to equip the members of its community with the appropriate knowledge and mind set geared towards preventing and mitigating the deleterious effects of climate change and disasters. In response to the Hyogo Framework for Action (HFA), the DepEd issued in 2007, Department Order (DO) No. 55, entitled "Prioritizing the Mainstreaming of Disaster Risk Reduction Management in the School System and Implementation of Programs and Projects Relative Therefor." This directive directs the development of modules, lesson exemplars and resource materials on DRR and climate change for the students and teachers in the basic education level.

Department Order No 55 is supplemented by DepEd Memorandum No. 175, s. 2007 that pushes for the "Creation of a Technical Working Group (TWG) on the Preparation of DepED Calamity, Disaster, and Risk Management and Control Operations Manual." In 2008, the DepEd's TWG published the Risk Reduction Resource Manual, which is a comprehensive collection of DRR information from local and international experts. The manual includes information on the nature of various hazards and calamities, the Philippines' risk profile, the Philippine disaster risk management system, and mechanisms for disaster monitoring and evaluation. In the same year, DepED issued Memorandum No. 297, entitled "Utilization of the Disaster Risk Reduction and Resource Manual in the School System Effective SY 2008-2009." Apparently, the foregoing policies are consistent with the goals of the HFA to build disaster-resilient schools, nations and communities, and reduce disaster losses.

The enactment of two (2) landmark legislations - Climate Change Act of 2009 (RA No. 9729) and Philippine Disaster Risk Reduction and Management Act of 2010 (RA No 10121) - has all the more bolstered the efforts regarding the integration of climate change and disaster risk reduction into the curricula of educational institutions.

In 2011, the National Search for Sustainable and Eco-Friendly Schools was conducted by the Department of Environment and Natural Resources (DENR), the DepEd and Smart Communications (Tuazon and Reyes 2011). With the theme, "Sustainable and Eco-Friendly Initiatives", the project was aimed at influencing academic institutions from primary to tertiary levels to be more involved on environmental concerns.

In 2013, the DepEd issued an unnumbered memorandum, entitled "Reiterating School

Disaster Risk Reduction Measures," emphasizing its commitment to institutionalize DRR practices in the school systems by citing the policy direction of RA 10121 and DepED's own DRR directives. After two (2) years, DepEd issued in 2015 Department Order No. 37 which provides for a "Comprehensive Disaster Risk Reduction and Management (DRRM) in Basic Education Framework." This framework provides a more comprehensive and coordinated set of programs and activities on DRR than those implemented in the past.

With the recent adoption of the K-12 curriculum in the basic education in the Philippines, DepEd has integrated DRR as a single course subject in Grades 11 and 12. This core course in senior high school, which is entitled "Disaster Readiness and Risk Reduction Education" or DRRRE, intends to educate students about hazards and disasters, the key concepts, principles, elements, and importance of DRR, DRR-related laws and policies, and various community-based practices for managing disaster risk to specific hazards (DepEd 2017). At the end of the course, the students are expected to develop a community preparedness plan and be able to prepare survival kits and materials for one's family and for public information and advocacy.

VII. Conclusion

The foregoing shows that the different international and national laws have provided the legal basis and have strengthened the implementation of various policies on education for sustainable development (ESD) among Philippine educational institutions. This is manifested in the curricular reorientation particularly in the basic education level. Much leaves to be desired, however, in terms of ESD implementation and integration in the higher education institutions (HEIs). This is a daunting task for HEIs and other academic institutions considering the environmental challenges that the Philippines regularly experiences.

Bibliography

Ali, Mohammad (2014). Education for national development, A case study of Indonesia. Intima: Indonesia

Balanay, Raquel and Halog, Anthony (2016). Teaching education for sustainable development at university level: A case study from the Philippines. In Filho, Walter and Pace, Paul (2016) Teaching education for sustainable development at university level. Switzerland: Springer International Publishing. Retrieved form http://link.springer.com/

Buchanan, John (2013). Sustainability education and teacher education: Finding a natural habitat. *Australian Journal of Environmental Education*, 28(2), 108–124

Cebrian, Gisela & Juyent, Merce. (2015). Competencies in education for sustainable development: Exploring student teacher views. *Sustainability*, 7, 2768-2786; doi:10.3390/su7032768

Commission on Higher Education (CHED) (2012). Commission on Higher Education (CHED) strategic plan 2011-2016. Retrieved from http://www.ched.gov.ph/wp-content/uploads/2014/12/CHED-Strategic-Plan-2011- 2016.pdf

Executive Order No. 888 (2010). "Strengthening Disaster Risk Reduction in the Philippines: Strategic National Action Plan [SNAP] 2009 – 2019

Quisumbing, Lourdes (2010). Integrating education for sustainable development (ESD) issues and concepts, main areas of content, and values in the secondary school social studies curriculum: A holistic approach. Keynote speech in Regional Research Workshop on Integrating ESD in the Southeast Asian Social Studies Secondary Education Curriculum. April 28-30, 2010. SEAMEO INNOTECH: Quezon City.

Republic Act (RA) No. 9163 (2001). "An Act Establishing the National Service Training Program (NSTP) for tertiary level students"

Republic Act No. No. 9729 (2009). "An Act Mainstreaming Climate Change into Government Policy Formulations, Establishing the Framework Strategy and Program on Climate Change, Creating for this Purpose the Climate Change Commission" or Climate Change Act of 2009

Republic Act No. 10121 (2010). "An Act Strengthening the Philippine Disaster Risk Reduction and Management System Providing for the National Disaster Risk

Reduction and Management Framework and Institutionalizing the National Disaster Risk Reduction and Management Plan," or Philippine Disaster Risk Reduction and Management Act of 2010

Ryan, Alexandra & Tilbury, Daniella (2013). Uncharted waters: voyages for education for sustainable development in the higher education curriculum, *The Curriculum Journal*, 24 (2), 272–294. Retrieved from http://dx.doi.org/10.1080/09585176.2013.779287

SEAMEO (2010). Integrating education for sustainable development into secondary education social studies curriculum in Southeast Asia: A toolkit for educators, curriculum developers, and education for sustainability development advocates. Philippines: SEAMEO INNOTECH

Soriano, Luz, Claudio, Corazon and Fansler, Lolita (1995). Sustainable development : A Philippine perspective. Manila: Phoenix Publishing House

Tilbury, Daniela and Cooke, K. (2005). A national review of environmental education and its contribution to sustainability in Australia: Frameworks for sustainability. Canberra: Australian Government Department of the Environment, Water, Heritage and the Arts, and Australian Research Institute in Education for Sustainability

Tuason, Jeanette and Reyes, Marie Antoinette (2011) in Country reports on education for sustainable development: Centered on the five cluster countries of UNESCO Office, Jakarta. Jakarta, UNESCO, pp. 25-32. Retrieved from http://www.unesdoc.unesco.org/images/0019/001928/192898E.

UNESCO (2002a). Education for sustainable development. Retrieved from http://www.unesco.org/new/en/education/themes/leading-the-international agenda/education-for-sustainable- development/three-terms-one-goal/

UNESCO (2002). Education for sustainability – from Rio to Johannesburg: Lessons learnt from a decade of commitment. Retrieved from http://www.unesco.org

UNESCO (2004). Promotion of a global partnership for the UN decade of education for sustainable development (2005-2014). Retrieved from http://unesco.unesco.org/images/0014/001473/147361e.pdf

UNESCO (2005). United Nations DESD: International implementation scheme. Retrieved from http://www.unesco.org

UNESCO (2011). Education for sustainable development country guidelines for changing the climate of teacher education to address sustainability: Putting transformative education into practice. Jakarta, UNESCO.

United Nations (1987). Our common future, United Nations World Commission on Environment and Development. Retrieved from http://www.un-documents.net/wced-ocf.htm

UNESCO (2014). Shaping the future we want: UN decade of education for sustainable development (2005-2014) final report. Paris, UNESCO. Retrieved from http://unesdoc.unesco.org/images/0023/002301/230171e.pdf.