

Desirability of Incorporating Environmental Literacy Education into The Global Efa Agenda with Focus on Developing Countries

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ABSTRACT: *The global Advocacy for Education for All (EFA) has its origin in Article 26 of the 1948 Declaration of Human Rights by the United Nations (UN). The Advocacy has gone through phases with limited success in the achievement of the cardinal objective of global inclusive education for humanity's survival and socio-economic development. The present (2015-2030) phase is anchored on 17 Sustainable Development Goals (SDGs) and targets African and other countries facing special developmental challenges. It has been observed that environmental literacy is at the heart of the SDGs. The purpose of this paper is to review the objectives and achievement levels of the various phases of the global EFA Advocacy and expound the desirability of incorporating Environmental Literacy Education (ELE) into the ongoing EFA Agenda, especially in developing countries. After a research-based exposé of the developmental benefits of integrating the competences offered by ELE with those provided by UNESCO in its Guidelines for achieving the SDGs, the paper concludes that incorporating ELE into the ongoing global EFA Agenda is highly desirable and goes on to suggest modalities for the incorporation.*

KEYWORDS: desirability, incorporation, environmental literacy education, global education for all agenda, developing countries.

INTRODUCTION

The Notion and Origin of Education for All (EFA)

Education for All (EFA) is a global Advocacy endorsed and sponsored by the United Nations (UN) for the purpose of meeting the educational needs of mankind-children, the youth and adults (Wikipedia, 2020). To ensure effective and efficient implementation, the Advocacy is made the responsibility of an Agency of the UN, the United Nations Educational, Scientific and Cultural Organization (UNESCO). The EFA project emerged from the strong belief by the UN that all human beings are equal and have fundamental

rights which are to be universally protected, irrespective of differences in colour, gender, creed or location (UNESCO, 2015). In effect, EFA could be rightly seen as having had its origin from the Universal Declaration of Human Rights (UDHR) which took place at the UN General Assembly on 10th December, 1948, with endorsement by 48 out of the then 50 member nations of the World Body (UN, 1948). On human right to education specifically, Article 26 of the UDHR proclaimed as follows (UN, 1948, p. 54):

1. Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.
2. Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace.
3. Parents have a prior right to choose the kind of education that shall be given to their children.

Purpose of the Paper

The purpose of this paper is to review the objectives and achievements of various phases of the EFA Advocacy from the proclamation of the UNDHR in 1948 to date (2022) and expound the importance of incorporating Environmental Literacy Education into the global EFA Agenda to cover the gap left in the Agenda with regard to addressing the special characteristics and challenges inhibiting sustainable development in emerging countries.

Why Focus on Developing Countries?

The current EFA global Agenda – The United Nations (UN) Education 2030 Agenda – emphasizes sustainable development which is of great interest to developing countries. Besides, in the execution of the 2030 Agenda, the UN targets African and other countries facing special developmental challenges (OSAA, 2018). Accordingly, this sub-section of the paper is designed to provide a brief but necessary description of the peculiarities of developing countries, underlining what particular characteristics and challenges of the countries necessitate infusion of Environmental Literacy Education in the EFA Advocacy Agenda in the interest of the countries.

The appellation, *developing countries*, has been explained as referring to a group of sovereign states with a less developed industrial base and lower Human Development Index (HDI) relative to other countries usually called ‘developed’ (Wikipedia, 2021). Currently (2022), there are 152 developing countries in the world with a population of 6.62 billion (Worlddata, 2022). Accordingly, developing countries constitute 79.2% of the 195 countries in the world (worldmeters, 2022a) and 82.75% of present world population of 8.0 billion (worldmeters, 2022b). Map 1 below provides a visual impression of these data.

MAP 1: Developing and Developed Countries of the world.



LEGEND: Developing Countries: dark green – developing according to the IMF; light green - developing outside of the scope of the IMF; red – graduated to developed. Developed Countries (grey colour).

Adapted from: WIKIMEDIA: File map model-png/Japinderum (2012).

The above data and more information below explain the focus of this paper on developing countries.

Terminology Controversy

The use of the term, *developing countries*, has experienced significant controversies which fundamentally arise from its tendency to evoke perpetual derogatory reference to or lack of regard for the countries so referred to. Accordingly, some alternative terms have been adopted by some world bodies. For instance, emphasizing differences in national per capita income, the World Bank (2015), adopted the term *Global South* as an alternative to *developing countries*. Similarly, the International Monetary Fund (IMF) uses such terms as *emerging countries*, or *countries in transition*, based on some criteria devised by the fund (Wikipedia, 2021). Other alternative terms used to refer to developing countries, based on their manifestation of high levels of poverty, illiteracy, environmental degradation, low level of industrialization and so on, include *low income countries* and *transition economies*.

Characteristics and Challenges of Developing Countries

Whatever the terminology used, developing countries, generally, have some common characteristics which are also germane to the achievement of the stated purpose this paper. Briefly, the characteristics and challenges include (Wikipedia, 2021):

- i. Prevalence of high levels of poverty. Many of the countries have an average per capita income of less than USD 1.025 (as of 2018).
- ii. Prevalence of inadequate provisions for mass health, education, nutrition and adult literacy, a situation that promotes human resource weakness and low Human Development Index (HDI) generally among the Developing Countries.
- iii. Instability of rural economy which is commonly based on primordial/traditional subsistence agricultural production processes with high livelihood vulnerability due to excessive use of natural resources, depletion of ecosystems, land pollution and improper use of chemicals.
- iv. Inadequate access to clean potable water, sanitation and hygiene services/facilities.
- v. Lack of reliable electricity and renewable clean energy sources.
- vi. High levels of water, air and land pollution as a result of massive environmental degradation due to indoor and outdoor activities like improper methods of refuse disposal, use of chemicals for fishing, bush burning and use of biomass (wood, charcoal, dung and crop residue) as fire fuel.
- vii. High vulnerability to climate change in the areas of health, habitat loss and economic disasters following lack of knowledge and skills to respond to real and impending environmental disasters affecting agricultural production, income and health of citizens.

How the above characteristics and challenges of developing countries crave for incorporation of Environmental Literacy Education (ELE) in the global EFA agenda is made obvious in relevant sections of this paper below after proper discussion of the progress of EFA so far.

Phases of the Global Education for All (EFA) Agenda (1948-2015)

As pointed out above, Article 6 of the 1948 Universal Declaration of Human Rights (UDHR) by the UN focuses on Education for All and has thus been recognized as the genesis of the Global EFA Advocacy (UN, 2017). Progressively, the EFA Advocacy has passed through three distinct phases between 1990 and 2015 with various goals and levels of achievements. The three phases are discussed immediately below.

1. First Phase: The Jomtien Declaration Phase (1990)

Forty-two years after the UDHR proclaimed that everyone has a right to education (1948), a number of constraining realities were identified as still facing the world. Despite efforts by countries and the world to ensure education for all. For instance, UNESCO (1990) reported that by 1990;

- i. More than 100 million children, including at least 60 million girls, were yet to have had access to primary schooling;
- ii) More than 960 million adults, two-thirds of whom were women, were illiterate, and functional illiteracy remained a significant problem in all countries, industrialized and developing;
- iii) More than one-third of the world's adults had no access to the printed knowledge, new skills and technologies that could improve the quality of their lives and help them shape and adapt to social and cultural change; and
- iv) More than 100 million children and countless adults failed to complete basic education programmes, and millions more that satisfied the attendance requirements were yet to acquire essential knowledge and skills.

To address the above realities and other apparent cogs in the wheel of progress of EFA, a World Conference on Education for All took place in Jomtien, Thailand, from 5 to 9 March, 1990. The conference which was attended by over 1,500 participants, gave birth to a *World Declaration on Education for All and a Framework for Action to meet Basic Learning needs*. This Declaration, usually referred to as the Jomtien Declaration, was related both to learning and life skills for every individual – child, youth and adult (Buchert, 1995). Details of the Declaration were encapsulated in ten “Articles or Goals (UNESCO, 1990); namely, (i) Meeting basic Learning Needs; (ii) Shaping an expanded vision of Education for All; (iii) Universalizing access and promoting equity; (iv) Focusing on learning; (v) Broadening the means and scope of basic education; (vi) Enhancing the environment for learning; (vii) Strengthening partnerships; (viii) Developing supportive policy context; (ix) Mobilizing resources, and (x) Strengthening international solidarity.

2. The Second Phase: The Dakar World Education Forum and New York Proclamation (2000)

Ten years after the Jomtien Declaration, i.e. in 2000, the international community met again at the World Education Forum (WEF) in Dakar, Senegal, in May, 2000, with 1,100 participants in attendance. After reviewing the level of success of EFA so far, the forum was faced with the fact that many countries were far from having reached the goals established at the World Conference on Education for All in 1990. The participants agreed on a new *Dakar Framework for Action* which re-affirmed their commitment to achieving Education for All by the year 2015, and identified six key measureable education goals which aim to meet the learning needs of all children, youth and adults by 2015. In addition, the forum reaffirmed UNESCO's role as the lead organization with the overall responsibility of coordinating other agencies and organizations in the attempt to achieve these goals. The six goals established in the Dakar Framework for Action are to (i) expand and improve comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children; (ii) ensure that by 2015 all children, particularly girls, those in difficult circumstances, and those belonging to ethnic minorities, have access to complete, free and compulsory primary education of good quality; (iii) ensure that the

learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programmes; (iv) achieve a 50% improvement in adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults; (v) eliminate gender disparities in primary and secondary education by 2005, and achieve gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality; and (vi) improve all aspects of the quality of education and ensure the excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills, (WEF, 2000).

These goals, declared at Dakar, contributed to the articulation and global pursuit of the 8 Millennium Development Goals (MDGs) proclaimed at the meeting of leaders of 189 countries in September, 2000 at the UN Headquarters in New York. With respect to EFA, MDGs 2 and 3 were aimed to achieve respectively by 2015: (i) Universal primary education by ensuring that all boys and girls complete a full course of primary schooling and (ii) Promotion of gender equality and empowerment of women by eliminating gender disparity in primary and secondary education, preferably by 2005, and in all levels of education not later than 2015 (UN, 2000). Since the EFA Advocacy meeting in Dakar in 2000, UNESCO has annually published an EFA Global Monitoring Report which tracks progress on the Dakar framework's goals. In 2015, the monitoring reports revealed that only one-third of countries reached all the EFA goals with measurable targets (UNESCO, 2015). Additionally, the report identified, among other findings, that by 2015,

- i. There were still 781 million illiterate adults globally;
 - ii. The poorest children were four times more likely to be out of primary school than the richest children, and
 - iii. Nearly half of all countries had failed to achieve universal primary enrolment.
- Finally, the Report identified key lessons for shaping the post-2015 global education agenda.

In the light of the above review of the first two post-1948 phases of EFA global agenda (1990-2015), it could be said that the concentration was mainly on development of human resource by ensuring that all countries embraced:

- i. Universal Primary Education for all boys and girls;
- ii. Empowerment of women by eliminating gender disparity in primary and secondary education;
- iii. Meeting the basic learning needs of all young people and
- iv. Promotion of adult literacy.

These global EFA areas of concentration, apparently, were aimed at elevating the Human Development Index (HDI) of all nations, especially the developing countries with low HDI as a challenge. Unfortunately, from the Jomtien Declaration in 1990 through the

proclamation and implementation of the Dakar Framework and the Millennium Development Goals (2000-2015). Reports from the EFA Monitoring Team showed that the pace of implementation of the EFA Agenda in the two phases by many countries was rather not encouraging as detailed above. A third phase of the global EFA Agenda was therefore found necessary.

3. Third Phase of Global EFA Agenda (2015-2030): The Incheon Declaration

In reaction to the second phase Monitoring Report above, UNESCO together with UNICEF, the World Bank, UNFPA, UNDP, UN Women and UNHCR organized the World Education Forum 2015 in Incheon, Republic of Korea, from 19–22 May, 2015. Over 1,600 participants from 160 countries, including over 120 Ministers, heads and members of delegations, heads of agencies, officials of multilateral and bilateral organizations, and representatives of civil society, the teaching profession, youth and the private sector, adopted the Incheon Declaration for Education 2030, which sets out a new vision of ensuring inclusive and equitable quality education and promotion of lifelong learning opportunities for all. The 2030 Agenda forms the new global development framework anchored around 17 Sustainable Development Goals (SDGs) with a total of 169 targets covering economic, social development and environmental protection. Poverty eradication is the overarching goal of the new agenda which is taking a far more ambitious approach than the MDGs by promising to address the unfinished business of the MDGs and meet the growing challenges in the interlinked economic, social and environmental dimensions of sustainable development. The United Nations (UN) General Assembly met between 25th and 27th September, 2015 in New York and adopted the new agenda for global sustainable development by 2030 in which education was made a key instrument for achieving the SDGs.

Table 1 below shows the 17 Sustainable Development Goals (SDGs) in which the agenda of the third and current phase of the global EFA Advocacy is encapsulated.

Table 1: The 17 Sustainable Development Goals (SDGs)

SDG	Focus/Target
1	No poverty – End poverty in all its forms everywhere
2.	Zero Hunger – End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
3.	Good Health and Well Being – Ensure healthy lives and promote well-being for all at all ages.
4.	Quality Education – Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
5.	Gender Equality – Achieve gender equality and empower all women and girls.
6.	Clean Water and Sanitation – Ensure availability and sustainable management of water and sanitation for all.
7.	Affordable and Clean Energy – Ensure access to affordable, reliable, sustainable and clean energy for all.
8.	Decent Work and Economic Growth – Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
9.	Industry, innovation and Infrastructure – Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
10.	Reduced inequalities – Reduce inequality within and among countries.
11.	Sustainable Cities and Communities – Make cities and human settlements inclusive, safe, resilient and sustainable.
12.	Responsible Consumption and Production – Ensure sustainable consumption and productive pattern.
13.	Climate action – Take urgent action to combat climate change and its impacts.
14.	Life below Water – Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
15.	Life on Land – Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and habit biodiversity loss.
16.	Peace, Justice and Strong Institutions – Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.
17.	Partnership for the Goals – Strengthen the means of implementation and revitalize the global partnership for sustainable development.

Source: <http://www.un.org/sustainabledevelopment/sustainable-development-goals>.

Environmental Literacy Education (ELE) and the SDGs

A close look at the 17 SDGs in table 1 above will reveal that up to 10 of them (eg. SDGs 1,2,3,6,7,11,12,13,14,15) are in the environment domain. Again, in a related article titled, “Educational Curriculum and Multispecies Relations”, Mabunda & McKay (2021) have observed that the focus on environmental literacy is at the heart of the SDGs. Besides, the Incheon Declaration by the World Education Forum (2015) clearly stated, as indicated above, that the third phase of the global EFA agenda was designed **to meet the growing**

challenges in the inter-linked economic, social and environmental dimensions of sustainable development, using education as a key instrument for achieving the SDGs.

Justification for the Focus of this Paper

The above references provide some strong hints on the relevance of Environmental Literacy Education (ELE) for achievement of the 2030 education agenda for sustainable development, especially in developing countries with their high rate of illiteracy, poverty, low HDI and other challenges associated with the countries as already highlighted in this paper. Herein lies the justification for this paper the focus of which is to close the gap left in the global EFA Agenda; namely, the absence of provision for a special education programme to address the peculiar characteristics and challenges of emerging countries which constrain their development. Further elucidation on the relevance of ELE to the achievement of the 2030 EFA Agenda is provided below in related sub-sections of this paper.

The Concept of Environmental Literacy (EL)

As the author of this paper has explained elsewhere (Eheazu, 2017) the term literacy has expanded well beyond what was generally understood as ‘the ability to read and write and to communicate with written or printed symbols’. The concept has now evolved to include the internalization and application of information from diverse developments in human knowledge, science, technology and real-life experiences. Accordingly, various notions of literacy have emerged, such as adult literacy, computer literacy, visual literacy and cultural literacy. Environmental literacy has also emerged as an important dimension amongst these literacies. Since the term was coined, a distinguishing characteristic of environmental literacy has been its “action” perspective.

Along this line of thought, Dissinger and Roth (1992) have suggested that environmental literacy is essentially the capacity to perceive and interpret the relative health of environmental systems and take appropriate action to maintain, restore, or improve the health of those systems. Roth (1992) is also of the opinion that Environmental Literacy should be defined in terms of observable behaviours; that is, people should be able to demonstrate in some observable form what they have learned - their knowledge of key concepts, skills acquired, disposition toward environmental issues, and the like. Environmental educators have often cited creation of an environmentally literate citizenry as one of the goals of environmental education. For instance, quoting the Belgrade Charter of 1975 Environmental Education and Training Partnership observes that the goal of environmental education is to develop a world population that is aware of, and concerned about the environment and its associated problems (EETAP, 1997).

In the same vein, the 1997 Tbilisi Declaration (EETAP, 1997:1) sees the primary role of environmental education as being:

...to succeed in making individuals and communities understand the complex nature of the natural and built environments ... to participate in a responsible and effective way in anticipating and solving environmental problems

.....

The citizenry referred to in these definitions include learners from all sectors of society who can be generally approached through many channels but more specifically through formal and non-formal education programmes. The challenge for educators is to provide meaningful educational learning experiences that help raise awareness in order to foster environmental ethics that will have long lasting impacts. If environmental educators succeed in developing methods to inculcate such environmental ethics, there is hope for the citizenry to influence future policies and positive environmentally focused decision making.

Levels of Environmental Literacy

Roth (1992) identified three levels of environmental literacy as follows:

- i) Environmental Literacy Level One (ELL₁), referred to as '*Nominal Level*', which indicates ability to recognise many of the basic terms used in communicating about the environment and to provide rough, unsophisticated, working definition of their meanings.
- ii) Environmental Literacy Level Two (ELL₂), called the '*functional level*', which shows a broader knowledge and understanding of the nature and interactions between human social systems and other natural systems; and
- iii) Environmental Literacy Level Three (ELL₃), the '*Operational Level*', depicting progress beyond functional literacy in both the breadth and depth of understandings and skills. Persons at the operational level routinely evaluate the impacts and consequences of actions, gathering and synthesizing pertinent information, choosing among alternatives, advocating action positions and taking actions that work to sustain or enhance a healthy environment. Such people demonstrate a strong, ongoing sense of investment in and responsibility for preventing or remediating environmental degradation both personally and collectively and are likely to be acting at several levels from local to global in so doing. The characteristic habits of mind of the environmentally literate at the operational level are well ingrained. They are routinely engaged in dealing with the world at large.

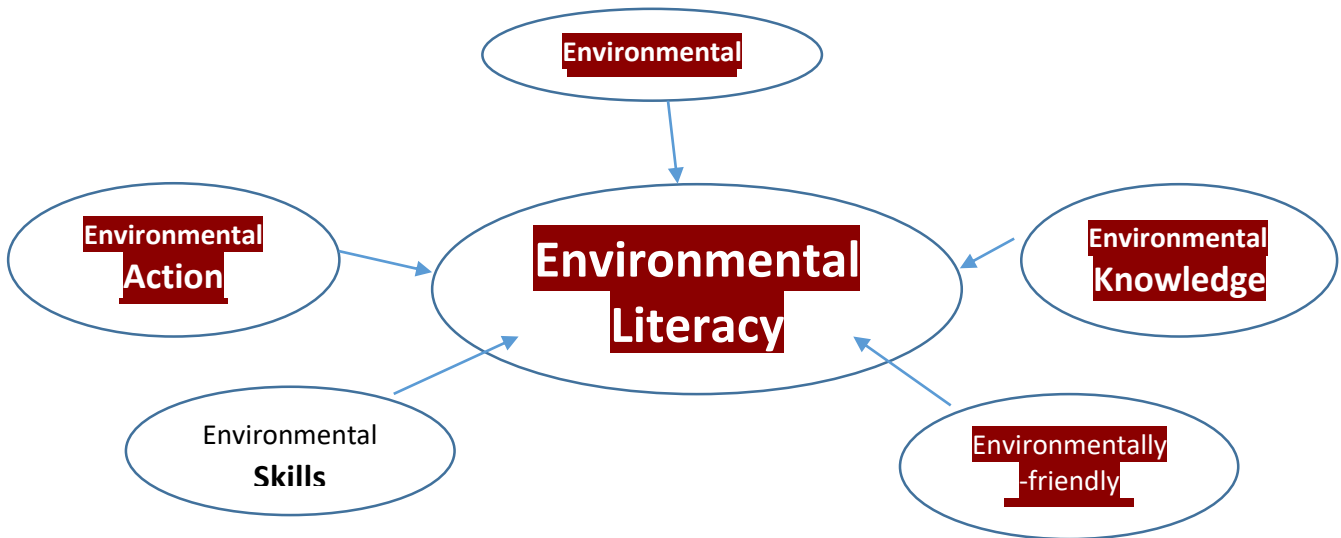
In all, an environmentally literate person is seen as one who has acquired the right environmental attitudes, values and knowledge to generate requisite action for sustainable human and socio-economic development at both local and global levels.

The above views about environmental literacy are very much reflective of the five element model of the attributes of an environmentally literate person, usually referred to as the “**AKASA**” model. This model was proposed in the Declaration of the Intergovernmental Conference on Environmental Education organised by UNESCO in Tbilisi (USSR) in 1977. This Declaration, popularly called the “Tbilisi Declaration”, specified five elements whereby goals and objectives of environmental literacy and the attributes of the environmentally literate should be identified. The **AKASA** model is an acronym of the elements which are (UNESCO, 1977):

- 1) **Awareness**, including sensitivity to the total environment and its allied problems;
- 2) **Knowledge** – involving a variety of experiences and understandings about the environment and its problems;
- 3) **Attitudes**, depicting appropriate values, concern, and motivation to participate in environmental improvement and protection;
- 4) **Skills**, indicating possession of appropriate capacity for identifying and solving environmental problems;
- 5) **Action**, depicting readiness to initiate or be involved at all levels in work towards solution of environmental problems.

These five elements of environmental literacy are represented graphically in fig. 1 below.

Fig. 1: Elements of Environmental Literacy



Adapted from: UNESCO (1977). The **AKASA** Model

Environmental Literacy Education (ELE): Process and Expected Outcomes

Environmental Literacy Education (ELE) could be described as the process of inculcating elements of Environmental Literacy (EL) in order to develop in beneficiaries environmental responsible behaviour, expected of environmentally literate persons, which Hungerford et al. (1994) have identified to include:

- i. Belief in their ability, both individually and collectively, to influence decisions on environmental problems and issues; such as mitigation of the impact of climate change on agriculture;
- ii. Assumption of responsibility for personal actions that would positively influence or avert environmental disaster;
- iii. Personal and/or group involvement (inclusiveness) in environmentally responsible behaviours; such as tree planting to minimize the environmental effects of deforestation;
- iv. Persuasion – e.g. using informal discussion to encourage one another to support a positive environmental position; such as adoption of farming methods that would minimize anthropogenic land and general environmental degradation.

From the attributes of an environmentally literate person ingrained in the elements of EL (fig. 1 above), it stands clear that development of environmental literacy is a multidimensional process which begins with basic environmental awareness and knowledge inculcation and acquisition. These basic elements of EL are predicated on the idea that before an individual can act on an environmental problem, that individual must first understand the problem (Pooley & O'Connor, 2000). The next step is training of the individual towards the application of the acquired knowledge to investigate and evaluate environmental issues and apply appropriate solutions. Finally, the individual must be equipped to be able to choose which course of action is best in a given situation. The said multidimensional process is applicable, if properly designed, at every level of education - basic, formal, non-formal and informal as well as higher education.

Incorporating Environmental Literacy Education in the Current EFA Agenda through the SDGs with Particular Reference to Developing Countries

In the effort to establish the role and applicability of Environmental Literacy Education (ELE) towards achievement of developmental objectives, especially in developing countries with their characteristics and challenges as identified earlier above, the author of this paper has carried out a number of studies on some regions/countries of Sub-Saharan/Rural Africa. The studies touched on a number of the SDGs (including SDGs 2,3,7,13 and 15) with results which depict the need for ELE in sustainable development programmes in the developing climes. Two examples of the findings could be briefly presented as follows:

- i. **SDG 7** (provision of affordable and clean energy). This study (Eheazu, 2019a) revealed, inter alia, that to achieve development of sustainable energy mix (SEM) in Nigeria (a developing country) would require “Popular Environmental Literacy Education (PELE) with appropriate contents for various groups of the Nigerian population (children, adolescents and adults) at various literacy levels (non-literate, semi literate and literate) as well as educated citizens at the helm of affairs (including policy makers) in both rural and urban locations.
- ii. **SDGs 2 and 15** (Zero hunger and life on land). The study (Eheazu, 2020) x-rayed the role and applicability of ELE towards the sustainability of agriculture, the major livelihood of rural adults (aged 15-64years) who constituted 59% of the 1.1billion population of Sub-Saharan Africa (SSA) by 2019 (Statista, 2019). The conclusion arrived at from the study is couched by the author in the following words (Eheazu, 2020, pp. 46-47):

Having comprehensively analyzed the environmental learning objectives and content provided in UNESCO’s (2017) SDGs 2 and 15 and the components and expected outcomes of Environmental Literacy (EL) as provided by NAAEE (2011) and other specialists, this paper concludes that Environmental Literacy Education (ELE) would appropriately serve the role of the special environmental education required by the rural adult agriculturist populations of SSA as a prerequisite to acquire the necessary technologies for effective participation in the processes for achieving sustainable agricultural systems in SSA. The paper has thus gone further to suggest and discuss the various modes (formal, non-formal and informal) through which the required ELE could be delivered to the target beneficiaries in rural Sub-Saharan Africa.

Other published studies by which the author of this paper has amplified the role and applicability of Environmental Literacy Education (ELE) towards achievement of the SDGs and the global EFA agenda include (i) Eheazu (2019b); (ii) Eheazu & Uzoagu (2021) and Eheazu (2022). For further clarification, it would be useful to succinctly highlight at this point, the competences offered by Environmental Literacy (EL) which would feature in the incorporation of ELE and the current Global Agenda for EFA as anchored on the 17 SDGs articulated by the UN.

Competencies Offered by Environmental Literacy (EL)

The competencies derivable from EL could be seen from the attributes of an environmentally literate person described by Hungerford et al. (1994). Alongside Roth's (1992) definition of EL cited above, the North American Association for Environmental Education (NAAEE) has also defined an environmentally literate person as "someone who, both individually and together with others, makes informed decisions concerning the environment, is willing to act on these decisions to improve the wellbeing of other individuals, societies, and the global environment; and participates in civil life" (NAAEE, 2011, pp. 2-3). The Association further clarifies that those who are environmentally literate possess, to varying degrees, the following four attributes:

- i. knowledge and understanding of a wide range of environmental concepts, problems, and issues;
- ii. a set of cognitive and affective dispositions;
- iii. a set of cognitive skills and abilities; and
- iv. the appropriate behavioural strategies to apply their acquired knowledge and understanding in order to make sound and effective decisions in a range of environmental contexts.

Accordingly, NAAEE has identified four interrelated components of EL acquisition as Competencies (abilities), Knowledge, Dispositions and Environmentally Responsible Behaviour. The Association has also identified contexts (from local to global) within which these components of EL acquisition are manifested to include interest, sensitivity, locus of control, responsibility and orientation to act (Eheazu, 2020).

Modalities for Incorporating Environmental Literacy Education (ELE) in the Global Education for All (EFA) Agenda Reflected in the SDGs

In one of its publications on the SDGs, UNESCO has identified learning objectives and suggested topics and learning activities for each SDG as well as implementation processes at different levels, from course design to national strategies, with the aim "to support policy makers, curriculum developers and educators in designing strategies, curricula and courses to promote learning for the SDGs" (UNESCO, 2017, p. 8). Accordingly, and in line with relevant references and clarifications made so far in this paper, incorporation of EL competencies through ELE into the global EFA Agenda in consonance with the SDGs would involve the following modalities (Eheazu, 2022):

- i. Identification of a sustainability issue within a given region or geographical entity (e.g. Sub-Saharan/Rural Africa);
- ii. Identification of the particular SDG(s) which relate(s) to the sustainability issue;

- iii. Selection from the Commonwealth Curriculum Framework for the SDGs (Osman et al 2017) and the UNESCO Guidelines on appropriate learning objectives and key competencies for achieving the SDG(s) (UNESCO 2017).
- iv. Identification of the overall literacy level and other relevant demographics of the target human beneficiaries/participants with special concern for their potentials to impact adversely on the environment;
- v. Specification of the requisite EL competencies to match with the compatible others provided in the Commonwealth Curriculum Framework and UNESCO Guidelines for the relevant SDG(s);
- vi. Integration/infusion of the requisite EL competencies with relevant key competencies depicted for the relevant SDG(s).

Ultimately, the EL competencies would fall under different education forms/modes (formal, non-formal and informal) for dissemination with specifications of what methods/strategies (pedagogy or andragogy) would be appropriate to effectively transmit needed environmental knowledges, skills, values and attitudes to the target beneficiaries/participants through the different modes and levels of education (early childhood, primary, secondary, tertiary, technical and adult education) as provided for in the commonwealth curriculum framework for the SDGs. This author's published papers cited above amply crystalize the outlined processes/modalities as well as the desirability of incorporating ELE into the global EFA Agenda. The citations also strengthen the justification for this paper,

CONCLUSION

The genesis, phases, levels of achievement and pitfalls of the Education for All (EFA) Global Advocacy Agenda so far, have been extensively discussed in this paper. Again, in the light of related published studies and UN targets on developing countries, the connectedness between ELE and the current and third phase of the EFA Agenda (2015-2030) anchored on the 17 SDGs, as well as the importance and necessity of incorporating the former into the latter for the achievement of the current EFA Agenda for global sustainable development, have also been broadly articulated in this paper. Given the potential advantages of the said incorporation as depicted in the paper, it becomes abundantly pertinent to conclude that incorporation of ELE with the global EFA Agenda is highly desirable for the achievement of the current phase of the Agenda, particularly in developing countries. This paper has also gone further to suggest processes/modalities for the desirable incorporation. All these constitute novel contributions towards addressing effectively the developmental challenges facing emerging nations.

RECOMMENDATION

Considering the detailed discussion and references above on the topic of this paper as well as the conclusion arrived at, it becomes cogent to recommend that:

- i. UNESCO, as an agency of the UN in charge of the EFA Advocacy, should give urgent attention to the incorporation of Environmental Literacy Education into the current global EFA Agenda, capsulized in the 17 SDGs, which will terminate by 2030.
- ii. UNESCO should also consider how to implement the modalities for the incorporation suggested in this paper, as well as any related approach(es) that may be recommended by other experts

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