

Role of Education in Achieving Sustainable Goals

Triveniyadav T

triveniyadavmys@gmail.com

"Education is a human right with immense power to transform. On its foundation rest the cornerstones of freedom, democracy and sustainable human development"Kofi Annan

Introduction

In September 2015, at the United Nations Sustainable Development Summit, Member States formally adopted the [2030 Agenda for Sustainable Development](#) in New York. The agenda contains 17 goals including a new global education goal (SDG 4). SDG 4 is to **ensure inclusive and equitable quality education and promote lifelong learning opportunities for all** and has seven targets and three means of implementation.

Education is seen as a big force; a force that not only contributes to national development, but also sustainable development. It is a key to development, be it social, economic, political or environmental. Education promotes development of knowledge and skills required to achieve sustainable development (SD). It encourages promotion of economic well-being, social equity, democratic values and much more. Education for Sustainable Development (ESD) enables people and citizens to learn as to how to preserve earth resources which are limited in availability. The ESD has the objective of empowering present and future generations to meet their needs using a balanced and integrated approach to the economic, social and environmental dimensions of SD.

The SD movement has grown on the basis of a concept of sustainability that protects both the interests of future generations and the capacity of the planet earth to regenerate. In the 21st century, sustainability refers generally to the capacity of the biosphere and human civilization to co-exist. The Rio Declaration on Environment and Development (1992) laid down 27 principles of sustainability. One such principle is the Declaration that says: "In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process, and cannot be considered in isolation from it. Eradicating disparities in living standards in different parts of the world is essential to achieve sustainable development and meet the needs of majority of people." Sustainable development can be defined as those developmental activities that do not degrade the environment and can be carried on for a long period of time. One of the central principles of sustainable development is living within the limits of consumption of natural resources. Thus, the goals of economic and social development must be defined in terms of sustainability in all countries, developed or developing, market-oriented or centrally planned. It may be noted that UN Conference on Environment and Development (popularly known the Earth Summit) also debated in 1992 and confirmed its resolve to promote the 3 pillars of SD, namely Economy, Society and Environment, as interdependent and mutually reinforcing concepts. To achieve SD, these sectors (pillars) need to come together. The economic, social or societal and environmental sectors are all critically important and interdependent. A healthy prosperous society relies on a healthy environment to provide food and resources, safe drinking water and clean air for its citizens. This Unit discusses the role of education in achieving SD and explores the interaction among economy, society and environment.

Meaning And Importance of Education

Before we discuss the role of education in sustainable development, it is imperative to understand the meaning and importance of role of education in sustainable development. Role is defined as "the function assumed or part played by a person or thing in a particular situation". The definition of a role "is a part or character someone performs or the function or position of a person". An example of a role is the position of the nurse in a hospital. Merriam-Webster defines role as a function or part performed, especially in a particular operation or process. Education is a process of developing the personality and creativity of the individuals so that they can in turn help in promoting a healthy society. Education is actually a process, which influences individual capabilities, social environment, economic development, ethical surroundings and above all cultural adaptability. Education is expected to evolve principles, methodologies and guidelines for the application of knowledge that could benefit society. It is also expected to provide knowledge and skills for addressing the issues of development. It must also enable people and students to develop an understanding and a perspective of the physical and social environment.

The importance of education can be interpreted from the reply to the question asked to Aristotle. The question was 'How much better educated men were than 152 Health, Education and Food Security those who were uneducated'. Aristotle's reply was 'As much as the living are from the dead.' Education thus is a process to shape the quality of life of individuals and through them of the society and the world. It is an investment in the human resources. In the present age of science and technology, it has been increasingly realised that one needs to be educated not only to become a better human and social being, but also a creative and productive being. Looking at the changes taking place around the world, it is being widely felt that the kind of world we will bequeath to our children and grandchildren may not be a better one as a result of environmental degradation that results from political and economic decisions made today. A matter of grave concern is that those who reap the fruits of economic development today may be making future generations worse off by excessively damaging and destroying the natural resources and polluting the earth's environment.

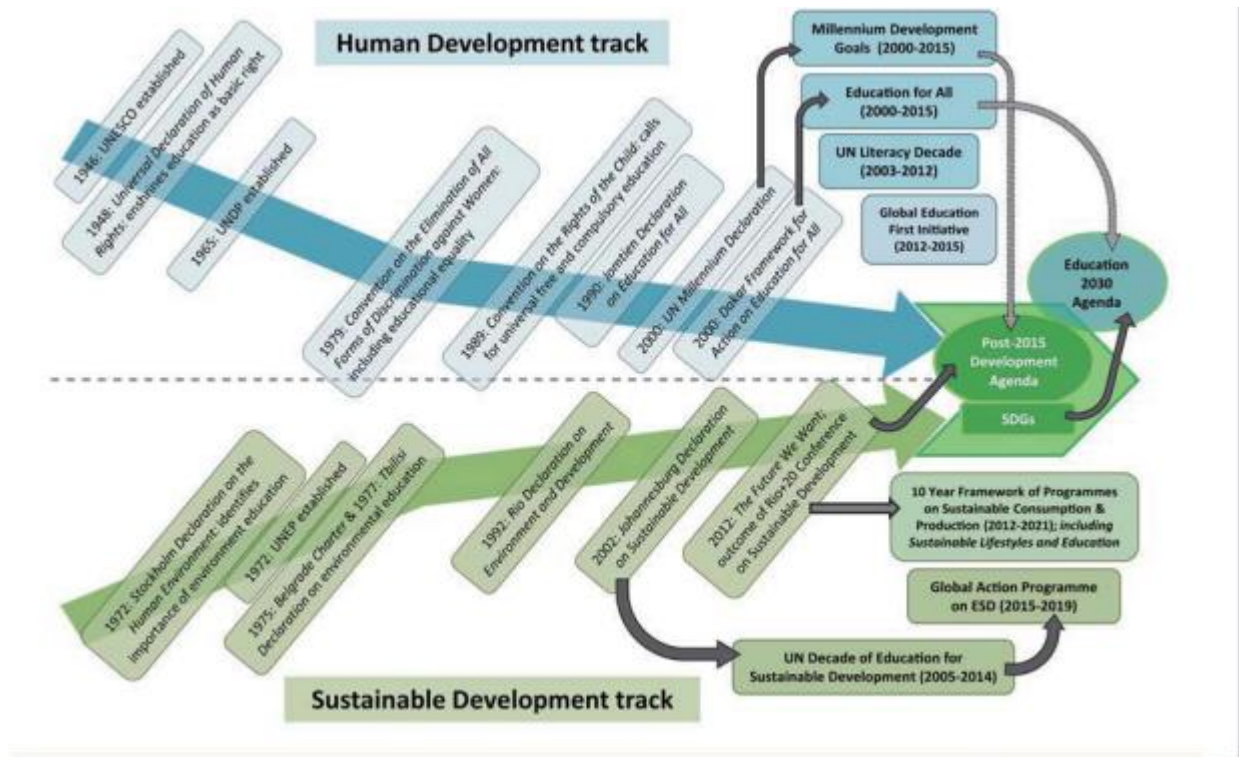
'Sustainable development' was a major focus of the United Nations Conference on Environment and Development (UNCED) held in Brazil in June 1992. The achievement of sustainable development globally is likely to prove as one of the greatest challenges to the world community in view of the continued population growth and rising levels of consumption per capita. As the World Commission on Environment and Development observed, efforts to achieve sustainable development are being carried out amidst the additional pressure of such global difficulties as "climate change, ozone depletion, and species loss" (WCED, 1987). As we all know, legacy of the concept of sustainable development is attributed to the Report of the World Commission on Environment and Development 'Our Common Future'. In this context, sustainable development secures a balance between economic development and ecological sustainability. Both economic and environmental systems need a certain minimum threshold value to survive. In essence, sustainable development is a process of change in which the exploitation of resources, direction of investments, orientation of technological development, and institutional change, are all in harmony and enhance both current and future potential to meet human needs and aspirations (Ibid.).

Harmonising Education Agendas Through An Integrated Sustainable Development Approach

Over the past two decades, the agendas for human development and sustainable development have run in parallel to each other. The SDGs provide the first substantial attempt by the global community to

reconcile and integrate these processes, and the situation for education is a prime example of this effort (see Figure 5.1). The importance of education for human development led to several international initiatives over the past few decades aimed at improving educational access and attainment globally. Reaffirming the Jomtien Declaration (1990) on Education for All (EFA), the World Education Conference in 2000 set targets to achieve universal free and compulsory primary education, halve global illiteracy rates, eliminate gender disparities in education, and improve early childhood care and education by 2015. This aligned directly with the objectives of the UN Millennium Declaration (2000),

The importance and prioritisation of education within the post-2015 development agenda is well supported with the clear indication that SDG 4 will provide a standalone goal with the aim to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” (Kutesa 2015: 12). SDG 4 provides a basis for the educational improvements the global community will strive for under the post-2015 development agenda and includes seven main targets and three additional targets on means of implementation. This is further strengthened by the general agreement on the “Education 2030 Agenda” and the draft Framework for Action – Education 2030 (UNESCO, 2015a) at the World Education Forum 2015 (19-22 May 2015) which provides a detailed plan of implementation for SDG 4 and specifies the monitoring and reporting mechanisms for this goal.



With the strong consensus and support mechanisms for SDG 4 agreed at the World Education Forum 2015, preparations for formalising this goal are generally progressing well. Nonetheless, a few critical questions need to be further addressed regarding how education will be aligned meaningfully with the post-2015 Development Agenda.

These include

1. What mechanisms will be put in place to achieve effective financing for education?

2. How can effective monitoring and reporting on SDG 4 be ensured to capture both the qualitative and transformative attributes of education?
3. How can advancement of "quality education" be actualised as a key priority of SDG 4?
4. What efforts are needed to empower education as a cross-cutting means of implementation for sustainable development (in addition to being a specific, standalone goal)?
5. How to once-and-for-all align the two parallel purposes of education, one for improving human development and the other for advancing sustainable development, into a single integrated paradigm?

Financing Education

The broad ranging and ambitious nature of the 169 targets proposed by the Open Working Group on the SDGs means that a significant amount of financing will need to be mobilised through a diversity of mechanisms and sources (UNEP Inquiry, 2015), or both the practicality of achieving these goals and the credibility of the international agreements on the SDGs will be severely undermined. Therefore, effective financing will be critical in achieving quality education that is inclusive and equitable, provides lifelong learning, and also strengthens sustainable development. Optimising all financial streams "domestic public, domestic private, international public, international private and blended finance" and coordinating them for greatest impact is critical (UNSG 2014: 26).

Traditional sources for education funding are: government (domestic) resources; foreign aid (from multilateral and bilateral donors/agencies); and private entities (households, individuals, private organisations)

It is commonly agreed that governments, through public expenditure, hold the key mechanism and main responsibility for long-term, sustainable financing of education. In 2006, the High Level Group on EFA recommended that governmental spending between 4-6% of GNP and 15-20% of public expenditure should be allocated to education. These benchmarks were then included in the Muscat Agreement on Global Education for All Meeting in May 2014 (EFA Global Monitoring Report 2015: 241). However, in lower and middle income countries where large investments are still required for overall infrastructure improvements in education systems, international aid and financing remains crucial. If all countries achieved these ambitious targets for domestic spending on education, it is projected that there would still be a shortfall of USD 22 billion annually over the next fifteen years to achieve the basic education targets by 2030 (EFA Global Monitoring Report 2015: 296).

Historically, a general trend of increasing finance for basic education by governments was observed over the past decade until recently. Between 1999 and 2010, domestic spending on education increased in 63% of countries and accounted for larger shares of total national income. Notable increases were recorded in many lower income countries (EFA Global Monitoring Report, 2012). Despite these significant increases in education financing through domestic resource mobilisation, considerable shortfalls in the required resources to achieve EFA persist in many lower and middle income countries. Moreover, the education sector only experienced limited success in mobilising additional international financial support under the MDGs (EFA Global Monitoring Report, 2012).

For lower income countries where education remains significantly underfunded, the multilateral donor agencies (MLAs) are extremely important. Despite the continued flow of educational financing from some important donors², the donor base for education remains narrow, and many bilateral donors are

decreasing overall funds for education (EFA Global Monitoring Report, 2015). Although multilateral aid for education increased between 2002 and 2011, the share allocated to basic education declined in favour of higher education funding, so this needs to be addressed in the future.

One of the key factors that hinders effective financing is the lack of a global aid architecture for education that coordinates donors (EFA Global Monitoring Report, 2015). To improve efficiency of financing, national education accounts have been proposed for better coordination and oversight as well as a more complete picture of education funding (Rose & Steer, 2013; Schmidt-Traub & Sachs, 2015). There are also calls to establish a Global Education Fund aiming to disburse USD 15 billion annually by 2020 which could draw on the organisational and operational experiences of the Global Partnership for Education (Schmidt-Traub & Sachs, 2015). Furthermore, financial support from the private sector could contribute significantly to achieving global education goals, although currently they account for only a fifth of the funding compared to government sources (EFA Global Monitoring Report, 2012). It is vital to explore the potential of new financing sources and to establish innovative funding approaches to fill financing gaps and strengthen how/where such aid is spent (EFA Global Monitoring Report, 2012; UNESCO, 2015a; World Bank Group, 2013). Although there is growing optimism regarding global support for education, caution should be exercised in relation to the perception that once a global fund is initiated “it would quickly attract supporters from around the world” because the “turnover rate” on investment in education is longer term and would dissuade donors who normally have expectations for quick, short-term results from investments.

Governance, Accountability and Partnerships

Governments play the key role in implementation, management and financing of effective and equitable national education systems. “Governments should integrate education planning into poverty-reduction and sustainable development strategies where appropriate, and ensure that policies are aligned with their legal obligations to respect, protect and fulfil the right to education” (UNESCO 2015a: 14). Good governance of education depends on inclusive participation of key actors and development of multi-faceted partnerships, and it is the role of governments to ensure that the governance processes for education are participatory and transparent. “The main parties contributing to the success of educational reforms are, first of all, the local community, including parents, school heads and teachers; secondly, the public authorities; and thirdly, the international community. Many past failures have been due to insufficient involvement of one or more of these partners” (Delors 1996: 26). Inclusivity, participation and accountability are recommended as essential criteria for good governance of education (UNSG, 2014; UNESCO, 2015a).

Institutional factors of governance include legal mandates and legislation, but these also require effective policy coherence and coordination. Governments will need to “guide the process of contextualising and implementing the Education 2030 goals and targets” into the mandates for education (UNESCO 2015a: 14), and SDG 4 targets should be aligned with countries’ individual policies and strategies for sustainable development. Advancing education within the context of the SDGs also necessitates inter-ministerial collaboration and cross-sectoral coordination. Furthermore, streamlining the flow between policy and implementation in education requires delegation of responsibilities and authority at all levels of the policy process from national governments down to individual schools and classrooms. Additional consideration on how education mandates influence practice across various sectors is needed. Formal education policies act as direct mandates for responsible public institutions, while non-formal education policies often require governments to strongly facilitate the engagement of civil society, community and private sectors (Didham & Ofei-Manu, 2012a).

Both the final monitoring reports for EFA (EFA Global Monitoring Report and DESD (Buckler & Creech, 2014) identify multi-stakeholder partnerships as decisive for progress made and view such partnerships as vital in increasing implementation capacities of education systems. Calls have been made for the inclusion of families, communities, youth, students, and teachers in partnerships for policy development and decision making; while civil society, the private sector, foundations and the research community are identified as key actors in mainstreaming and implementing education policies (UNESCO, 2015a). These partnerships can lead to a holistic and integrated understanding of education systems and through this support evidence-based policy making, practical planning and applicability, applied and relevant learning, transparency and accountability.

Accountability is particularly important for the governance of education. It must be framed across the entire educational process – meaning it must be integrated into structures; it must be part of the review process in education planning; and it must be a focus in the assessment of schools, teachers and student performance. In terms of governance, accountability needs to ensure that policies are properly put into action, responsibilities are fulfilled, and resources are effectively mobilised. For the management of education systems, the quality of curricula, schools, and teachers should all be benchmarked against specific criteria and qualifications. Within educational practice, mechanisms “may include accountability measurements such as practice standards and targets, value and behaviour change, ESD knowledge gain and assessment tools for monitoring and evaluation” (Didham and Ofei-Manu 2012b: 87).

Effective Coordination

Effective coordination can ensure that policy-level goals for inclusiveness, equality, effectiveness and quality are met in the management and implementation of education. A ‘whole government’ approach is needed to ensure that what is practiced within schools and communities contributes to the development of knowledge-based societies and the necessary skills/capacities to realise sustainable well-being for all (UNESCO, 2015a). Effective coordination starts at international and regional levels to tackle common challenges and scale-up good practices. At national, sub-national, and local levels, effective coordination will ensure multi-stakeholder engagement, common mechanisms for planning, financing and evaluation, as well as appropriate implementation methodologies. Additionally, “there is need for stronger leadership, coordination and synergy within governments as regards education development and its integration into wider socio-economic development frameworks” (UNESCO, 2015a: 16). National governments must ensure effective coordination and planning from international down to local level. This is a prerequisite for successful adaptation and contextualisation of the Education 2030 agenda for their countries and for efficient mobilisation of necessary capacities and resources needed for implementation.

Monitoring, Reporting and Evaluation for Evidence-Based Policies

Monitoring and evaluation (M&E) is a crucial MOI because it reveals achieved progress in a timely manner and enables corrective actions when results are unsatisfactory. M&E thus enables an iterative cycle for regular review and improvement of implementation. The final report of DESD highlights the need to improve M&E mechanisms as one of the main challenges for ESD and argues for a stronger effort to elucidate the causal relationship between education and sustainable development. “To date, there has been limited use of monitoring tools to assess the quality of ESD programmes, the extent of their implementation, and the ESD learning outcomes they generate. M&E must be improved to secure the evidence for continued and expanded investment in ESD, and for reflexive engagement with ESD as an emerging educational reorientation process” (Buckler and Creech 2014: 32).

M&E is essential across all SDGs, and it necessitates a massive undertaking to identify appropriate indicators, collect, manage and evaluate essential data, and ensure timely assessment so adverse results may be quickly resolved. The key purpose of M&E deserves emphasis, “to engender a process of both individual and institutional learning by creating an action-reflection cycle that supports the continual review and improvement of ... implementation and practice” (Didham and Ofei-Manu 2012b: 103). Within the Education 2030 agenda, the expertise from the EFA global monitoring mechanisms will be renewed as the Global Education Monitoring Report.

National governments are to take the primary responsibility for establishing and incorporating the mechanisms for effective monitoring and accountability into their respective policy and planning strategies (UNESCO, 2015a). With quality education improvements a key objective in learning for sustainable development, the M&E of SDG 4 is more arduous than previous education goals. This requires “a multi-dimensional approach, covering system design, inputs, contents, processes and outcomes” (UNESCO 2015b: 17). Monitoring global progress towards universal access and attainment in education is statistically straightforward (although still difficult to conduct), but assessing if education empowers societal change towards sustainability is more demanding.

Lessons from DESD show a tendency “to measure inputs, such as the development of strategies, plans, coordinating mechanisms and resources, as well as 113 Robert J. Didham and Paul Ofei-Manu 114 intermediate outcomes, such as changes in policy and curricula. Whether these have led to the desired changes in learning attainments or whether learners are now contributing to the sustainability of communities and nations has been difficult to assess” (Buckler and Creech 2014: 184).

This challenge requires looking beyond traditional M&E mechanisms and pursuing a strategic approach to assess the quality and performance of educational systems – not only in regards to the level of knowledge dissemination, but also in terms of the lifelong learning skills and adaptive/problem solving capacities that are individually and collectively gained. In one sense, an M&E process is inherently limited by its data collection and assessment methods because this predicates what type of information can be collected. However, in another sense the M&E process is determined by the selected targets and indicators it must report on, and this further directs actual work prioritisation and implementation as efforts are commonly aimed at demonstrating improvements only in areas which are specifically measured. In order to understand if education is contributing to the sustainability of society, M&E processes must look beyond indicators that solely track progress on MOI

Conclusion: Empowering a Learning Society for Sustainability

The Global Action Programme on ESD identifies two parallel objectives simply defined as

- 1) integrating sustainable development into education, and
- 2) integrating education into sustainable development (UNESCO, 2014). Throughout the discussion on SDG 4 in this chapter, the opportunity for enhancing the quality of education through the integration of sustainable development – or ESD specifically – has been repeatedly stressed. Not quite as frequently but with as much zeal, the importance of education as a cross-cutting MOI and the ability to enrich achievement across the SDGs through the stronger integration of education throughout the sustainable development agenda (and not only as a standalone goal) has also been highlighted. Although ESD is present within Target 4.7, throughout the post-2015 development agenda and the Education 2030 agenda an integrated and holistic understanding of education and sustainable development (or learning for sustainability) is relatively unapparent. This chapter concludes by recommending two parallel approaches

for achieving a learning society for sustainability through a focus on integrating education into sustainable development and integrating sustainable development into education (see Figure 5.2 and Table 5.2 for additional information).

For the 'integration of sustainable development into education', the focus of the recommendations is on the combined perspective of advancing quality education and achieving ESD-based learning performance. This perspective needs greater incorporation into SDG 4 and its implementation. Achieving quality education for sustainable development (QESD) must be stressed as a universal goal that builds on and supports the goals for access and attainment. This QESD perspective could be integrated into the targets of SDG 4 to strengthen its overall efficacy, but it also needs to serve as the defining construct in national-level education planning and for the mobilisation of relevant education MOI. Such identification of QESD as a long-term achievement target will help to ensure that policymakers and practitioners better appreciate quality education's pivotal role in sustainable development and reduce the likelihood that the less quantifiable elements of quality education are cut from budgets, policy agendas and curricula in favour of short-term, quantifiable gains.

References

Buckler, C., & Creech, H. (2014). *Shaping the Future We Want: UN Decade of Education for Sustainable Development (2005-2014) - Final Report*. Paris: UNESCO.

Carneiro, R. (1996). *Revitalizing the Community Spirit: A glimpse of the socializing role of the school in the next century*. In *Learning: The Treasure Within* (pp. 201–204). Paris: UNESCO. Center for Global Development. (2006). *Education and the Developing World: Why is education essential for development*. Washington, D.C.

CIDA. (2013). *Achieve Universal Primary Education (MDG 2)*. Gatineau, Quebec. Retrieved from [http://www.acdi-cida.gc.ca/INET/IMAGES.NSF/vLUIImages/MDGpdf/\\$file/MDG-2-E.pdf](http://www.acdi-cida.gc.ca/INET/IMAGES.NSF/vLUIImages/MDGpdf/$file/MDG-2-E.pdf)

Collier, P., & Sambanis, N. (Eds.). (2005). *Understanding Civil War: Evidence and analysis*. Washington, D.C: The World Bank. Delors, J. (1996). *Education: The necessary Utopia*. In *Learning: The Treasure Within* (pp. 11–33). Paris: UNESCO.

Didham, R. J., & Ofei-Manu, P. (2012a). *Education for Sustainable Development Country Status Reports: An evaluation of national implementation during the UN Decade of Education for Sustainable Development (2005-2014) in East and Southeast Asia*. Hayama, Japan. Retrieved from <http://pub.iges.or.jp/modules/envirolib/view.php?docid=4140>

