1. **Introduction:**

Environment is the total outer physical and biological system within which human beings and other organisms live. It covers the atmosphere, water, land, minerals, vegetation, oceans, forests, living organisms and everything else around us including outer space. It is a whole, highly complicated system having many interacting components. The Oxford Advanced Learners’ Dictionary defines environment as the natural world in which people, animals and plants live.

There has always been a strong interaction between people and their environment. Man is a part of nature and his survival is very much dependent on the quality of the environment. The increasing human demands have been exerting great pressure on nature’s precious resources, agricultural land, energy sources, forests etc. resulting in environmental degradation. Man has created an imbalance in the environment by its haphazard exploitation to fulfill his needs. If environmental pollution keeps on increasing at the present rate, the very existence of life on earth is endangered.

There is now a general acceptance that there are a series of major global environmental problems. These are global warming; damage to the ozone layer; deforestation, particularly of the tropical rain forest; acid rain; soil erosion; desertification; the threat to endangered species of plants and animals. Each of these global problems are characterized by their scale and complexity, their
interdependence, the threat that they pose to the planet and the fact that they require international co-operation to tackle them. There is a vital need to bring awareness amongst the people so as to help them acquire an awareness of and sensitivity to the total environment and its allied problems.

In 1972, the UN Conference on Human Environment in Stockholm was instrumental in bringing countries together to consider the future of the number of studies expressing environmental concern. Addressing the Plenary Session of the Conference, our late Prime Minister, Indira Gandhi said, “… the modern man must re-establish the unbroken link with nature and with life. He must again learn to invoke the energy of the growing things and to recognize as did the ancients in India, centuries ago, that one can take from the earth and atmosphere only so much as one puts back into them…”


In 1970, the International Union for Conservation Nature and Natural Resources (IUCN) worked out an environmental education curriculum for schools. The central theme was to evolve an educational process through which an understanding of the connections between man, his culture and his bio-
physical environment is achieved. The Finnish National Commission for UNESCO (1974) has shown that environmental education is “a way of reaching environmental protection targets and is not a separate branch of science or a special subject of study. It should be included in the entire lifelong educational process.”

Environmental education has a dimension which has generated a great deal of enthusiasm and interest in teachers, students, political leaders and the general public throughout the world. The International Workshop held in Belgrade, Yugoslavia in 1975, contributed much to developing global awareness and it also produced the now famous Belgrade Charter, a world master plan for environmental education. Environmental education may serve to unite all the people of the world in a common effort to find solutions to the perplexing and difficult problems that threaten life on the planet. It should inculcate in individuals a sense of responsibility for the improvement of the environmental quality for the benefit of all humanity. The three central themes recognized are (i) education in which the environment represents a means (ii) education concerning the environment, and (iii) education of the individual as a person living in an environment of a given quality and who is partly responsible for that quality.

Highlighting the goal of environmental education, Stapp (1970) said that, “Environmental education is education designed to produce a citizenry that is knowledgeable concerning the interrelated bio-physical and socio-cultural
environments, of which man is a part, and their associated problems, and is motivated to work toward solutions to those present and project problems.”

The Intergovernmental Conference on Environmental Education at Tbilisi in 1977 also highlighted the goals of environmental education as (i) to foster clear awareness of, and concern about economic, social, political and ecological interdependence in urban and rural areas. (ii) to provide every person with opportunities to acquire the knowledge, values, attitude, commitments and skills needed to protect and improve the environment and (iii) to create new patterns of behaviours of individuals, groups and society as a whole towards the environment.

2. **The Study Area:**

Mizoram, the southernmost state of north-east India, covers a total area of 21,081 sq.km. Its 1,014 km-long international boundaries touch the neighbouring countries of Bangladesh in the west and Myanmar in the east and the south. The Indian states of Manipur, Assam, and Tripura are located on its north-east.

Mizoram is a land of great natural beauty, an endless variety of landscape with rich flora and fauna, clusters of whispering pines and quaint villages with houses on stilts. The state animal of Mizoram is Saza (Serow), and the state bird is Vavu (Hume’s bartailed pheasant), the State flower is Senhri (Red Vanda) and the state tree is Herhse (MesuaFerrea/Nahar).
The state is divided into eight districts, viz., Kolasib, Mamit, Aizawl, Champhai, Serchhip, Lunglei, Lawngtlai, Saiha. The capital city is Aizawl. The population of Mizoram stood at 8,88,573 (2001 census) of which 4,59,109 are males and 4,29,464 are females. The literacy rate is 88.80 and is the second highest among all the states of India, after Kerala.

The climate of Mizoram is moderate, cool and pleasant throughout the year but during the months of May to September, the state receives south-west and north-east monsoon with an annual rainfall of 200-250cm. Mizoram has an abundant growth of vegetation. The climatic condition favours the luxuriant growth of vegetation. Mizoram has a vast area of forest covering as much as 19,240 sq.km. About 20 percent of the area is under dense forest while 68 percent are open forest.

The scientists of the Zoological Survey of India (ZSI) conducted a detailed study of the State. The study focuses on nearly 1,468 species belonging to 891 genera under 295 families, of which insects alone form 37 percent with 520 species; the next abundant group is the birds with nearly 370 species and subspecies distributed in the State. The State government is aware and active to the needs of the conservation of wildlife. At present, the State government has notified eight numbers of protected areas for preservation and management of wildlife.
While Mizoram is backward in agriculture, industry and basic economic infrastructure facilities like power, transport and communication etc., it has made remarkable achievement in the field of education in the post-independent period. Between the period of 1947-72, there was a rapid increase in the number of primary and middle schools. There was tremendous progress and development in the education sector during 1972-81. Many new private Middle and High schools were opened during this period.

Mizoram became a full-fledged State of the Indian Union on February 20, 1987. It was about two years after Mizoram attained statehood that a significant development took place in education one of which was the inclusion of higher secondary stage under school education. The higher secondary stage was de-linked from the University system and was attached to the school system in 1996. Selected high schools were upgraded to higher secondary schools as a step towards making plus two stage an integral part of the school system. To regulate, supervise and develop higher secondary education, as a part of the school system, the responsibility was vested on the Mizoram Board of School Education (MBSE) by way of extending its jurisdiction over the stage.

Higher secondary education is a crucial and terminal stage of the school system. It is a gateway for higher education and also a vital link to the world of work. The greatest pressure in the coming years will be to redefine the role of
higher secondary education consistent with the long-term social and economic development strategy of the country.

3. **Justification of the Study:**

   Environmental education should be for protection and enhancement of the environment for present and future generations. Its chief objective is that people should acquire awareness and knowledge, develop attitudes, skills and abilities and participate in solving real life environmental problems.

   There is a need to promote an awareness and understanding of the environment amongst the students. It is only when the students possess positive attitudes and behaviour towards the environment that they can participate actively in preventing and solving environmental problems. Students should be helped to develop critical thinking and creative problem-solving ability in order to deal with the complex problems of environment. Given proper guidance, students will have the ability to discover the symptoms and real causes of environmental problems and arrive at strategies for environmental protection and preservation.

   Environmental educational curricula should be reviewed and where appropriate, revised to promote inclusion of scientific and cultural (humanities, politics, economics) contents sufficient to ensure that students understand the scientific basis of environment and ecology and the organization and process of human societies.
The educational curricula in schools have been undergoing changes and attempts have been made to make the teaching-learning more environment based. In Mizoram, Environmental Studies have been made a compulsory subject at the primary level and is given a weightage of 15 percent of the curriculum. Environmental issues and problems have been incorporated into different subjects in the school curriculum. However, many students are still unaware of the environmental problems. It is therefore necessary to create general awareness among the students of Mizoram and generate enthusiasm and commitment to solve the environmental problems.

There is a great need to bring the students to a heightened awareness of the environmental problems that threaten us and motivate them to work toward favourable solutions of those problems. The study of environmental education therefore helps develop new knowledge, skills and values in the students in a drive towards better quality of environment.

Environmentally conscious individuals are needed to prevent environmental disasters. The effects of these disasters have become so great that there is a vital need to bring awareness among the students. It has now become impossible to make wise decisions about our environment without an understanding of the broad concept and importance of environment. The study of environment education helps develop new knowledge, skills and values in the students in a drive towards better quality of the environment.
The present study, therefore, has been undertaken keeping in view the importance of incorporating suitable environmental dimensions into our educational practices and the need for creating environmental awareness amongst the higher secondary school students of Mizoram.

4. Statement of the Problem:

The title of the present study is:

“A Study of Environmental Awareness amongst Higher Secondary School Students in Aizawl & Lunglei Districts of Mizoram.”

5. Operational Definitions of Important Terms:

Environmental Awareness:

‘Environmental Awareness’ in the present study refers to the knowledge which the students have acquired about the total environment and its allied problems.

Higher Secondary School Students:

The Higher Secondary School Students in the present study include students studying in class XI and class XII.
6. **Delimitations of the Study:**

The study is delimited to the following:

i. The study is delimited to only Aizawl district and Lunglei district of Mizoram.

ii. The study is also delimited to only arts, science and commerce students.

iii. The study does not include students studying in the vocational stream.

iv. The study also does not include the central school in Aizawl district.

v. The study is delimited to variables like gender, type of school, area, streams and districts.

7. **Objectives of the Study:**

The objectives of the study are:

(i) To develop a test to find out the level of environmental awareness amongst the higher secondary school students in Aizawl and Lunglei districts of Mizoram.

(ii) To study the level of environmental awareness amongst the higher secondary school students in Aizawl and Lunglei districts of Mizoram.

(iii) To compare the level of environmental awareness of the higher secondary school students in Aizawl and Lunglei districts of Mizoram based on gender, type of school, areas and streams.
To compare the level of environmental awareness between the higher secondary school students in Aizawl district and Lunglei districts of Mizoram.

8. **Statement of Hypotheses:**

Hypotheses are developed for objective (iii) and objective (iv). They are:

**Objective (iii):**

1. There is no significant difference between Male and Female higher secondary school students in their level of environmental awareness.
2. There is no significant difference between higher secondary school students studying in Government schools and Deficit schools in their level of environmental awareness.
3. There is no significant difference between higher secondary school students studying in Government schools and Private-Aided schools in their level of environmental awareness.
4. There is no significant difference between higher secondary school students studying in Government schools and Private-Unaided schools students in their level of environmental awareness.
5. There is no significant difference between higher secondary school students studying in Deficit schools and Private-Aided schools in their level of environmental awareness.
6. There is no significant difference between higher secondary school students studying in Deficit schools and Private-Unaided schools in their level of environmental awareness.

7. There is no significant difference between higher secondary school students studying in Private-Aided and Private-Unaided schools in their level of environmental awareness.

8. There is no significant difference between higher secondary school students coming from the Rural areas and the Urban areas in their level of environmental awareness.

9. There is no significant difference between higher secondary school students studying in Arts stream and Science stream in their level of environmental awareness.

10. There is no significant difference between higher secondary school students studying in Arts stream and Commerce stream in their level of environmental awareness.

11. There is no significant difference between higher secondary school students studying in Science stream and Commerce stream in their level of environmental awareness.
Objective (iv):

12. There is no significant difference between higher secondary school students studying in Aizawl district and Lunglei district in their level of environmental awareness.

9. Methodology:

The present study is a descriptive research that uses quantitative methods for analysis of the data obtained. Quantitative research provides good quantitative results and has proved to be valuable in the field of research.

10. Population:

The population of the study comprised the students of Class XI and Class XII of the higher secondary schools studying in different streams like arts, science and commerce in Aizawl district and Lunglei district of Mizoram. The population included both male and female students studying in different type of schools, viz. government schools, deficit schools, private-aided schools, private-unaided schools and from the rural areas and the urban areas. The total number of population of this study was 10087 students of higher secondary school in Aizawl district and Lunglei district of Mizoram.

Table 1 shows the total population of higher secondary school students in Aizawl and Lunglei district of Mizoram.
### TABLE 1

The Total Population of Higher Secondary School Students in Aizawl and Lunglei District

<table>
<thead>
<tr>
<th>District</th>
<th>Area</th>
<th>Type of School</th>
<th>Stream</th>
<th>M</th>
<th>F</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aizawl</td>
<td>Urban</td>
<td>Government</td>
<td>Arts</td>
<td>1552</td>
<td>1589</td>
<td>3141</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Science</td>
<td>407</td>
<td>365</td>
<td>772</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Commerce</td>
<td>116</td>
<td>89</td>
<td>205</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>Arts</td>
<td>260</td>
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<td>560</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td></td>
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<td>Private-Aided</td>
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<td>184</td>
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</tr>
<tr>
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<td></td>
<td></td>
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<td>40</td>
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</tr>
<tr>
<td></td>
<td>Private-Unaided</td>
<td>Arts</td>
<td>67</td>
<td>49</td>
<td>116</td>
<td></td>
</tr>
<tr>
<td>Lunglei</td>
<td>Urban</td>
<td>Government</td>
<td>Arts</td>
<td>344</td>
<td>338</td>
<td>682</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Science</td>
<td>62</td>
<td>45</td>
<td>107</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Commerce</td>
<td>69</td>
<td>43</td>
<td>112</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Deficit</td>
<td>Arts</td>
<td>209</td>
<td>178</td>
<td>387</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>79</td>
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<tr>
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<td></td>
<td>Private-Aided</td>
<td>Arts</td>
<td>59</td>
<td>55</td>
<td>114</td>
</tr>
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<td>Private-Unaided</td>
<td>Arts</td>
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<tr>
<td></td>
<td>Rural</td>
<td>Private-Aided</td>
<td>Arts</td>
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<td>42</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Commerce</td>
<td>6</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td></td>
<td>5202</td>
<td>4885</td>
<td>10087</td>
</tr>
</tbody>
</table>

11. Sample:

The sample for the study comprised 500 male and 500 female higher secondary school students from the arts stream, the science stream and the commerce stream. The samples were taken from the students studying in the government schools, deficit schools, private-aided schools and private-unaided schools in the rural areas and the urban areas. The total number of the higher secondary school students taken for the study was 1000. Table 2 shows the distribution of the final sample.

**TABLE 2**

<table>
<thead>
<tr>
<th>District</th>
<th>Area</th>
<th>Type of School</th>
<th>Stream</th>
<th>M</th>
<th>F</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aizawl</td>
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<td>Government</td>
<td>Arts</td>
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<td>100</td>
<td>200</td>
</tr>
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<td></td>
<td>Science</td>
<td>50</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Deficit</td>
<td></td>
<td>Science</td>
<td></td>
<td>50</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Commerce</td>
<td></td>
<td>25</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Private-Aided</td>
<td>Arts</td>
<td></td>
<td></td>
<td>25</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Private-Unaided</td>
<td>Commerce</td>
<td></td>
<td></td>
<td>25</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Rural</td>
<td>Private-Unaided</td>
<td>Arts</td>
<td></td>
<td>25</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Lunglei</td>
<td>Urban</td>
<td>Government</td>
<td>Arts</td>
<td>25</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td></td>
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<td>Science</td>
<td>50</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Commerce</td>
<td></td>
<td>25</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Deficit</td>
<td></td>
<td>Arts</td>
<td></td>
<td>25</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
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<td>Science</td>
<td></td>
<td>25</td>
<td>25</td>
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</tr>
<tr>
<td>Private-Unaided</td>
<td>Arts</td>
<td></td>
<td></td>
<td>25</td>
<td>25</td>
<td>50</td>
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<tr>
<td>Rural</td>
<td>Private-Aided</td>
<td>Arts</td>
<td></td>
<td>25</td>
<td>25</td>
<td>50</td>
</tr>
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<td>Total</td>
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<td>500</td>
<td>500</td>
<td>1000</td>
</tr>
</tbody>
</table>
12. **Data Collection:**

The investigator developed the Environmental Awareness Test to assess the level of environmental awareness of Higher Secondary School students in Aizawl and Lunglei district of Mizoram. The study was conducted in two phases. In the first phase, an Environmental Awareness Test (EAT) was developed and standardized. In the second phase, data were collected by administering the Environmental Awareness Test (EAT) on the sample picked up from the higher secondary schools in Aizawl and Lunglei district of Mizoram.

13. **Statistical Treatment of the Data:**

The scores obtained from the final administration of the test were subjected to necessary statistical computation. To find out the level of environmental awareness, the obtained scores were analyzed by computing percentages, mean, median, mode and standard deviation for the entire sample as well as for male; female; students studying in government, deficit, private-aided, private-unaided schools; students coming from rural and urban areas; students studying in arts, science and commerce streams; and students in Aizawl and Lunglei district. Statistical Package for the Social Sciences (SPSS) Version 16 and Microsoft Excel 2012 were used for the analysis of data.
The level of environmental awareness of higher secondary school students in Aizawl and Lunglei District of Mizoram was found out by classifying the obtained scores of Environmental Awareness Test (EAT) into different categories. The scores ranging from 0-16 were put in the low awareness level category and interpreted as poor. The scores ranging from 17-33 were put in the average awareness level category and interpreted as satisfactory and the scores ranging from 34-50 were put in the high awareness level category and interpreted as good. Students who earned a score of 0-16, 17-33 and 34-50 were under the low, average and high awareness level category respectively. Percentages of the students corresponding to each category of awareness level were calculated.

The obtained scores were also grouped into a frequency distribution for the calculation of measures of central tendency - the mean, median and mode. The range and standard deviation were used to find out the measures of variability.

The reliability of the test was computed by the test-retest method. The reliability coefficient was found to be 0.85. Content validity was established for the test.

The differences in the level of environmental awareness was computed by applying ‘t’ test. The level of significance was taken at 0.01 level. The differences were found out between:

1) The male and the female students.
2) The students studying in government schools and deficit schools; government schools and private-aided schools; government schools and private-unaided schools; deficit schools and private-aided schools; deficit schools and private-unaided schools; and between private-aided schools and private-unaided schools.

3) The students of higher secondary schools coming from rural areas and urban areas.

4) The students studying in arts stream and science stream; arts stream and commerce stream; and between science stream and commerce stream.

5) The students of higher secondary schools studying in Aizawl district and Lunglei district.

14. Major Findings of the Study:

Based on objective (i) An Environmental Awareness Test was developed to find out the level of environmental awareness amongst the higher secondary school students in Aizawl and Lunglei district of Mizoram.

Based on Objective (ii) of the study, the following summarizes the major findings of the study of the level of environmental awareness amongst the higher secondary school students in Aizawl and Lunglei district of Mizoram. The findings of this objective were calculated using percentages and by grouping the obtained scores into frequency distributions:
1) The overall level of environmental awareness of higher secondary school students was found to be good. The frequency distribution when calculated showed mean, median and mode from the obtained scores as 34.71, 36 and 40 respectively. The value of standard deviation was 7.39.

2) The level of environmental awareness of the male higher secondary school students was found to be good. The mean, median and mode of the scores of the male students were 35.29, 36.50 and 39 respectively. The value of standard deviation was 7.17.

3) The level of environmental awareness of the female higher secondary school students was found to be good. The mean, median and mode of the scores were 34.13, 35 and 40 respectively. The standard deviation was found to be 7.57.

4) The level of environmental awareness of higher secondary school students studying in government schools was found to be good. The mean was 33.50, the median was 34 and the mode was 39. The value of standard deviation was 7.43.

5) The level of environmental awareness of the higher secondary school students studying in deficit schools was found to be good. The mean, median and mode of the scores of the students were 39.10, 40 and 40 respectively. The value of standard deviation was 5.92.

6) The level of environmental awareness of higher secondary school students studying in private-aided schools was found to be satisfactory. The mean,
median and mode were 31.07, 30 and 29 respectively. Standard deviation was 6.10.

7) The level of environmental awareness of higher secondary school students studying in private-unaided schools was found to be good. The mean was found to be 33.83, median was 36 and mode was 39. The value of standard deviation was 7.14.

8) The level of environmental awareness of higher secondary school students coming from the rural areas was found to be good. The mean, median and mode were 33.88, 34.50 and 29 respectively. Standard deviation was 5.21.

9) The level of environmental awareness of higher secondary school students coming from the urban areas was found to be good. The mean, median and mode were 34.80, 36 and 40 respectively. The value of standard deviation was 7.59.

10) The level of environmental awareness of higher secondary school students studying in the arts stream was found to be satisfactory. The mean, median and mode were 32.30, 32.50 and 39 respectively. The value of standard deviation was 7.26.

11) The level of environmental awareness of higher secondary school students studying in the science stream was found to be good. The mean, median and mode were found to be 38.75, 40 and 40 respectively. The value of standard deviation was 5.94.
12) The level of environmental awareness of higher secondary school students studying in the commerce stream was found to be good. The mean, median and mode were 33.29, 34 and 29 respectively. The value of standard deviation was 6.88.

13) The level of environmental awareness of higher secondary school students studying in Aizawl district was found to be good. The mean, median and mode were 35.18, 37 and 40 respectively. The value of standard deviation was 7.06.

14) The level of environmental awareness of higher secondary school students studying in Lunglei district was found to be good. The mean was 34, median was 34 and mode was 29. Standard deviation was 7.82.

Based on Objective (iii) of the study and the hypotheses developed, the following summarizes the major findings from the comparative analysis of the level of environmental awareness of the higher secondary school students in Aizawl and Lunglei district of Mizoram:

a) The male students had a mean score of 35.29 and SD of 7.17 and the female students had a mean score of 34.13 and SD of 7.57. It indicates that the male students had a slightly higher mean score than the female students. The value of ‘t’ is 2.48. The difference in the means of the scores of male and female higher secondary school students is not statistically significant at 0.01 level. There is no significant difference
between the male students and the female students in the level of environmental awareness. Thus, the null hypothesis is retained.

b) The students studying in government schools had a mean score of 33.50 and SD of 7.43. Students studying in deficit schools had a mean score of 39.10 and SD of 5.92. The students studying in deficit schools had a higher mean score. The difference in the means of the scores of students studying in government schools and students studying in deficit schools is statistically significant. The ‘t’ being 10.39 is significant at 0.01 level. It indicates that students studying in deficit schools exhibited a higher environmental awareness level than the students studying in government schools. The null hypothesis is thus rejected.

c) The mean score and SD of students studying in government schools were 33.50 and 7.43 respectively. Students studying in private-aided schools had a mean score of 31.07 and SD of 6.10. The difference in the means of the scores of students studying in government schools and students studying in private-aided schools is statistically significant. The ‘t’ being 3.07 is significant at 0.01 level. It indicates that there is significant difference between the students studying in government schools and the students studying in private-aided schools in the level of environmental awareness. The null hypothesis is thus rejected.

d) The students studying in government schools had a mean score of 33.50 and SD of 7.43. Students studying in private-unaided schools had a mean
score of 33.83 and SD of 7.14. The difference in the means of the scores of students studying in government schools and students studying in private-unaided schools is not statistically significant. The ‘t’ being 0.49 is not significant at 0.01 level. This shows that there is no significant difference in the environmental awareness level of the students studying in government schools and the students studying in private-unaided schools. Thus, the null hypothesis is retained.

e) The deficit schools students had a mean score of 39.10 and SD of 5.92. Students studying in private-aided schools had a mean score of 31.07 and SD of 6.10. The difference in the means of the scores of students studying in deficit schools and students studying in private-aided schools is statistically significant. The ‘t’ being 11.37 is significant at 0.01 level. This denotes that the students studying in deficit schools showed a higher environmental awareness level than the students studying in private-aided schools. The null hypothesis is therefore rejected.

f) The mean score of students studying in deficit schools was 39.10 with SD of 5.92. The mean score of students studying in private-unaided schools was 33.83 with SD of 7.14. The difference in the means of the scores of students studying in deficit schools and students studying in private-unaided schools is statistically significant. The ‘t’ being 7.96 is significant at 0.01 level. It is evident that the students studying in deficit schools
exhibited a higher environmental awareness level than the students studying in private-unaided schools. The null hypothesis is thus rejected.

g) The students studying in private-aided schools had a mean score of 31.07 and SD of 6.10. Students studying in private-unaided schools had a mean score of 33.83 and SD of 7.14. The mean difference of students studying in private-aided schools and students studying in private-unaided schools is statistically significant. The ‘t’ being 3.17 is significant at 0.01 level. It can be seen that the students studying in private-unaided schools showed a higher level of environmental awareness than the private-aided school students. Thus, the null hypothesis is rejected.

h) The students coming from the rural areas had a mean score of 33.88 and SD of 5.21. The students coming from the urban areas had a mean score of 34.80 and SD of 7.59. The difference in the means of the scores of students coming from the rural areas and students coming from the urban areas is not statistically significant. The ‘t’ being 1.18 is not significant at 0.01 level. This indicates that there is no significant difference in the level of environmental awareness between the students coming from the urban areas the students coming from the rural areas. The null hypothesis is therefore retained.

i) The students studying in arts stream had a mean score of 32.30 and SD of 7.26. Students studying in science stream had a mean score of 38.75 and SD of 5.94. The difference in the means of the scores of students studying
in arts stream and of the students studying in science stream is statistically significant. The ‘t’ value is 13.73 which is significant at 0.01 level. It indicates that the students studying in science stream showed a higher environmental awareness level than the students studying in arts stream. Thus, the null hypothesis is rejected.

j) The mean score of students studying in arts stream was 32.30 and SD was 7.26. The students studying in commerce stream had a mean score of 33.29 and SD of 6.88. The difference in the means of the scores of students studying in arts stream and students studying in commerce stream is not statistically significant. The ‘t’ being 1.49 is not significant at 0.01 level. This shows that there is no significant difference in the level of environmental awareness between the students studying in arts stream and the students studying in commerce stream. The null hypothesis is thus retained.

k) The science students had a mean score of 38.75 and SD of 5.94. The commerce students had a mean score of 33.29 and SD of 6.88. This difference in the means of the scores of students studying in science stream and students studying in commerce stream is statistically significant. The value of ‘t’ is 8.98 and is significant at 0.01 level. It is evident that the students studying in science stream exhibited a higher level of environmental awareness than the students studying in commerce stream. Thus, the null hypothesis is rejected.
Based on Objective (iv) of the study and the hypothesis developed, the following summarizes the major findings from the comparative analysis of the level of environmental awareness between the higher secondary school students in Aizawl district and Lunglei district of Mizoram:

i. The students studying in Aizawl district had a mean score of 35.18 and SD of 7.06 and students studying in Lunglei district had a mean score of 34.00 and SD of 7.82. The difference in the means of the scores of students studying in Aizawl district and students studying in Lunglei district is not statistically significant. The ‘t’ value which is 2.47 is not significant at 0.01 level. Therefore, this reveals that there existed no difference in the level of environmental awareness of the students studying in Aizawl district and in Lunglei district. The null hypothesis is thus retained.

**15. Recommendations:**

In the light of the results of this study, the investigator recommends the following:

i. Steps should be taken to ensure that every student is provided opportunities to acquire the knowledge, values, attitude, commitments and skills needed to protect and improve the environment. In this regard,
issues concerning the environment have to be incorporated into not only the different subjects, but into the co-curricular activities of the school.

ii. Audio-visual aids and modern teaching aids should be adopted to help the students discover the symptoms and real causes of environmental problems and arrive at concrete strategies for environmental protection and preservation.

iii. Eco clubs could be set up in the schools so as to encourage the students to participate actively in the campaign for protection of the environment. Activities such as seminars, camps, rallies, film shows, advertisement campaigns and dramas could be organized by such clubs.

iv. Efforts should be made to acquaint the students with environmental problems. Steps may be taken in this regard by supplementing theoretical knowledge of the environment with practical knowledge by organizing field trips, nature walk and nature study so as to create awareness amongst the students regarding the environment and its different aspects.

v. The schools can work together with the NGOs and the community on environmental issues like motivating the masses for environmental protection, formulating proper waste management plan, organizing public awareness programme and coordinating a cleanliness drive, tree plantation drive etc.
16. Suggestions for Further Research:

In order to understand the concept and recognize the importance of the environment and environmental education, more research is needed. It is needed to address the issues concerned with the environment and its different aspects. The following are suggestions for further research:

1) The present study is confined to higher secondary school students. Studies could be undertaken to find out the level of environmental awareness of students at the elementary stage in Mizoram.

2) Studies could be conducted to find out the level of environmental awareness of higher secondary students of other districts in Mizoram other than Aizawl and Lunglei district.

3) The contents of environmental education textbooks at the secondary stage in Mizoram and its impact on the environmental awareness of the students could be studied.

4) The role of mass media in creating environmental awareness among the students in Mizoram could be studied.

5) Studies could be carried out to find out the environmental awareness level of the university students of Mizoram University.

6) The purpose of the present study is to assess the environmental awareness of the students. Studies could be conducted to find out
whether or not the students have pro-environmental attitude towards the environment.

17. Conclusion:

The present study was conducted to find out the level of environmental awareness amongst higher secondary school students in Aizawl district and Lunglei district of Mizoram. The investigator feels that environmental education has not been given priority in the educational institutions in Mizoram. No separate environmental education textbook had been prescribed for the higher secondary school students in Mizoram although it has been introduced as a separate subject of study in the elementary stage. Again, in the elementary stage there are no trained teachers to foster the understanding and skills necessary to teach the goals of environmental education. As found in the results of the study, the overall environmental awareness of the students was good. It is clear that the students had gained some environmental knowledge from the study of the different aspects of the environment incorporated into the different subjects. The purpose should not just end in the acquisition of knowledge about the environment. The major concern should be to provide environmental knowledge and skills, to inculcate pro-environmental attitude combined with the practical applications of that knowledge. Students have to be encouraged to actively participate in the protection and improvement of the environment. We have to go
beyond content-driven method and acquire a new approach to the teaching of environmental issues.

This study therefore has helped us in realizing the environmental awareness level of the higher secondary schools students in Aizawl and Lunglei district of Mizoram. It is anticipated that the outcome of this research work will be useful in formulating a curriculum that encompasses environmental issues, and in the planning of programmes to promote an awareness and understanding of the environment amongst the students in Mizoram.