RESEARCH ARTICLE

Role of Education in Sustainable Development of Modern India

Archana Yadav
Baba Mohan Das College of Education,
Motla Kalan, Rewari, Haryana, 123411
Email: archanabmd1988@gmail.com

ABSTRACT

Sustainable development is the development that meets the needs of present generation without compromising the ability of future generations to meet their own needs. Education for sustainable development allows every human being to acquire the knowledge, skills, attitudes and values necessary to shape a sustainable future. Basic education is a key to a nation's ability to develop and achieve sustainability targets. Education can improve agricultural productivity, enhance the status of women, reduce population growth rates, enhance environment protection, and generally raise the standard of living. But simply increasing basic literacy will not support a sustainable society. Institutional reform, curriculum reform and development of locale specific resource material incorporating Education for sustainable development are priorities. Education for sustainable development requires including key sustainable development issues into teaching and learning like climate change, disaster risk reduction, poverty reduction, bio diversity and sustainable consumption. It also requires participatory teaching and learning methods that motivate and empower learners to change their behavior and take action for sustainable development like conservation of energy, water, tree plantation, use of natural energy etc. If the goals of sustainable development are to be realized, the attitudes of all the stakeholders of education at all levels with regard to our current life styles and impact they have on the environment will need to change.
Key words: Sustainable Development, Education, Modern India

INTRODUCTION

Education encompasses teaching and learning specific skills, imparting of knowledge, positive judgment and well developed wisdom. It has one of its fundamental aspects of imparting culture from generation to generation. It is an application of pedagogy, a body of theoretical and applied research related to teaching and learning. The basic aim of the education system for sustainable development is 'education of a new man', 'a man of a sustainable type of thinking'. Education in its contemporary development should be aimed at the future, should "foresee" and form in a certain way and satisfy needs of future generations of people. "Education is critical for promoting sustainable development and improving the capacity of people to address environment and development issues. It is critical for achieving environmental and ethical awareness, values and attitudes, skills and behavior consistent with sustainable development and for effective public participation in decision making".

The concept of sustainable development is not a mere concept leading to awareness or knowledge, but it is an act that requires more participation in the modern world. All the developed, developing and under-developed countries need to participate in sustainable development practices, so that the whole world becomes a better place to live for the present as well as for the future generations to come. The depletion of nature and natural resources can be traced back to the times when man started to live in caves, lead a nomadic life and settled for practicing agriculture. The depletion of these resources reached its zenith when the basic needs of man has given way for his greed, whereby, he started to exploit the environment by cutting trees, destroying forests, destroying land, constructing buildings, depleting of non-renewable resources, using various modes of transportation, development in technology etc. It is from this realization that 'Education for

sustainable development' (ESD) emerged with an immediate urge to preserve and conserve our nature and natural resources.

Sustainable Development is grounded on four independent systems such as environment, economic, social and political aspects. It include issues pertaining to poverty, biodiversity conservation, agriculture, capacity-building, climate change, desertification and drought, disaster reduction and management, energy, finance, forests, fresh water, health, international law, poverty, sanitation, toxic chemicals, waste management etc. The ethical issues and concerns of sustainable development need to be addressed through education at different levels to make an impact on people's lifestyles and responsible behaviours and help them build a sustainable future. A need to refocus many existing educational policies and programmes to emphasize ESD issues is mandatory, as education can play a very significant role in ensuring the economic, culture and ecological vitality of the growing human world communities. It is the need of the hour to look into what Education can do to foster sustainability. In this paper an attempt has been made to view into the meaning of ESD, with emphasis on is perspectives and concerns in teacher education and also on how to transact ESD.

SUSTAINABLE DEVELOPMENT

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development is generally thought to have three components: environment, society, and economy. The well-being of these three areas is inter related, not separate. For example, a healthy, prosperous society relies on a healthy environment to provide food and resources, safe drinking water, and clean air for its citizens. Thus, sustainability to be a paradigm for thinking about a future in which environmental, societal, and economic considerations are balanced in the pursuit of development and improved quality of life. If you consider the three components to be overlapping circles of the same size, the area of overlap in the center is human well-being. As the environment, society, and economy become more aligned, the area of overlap increases, and so does human well-being. The human rights community says that sustainability is attainable through and supported by peace, justice, and democracy. Economics educators say sustainability is living on the interest rather than the principle.

EDUCATION FOR SUSTAINABLE DEVELOPMENT

Education for Sustainable Development (ESD) is simultaneously a sub-field of education and a conceptual tool to aid policy makers in authoring educational policies that take into account the present environmental, societal and economic challenges. According to the UNESCO, it is based on all levels and types of learning - learning to know, learning to be, learning to live together, learning to do and learning to transform oneself and society." It further says that, "Perhaps ESD can be seen as the total sum of diverse ways to arrive at a 'learning society' in which people learn from and with one another and collectively become more capable of withstanding setbacks and dealing with sustainability-induced insecurity, complexity and risks. From this vantage point, ESD is about- through education and learning- engaging people in sustainable development issues, developing their capacities to give meaning to SD and to contribute to its development and utilizing the diversity represented by all people- including those who have been or feel marginalized- in generating innovative solutions challenges".

NEED FOR SUSTAINABLE DEVELOPMENT

Sustainable Development is a complex concept with its origin in the natural and social Sciences that has been developed through international dialogue in response to the challenges facing the world today. A core principle behind sustainable development is the idea that economic, social and environmental conditions play a major role. Education Sustainable Development has five components; knowledge, skills, perspectives, values and teaching issues which are to be addressed in a formal curriculum for sustainable development. The basic vision of the United Nations Decade for Education for Sustainable Development (DESD) is a world where everyone has the opportunity to benefit from education and learn the values, behavior and life styles required for a sustainable

future and for positive societal transformation. Some of the proposed DESD objectives are to facilitate links and networking, exchange and interaction among stakeholders in ESD; provide a space and opportunity for refining and promoting the vision of, and transition to sustainable development through all forms of learning and public awareness; foster increased quality of teaching and learning in education for sustainable development; develop strategies at every level to strengthen capacity in ESD.

Education For Sustainable Development examine major environmental issues for local, national, regional and international points of view, so that students receive insights into environmental conditions in other geographical areas, Focus on current and potential environmental situations while taking into account the historical perspective; Promote the value and necessity of local, national and international co-operation in prevention and solution of environmental problems; Enable learners to have a role in planning their learning experiences and provide an opportunity for making decisions and accepting their consequences; Relate environmental sensitivity, knowledge, problem solving skills and value clarification to every age but with special emphasis on environmental sensitivity to the learner's own community in early years; Help learners discover the symptoms and real cause of environmental problems; Emphasize the complexity of environmental problems and thus the need to develop critical thinking and problem solving skills; Utilize diverse learning environments and a broad array of educational approaches to teaching/ learning about and from the environment with due stress on practical activities and first hand experience.

EDUCATION FOR SUSTAINABLE DEVELOPMENT AND SCHOOL CURRICULUM

In India, since the mid 1980s efforts have been on to bring Environmental education (EE) in formal education at all levels. In 2003, the Honorable Supreme court of India directed that EE should be a compulsory subject at all levels of education. It further directed that the NCERT should prepare a model syllabus for class I to XII, which shall be adopted by every state in their respective schools. Pacific Education for sustainable development framework (2006) have identified a priority area in formal education and training which focused on structured learning initiatives for improved knowledge and understanding to support implementation of sustainable practices where the objectives of promoting quality education in all member countries was given focus. Inclusion of materials and experiences to develop a conceptual understanding of the phenomenon of change and the problems related to Sustainable development and to develop minds that cope with change and reasonable techniques for doing so is required. Hence ESD should be incorporated in the entire curriculum starting from pre-schooling to higher education which should be transacted in a meaningful manner.

EDUCATION DIRECTLY AFFECTS SUSTAINABILITY PLANS IN THE FOLLOWING THREE AREAS

1. Implementation: An educated citizenry is vital to implementing informed and sustainable development. In fact, a national sustainability plan can be enhanced or limited by the level of education attained by the nation's citizens. Nations with high illiteracy rates and unskilled workforces have fewer development options. For the most part, these nations are forced to buy energy and manufactured goods on the international market with hard currency. To acquire hard currency, these countries need international trade; usually this leads to exploitation of natural resources or conversion of lands from self-sufficient family-based farming to cash-crop agriculture. An educated workforce is key to moving beyond an extractive and agricultural economy.

2. Decision making: Good community-based decisions- which will affect social, economic, and environmental well-being- also depend on educated citizens. For example, a community with an abundance of skilled labor and technically trained people can persuade a corporation to locate a new information-technology and software-development facility nearby. Citizens can also act to protect their communities by analyzing reports and data. For example, citizens who were concerned about water pollution reported in a nearby watershed started monitoring the water quality of local streams.

3. Quality of life: Education is also central to improving quality of life. Education raises the economic status of families; it improves life conditions, lowers infant mortality, and improves the educational attainment of the next generation, thereby raising the next generation's chances for economic and social well-being. Improved education holds both individual and national implications.

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:

1. **Knowledge:** People need basic knowledge from the natural sciences, social sciences, and humanities to understand the principles of SD. Knowledge based on traditional disciplines supports ESD.

2. **Values:** They are an integral part of ESD, 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.

3. **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 analyze issues and the proposed solutions to them, understand the values underlying opposing positions, and analyze conflicts arising from those issues and proposed solutions.

4. **Perspective:** The ability to consider an issue from the view of different stakeholders is essential to ESD. 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.

5. **Skills:** ESD 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. 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.

SUGGESTIONS

Role of education in Sustainable Development is play a main roll in sustainability. Suggestions for ESD are following:

1. Facilitate networking linkages, exchange and interaction among stakeholders in ESD.
2. Foster increased quality of teaching and learning in education for sustainable development.
3. Help countries make progress towards and attain the Millennium Development Goals through education for sustainable development efforts.
4. Provide countries with new opportunities to incorporate ESD into education reform efforts.
5. Adequate resources and support for education for sustainable development are essential. An understanding must be promoted among key decision makers of the potential of education to promote sustainability, reduce poverty, train people for sustainable livelihoods and catalyze necessary public support for sustainable development initiatives.
6. The empowerment of women and girls must be supported by actions to improve their access to basic and higher education, training and capacity building. The emphasis should be on gender mainstreaming.
7. Greater capacity needs to be built in science and technology through improved collaboration among research institutions, the private sector, NGOs and government. Collaborations and partnerships between and among scientists, government and all stakeholders, on scientific research and development and its widespread application need to be improved.
8. Mechanisms must be put in place to make available to developing countries the latest technologies at reasonable cost.

CONCLUSION

Sustainable Development is development that meets the need of the present without compromising the ability of future generations to meet their own needs. Education for sustainable development that includes key sustainable development issues into teaching and learning and requires participatory teaching and learning methods that motivate and empower learners to change their behavior and promotes competencies like critical thinking, imagining future scenarios and making decisions in a collaborative way. This paper attempts to examine the actions taken by the government for eradication of illiteracy and status achieved relating to school education in India.

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