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## RESEARCH ARTICLE

### A STUDY ON ENVIRONMENTAL POLLUTION AND BIODIVERSITY IN VALSAD AND NAVSARI DISTRICT

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#### ABSTRACT

Biodiversity is defined as the “diversity of life on Earth.” This paper provides evidence to support the case for protecting biodiversity. Biodiversity is recognized as important but can often be overlooked or given a lesser weightage. This is partly because decision-making involves weighing costs and benefits and it is difficult to include biodiversity in this because its value is either overlooked or not understood. Therefore, valuation of diversity becomes necessary therefore to illustrate the importance of biodiversity. Valuing biodiversity requires an understanding of the range of benefits it provides. The main drivers of biodiversity loss are deforestation, desertification, overexploitation, invasive species, pollution, and climate change. Biodiversity underpins economic development, but it is threatened globally and its ability to continue to provide the goods and services that support economic growth is failing. Awareness-raising activities are diverse and often rolled up with activities that have broader objectives of personal and social involvement, public health or civic responsibility. In such circumstances, biodiversity awareness may be secondary or even incidental to other objectives. Due to industrialization pollution has become one of the greatest threats to global biodiversity. Many species cannot cope with the rapid changes in physical parameters which are occurring to our environment. The widespread introduction of exotic species by humans is a potent threat to biodiversity. The recent phenomenon of global warming is also considered to be a major threat to global biodiversity.”The loss of biological diversity is second only to nuclear warfare in its threat to human and other life on this planet”.

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## INTRODUCTION

Biodiversity describes the number, variety and variability of living organisms. Biodiversity leads to stability of the ecosystem. In the process of biological evolution many small and big animals and plants were born and many were rained for ever due to climatic change, earth quake, volcanic eruptions and other natural disasters. Species which could adapt themselves with the changing circumstances survive still; dinosaurs that could not adapt had dwindled away. Biodiversity of an ecosystem or of a geographical area includes various kinds of trees, plants, animals, birds, insects and even micro-organisms. It has been estimated that in the great store house of the earth’s biodiversity. The environmental science is being incorporated in the school curriculum in various countries all over the world. The environmental education curriculum and its implementation in different Asian countries and in India are also reported.

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The various research findings revealed that the achievement level is low especially higher secondary level due to lack of effective teaching to enhance the achievement level, various effective teaching strategies were adopted by different researcher. The tropical forest areas are the richest store houses of biodiversity. Biodiversity is the foundation of life on earth. It is crucial for the functioning of ecosystems which provide us with products and services without which we couldn’t live. Oxygen, food, freshwater, fertile soil, medicines, shelter, protection from the storms and floods, stable climate and recreation, all have their source in nature and healthy ecosystems. Biodiversity is extremely complex, dynamic and varied like no other feature of the earth. Its innumerable plants, animals and microbes physically and chemically unite the atmosphere (the mixture of gases around the earth), geosphere (the solid part of the earth), and hydrosphere (the earth water, ice and water vapour) into the environmental system which makes it possible for millions of species, including people, to exist. Biodiversity plays a major role in many ecosystem services such as replenishing oxygen through photosynthesis, pollination through bees, bumble bees, birds and bats etc. regulation of global climate, storage and retention of rainwater

in aquifers and reservoirs. Control of floods and soil erosion, nutrient cycling, microbial waste treatment, biological control of pests was documented. The section of biodiversity presents a less amount of information about conservation of plants and animals and therefore students have low level of awareness on biodiversity. In order to enhance their knowledge level in biodiversity, the investigator made an attempt to identify the awareness level of students in biodiversity and to promote the same.

**Objectives:** The following objectives are preferred to conduct this study

- To identify the key concepts of biodiversity from various sources
- To find out the level of awareness on biodiversity among higher secondary students of Valsad and Navsari district.
- To identify the gender, age group and demography of the respondents;
- To determine the respondents awareness and understanding of the term biodiversity;
- To rate the importance of biodiversity to respondents daily lives, their concern for the loss and threats to biodiversity;
- To establish respondents awareness of communications regarding biodiversity;
- To ascertain which parks and green spaces were perceived by respondents to be good for biodiversity;
- To determine what actions respondents were willing to take, to enhance biodiversity within the Valsad and Navsari district;
- To identify which factors respondents thought were related to biodiversity;
- To determine if respondents could identify local priority and invasive species; and

A To establish if respondents were willing to record wildlife and attend events. of in and around Valsad and Navsari district.

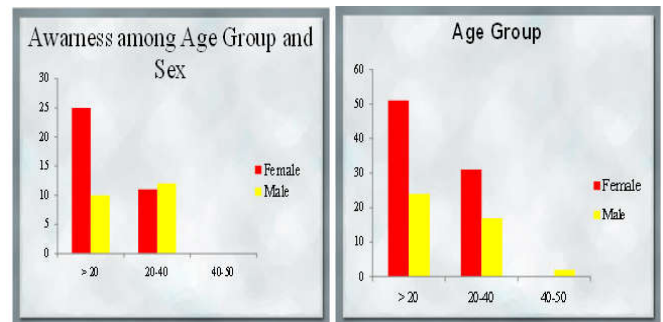
## METHODOLOGY

In this study questionnaire survey was conducted to identify the awareness regarding biodiversity and environment pollution in Valsad and Navsari District. Structured questionnaire were formulated in order to evaluate the knowledge and interest of the respondents. The intended for this questionnaire was 125 in service teacher, student and others (>40 years). This questionnaire include question which is related to biodiversity and environmental pollution. Data collected from this survey express the knowledge of the society regarding biodiversity. Respondents were asked whether they were familiar with the term "biodiversity." If they responded "no," they were only asked whether conservation is important to them. If they were familiar with biodiversity, they were asked whether they could provide a definition. All definitions were later categorized as to the type of response given. They were also asked additional questions concerning their perceptions about whether biodiversity should be preserved, the importance of biodiversity to society, why it is important to preserve, whether state or local governments should spend money to preserve or to study biodiversity, and finally whether they perceive a conflict between economic development and

protecting biodiversity. Then it was asked whether they are interested in developing the biodiversity. Most questions in local area or want to join any local organization from local area for the development of biodiversity. In this questionnaire mostly allowed the respondent to provide a yes or no answer, but additional comments were recorded. A copy of the survey is available from the author. Computer analysis was used to analyze data.

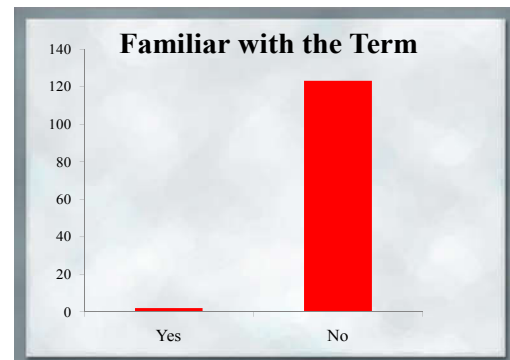
## FINDINGS AND ANALYSIS

### Age Group



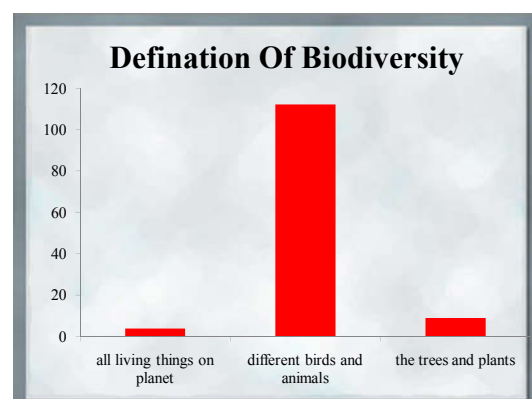
When respondents were categorized by age group we found that below the age group of 20 years, 41% were female respondent and 19.2% were male respondents and female (20%) respondent were found to be more aware compared to male (8%) respondents. In the range of 20-40 years, 24.8% female and 13.6% were male respondents, here both the gender were almost equal in awareness. Above 40 years of age group 1.6% were male respondents and were totally unaware of biodiversity.

### Term biodiversity



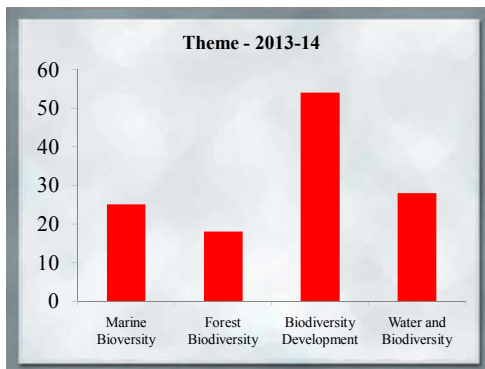
Upon survey it was found that majority of them (98.4%) were not familiar of the term Biodiversity

### Definitions



Majority of the respondents were unaware of the theme assigned for this current year, only 22% knew the theme was 'Water and Biodiversity'. Maximum respondent thought the current theme was biodiversity development.

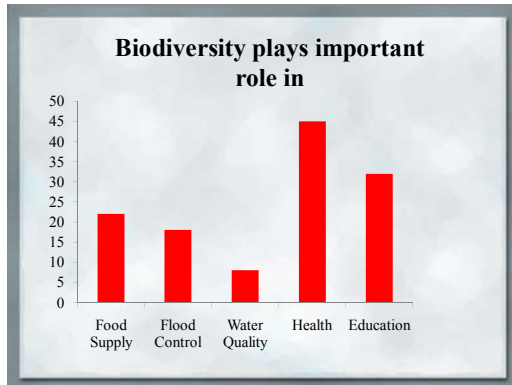
**Theme of biodiversity 2013**



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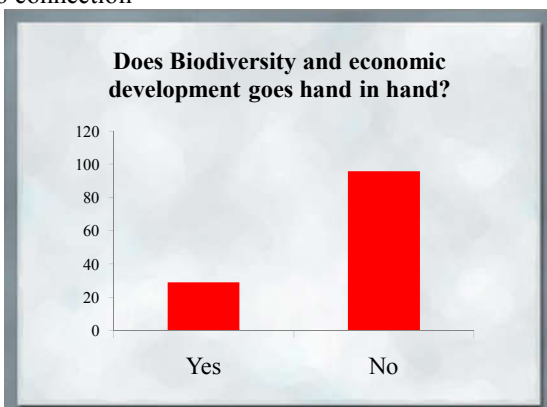
**Biodiversity plays important role in???**

When it was asked to respondant Which of the following do you think that biodiversity has a factor in 36% of the respondant believed that it plays important role in health and 26%. Belived that it plays role in education. Only 8.8% believed that biodiversity plays important role in weather change



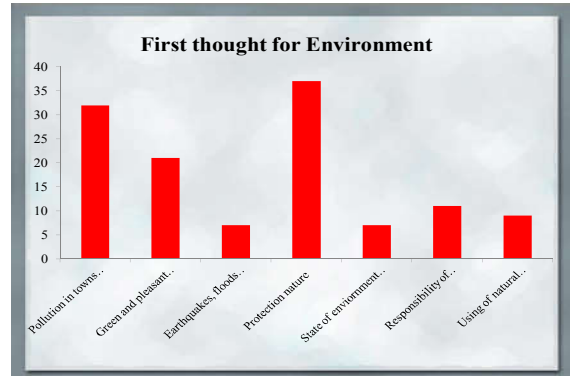
**Economic development and biodiversity**

when it was asked wheather economic development and biodiversity goes hand to hand only 23% agree that biodiversity and economic development goes hand in hand. Rest 77% believe that economic development and biodiversity has no connection



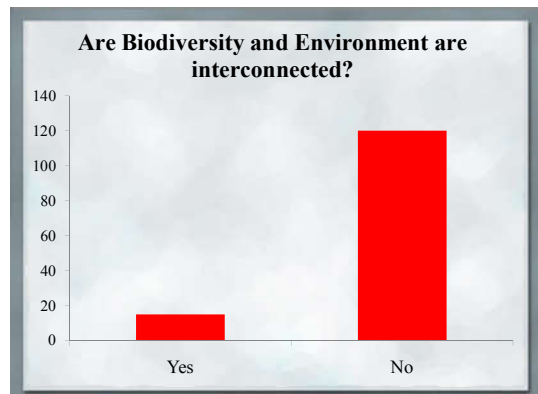
**What come first in mind when heard the term environment**

When it was asked as if what thought comes first when thinking of Environment, majority (29.6%) of the respondent thought of it as Protecting Nature, 25.6% thought about Pollution, 16.8% saw it as Green and pleasant landscapes



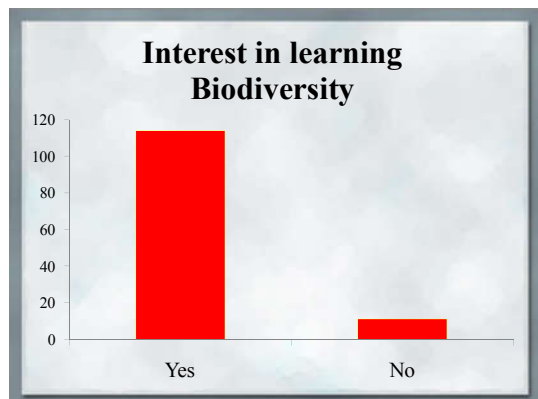
**Biodiversity and environment**

When asked wheather environment and biodiversity interconnected 80% believed that there is no connection between these two term only 20% believed that environment and biodiversity are interconnected.



**Interested in learning biodiversity**

Despite of majority of the respondents being unaware of Biodiversity, 91% of them are interested to know about biodiversity.



**Conclusion**

Main objective of the study was to find out level of awareness about biodiversity in the society. It was found that majority of the people are not knowing biodiversity exactly.

But most of the respondent are interested in knowing biodiversity. Most of them are ready to join any local organization related to biodiversity and wanted to develop biodiversity of the area. So there is need of developing more awareness regarding environment protection and biodiversity in the society for the development of the country because there is believes that more the rich in biodiversity the country is its economic growth will also rich.

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