



Role of Education in Creating Environmental Sustainability

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Abstract:

In the 21st century, there is a need for increasing global awareness of the threat posed by human induced enhanced greenhouse effect, produced largely by forest cleaning and burning of fossil fuels. Education can make people realize that an important cause of human impact on Earth system is the destruction of biophysical resources. The system of education at secondary and higher levels needs to lay emphasis on "Green India Mission" in order to improve the existing quality of forest cover and ecosystem services. This may be brought about by a change in values, ethical considerations for a favourable consumption pattern of households as well as individuals. The Millennium Ecosystem Assessment, an international synthesis by over 1000 of the world's leading scientists have concluded that human activity is having a significant impact on the biodiversity of the world ecosystem, reducing both their resilience and bio capacity. People need to be educated for a better management of renewable and non-renewable resources along with waste management. This would increase the assimilative capacity of the environment. The critical issue of "Climate Change", as pioneered by the Hon'ble prime-minister of India at UN calls for a serious thought by educationists. Education can bring about a change in land use for urbanisation, agriculture and pastures, resulting in a marked impact on global water, carbon, and nitrogen biochemical cycles. There is an urgent need to bring about an awareness of benefits that accrue from sustainable parks, gardens and green cities for all including PwDs. It is here that education can play a major role.

Keywords: *Climate Change, Education, Environment Sustainability, Millennium*

1. Introduction

Education can bring in awareness, appreciation, understanding and solution for environmental management. With overpopulation, there is a problem of sharing the environmental resources. More efficient use of resources can improve the quality of life. During the 20th century, more than half the world's wetlands have been lost along with their valuable resources. Increasing urbanisation and lack of knowledge for proper use, pollutes clean water supply, as a result much of the world still does not have access to clean, safe water.

Sustainability is a system of institutions, people and the environment that can be maintained indefinitely. One of the most promising ways of reaching a state of sustainability is through education. Education can provide the means for modifying the natural environment for human purposes like food, shelter, communication, transportation and a wide variety of consumer products as well as services. It is through the system of education that a responsible management of resources can be developed. Sustainability is the capacity to endure and has educational, environmental, economic and social dimensions.

2. Climate Change: A Major Challenge for a Sustainable Environment

Climate change is a major challenge for countries such as India, which are often exposed to risks from climate change. India is more vulnerable to the effects of climate change with its vast population. It

also entails trade-offs with economic growth and social development. In recognition of the growing problem of climate change, India has declared a voluntary goal of reducing the emission intensity of its GDP by 20-25% by 2020, despite having no binding mitigation obligation as per the convention. A number of policy measures have been launched to achieve this goal. As a result the emission intensity of our GDP decreased by 12% between 2005 & 2010. It is a matter of satisfaction that the United Nations Environment Programme (UNEP) in its emission gap report 2014 has recognized India as one of the countries on course to achieving its voluntary goal.

Education can play a major role in bringing about awareness about climate change amongst the vast population of India.

- Education can bring in awareness appreciation understanding and solution for environmental management as well as the biodiversity conservation.
- Education may provide training for a more efficient use of resources which will improve the quality of life.
- Education may enhance the knowledge for proper use of valuable natural resources, thus reducing pollution of water supply.
- System of education at secondary and higher levels will lay more emphasis "Green India Mission" resulting in improvement in quality of existing forest cover and ecosystem services
- Providing knowledge about Environmental Sustainability, will result in favourable consumption patterns of households and individuals.
- It will result in keeping a check on human activities which reduce the resilience of world ecosystem.
- People will be educated for better management of renewable, non-renewable resources and waste management. This would increase the assimilative capacity of the environment.
- Better environmental management would help to reduce the global climate change.

3. Role of Environmental Ethics in maintaining Sustainability

Environmental ethics has been described as having a conscience or moral that reflects a commitment and responsibility toward the environment as well as present and future generations of people. The current focus on counteracting the adverse effects of climate change suggests that society has recognised both the importance of its role in, and the need for, sustainable environmental management for the benefit and use of current and future generations. Environmental ethics thus has to do with the duty of care that we have for the environment in an all-encompassing sense: the earth as a whole, or the whole of the community of life, and other processes that sustain life.

4. Need for Ethics

The emergence of the field of environmental ethics was due to the increasing awareness of the effects that technology, industry, economic expansion and population growth were having on the environment. It is all the more relevant today as most environmental problems are the result of the unethical actions of individuals or organizations. There are many ethical decisions that human beings make with respect to the environment. For example:

- Should we continue to clear cut forests for the sake of human consumption?
- Should we continue to make petrol and diesel powered vehicles, depleting fossil fuel resources while the technology exists to create zero-emission vehicles?
- Destruction of Ozone layer due to the human-created chemicals?
- What environmental obligations do we need to keep for future generations?
- Is it right for humans to knowingly cause the extinction of a species?

The goal of environmental education is to develop a world population that is aware of and concerned about the environment and its associated problems and who has the knowledge, skills, attitudes, motivations and commitment to work individually and collectively towards solution of current

environmental problems and prevention of new ones. School system provides the largest organized base for environmental education and action. It offers an effective instrument for embedding in them the desirable environmental ethics. Teacher is one of the important factors, which is bound to affect this programme. Teachers can provide a vital link in the delivery of environmental knowledge, its associated problems and their solutions.

5. Need of Environmental Ethics for future generations

One main approach to a theory of environmental ethics is the human-centered approach. A single individual's actions with regard to the environment may have an impact on all human beings. Therefore, a need arises to make the future generations aware of the impact of their un-ethical lifestyles on the global environment.

6. Global Environmental Problems

As a branch of philosophy, environmental ethics is a fairly recent development, having become a body of organized knowledge only in the last decades of the twentieth century. It came about as a necessary response to a growing number of very obvious threats to the physical condition of the world in which we live. The list of some of these global environmental problems is a long and familiar one, and many of them came about because of the massive increase in the growth of the human population worldwide. As populations continue to soar, the various problems caused by too many people naturally increase in both their number and seriousness. It is predicted that the 2000 world population of six billion people will rise by another one billion people within ten years. To the many problems this causes, such as increased pollution of the air, water, and soil, is also added the depletion of these and other important natural resources.

7. Steps for Implementing Environmental Ethics

There seems to be a growing need in the world in which we function today to articulate a pragmatic environmental ethic that can guide our actions and decisions in individual, social, professional, corporate and public decision-making contexts. Commit yourself or your organisation to the basic aim of environmental ethics. In general terms, the practical aim of environmental ethics could be formulated as the duty to take responsibility for the environmental consequences of our actions.

1. Determine who the subject of this environmental ethics is. Who is the agent that will take this responsibility on board? You, yourself, as an individual? You as a citizen, or as a professional, or as an employer, or manager in a business? The important point is that different subject positions will require different actions to discharge responsibility for environmental impacts.
2. Determine what the impact of this subject is on the environment. The point of departure of any environmental ethics is to know what the environmental impact of our choices and actions are.
3. Determine which steps should be taken to implement these changes. As an individual, one can decide to change one's own behaviour. As a member of civil society, one can form lobby groups to place pressure on corporations, government officials and politicians to take responsibility for their environmental impacts.
4. Therefore all men and women of good will may be invited to ponder upon the importance of the following ethical goals:
 - To think of the world's children when we reflect on and evaluate our options for action.
 - To be open to study the true values based on the natural law that sustain every human culture.
 - To use science and technology in a full and constructive way, while recognizing that the findings of science have always to be evaluated in the light of the centrality of the human person, of the common good and of the inner purpose of creation. Science may help us to correct the mistakes of the past, in order to enhance the spiritual and material well-being of the present and future generations. It is love for our children that will show us the path that we must follow into the future.

- To be humble regarding the idea of ownership and to be open to the demands of solidarity. Our mortality and our weakness of judgment together warn us not to take irreversible actions with what we choose to regard as our property during our brief stay on this earth. We have not been entrusted with unlimited power over creation, we are only stewards of the common heritage.
- To acknowledge the diversity of situations and responsibilities in the work for a better world environment. We do not expect every person and every institution to assume the same burden. Everyone has a part to play, but for the demands of justice and charity to be respected the most affluent societies must carry the greater burden, and from them is demanded a sacrifice greater than can be offered by the poor.
- To promote a peaceful approach to disagreement about how to live on this earth, about how to share it and use it, about what to change and what to leave unchanged.

8. Suggestions for creating an Ethical basis of Education for Sustainability

Our current educational processes at school and college level are being reoriented to create a love for nature by -

8.1 Valuing Nature as Resource

The Gandhian way of life “man’s needs but not his greed can be supported by our earth” was an important concept initiated by Mahatma Gandhi. He believed in simplistic living to save our Earth’s resources. The Shantiniketan model-Tagore’s philosophy of education focused upon the need for a harmonious association between human beings and their environment. To achieve this, he relied on exposing young people to nature. Tagore linked the concepts of ancient India with celebrations of nature through dance, music, drama and poetry. At Shantiniketan, there were celebrations for each season and ceremonial tree planting. He started Vriksharopan way back in 1928. In fact what was initiated at Shantiniketan is now accepted as a route to environment education based on preserving nature.

8.2 Appreciating the Beauty of nature and Treasuring the magnificence of wilderness

It is the beauty of nature that gives it an intrinsic value which we tend to ignore. If we experience the wondrous aspects of nature, our lives will be immeasurably enriched. Once the future generation realizes that wilderness has a value, it will become a custodian of nature rather than an exploiter. A visit to a wilderness area, a forest, lakeside, or seashore makes one value its beauty.

8.3 By inculcating a Belief in the Ancient Indian Traditions

In ancient Indian tradition, people have always valued mountains, rivers, forests, trees and several animals. Many plants have been given a religious significance. Ficus religiosa, the peepal tree. Is venerated and is not to be cut down. The banyan tree in some regions, such as Maharashtra, is venerated once a year by tying a thread around it as a symbol of respect. The Tulsi plant is linked to goddess Lakshmi and Lord Krishna. The peepal tree is said to be the tree under which Buddha attained enlightenment. The Amalaki and mango trees are associated to goddess Lakshmi. Certain species of trees are protected for their fruits or flowers. The mango tree is protected for its fruit. The mahua tree is protected for its edible flowers and oil from its seeds is used to make a potent alcohol. Many species of animals are venerated as being the ‘vahan or vehicle of different gods. In Indian mythology, the elephant is associated with Ganesha. Vishnu is associated with the eagle. Rama is linked to monkeys. The Sun god rides a horse. The Lion is linked to goddess Durga. The cow is associated to Krishna, the snake to Shiva and the swan to Saraswati. These examples are a part of ethical values that protected nature. These concepts must become a part of modern educational system and thus help in conserving nature and developing environmental ethics

9. Conclusion

Just as our ancestors have left resources for us, it is our duty to leave them behind for our future generations. We only hold the world as trustees for the future generations. If we overuse and misuse

resources, our future generations will find survival very difficult. A critical concern to preserve species and undisturbed ecosystems therefore must be developed amongst the future generations. It is not too late. God's world has incredible healing powers. This work has to be taken up by educationists on a priority basis. It has to be developed just as habits are developed and remain unchanged over generations.

References

1. Agarwal, J.C. and S. P. Agarwal : Environmental Protection, Education and Development: Global view with special reference to India Environmental Ethics and Forestry: a reader by Peter C. List.
2. Callicott, J. Baird Weston, A. (2002). Multicultural Environmental Ethics Daedalus, A Practical companion to Ethics (2nd edition) New York: Oxford University Press.
3. Clare, Palmer (2006). Teaching Environmental Ethics Ed. Brill Academic Publishers.
4. Common Declaration of John Paul II and the Ecumenical Patriarch his holiness Bartholomewi, Monday, 10 June 2002, Rome-Venice.
5. Environmental Ethics Graduate programme in environmental ethics at University of North Texas www.cep.unt.edu .
6. Environmental Ethics online. stu.edu/~one/ Environ/ Enviroethics.htm
7. Environmental Ethics Resources on www, Centre for Applied Ethics www.ethics.ubc.ca/resources/environmental,
8. Environmental Ethics Resources- www.jbojen.com/env/
9. Gadenne, D.L J. Kennedy, C Mckeiver (2009). An Empirical Study of Environmental Awareness and Practices by Journal of Business Ethics, -Springer.
10. Holmes Rolston. Environmental Ethics: Duties to and values in Natural World
11. _____. Environmental Ethics: an anthology by Andrew Light.
12. Misra, R.P. Environmental Ethics: A Dialogue of Culture
13. Mukherjee, Amitava and V.K. Agnihotri, Environment and Development: Views from the east and west Concept Publishing Company, New Delhi.
14. Singh, R.B. & Suresh Misra, Environment and Law: Global issues and Indian perspectives Concept publishing company, New Delhi.
15. Stanford Encyclopaedia of Philosophy- Environmental Ethics- Ed. By Edward Zalta plato.stanford.edu/ethics_environmental/
16. The Environmental Ethics and Public Policy Programme at Harvard ecoethics.net/