



## NEED FOR ENVIRONMENTAL EDUCATION FOR SUSTAINABLE DEVELOPMENT

**Dr.N. Thyagaraju**

Lecturer in Commerce, SRI A.B.R Government Degree College, Repalle, Guntur, AP.

### **Abstract**

*In the present scenario, due to anthropogenic activities, environmental degradation is in an alarming rate and it results in various environmental issues such as global warming, ozone layer depletion, greenhouse effects, raise in sea water level, improper monsoon and acid rain. Science and technology have brought immense benefits but we are paying a high 'price' for it. There is a wrong myth that economic development is based only in industrialisation. But in the international organisations such as World Bank and International Monetary Fund, environmental degradation is considered as the norm. Science and advanced technology can however only help the process of global sustainable environment in a limited way but they cannot deliver it. The success of the technology lies in its implementation part. In spite of conducting more conferences, seminars and world summits towards the protection of environment for the past two decades, the present world is environmentally less sustainable than in the previous days. The progress whatever the rich developed countries have made so far has largely been achieved through the relocation of their dirty manufacturing facilities to poor developing countries. However the relocation of the manufacturing facilities in this way cannot address the growing problem of anthropogenic pollution – it merely changes the jurisdiction of the pollution created from the 'rich' to the 'poor' world. Therefore in order to achieve the acceptable level of global environmental sustainability, the citizens must be empowered with essential knowledge and information especially in developing countries like India . Since educational institutions are the places where the contact of the society is more, it is possible to bring remarkable changes in the mindset of the public. To protect children living in polluted regions, environmental education represents a relevant means of prevention because this type of education encourages learner's awareness of their environment's ambient conditions, as well as their active participation in solving local problems. It is the need of the hour to propose environmental education with the essential elements of moral philosophy. Conventional educational methods are no longer adequate for the real needs of tomorrow. Future engineers and also other students of specialised areas must acquire knowledge and skills in their own field and keep pace with rapid advances in practically all branches of engineering as well as the other areas of specialisation.. The communication perspective opens the door to other kinds of tools that environmental educators can use in order to improve the educational practice.*

*To this end a generic outline syllabus, including essential elements of moral philosophy has to be proposed for environmental education in schools and also undergraduate students in college level.*

**Keywords:** *Environmental Education, Students, Schools and Colleges, Sustainable Development, Pedagogical Strategies, Responsible Environmental Behaviour, Ethics, Morality.*

### **Introduction**

For the past one decade much effort was expended in the global level to achieve sustainable development. In spite of conducting more number of conferences, seminars and world summits towards the protection of environment, the present world is environmentally less sustainable than in the previous days. The reason is very predictable that the poor developing countries had been seriously thwarted by the lack of financial and skilled manpower resources whereas the rich developed countries appeared to be reasonably content with the progress they had made. The progress whatever the developed countries have made so far has largely been achieved through the relocation of their dirty manufacturing facilities to poor developing countries. However the relocation of the manufacturing facilities in this way cannot address the growing problem of anthropogenic pollution – it merely changes the jurisdiction of the pollution created from the 'rich' to the 'poor' world. Therefore in order to achieve the acceptable level of global environmental sustainability, the citizens must be empowered with essential knowledge and information. Then only they can exert pressure on their elected representatives to develop and implement policies for securing environmental sustainability. The awareness among the public and industrial generators have to be created and motivated by the updated techniques and incorporating the innovative and implementable solutions to reform our economy. These can be achieved through environmental education.

### **Definition for Sustainable Development**

The common definition for sustainable development is as follows : "Development that meets the needs of the present without compromising the ability of future generation to meet their own needs". The resource base is not inexhaustible, it follows that there must exist some limit beyond which the rate of exploitation of natural resources to supply the open ended and increasing demand for goods and services will compromise the ability of future generations to meet their own needs. Therefore, it is clear that sustainable development is economic development that exclusively relies upon and is firmly rooted



in the integrity and sustainability of the natural environment. National resources management has emerged in line with the evolving concept of sustainable development over the past three decades. If nature's resource base is irredeemably depleted or irreversibly degraded, the means of wealth creation for social welfare will be seriously jeopardised. Without environmental sustainability, it is impossible to achieve sustainable development.

At present, there is no unique operational definition for sustainable development. The reason is that there is no single indicator for comparing the relative progress made by different countries or regions towards sustainable development at a given time or for measuring progress made by a given country or region over time. This lack has been impeding progress towards global sustainable development. The operational definition of sustainable global development was " Sustainable global development requires that those who are more affluent adopt lifestyles within the planet's ecological means – for example, in their use of energy ."

Therefore, if the international community is at all serious about achieving even a modest degree of global sustainable development, its operational definition must be based on the reduction in consumption of goods and services by the affluent within and between nations. Such a definition will pave the way both to developing a simple and unique indicator to measure sustainable development and to a more equitable distribution of wealth and resources among nations. The production and consumption must be curbed to achieve even a modest degree of sustainable development and determined efforts must be made to reduce consumption through formal education. The eminent French anthropologist Levi – Strauss's view is that " Man is not a privileged inhabitant of the universe, but merely a passing species that will leave only a few faint traces of its passage when it becomes extinct".

Thus, environmental education has two essential components:

- Alerting the public to the need to achieve global sustainable development and the likely
- Consequences focusing the educational curricula for global sustainable development by incorporating the know-how and skills and also the moral imperatives.
- To have a clear idea about the environmental education, more awareness about the following issues are needed.
- Difference between sustainable development and environmental sustainability.
- Unique definition for sustainable development

### **Sustainable Development and Environmental Sustainability**

Unfortunately, experience shows that in the environmental community there are many who do not understand the true meaning of sustainable development. In addition, the environmental community must discharge its collective professional responsibility in ways that are consistent with the core requirements of sustainable development and global environmental sustainability.

### **Science, Technology and Environmental Sustainability**

- Role of science and technology in delivering environmental sustainability
- Sustainable development through science and technology :

### **Environmental Awareness through Education**

- Teaching methodology in schools
- Young children's ideas about pollution
- The evolution of children's conceptions
- Teaching strategies favouring conceptual change:

### **Teaching Methodology in Colleges**

- Curriculum development
- Criteria for curriculum development
- Enhancing Research activities
- understanding environmental behavioural change through communication
- Communication approach in responsible environmental behaviour:

### **Conclusion**

The international community is serious about achieving even a modest degree of global environmental sustainability and sustainable development. Effective policies must be implemented to curb consumption by the affluent. We need moral



education to install genuine environment respecting moral values in the young budding engineers and other specialised area students who, in their professional careers as planners, designers, builders and decision makers, will bear considerable responsibility for mankind's impact on nature and the natural environment. Future engineers must acquire knowledge and skills in engineering and keep pace with rapid advances in practically all branches of engineering and other areas too. Following interventions based on observations, discussion, research, writing, reflection and idea comparison, young children seem to be able to construct the conception that pollution can be hazardous to their health, starting from the idea that pollution only constitutes visible waste., *hands-on* experience is not enough; we also need *minds-on* experiences. The communication perspective opens the door to another kind of tools that environmental educators can use in order to improve the educational practice.

### References

1. Anna Kurtycz (2005) 'Understanding Environmental behavioral change through communication: a new perspective of environmental education', *International Journal of environment and Pollution*, Vol.4 , No.1,pp 35 - 46.
2. Bell , M. (1995) 'What constitutes experience? Rethinking theoretical assumptions', in Kraft, R.J. and Kielsmeier, J. (Eds.): *Experiential Learning in Schools and Higher Education*, Kendall/Hunt, Boulder, CO, pp.9–16. (27)
3. Bhaskar Nath (2005) 'Proposal of environmental education of engineering graduates', *International Journal of environment and Pollution* , Vol.23, No.1, pp 1 – 15.
4. Di Sessa, A.A. and Sherin, B.L. (1998) 'What changes in conceptual change?', *International Journal of Science Education* , Vol. 20, No. 10, pp.1155–1191. (17)
5. Diane Pruneau (2005) ' The evolution of children's ideas on pollution in the frame work of experiential and socioconstructivist activities' , *International Journal of environment and Pollution* , Vol.4 , No.1, pp 17 – 34.
6. Driver, R. (1989) 'Student's conceptions and the learning of science', *International Journal of Science Education*, Vol. 11, pp.481–490. (29)