## **CHAPTER-I**

# INTRODUCTION, CONCEPTUAL FRAMEWORK, RATIONALE OF THE STUDY, OBJECTIVES, HYPOTHESES AND DELIMITATIONS OF THE RESEARCH

## 1.0.0 INTRODUCTION

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The environment is the objects, conditions or circumstances through which an organism is surrounded which consists of all biotic factors comprising human beings, plants, animals, microbes and all a biotic factors consisting of water, light, soil, air, and so on. In other words, the environment is the aggregate of peripheral situations that stimulus the life of all organisms and determines the quality and duration of survival. Due to the population explosion, expanding industrialization and unplanned urbanization, the problems of environmental degradation is increasing rapidly. Many threats and problems are occurring to the environment such as global warming, ozone depletion, drought, soil erosion, deforestation, and pollutions which are degrading our environment.

Most of these burning environmental problems are occurring by human activities mainly. Human beings are regularly exploiting environmental resources without proper planning and ecological thinking. The recently developed concept of sustainable development has increased the importance of environmental sustainability, as it is impossible to achieve sustainable development without environmental sustainability. Therefore, educating about the environment and creating environmental awareness among masses is very important and need of the hour. Environmental education is the process of building knowledge, skills, understanding, values, attitudes, abilities and awareness among people about the environment and its protection. It is the process of education about the environment, education for the environment and education through the environment.

## 1.1.0 ENVIRONMENTAL EDUCATION

Environmental education is a new addition to the scope of education. Social problems have always been a matter of concern for education. While environment related problem are a global concern now. Simply it is the education through environment about

environment and for environment. It has now been sensually integrated with the curriculum. As far as the subject matter are concerned, environmental education deals about the teaching components and constituents of the environment. But the teaching for environment is concerned with knowing environment, environmental hazards and conservation and protection of environment and maintaining the proper ecological balance. It also includes proper environmental planning to make the surrounding aesthetically enjoyable.

Environmental education is a medium and process of education and it covers man's natural relationship with his social and manmade environment. Not only this, environmental education is the relationship between man and industrialization, pollution, resource allocation, conservation, transportation, technology, energy and urban and rural planning to the total biosphere. Thus environmental education is the education which deals with man's relationship with his natural and man-made surrounding and also aimed at developing responsible actions necessary for presentation and conservation of environment and its components. Environmental education also entails practice in decision making and self formulation of a code of behavior about issues concerning environmental quality.

Conscious efforts are being made by government departments such as central and state departments of environment to encourage both research and regulation of environmental issues. Various organizations voluntary and non-governmental have been set up to increase the environmental awareness in the society. However what is urgently needed is the building of a constituency for the future, a constituency of future citizens which will expect nothing less from its government and the private sector than a quality of life, and a livable environment there the man will live in dignity. Building of such a constituency is the task of our educational institutions. This constituency should be transparent and answerable for the general public. The nation cannot afford to keep on producing scientists, lawyers, administrators and businessmen who would view, as many of them do now, in the next ten to twenty years pollutions as a minor white collar crime, and irritant necessary toward economic development, and a value which can be subordinated to other immediate concerns of the society. The government should establish such a kind of Environmental in institutions which will conduct the research programmes at the higher education level. It should be the prime responsibilities of these institutions to aware the general masses about the Hazardous effects of environmental pollutions. The central and state government should provide every kind of facilities to these institutions. Environmental education would have to aim at producing a citizenry, creating a constituency of environmentally oriented people, that in knowledgeable regarding the bio-physical and man-made environment and its problems, and also aware of how to solve these problems and motivated enough to work towards their solutions. Such a challenge has to be taken by educational institutions, and among these, universities and colleges will have to show the leadership. These universities and colleges should conduct such programmes which will boost the students to go in field of research in this particulars environment subject. Seminars and symposiums will also help in this regard to protect our environment from these hazardous sources which badly effects of our environment.

#### 1.1.1 Environmental Education: International Involvement

The Stockholm conference (1972) on Human environment specifically recommended the UNESCO and the other international program in environmental education. The program will be interdisciplinary in approach to be organized in schools and all of school encompassing all levels of education, directed towards the general public in particular and the ordinary citizens living in both rural and urban area.

Based on the guidelines laid down at the seminar held in Belgrade (1975) under the joint sponsorship of UNESCO and UNEP, a start has been made on the task of drafting organizing and developing environmental education programs. These programs are designed for primary, secondary and university level.

At the ninth non aligned summit held in Belgrade in sep. 1989 in which environment was one of the sixth priority areas. India proposed Planet Protection Fund under the United Nation for global co-operation to protect the environment. issues. But still we found that the environment is deteriorating day by day as level of pollutants is increasing across the globe. Despite all such efforts from various governmental, non-governmental and other agencies there found some studies by the researcher that are reporting contradictory and contrasting results in this direction.

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Arunkumar (2012) reported average level of environmental awareness among teacher trainees in Teacher Training Institutes in Trichy, District Tiruchirapalli, Tamilnadu. Average level of participation in extension activities relating to environment and also an average level in various dimensions of environment like pollution, population health and hygiene, biodiversity, energy, concern and sustainable development was reported by the researcher. Abbas and Singh (2014) also reported higher proportion of university students possessing high level of environmental awareness but low level of participation in environmental activities. Similarly, high level of environmental awareness among secondary school students in Balikesir city of Turkiye by Altin et. al., (2014) and fairly good environmental awareness was reported by Sharma (2014) among degree college students of Dharamshala (Himachal Pradesh).

Some researchers tried to explore the relationship of level of environmental awareness with gender, area of residence and stream of study of the students studying at various levels. Regarding relationship of level of environmental awareness with stream of study, Pillai (2012) [In Pandey, 2014] reported the effect of stream of study on environmental awareness. Astalin (2011) reported a significant difference between mean scores of arts and science students studying at higher secondary level on Paryavaran Jagrukta Prashnavali and found that science stream students have higher environmental awareness as compared to arts students. Similar results were reported by Sharma (2014) through a study conducted on degree college students of Dharamshala (Himachal Pradesh) and also by Simmons (1998) and Yilmaz et. al. (2004) [In Senguta, Das and Maji, 2010]. Sebastian and Nima (2005) reported that science students were found to have more awareness of biodiversity and its conservation than other students [In Ghosh, 2014]. Although Sengupta, Das and Maji (2010) reported that stream of study was found to be a significant source of variation in environment related behaviour of twelfth grade students studying in Kolkata but contrary to above results the researchers reported that

the science students scored less as compared to arts students. Pandey (2014) through a study conducted on higher secondary students of Ahmedabad district reported that there found no significant difference in mean scores of environmental awareness ability of science and commerce students. Khalid (2001) found no statistical difference in environmental awareness of science and non-science students [In Sharma, 2014].

Regarding relationship of level of environmental awareness with area of residence, Altin et. al., (2014) through their study on "Environmental awareness level of secondary school students: A case study in Balikesir (Turkiye)" reported that level of environmental awareness and active participation in environmental activities increases with family income and family education. Fisman (2005) also showed that the local environmental awareness found only among students living in high socio-economic neighborhood [In Ghosh, 2014]. Sharma (2014) in a study conducted on degree college students of Dharamshala (Himachal Pradesh) found significant difference in environmental awareness ability of rural and urban students. Similar results were reported by Ghosh (2014) that there was a significant difference between rural and urban secondary school students of Golaghat district of Assam and also by Vashist (2001) [In Sharma, 2014]. Ali and Sinha (2013) through a study conducted in Kolkata on female B.Ed. students reported that urban female B.Ed. students were found more aware of environmental issues. Similar results were also reported by Mondal and Mete (2010) that urban boys possessed higher level of environmental awareness as compared to rural boys [In Ali and Sinha, 2013]. But Budak et al. (2005) [In Ali and Sinha, 2013] reported contradictory results and on the other hand Bhardwaj (2004) [In Sharma, 2014] and Suneetha (2007) reported that the locality of respondents (scholars) have no bearing on environmental awareness [In Ali and Sinha, 2013].

#### 1.4.0 NEED AND IMPORTANCE OF THE STUDY

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Environmental awareness and environmental protection is the need of the time because as the world moves in to the part of destruction and havoc it is the right step to make them aware about environment and environmental protection and how it is important. As the world is facing the problems like ozone hole global warming and natural disasters so aware the world about environmental destruction is a must.

The science curriculum follower in schools and colleges to some extent fulfill this as the major concern of the study. This study particularly focuses on the awareness among the students about the environmental where they survive. The importance of environmental curriculum followed in schools must encourage and initiates students towards environmental protection.

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Environmental study has to respond to the changing needs of the rapidly changing world. Updating the syllabi is yet another issue for environmental study which requires instructional material written in such a way that it promotes the understanding of teachers that how to guide students.

This study is pertinent because it tries to investigate the environmental awareness among the students whether this study will Endeavour to emphasizes environmental awareness of class ninth students according to the guidelines of National Curriculum Frame Work 2005.

Environmental protection is a global challenge where the whole world is trying to save the environment and even some of the countries already intuited some strict rules for the betterment of environment protections. So, study of environment is really one of the most important needs of the time.

## **1.5.0 STATEMENT OF THE TOPIC**

"A Study of Environmental Awareness of Class IX Students of Bhadrak District, Odisha".

#### 1.6.0 OBJECTIVES

- To study the Environment Awareness of class IX students of BHADRAK district.
- To compare the Environmental Awareness of class IX students of urban and rural areas.
- To compare the Environmental Awareness of boys and girls students of class IX.

## **1.7.0 HYPOTHESIS**

- 1. There is no significant difference between boys and girls students in their environmental awareness.
- 2. There is no significant difference between Rural & Urban boys with regards to Environmental Awareness.
- There is no significant difference between Rural and urban girls with regards to Environmental awareness.

## 1.8.0 OPERATIONAL DEFINITIONS

The statement of the problem introduces the following terms which require definitive explanation and the context:

1. Environment.

2. Environmental Awareness.

3. Environmental Education.

## 1.8.1 Environment

Environment means the surrounding including Hydrosphere; Atmosphere, Lithosphere constitute called Biosphere, where all living and non-living things are present.

Schaumberg - (1980) define;

Environment includes the factors which affect the survival and reproduction of living organism or any individual emphasis is placed on man and his bio:-physical surroundings.

The present study is now ever limited to the universe of biotic and other physical materials as organized in to dynamic system. This system or Eco-system represents the living (Biotic) and non living (A Biotic) and their integration.

#### 1.8.2 Environmental Awareness

Environmental Awareness means to aware the people about environment that how far it is important to be aware of the environmental hazards of present and future.

Environmental Awareness is categorized as almost cognitive and a first step to learns. Hence the learner is sensitized to the existence of certain phenomena or stimuli.

"Environmental Awareness" is a state of acquiring an awareness and sensitivity to the total environment and its allied problems (Jha, 1998). People sometimes lack that awareness relating to a particular environmental issue and start harming the environment. There are a number of localities based or habitat specific environmental issues or problems and those local people unknowingly indulge themselves in such activities that are harming the

#### 1.8.3 Environmental education

Environmental education means to educate the society including persons of all ages by different means of communication educating.

Environment is the need of the time because if we educate children about the importance of environment and hazards of the environment, if not handled properly what will be the consequences which directly affect the life of many living things of the world environment sciences or environmental studies in curriculum is really the right step to

make aware the young group by which they will be conscious and becomes a responsible citizen.

"Environment Education (EE)" is an approach to education in which the relationship of man and environment is at the pivotal position. EE is an effective process to develop the understanding of environmental awareness (Shrivastava, 2008). It's main objective is to make pupil educated with respect to various aspects of environment, its dimensions or components, various angles of relationship of man and environment, impact of man activities on environment and vice-versa; to develop pupil's understanding with respect to various issues and problems relating to environment and how to resolve them; to empower the pupils with such skills and competencies that would prove helpful in realizing the objective of sustainable development; to infuse in pupils the concern, urge and spirit of active participation in such activities that facilitate sustainable development, and also to inculcate such attitude and positive etiquettes that would promote a healthy, harmonious and enriched relationship with environment. According to Jha (1998), the objective of environmental education includes awareness, knowledge, attitudes, skills and participation of people in protecting the environment. The Geographical Association's Environmental Education Working Group (1980) defined "Environmental Education" as a multitude of processes and activities by which an understanding of environment is developed and through which caring and committed responses are evolved. It is concerned with knowledge, emotions, feelings, attitudes and values (Abbas and Singh, 2014).

#### 1.9.0 DELIMITATION OF THE STUDY

In view of time constraint, the present research will be delimited in the following aspects:

- 1. The study will be delimited to 72 class IX students only.
- 2. The study will be restricted to Bhadrak district only.
- 3. The study will be restricted to the rural & urban school students only.
- 4. The study will evaluate natural environment.

## 1.10.0 SUMMARY

This chapter deals with the introductory aspects of Environmental Awareness and the need for the present study, statement of the problem, defining of the technical terms, objectives, hypothesis and delimitation.