Importance of Environmental Studies in Higher Education

A.Sujitha Amalin Nancy#1

Abstract- Since the ultimate aim of education is shaping of human behavior[1], in higher education Environmental studies plays vital role in understanding, evaluating and solving the issues faced by environment. In higher education a student can pursue a career that interests and inspires them with theoretical and practical knowledge, which will help them to achieve and excel in their life.

Keywords- Biogeographical, Periyar River, Karinthiri Malai

I. INTRODUCTION

In higher education Students use a range of technologies to meet their goals, such as the computer (various software programs including video editing programs and presentation programs, Internet searches, e-mail), cameras (still and video), telephones. The types of projects produced by the students include presentations, videos, school assignments, correspondence, and testimony, texts for speeches, texts for publication, overhead transparencies. The technology is not regarded as another thing to learn. It is regarded as a needed tool towards the achievement of goals [2]

II. NEED OF ENVIRONMENTAL STUDIES

Environmental education is a process aimed at developing world population that is aware of and concerned about the total environment and its associated problems and which has the knowledge, attitudes, commitments and skills to work individually and collectively towards the solution of the current problems and prevention of the new ones[3].
While incorporating the objectives of environmental education “Fig.1” and including environmental studies in higher education will help them use these above technology to improve their knowledge about the environment and is problems.

The curriculum framed in the environmental studies consist the following attributes.

A. Multidisciplinary nature of environmental studies

Multidisciplinary nature of environmental studies “Fig.2” help the student understand the basic knowledge about the environment.
B. Renewable and non-renewable resources

In this students learn about the natural resources like forest, water, mineral, food, energy, land etc which help them understand their role in conservation of natural resources and Equitable use of resources for sustainable lifestyles.

C. Ecosystems

The knowledge of Energy flow in the ecosystem, Ecological succession, Food chains, food webs and ecological pyramids help them in understanding the concept of Introduction, types, characteristic features, structure and function of the following ecosystem :-

a. Forest ecosystem
b. Grassland ecosystem
c. Desert ecosystem
d. Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)
D. Biodiversity and its conservation

Where as in Biodiversity and its conservation they learn about the Biogeographical classification of the environment they are in. it will help them understand the Biodiversity at global, National and local level. They also learn about the Threats to biodiversity like habitat loss, poaching of wildlife, man-wildlife conflicts. They can also learn about the Endangered and endemic species and Conservation of biodiversity.

E. Environmental Pollution

Environmental Pollution will help them find their role in prevention of pollution using various strategies like Pollution case studies, Disaster management (floods, earthquake, cyclone and landslides) and the Cause, effects and control measures of :-

a. Air pollution
b. Water pollution
c. Soil pollution
d. Marine pollution
e. Noise pollution
f. Thermal pollution
g. Nuclear hazards

F. Social Issues and the Environment

The knowledge about Water conservation, rain water harvesting, and watershed management will help them understand the Resettlement and rehabilitation of people and its problems and concerns. The Case Studies of Urban problems related to energy, Environmental ethics and its Issues and possible solutions. Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Urban problems related to energy these will help them find Environmental ethics and its Issues and possible solutions.

G. Field work

In field work they can Visit to a local area to document environmental assets river/forest/grassland/hill/mountain. They can also Visit to a local polluted site like Urban, Rural, Industrial, Agricultural to understand the urgency of protecting the environment. The Study of common plants, insects, birds, the Study of simple ecosystems-pond, river, hill slopes, etc. Will help them understand the environment better.

In Kerala[4], popularly known as "God's Own Country" and is famed for its scenic lagoons, lakes, and canals, has a lengthy coastline and is home to thousands of fishermen and boat tour operators. In the year 2018 Kerala received the highest rainfall in its recorded history of 3368mm.
during the 1924 south-west monsoon. The Continuous rain for three weeks flooded the Periyar River and submerged many districts along the coast in the areas and even washed away a hill called Karinthiri Malai. Since the flood occurred in the Malayalam Era 1099, it is known as the “Great Flood of ’99” ”Fig.3”.

Initial estimates put monsoon-related losses at Rs 8,316 crore. More than 20,000 homes have been completely destroyed and 10,000 km of roads have been damaged. As many 215 landslides have been reported [5]. More than 30,000 people have moved to government relief camps. The death toll of the Great Flood of 99 is believed to be around 1,000. On top of this, the floods killed a number of livestock. Disaster management team rescued more than 30,000 people and moved them to government relief camps “Fig.4”. In this 2018 flood the biggest heroes were fishermen, they came in 600 boats and rescued people “Fig.5”
Fig 4

Fig 5

H. CONCLUSION

No one can outwit nature’s fury, but timely and concerted efforts can attenuate the effects [6]. In higher education the study of environmental studies will help an individual to understand the community, environmental issues and the case studies and filed work will help them to find the solution to solve those issues related to environment.
REFERENCES
[1] “changing learner behavior trough environmental education” by Harold R. Hungerford and Trudi L. Volk
[2] The Effects of an Environmental Education Program on Students, Parents, and Community by Trudi L. Volk and Marie J. Cheak
[3] greenteacher.org