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Sustainable Development: Environmental, Economical, Social Well-Being for Today and Tomorrow

ABSTRACT: In 1987, the World Commission on Environment and Development stated that sustainable development is development meets the needs of the present without compromising the ability of future generations. Sustainable development constantly seeks to achieve social and economic progress in ways that will not exhaust the earth's finite natural resources. The needs of the world today are real and immediate, yet it's necessary to develop ways to meet these needs that do not disregard the future. The capacity of our ecosystem is not limitless, meaning that future generations may not be able to meet their needs the way we are able to now. The growth that is unmanaged and unsustainable will lead to increased poverty and decline of the environment. We owe it to future generations to explore lifestyles and paths of development that effectively balance progress with awareness of its environmental impact. Sustainable development practices can help us do this; and through education and building awareness, preserving the future is within everyone's reach. It is our duty to make people aware about the sustainable development and its importance for our future generation. In this paper, we will discuss that education is the only instrument which can provide knowledge on this particular respect to the common people.

KEY WORD: Sustainable development, economic progress, educational awareness, future generations, and quality of life.

ABSTRAKSI: "Pembangunan Berkelanjutan: Lingkungan, Ekonomi, Kesejahteraan Sosial untuk Hari Ini dan Esok". Pada tahun 1987, Komisi Dunia tentang Lingkungan dan Pembangunan menyatakan bahwa pembangunan berkelanjutan adalah pembangunan yang memenuhi kebutuhan saat ini tanpa mengorbankan kemampuan generasi mendatang. Pembangunan berkelanjutan terus berupaya untuk mencapai kemajuan sosial dan ekonomi dengan cara-cara yang tidak akan menguras sumber daya alam yang terbatas. Kebutuhan dunia saat ini adalah nyata dan segera, namun cara-cara untuk memenuhi kebutuhan tersebut yang tidak mengabaikan masa depan perlu dikembangkan. Kapasitas ekosistem kita tidak tak terbatas, yang berarti bahwa generasi masa depan mungkin tidak dapat memenuhi kebutuhan mereka dengan cara yang kita dapat sekarang. Pertumbuhan yang tak dikelola dan dilestarikan dengan baik akan mengakibatkan peningkatan kemiskinan dan penurunan kualitas lingkungan. Kita berutang kepada generasi mendatang untuk mengeksplorasi gaya hidup dan jalur pembangunan yang efektif dalam menyeimbangkan kemajuan dengan kesadaran dampak lingkungan. Praktek-praktek pembangunan berkelanjutan dapat membantu kita melakukan ini semua; dan melalui pendidikan dan penyadaran, pelestarian masa depan berada dalam jangkauan setiap orang. Adalah tugas kita untuk membuat orang sadar tentang pembangunan berkelanjutan dan pentingnya bagi generasi kita di masa depan. Dalam tulisan ini, kami akan membahas pendidikan sebagai satu-satunya alat yang dapat memberikan pengetahuan tentang hal ini, khususnya menghargai kepentingan umum.

KATA KUNCI: Pembangunan berkelanjutan, kemajuan ekonomi, kesadaran pendidikan, generasi masa depan, dan kualitas hidup.

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INTRODUCTION

Sustainable development is an approach to development that takes the finite resources of the Earth into consideration. This can mean a lot of different things to different people, but it most commonly refers to the use of renewable energy resources and sustainable agriculture or forestry practices. It also entails the use of sustainable mineral use along with many other things. The idea is to create a system that is “sustainable”, meaning one that can keep going indefinitely into the future.

The ESF (Education for a Sustainable Future) fosters an understanding of the interconnectedness of ecology, economics, and social equity. It utilizes a multi-disciplinary, learner-centred approach, and an innovative and participative style to sensitize and empower individuals, especially students, to think, act, and re-act as responsible citizens and to find sustainable solutions to real life issues, at local, national, and international levels.

Hence, it is a mix of EE (Environmental Education), VE (Value Education), CE (Citizenship Education), McEd (Multidisciplinary Education), and SE (Systems Education); and uses diverse educational techniques and strategies like experimental learning, enquiry based learned, situational analysis, forward and backward visioning, storytelling, brainstorming, and mapping to explore the issue in its totality.

According to Julian Agyeman (2009), Assistant Professor at Tufts University, sustainability places emphasis upon the need to ensure a better quality of life for all, in a just and equitable manner, whilst living within the limits of supporting eco-systems (Agyeman, 2009). The views expressed above not only aptly summarise the views articulated in the Earth Charter, but also sum up the underlying principles of ESF – the only means to attain the sustainability goals, as defined above. The Earth Summit, the UN (United Nations) Conference on Environment

and Development, in 1992, and its Agenda 21, also emphasized the role of education in creating and nurturing sustainable communities.¹

The Johannesburg Summit, in 2002, re-affirmed the importance of education in achieving the Millennium Development Goal of international co-operation to promote strategies for SD (Sustainable Development). Then, in December 2002, the United Nations General Assembly declared the period from 2005 to 2014 as the DESD (Decade of Education for Sustainable Development). DESD envisions a world where everyone has the opportunity to benefit from education, and learn the values, behaviour and lifestyles essential for a sustainable future and for positive societal transformation.²

Hence, if communities and nations hope to achieve sustainability goals, basic education must be reoriented to integrate ESD (Education for Sustainable Development) at all the stages of education – pre-primary, primary, secondary, higher secondary, and advanced – and within all forms of the existing educational set-up, i.e. formal and otherwise (Balisacan, Ujjayant & Majah-Leah, 2014).

Sustainable Development. Sustainable Development is often described as being built on three, equally important foundations or pillars.

Social Development. To have a sustainable future, the needs of people must be met equally. Needs are things like access to medical care, suitable housing, food, and sanitation. Additionally, people will want as high a standard of living as possible and this must be achieved in a way that does not harm or exploit others. Sustainable development addresses these needs by promoting equality,

¹See, for example, <https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf> [accessed in Nadia, India: January 15, 2016].

²See also “UNESCO and Sustainable Development”. Available online also at: <http://unesdoc.unesco.org/images/0013/001393/139369e.pdf> [accessed in Nadia, India: January 15, 2016].

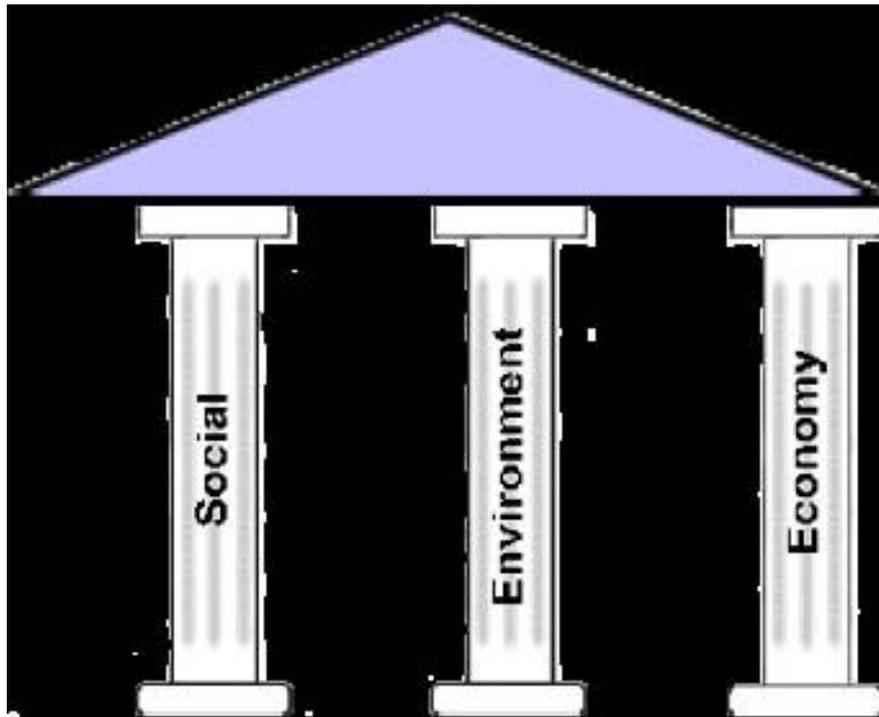


Figure 1:
Sustainable Development

education, and participation in local communities.

Environmental Protection. Planet Earth has a limited amount of resources. We all need clean air, clean water, and land to live on that also is productive enough to provide good quality food for all. Sustainable human activities look to protect the Earth's environment to make sure it is not damaged for future generations. Current issues include global warming, overfishing the seas, and deforestation on the land.

Economic Development. People throughout the world deserve the best standard of living that is sustainable. Improving medical care, sanitation, education, and enabling people to support themselves with a good standard of living requires the generation of wealth by economic activity. Sustainable economies also need to be competitive in a world market. Products that are too expensive to buy cannot be sustainable, even if they are environmentally friendly. See figure 1.

WHY SUSTAINABLE DEVELOPMENT IS IMPORTANT?

It's no secret that people are living longer and that the global population is on the rise. In fact, the UN (United Nations) projects that there will be more than 10 billion people living on the Earth by the year 2100 (UN, 2015). This explosion in population is perhaps one of the greatest reasons why sustainable development is so important.

Protect Technological Resources. The people coming into this world are coming into an increasingly technological age, where more people than ever are relying on technology for nearly every aspect of their lives. Of course, these technologies are not built out of thin air and good intentions. They require a significant array of minerals and other inputs simply to be manufactured. This doesn't account for the amount of resources required to develop them in the first place.

Provide Basic Human Needs. A rising population will also make use of the bare

essentials of life such as food, water, and shelter. The provision of these essentials is based almost entirely around having an infrastructure that can sustain them for the long-term. If energy is continually developed on finite fossil fuels instead of sustainable options, the cost and environmental toll of supplying even basic needs can become staggering.

Agricultural Necessity. Agriculture will have to catch up with that growing population as well, figuring out ways to feed around 3 billion more people than it currently does. If the same unsustainable tilling, seeding, watering, spraying, and harvesting methods are used into the future, they can become very costly as fossil fuel resources run out. *Sustainable agriculture* practices like crop rotation and effective seeding practices can help to promote high yields while protecting the integrity of the soil as it produces food for larger amounts of people.

Accommodate City Development. As populations rise, cities will need to become larger to accommodate the influx of new residents. If these cities are developed non-sustainably, they will become more and more expensive to build and maintain over time. This is because the resources being used to develop the cities will be finite fossil fuels that will only get more expensive as they run out over time. The higher volume of these fuels required to produce energy for this larger population will also negatively impact the air quality of cities. If cities use sustainable development practices, they can conceivably make way for new housing and business developments indefinitely.

Provide Financial Stability. Sustainable development can also produce more financially sustainable economies throughout the world. Resource-poor economies will gain access to free and accessible energy through renewables while also having the opportunity to train workers for jobs that won't be displaced by the basic reality of finite resources. Jobs built

around the "old" model of unsustainable development simply have no place in economies of the future. This has nothing to do with politics or ethics, but rather the bare mechanics of how economies price out finite resources over time. Industries built around a reliance upon a resource that will not be accessible into the future will ultimately fail, leaving sustainable development as the only option moving forward.

Sustain Biodiversity. Biodiversity suffers through overconsumption and unsustainable development practices. Beyond the basic ethical quandary presented by this fact, there is the further concern that these species are a part of a food web that humans rely on. For example, if unsustainable agricultural practices are used in regard to pesticides, bees and other pollinators could be negatively impacted. Without bees, at least 19 major food crops would suffer and nearly 50% of the food in most grocery stores would be non-existent. Also, unsustainable development pollutes the oceans, which are home to a significant amount of algae species that humans rely on for a significant amount of the oxygen they breathe.

EDUCATION FOR SUSTAINABLE DEVELOPMENT/ FUTURE: AN EMERGING GLOBAL CONCEPT

It is important at this point to clearly understand the concepts of ESD (Education for Sustainable Development) and ESF (Education for Sustainable Future). ESD is future oriented education that fosters understanding of the interconnectedness of ecology, economics, and social equity. The five major components of ESD that guide and motivate people to seek sustainable livelihoods, participate in a democratic society, and live in a sustainable manner are as follows:

First, Knowledge. People need basic knowledge from the natural sciences, social sciences, and humanities to understand the

principles of SD (Sustainable Development). Knowledge based on traditional disciplines supports ESD (Education for Sustainable Development).

Second, Values. They are an integral part of ESD (Education for Sustainable Development), with respect at the centre: respect for present and future generations, respect for cultural difference and diversity, and respect for the natural environment. Values taught in school need to reflect the larger values of the society that surrounds the school. Social justice is also a central part of ESD, since it includes respect for the traditions and religions of other communities, meeting basic human needs, and concern for the rights, dignity, and welfare of all people.

Third, Issues. Teachers should be equipped to help students identify and think about the complexities of issues from the perspectives of many stakeholders. Older pupils and university students need to acquire skills to analyse issues and the proposed solutions to them, understand the values underlying opposing positions, and analyse conflicts arising from those issues and proposed solutions.

Fourth, Perspective. The ability to consider an issue from the view of different stakeholders is essential to ESD (Education for Sustainable Development). Every issue has a history and a future. Looking at the roots of an issue and forecasting possible futures based on different scenarios are part of ESD, as is understanding that many global issues are linked. For example, over-consumption of such consumer goods as paper leads to deforestation, which is thought to be related to global climate change.

Fifth, Skills. ESD (Education for Sustainable Development) must give people practical skills that will enable them to continue learning after they leave school, to have a sustainable livelihood, and to live sustainable lives. Hence, ESD is value-driven and utilizes interdisciplinary and multi-disciplinary, learner centered

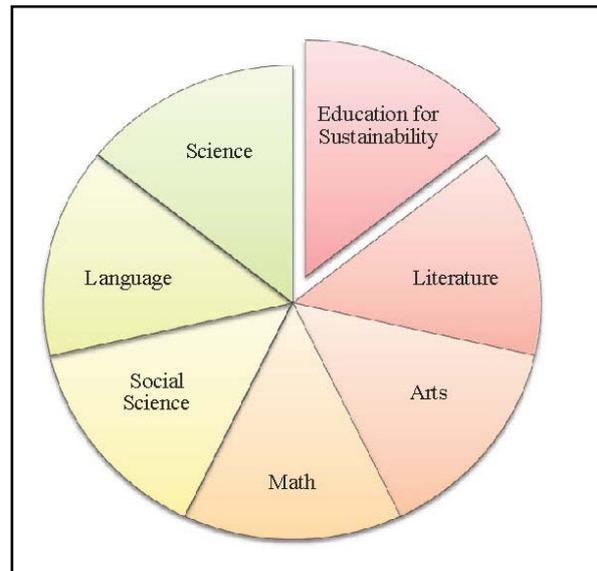


Figure 2:
 A Weak Structure

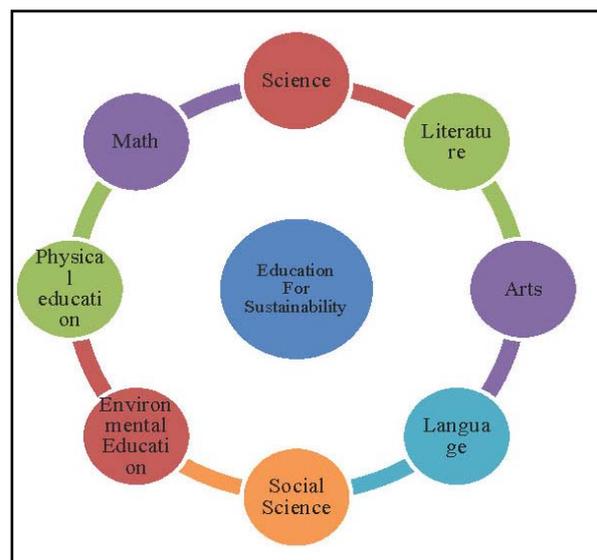


Figure 3:
 A Strong Structure

approaches (as illustrated in figure 2 and figure 3), innovative and participative styles to sensitize and empower individuals, especially students, to think, act, and re-act as responsible citizens and find sustainable solutions to real life issues, at the local, national, and international level.

ESD (Education for Sustainable Development) is transformative education,

which calls for transformational motivators or educators who can understand its continuously evolving nature. The challenge today before teachers is to integrate ESD in the formal structured curriculum by addressing all the above components in it (i.e. knowledge, values, issues, perspectives, skills, and strategies). Simply adding more to the curriculum will not be feasible in most schools; they already have a full curriculum. Deciding what to leave out – what does not contribute to sustainability or is obsolete – is an integral part of the reorienting process.

THE ROOTS OF ESD IN INDIA

ESD (Education for Sustainable Development) has deep roots in Indian history. Since Vedic times, Indian religion and culture in its diverse forms has proposed, practiced and preached ESD as it is understood today. One finds several instances in our holy scriptures where special stress has been laid on inculcating ESD from a very young age. The basic values and underlying principles of ESD were taught at home, and were later nurtured by the *gurus*, i.e. the teachers, in the *gurukuls* (Kashalkar-Karve, 2013).

Set in natural surroundings, the *gurukuls* (the traditional educational structure) provided an excellent platform to the *shishyas* (students) for a first-hand experience of nature. This helped them to acquire a deeper understanding of the various issues resulting from the interconnectedness of society, economy and ecology, developed in them the right perspectives, values and skills so as to lead sustainable lives. Though challenging and difficult, the well-defined, structured, and versatile approach of the *gurukuls* was unique in all aspects and very close to the present model of ESD being proposed across the globe.

Even in the pre-independence era, lot of stress was laid on EE (Environmental Education) since the *vidhyalayas* or the *padhshalas* (schools) were set in rural settings and had an open and flexible

structure (i.e. not confined to the four walls of the school building). This provided ample scope for a wide range of activities for the young students.³

The *Vardha* scheme formulated by Gandhiji and the concept of *Shantiniketan* by Sri Rabindranath Tagore re-emphasized the importance attached to the concept of ESD in India down the ages. With the coming of the British, the Indian education system witnessed a major transformation both in terms of structure and methodology used. The present education system reflects the strong dominance of the British system. One rarely comes across the rich traditional *gurukul* system of education in modern India (Kashalkar-Karve, 2013).

Despite the strong roots of ESD in Indian soil, do the present teachers in India understand ESD as the emerging global concept? Do they share the same educational goals when it comes to integrating ESD in the school curriculum? Do they consider ESD an important concept? Do they see it as a Western concept, a foreign concept difficult to assimilate and adopt? How many strongly feel that the *gurukul* system in India was in the true sense ESD? Are they ready to look beyond and innovate and experiment in this field?

These are some of the vital issues that the present study aims to present, highlight, and share with the various stakeholders of ESD.

Who are the Stakeholders for Education for Sustainable Development? Some key stakeholder groups for ESD (Education for Sustainable Development) include: (1) Governments and intergovernmental bodies; (2) Mass media; (3) Civil society and non-governmental organizations; (4) The private sector; and (5) Formal education institutions.

These sectors can be further divided into sub-groups to demonstrate the wide range of

³See, for example, "Category: Boys' Schools in India". Available online also at: https://en.wikipedia.org/wiki/Category:Boys%27_schools_in_India [accessed in Nadia, India: January 15, 2016].

people that can be engaged. Stakeholders will choose to become engaged in different ways. It is important to develop partnerships so that people learn from and support each other in their endeavours.

BACKGROUND OF THE STUDY AND OBJECTIVES OF ESD

A number of multi-dimensional, “Beyond Class-rooms” programs on VE (Value Education), EE (Environmental Education), CP (Community Participation) and CE (Citizenship Education), and CBT (Capacity Building for Teachers), organized by Prithvi Innovations under the broad theme of ESD, in different schools of Lucknow over a period of three years provided Prithvi ample opportunity to closely interact with the principals, teachers, and students of various schools. This helped in gaining some insight into the present system of education followed by various schools, the structure and content of the course curriculum of pre-primary, primary, middle and senior level, the competency and commitment of teachers, the teaching approach and methodologies followed by them and the evaluation pattern.

The overwhelming response and participation of all concerned (principals, teachers, students, parents, and staff) in the above programs, established beyond doubt the immediate need for this kind of re-orientation in the present educational system to integrate ESD (Education for Sustainable Development) in all disciplines, so as to make education a life-long learning experience capable of bringing positive socio-economic change leading to a sustainable future.

It also highlighted the immediate need to develop a well-defined, focused study to explore and identify, examine and evaluate, compare and contrast such transformational interventions taking place outside India over a period of time, and to document such responses, to serve as the basis of further research and innovation in the field

of education. This is how the present study came into existence.

Teachers play an important role in the development of a child from a very early age; hence, it is important to know what they think, understand, and feel about ESD, both in the Indian and international context. The paper has thus been divided into three phases with the aim of assessing and analysing the following major components of ESD, with respect to Indian teachers.

Firstly, their present *level of awareness, knowledge* about the various concepts related to ESD; secondly, their *perspective or approach* towards ESD; thirdly, the present *skills and styles* utilized by the teachers to promote ESD in their day-to-day curriculum; fourthly, the nature of the *support system* that facilitates the adoption of ESD in the daily teaching schedule on a regular basis; fifthly, the barriers or constraints that hinder the process of adoption of ESD as a regular teaching tool; sixthly, their *attitude, inclination or willingness* to adopt ESD; seventhly, their own ideas, *suggestions and strategies* to promote ESD amongst other teachers; and eighthly, the degree of their *concern and commitment* towards developing guidelines and priorities for ESD in this decade (*cf* Choudhory, 2012; and Sachs, 2015).

The information and insights gained would go a long way in evolving a progressive, creative, dynamic, effective, and practical strategy with regard to ESD in the coming decade, in line with the vision of the DESD (Decade of Education for Sustainable Development).

IMPLICATION OF ESD IN INDIA

Education has always been considered as the only key component of human development and greatest liberating force. Hence, traditionally, education has always held the most venerable position in our society. It is considered as fundamental to all round development of the individual both at material and spiritual levels. Education is

intrinsically intertwined with the development process and constitutes the instrumentality of modernisation of tradition (Rogers, Kazi & John, 2007).

Environmental education has been already introduced in school syllabus. The positive point is that not in secondary and higher secondary level but also in primary, graduate and in higher studies environmental education become a compulsory subject. But, in spite of all these there is lack of awareness among students as well as among parents.

The present study attempts to examine the various actions taken and status achieved relating to school education in India. The correlates of enrolment and dropout examined in great detail and challenges ahead also looked into. The DISE (District Information System for Education) data available for 581 districts in 29 States/Union Territories of India for 2004-2005 forms the basis of our investigation. The reliability of analysis based on this data is, of course, subject to the limitation of collecting such a huge data.

Actions. The school education in India has a long history. The concept of the provision of elementary education to all children has its root in the beginning of Indian civilization. In the *Vedic Aryan* times, education for children was not provided by the state but was more in the form of a religious practice. Education began with *Upanayana* ceremony, the practice of taking the pupil to the teacher or *guru* for education.⁴

During pre-independence period, the British build up an elementary education system for training natives for administrative work under the empire. A tremendous progress made with the transfer of elementary education to Indian control under the Dyarchy (1921-1937) when the value-education was stressed, universal

participation in education for all attempted, and expenditure allocation increased (Venkatanarayanan, 2013).

The post-independence period saw a very strong demand by the people for free and compulsory universal elementary education for national development. The free and compulsory education to all children up to the age of 14 years has become the constitutional commitment in 1950. In 1952-1953, the Secondary Education Commission and again in 1964-1965, the Education Commission made specific recommendations for improving school education. The Education Commission (1964-1965) took a more comprehensive view of the entire educational system in relation to national development (Ghosh, 2000).

Livelihoods Approaches. Sustainable livelihoods approaches have evolved from three decades of changing perspectives on poverty, how poor people construct their lives, and the importance of structural and institutional issues (Ashley & Carney, 1999). The concept of “livelihoods” has become increasingly popular in development thinking as a way of conceptualizing the economic activities poor people undertake in their totalities.

The focus of development thinking in the 1970s on employment and “jobs” has given way to the realization that while job creation in the formal sector continues to be one important strategy for poverty reduction, the reality for poor people in the South is that survival and prosperity depends on the pursuit of diverse and multiple activities simultaneously, by different family members, taking advantage of different opportunities and resources at different times.

Livelihood activities may be composed of, for example, year-round or seasonal formal-sector employment, informal trading or sale of labor, home gardens and food processing, livestock production, cultivation or use of natural or common property resources, labor exchange among family or neighbours,

⁴See “Education in India”. Available online also at: <http://www.nios.ac.in/media/documents/SecIHCour/English/CH.18.pdf> [accessed in Nadia, India: January 15, 2016].

contracted “home-work”, borrowing, scavenging, stealing, and begging. They may be on or off farm, include local or international migration, involve elderly household members or children, be legal or illegal.

For poverty analysis and poverty reduction interventions to be effective, it is important to understand these multiple activities in order to understand the multiple sources of vulnerability faced by the poor, the multiple ways in which their lives are affected by structures and institutions, and the varied ways in which development interventions may strengthen or weaken these livelihood activities. In addition to recognizing these activities, using livelihoods approaches requires an attempt to understand the processes that underlie poverty, and the social, cultural, political, and institutional contexts in which poor people live. Although the individual, household, and community are the primary levels of analysis, livelihoods approaches seek out the relevant interactions at micro, intermediate, and macro levels (*cf* Saigal, 2010; and Otieno, 2013).

The Sustainable Livelihoods Frameworks. The sustainable livelihoods conceptual framework is a particular form of livelihoods analysis used by a growing number of research and applied development organizations, including the DfID (Department for International Development) of the United Kingdom as one of its most ardent supporters, the UNDP (United Nations Development Program), as well as NGOs (Non-Governmental Organizations), such as CARE and Oxfam (DfID 1997; and Carney *et al.*, 1999).

It is primarily a conceptual framework for analysing causes of poverty, peoples’ access to resources and their diverse livelihoods activities, and relationship between relevant factors at micro, intermediate, and macro levels. It is also a framework for assessing and prioritizing interventions. The IFPRI/ SPIA (International Food Policy Research

Institute/Standing Panel on Impact Assessment) study is testing and adapting the sustainable livelihoods framework for use in agricultural research, with the aim of assisting agricultural researchers to conduct ex-post and ex-ante assessments of the impact of their interventions on poverty (Adato & Meinzen-Dick, 2015).

To date, the vast majority of impact assessments in CGIAR (Consultative Group for International Agricultural Research) centres have used conventional measures of poverty based on income and consumption data, and sometimes nutrition indicators. The sustainable livelihoods framework takes as a starting point an expanded definition of poverty that looks beyond the following:

Firstly, conventional poverty measures based on income, consumption, or nutrition to additional aspects of poverty and well-being, e.g. access land, water, credit, or education, vulnerability to natural disasters, political rights, physical safety, and social relationships that provide economic security and social well-being; *secondly*, “today’s poor” to who is vulnerable or likely to be “tomorrow’s poor”; *thirdly*, aggregated household or head counts to the effects of social differentiation by class, ethnic group, gender, and other locally-specific social differences; and *fourthly*, external standards to self-perceptions by local communities on who is poor and what poverty means, taking into account what people themselves value.⁵

CONCLUSION

In the end, there is no argument beyond a political one when it comes to sustainable development. Sustainable development is cleaner, has the potential to be more efficient, has long-term potential, and is the only way forward for a growing world economy. People already use a huge amount of the

⁵See, for example, “CGIAR (Consultative Group for International Agricultural Research)”. Available online also at: <https://en.wikipedia.org/wiki/CGIAR> [accessed in Nadia, India: January 15, 2016].

Earth's non-renewable resources to live their everyday lives. As more people join them, more of these resources are needed and the faster these resources are depleted.

Over enough time, sustainable development will no longer be an option for people who want to feel good about their choices. It will be the only available option for cities and regional development. It's simply a matter of time until there is no option. The question is whether humans have the will to make the transition toward sustainability on their own terms or if they will simply be forced to make a rapid transition when all of the other options finally run out.⁶

References

- Adato, Michelle & Ruth Meinzen-Dick. (2015). "Assessing the Impact of Agricultural Research on Poverty Using the Sustainable Livelihoods Framework: Discussion Paper 128". Available online also at: <http://ageconsearch.umn.edu/bitstream/15926/1/dp02128b.pdf> [accessed in Nadia, India: January 15, 2016].
- Agyeman, Julian. (2009). "Toward a 'Just' Sustainability: A Power Point". Available online also at: <https://www.wpi.edu/Images/CMS/Lecture/WPI2009.pdf> [accessed in Nadia, India: January 15, 2016].
- Ashley, C. & D. Carney. (1999). *Sustainable Livelihoods: Lessons from Early Experience*. London: Department for International Development.
- Balisacan, M. Arsenio, Chakravorty Ujjayant & Ravago V. Majah-Leah. (2014). *Sustainable Economic Development: Resources, Environment, and Institutions*. New Delhi: Academic Press.
- Carney, Diana et al. (1999). "Livelihoods Approaches Compared: A Brief Comparison of the Livelihoods Approaches of the UK Department for International Development (DFID), CARE, Oxfam, and the United Nations Development Programme (UNDP) and the United Nations Development Programme (UNDP)". Available online also at: http://www.start.org/Program/advanced_institute3_web/p3_documents_folder/Carney_et.al.pdf [accessed in Nadia, India: January 15, 2016].
- "Category: Boys' Schools in India". Available online also at: https://en.wikipedia.org/wiki/Category:Boys%27_schools_in_India [accessed in Nadia, India: January 15, 2016].
- "CGIAR (Consultative Group for International Agricultural Research)". Available online also at: <https://en.wikipedia.org/wiki/CGIAR> [accessed in Nadia, India: January 15, 2016].
- Choudhory, S.N. (2012). *In Search of Sustainable Development*. New Delhi: Neha Publishers & Distributors.
- DfID [Department for International Development]. (1997). *Our Common Future: Report of the World Commission on Environment and Development*. Geneva, Switzerland: Department for International Development.
- "Education in India". Available online also at: <http://www.nios.ac.in/media/documents/SecICHCour/English/CH.18.pdf> [accessed in Nadia, India: January 15, 2016].
- Ghosh, S.C. (2000). *The History of Education in Modern India (1757-1998)*. New Delhi, India: Orient Longman.
- <https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf> [accessed in Nadia, India: January 15, 2016].
- Kashalkar-Karve, Sanyukta. (2013). "Comparative Study of Ancient Gurukul System and the New Trends of Guru-Shishya Parampara" in *American International Journal of Research in Humanities, Arts and Social Sciences*, Vol.2(1), March-May, pp.81-84. Available online also at: <http://iasir.net/AIJRHASSpapers/AIJRHASS13-140.pdf> [accessed in Nadia, India: January 15, 2016].
- Otieno, Dorcas. (2013). *Environmental Philosophy/Ethics and Sustainable Development*. Nairobi, Kenya: Kenya Organization of Environmental Education.
- Rogers, P. Peter, Jalal F. Kazi & Boyd A. John. (2007). *An Introduction to Sustainable Development*. London: Routledge.
- Sachs, D. Jeffrey. (2015). *The Age of Sustainable Development*. Washington D.C.: Columbia University Press.
- Saigal, Krishan. (2010). *Sustainable Development: The Spiritual Dimension*. New Delhi: Kalpaz Publications.
- UN [United Nations]. (2015). *World Population Prospects: The 2015 Revision, Key Findings, and Advance Tables*. New York: United Nations. Available online also at: http://esa.un.org/unpd/wpp/publications/files/key_findings_wpp_2015.pdf [accessed in Nadia, India: January 15, 2016].

⁶**Statement:** Herewith, we declare that this paper is an original work and has not been published or submitted for publication elsewhere.

“UNESCO and Sustainable Development”. Available online also at: <http://unesdoc.unesco.org/images/0013/001393/139369e.pdf> [accessed in Nadia, India: January 15, 2016].
Venkatanarayanan, S. (2013). “Tracing the Genealogy of Elementary Education Policy in India Till

Independence” in *SAGE Open*, October-December, pp.1–10. Available online also at: <http://sgo.sagepub.com/content/3/4/2158244013510302.full-text.pdf+html> [accessed in Nadia, India: January 15, 2016].



Education and Sustainable Development in India

(Source: <http://www.education4sustainability.org>, 15/1/2016)

Education has always been considered as the only key component of human development and greatest liberating force. Hence, traditionally, education has always held the most venerable position in our society. It is considered as fundamental to all round development of the individual both at material and spiritual levels. Education is intrinsically intertwined with the development process and constitutes the instrumentality of modernisation of tradition.