Original Paper

Environmental Studies: Bottlenecks and Prosperities

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Abstract

The environmentalists of the entire world are crying by forecasting the depletion of biotic and abiotic resources at an accelerating rate which may make the survival of life on earth questionable. The main cause of this disastrous degradation is due to unmindful anthropogenic activities. The present generation is unaware of consequences of environmental degradation and the need for the conservation of species and their habitats. It is an imperative need and responsibility to inculcate the culture of loving and living with nature among the youth. The University Grants Commission as per the directions of the Honourable Supreme Court of India directed all the Universities and Colleges to include Environmental Studies course in the curriculum. Accordingly, all the institutions have introduced this course in their curriculum. Nevertheless, there are several constrains in teaching this course to all students in letter and spirit of the law. Though there are certain constrains, there is scope for the enhancement of teaching and learning efficacy. This paper briefly describes the need for the introduction of the course, challenges in teaching and possible solutions.

Key words

honourable supreme court of India, UGC, environmental studies, NEP

1. Introduction

In the era of modernization environment is facing serious threats. Indiscriminate exploitation of resources by all of us and by all possible means accelerate the depletion of biotic and abiotic resources. The human evolution with strategic thoughts provided man with tremendous knowledge to utilize the natural resources both biotic and abiotic but drained away the concept of coexistence. Since the dawn of

human civilization, man started establishing his own environment by partitioning the resources. With intellectual development, man dominated all other organisms and in due course trying to dominate his own kind. The evil spirit of accession made him mad to encroach as much as possible. The accession and encroachment in land, water and air destructed the environment and the nature to a huge extent. The constant aggression of man on the environment now has posed a serious life threat to even to him also as he is also a part of the ecosystem.

This extreme unethical attack by man on the environment, where he lives, is mainly because of the lack of understanding of the basic ecological concept of dependency. Knowledge and understanding on environment, the interaction among living organisms, significance of each component of an ecosystem, belief in sharing of resources and huge role of man on the sustenance of the system will help to mitigate the issues on environment. Considering these facts, Honourable Supreme Court of India directed the University Grants Commission to introduce a course on environmental studies in December 1991 as a response to a Civil Writ Petition. In response to Supreme Court's direction, UGC formed a six-member committee under the headship of Prof. Erach Bharucha (2004), Director, Bharthi Vidyapeeth, Institute of Education and Research, Pune. The committee has prepared a module and study material encompassing various aspects of environment.

The Ministry of Education in its New Education Policy emphasizes the inclusion and integration of various environmental aspects such as sustainable farming, water conservation, renewable energy and other green initiatives.

2. Mode of Implementation

The UGC circulated the module to all the Universities and Colleges and passed guidelines to introduce the course on Environmental studies in 2004. In accordance with the regulations by UGC, all Universities and Autonomous Colleges have introduced the course of Environmental Studies for all the programmes. Universities and Autonomous Colleges have conducted special Board of studies and Academic Council meetings for inclusion of Environmental Studies course in the curriculum of all under graduate programmes. The institutions depending on their convenience included the course in any of semesters as one of the Part IV courses.

Issues related to implementation:

Shri. M.C. Mehta further pleaded to Honourable Supreme Court in 2004 that those who have cleared NET exam in Environmental Studies or holding doctoral degree alone should teach Environmental education. However, it is not justifiable that Environmental Studies graduates alone are eligible to teach environmental studies and in fact, Shri. Mehta himself is a good environmentalist without having cleared NET in Environmental Studies.

Handling environmental studies course is not an issue for the faculty belonging to biological sciences and manageable to Physics and Chemistry faculty. However, in general, for other faculty, especially those who teach Computer Science, Arts, Humanities and Commerce may find it difficult to teach

environmental studies course sparing a few. Further, as the course is included under Part IV, it gains no significance rather than a pass.

The UGC, in its module has allotted 25 marks to field activities. Normally feasibility for carrying out field activities to huge number of students is burdensome. So, such activities ends in submission of just an assignment.

The module is comprehensive and includes all the thrust areas in environmental studies. But the teaching of this module within the stipulated time especially to non biology students who are in large numbers is a herculean task.

3. Measures in Breaking the Bottlenecks

Again, the thorn pricks the head of the teachers. A teacher with love towards nature and creativeness can make this venture a success. As teachers, we have to try to understand and admire the environment and environmental issues. We intentionally used the term 'try to' because the environment appears to be easy but the principles are not so, but of course, interest makes it easy. A teacher can bring the environment to the classrooms and makes the environment as classrooms and hence, it is possible for the teachers to make the thorns into crowns.

At present there is wide scope for the teachers to develop their skills, as institutes of higher learning such as IITs, IISc, NITs and Universities are offering various courses related to environmental studies including Pedagogy of Environmental Studies through NPTEL and SWAYAM, thanks to the digital learning initiatives made by the Government. Colleges may identify faculties interested and efficient from their own institutes, encourage and sponsor to complete online courses to make them competent in teaching environmental studies effectively.

To fulfill the intention of inclusion of environmental studies, along with this course under Part IV, certain aspects of environmental studies may be included in Part III of the curriculum. Nevertheless, Part III is already very generous, as it has shared its hours with all Part IV and Part V courses. Further diluting Core course may not be judicial. However, without thinning out core courses, discipline specific environmental topics may be included. For example, topics of nature and environment in literature, WTO, TRIPS, E-Commerce, illicit trade, environmental economics, green environment with alternate energy resources, pollution and pollution abatement, electronic world in paper less communication and e waste management and so on.

Almost all the students in Arts, Science and Commerce Colleges have mandatory Part V programmes (NCC/NSS/YRC/Green Club/, etc.) in I and II year of their studies, where the students are involved in implementing / creating awareness on various programmes like Swachh Bharat Abhiyan, Swachh Sagar-Surakshit Sagar, Green Skill Development Programme, Nagar Van Scheme, Atal Bhujal Yojana, Jal Jeevan Mission, National Clean Air Programme, Nagar Vana Udyan Yojana. Environmental Studies course may be tied with these Part V programmes by which allotment of 25 marks for field

activities as suggested by UGC can be made feasible. NAAC also insist participation of more students in extension activities and further, green initiative by the institutions is credited by NAAC.

Further, as India is rich in both geological and biological diversity, the components in the syllabus and activities may be modified according to the local needs which fetch more interest among the students. It also enhance understanding of the environment and passion towards it.

4. Conclusion

As we are socially committed, let us make our children to live along with the environment by imparting the values of environment. The art of coexistence is the only solution for harmonious and sustainable life. In the present era of fast degrading environment, the youth must be imbibed with the sense of environmental consciousness. Teachers should uphold one more moral commitment of building environmental responsibility among the students. Awarding and rewarding are universal phenomena. Bees pollinate flowers only if they offer nectar and flowers offer nectar only if bees pollinate. The authorities may think of considering environmental related courses / programmes earned by the teachers through online or offline mode as equivalent to orientation / refresher courses which is essential for their career advancement. Making one refresher course in environmental studies as mandate out or two/three refresher courses undertaken by the teachers for their career advancement is also yet another option, as everything and everybody is dependent on environment. Educationists, researchers and policy makers may think on these lines to structure better framework so as to strengthen the teaching pedagogy of Environmental Studies Course and make it purposeful.

References

- Anonymou. (1999). Directives of Honourable Supreme Court of India. Writ Petition No. 860/1991on 06.12.1999
- Anonymous. (2020). *New Education Policy*, 2020, *MoE*, *GoI*. Retrieved from https://www.education.gov.in>sites>mhrd>files
- Bharucha, E. (2004). *Environmental Studies for Undergraduate Courses-UGC*. Retrieved from https://www.ugc.ac.in>modelcurriculum>env
- Anonymous. (2003, July 24). UGC Circular D.O. No. F13-1/2000 (EA/ENV/COS.I to all Varsities dated, 24.07.2003).
- Anonymous. (2003, December 18). *Directives of Honourable Supreme Court of India*. Writ Petition No. 860/1991 on 18th Dec 2003