CHAPTER V
SUMMARY AND CONCLUSION

INTRODUCTION

Today we are living in computer era with a fashion of use and throw style and without knowing it’s cause and ill effects to the ecosystem and our human system as a whole. Environment is a gift of the nature which cannot be priced and is highly dynamic multidimensional and an interdisciplinary concept which encompasses various elements concerning human settlements, air, land which consequently influences all forms of life in one way or other.

To develop a world population that is concerned and aware about the environment and its problems and who have got knowledge, motivation, skill, commitment and attitude to work together and individually in order to find solution to the current environmental problems and to prevent the new ones are the goal of environmental education.

With so many Secondary schools and Higher secondary school of various boards like Mumbai board, CBSE and ICSE boards that have sprung up to cater to the needs of the new generation, it is necessary to teach this upcoming generation i.e. the youth the need to stop environmental degradation. Awareness has to be created now to save Mumbai the economic capital of India among the youth, as youth power is tremendous and they can change the entire scenario if they are sensitized. The base for environment education and action is provided by the school system in our country.

Teachers are real builders of the nation. Teachers are the most pivotal part in the class room. They are the one who can provide link in delivering environmental knowledge and create among the students the awareness of problems associated with environment. Teacher can play an important role in making the program of environmental education successful. Today there is a great need to preserve and protect our environment, as degradation of environment will result into a number of problems and to achieve this desired goal the role of students would go a long way.
STATEMENT OF THE PROBLEM

“A Study of Environmental Awareness and Environmental Ethics among the Secondary and Higher secondary school students of Greater Mumbai”.

Operational Definition:

**Environmental awareness:** “Envision the increasing of awareness and understanding of the environment through education.” Most of our population is not aware of our limited resources and how quickly they are being used up. Hence environmental awareness means to help social groups and individuals to acquire an awareness of sensitivity to the total environment and its allied problems.

**Environmental Ethics:** “Refers to the responsibility to understand the environmental consequences of our consumption, and need to recover our individual and social responsibility to conserve natural resources and protect the earth for future generations.”

**Secondary School Students:** Refers to male and female students studying in the secondary schools i.e. standard IX and X affiliated to the State Board and Central Board of Secondary Education (CBSE Board).

**Higher Secondary School Students:** Refers to male and female students studying in the junior college i.e. standard XI and XII affiliated to the Maharashtra State Board belonging to Arts, Commerce and Science discipline.

**Greater Mumbai:** Refers to secondary school and higher secondary schools under western, central and harbour railway routes.

AIMS OF THE STUDY

The study seeks to achieve the following aims:

1) To understand the extent of environmental awareness among the Secondary school students and Higher secondary school students.
2) To understand what level of environmental ethics, the Secondary school students and Higher secondary school students possess.

OBJECTIVES OF THE STUDY

The researcher has undertaken the study to achieve the following objectives:

1. To study the awareness of causes of environmental pollution among the Secondary school students on the basis of
   a. Gender
   b. Education at different boards

2. To study the awareness of causes of environmental pollution among the Higher Secondary school students on the basis of:
   a. Gender
   b. Discipline [Arts, Commerce & Science]

3. To compare the awareness of causes of environmental pollution among the Secondary school students and Higher Secondary school students.

4. To study the awareness of conservation of environment among the Secondary school students on the basis of:
   a. Gender
   b. Education to different boards

5. To study the awareness of conservation of environment among the Higher secondary school students on the basis of:
   a. Gender
   b. Discipline [Arts, Commerce & Science]

6. To compare the awareness of conservation of environment among the Secondary School students and Higher Secondary school students.
7. To study the environmental awareness among the Secondary school students on the basis of
   a. Gender
   b. Education at different boards

8. To study the environmental awareness among the Higher Secondary school students on the basis of:
   a. Gender
   b. Discipline [Arts, Commerce & Science]

9. To compare the environmental awareness of Secondary school students and Higher Secondary school students.

10. To study the level of environmental ethics of Secondary school students on the basis of:
    a. Gender
    b. Education at different boards

11. To study the level of environmental ethics of Higher Secondary school students on the basis of:
    a. Gender
    b. Discipline [Arts, Commerce & Science]

12. To compare the level of environmental ethics among Secondary school students and Higher Secondary school students.

13. To study the correlation between environmental awareness and environmental ethics among the Secondary school students on basis of:
    a. Gender
    b. Education at different boards

14. To compare the correlation between environmental awareness and environmental ethics among the Higher Secondary school students on basis of:
    a. Gender
b. Discipline [Arts, Commerce & Science]

HYPOTHESES OF THE STUDY

1. There is no significant difference in the awareness of causes of environmental pollution among the secondary school students on the basis of:
   a. Gender
   b. Education at different boards

2. There is no significant difference in the awareness of causes of environmental pollution among the higher secondary students on the basis of:
   a. Gender
   b. Discipline [Arts, Commerce & Science]

3. There is no significant difference in the comparison of the awareness of causes of environmental pollution among the Secondary school students and Higher Secondary school students.

4. There is no significant difference in study of the awareness of conservation of environment among the Secondary school students on the basis of:
   a. Gender
   b. Education at different boards

5. There is no significant difference in the study of the awareness of conservation of environment among the Higher Secondary school students on the basis of:
   a. Gender
   b. Discipline [Arts, Commerce & Science]

6. There is no significant difference in the comparison of the awareness of conservation of environment among the Secondary school students and Higher Secondary school students.
7. There is no significant difference in the study of the environmental awareness among the secondary school students on the basis of:
   a. Gender
   b. Education at different boards.

8. There is no significant difference in the study of the environmental awareness among the higher Secondary school students on the basis of:
   a. Gender
   b. Discipline [Arts, Commerce & Science]

9. There is no significant difference in the comparison of the environmental awareness of secondary school students and Higher Secondary school students.

10. There is no significant difference in the study of the level of environmental ethics of secondary school students on the basis of:
    a. Gender
    b. Education at different boards

11. There is no significant difference in the study of the level of environmental ethics of higher secondary school students on the basis of:
    a. Gender
    b. Discipline

12. There is no significant difference in the comparison of the level of environmental ethics among Secondary school students and higher secondary school students.

13. There is no significant correlation between environmental awareness and environmental ethics among the Secondary school students on the basis of:
    a. Gender
    b. Education at different boards
There is no significant correlation between environmental awareness and environmental ethics among Higher Secondary school students on the basis of:

a. Gender
b. Discipline [Arts, Commerce & Science]

**DELIMITATIONS AND SCOPE OF THE STUDY**

To define the scope of the study and demarcating its frontiers ensures greater specificity and precision besides keeping at bay unwanted inferences. The scope of the study elaborates what the investigator actually attempts to study. Delimitations draw the boundaries for the study.

The present study, studies the awareness of the environment of Secondary school students and Higher secondary school students. It also studies the level of environmental ethics of Secondary school students and Higher secondary school students.

- It studies the awareness as under:
  a) Factors which causes pollution
  b) Conservation of forest, soil, energy, air, wildlife, human health and animal husbandry

- It studies the ethics towards environment.

- It studies the awareness of environment and level of environmental ethics of Secondary school students with respect to:
  a. Gender
  b. Education at different boards

- It studies the awareness of environment and level of environmental ethics of Higher secondary school students with respect to:
  a. Gender
  b. Discipline (arts, science and commerce)
• It covers the secondary school students of English medium schools following curriculum prescribed by Secondary School Board and CBSE Board.

• It covers the Higher Secondary school students from different disciplines mainly Arts, Commerce and Science, following curriculum prescribed by MSBSHSE.

• It covers the geographical area of Greater Mumbai under western, central and harbour railway routes.

• The present study does not cover the Environmental Awareness and Environmental Ethics among Administrators, Institutions, Teachers Teaching Primary, Pre-Primary, Secondary, Higher Secondary and University Levels.

• Hindi, Marathi, Guajarati, Urdu, Kannada or other medium are not covered

• ICSE, IGCSE, IB and other boards are not covered.

The study does not cover geographical area of Thane.

VARIABLES OF THE STUDY

“Variables are properties or characteristics of some event, object, or person that can take on different values or amounts. Variables are things that we measure, control, or manipulate in research. They differ in many respects, most notably in the role they are given in our research and in the type of measures that can be applied to them.”

The outcome variables and the variables which we calculate statistically are dependent variables. Dependent variable changes on account of independent variables.

Variables which can be manipulated, changed or controlled are called Independent variables. The classifying or attributes independent variables are the variables which cannot be manipulated but the sample can be classified accordingly.
Dependent and independent variables are mostly used in experimental research where some variables are manipulated so that they are independent from the initial reaction patterns, intentions etc.

The dependent variables of the study are:

(a) Awareness of environment
(b) Level of environmental ethics.

The demographic for classification of the variables of the study are:

- Gender
- Education at different boards
- Discipline (arts, science and commerce).

THE SAMPLE – ITS NATURE AND SIZE

“A sample is a subset of a population to which the researcher intends to generalize the results.”

According to Best and Kahn, “The ideal sample is large enough to serve as an adequate representation of the population about which the researcher wishes to generalize and small enough to be selected economically – in terms of subject availability, expense in both time and money and complexity of data analysis.”

For the present study data was collected from 267 Secondary school students from 10 English medium schools attached to State Board and 275 Secondary school students of 8 English medium schools attached to CBSC Board and 827 Higher Secondary school students of (arts, commerce and science discipline) 15 Junior Colleges attached to MSBSHSE.
MAJOR FINDINGS AND DISCUSSIONS

AWARENESS OF CAUSES OF ENVIRONMENTAL POLLUTION

Findings

The causes of Environmental pollution and its awareness among the Secondary school students do not significantly differ on the basis of gender and education at different board.

Discussion

The causes of Environmental pollution and its awareness among the Secondary school students donot differ on the basis of Gender and Education at different board; this may be due to the fact that the male and female students perceive EVS merely as a subject and does not provide equal attention as to other subject. As the education levels of different board have been equalised as per the new education policy it can be perceived that level of awareness of cause of pollution doesn’t differ among different board

Findings

The awareness of causes of Environmental pollution differs significantly on the basis of Genderamong the Higher Secondary School students. The mean value for the awareness of causes of environmental pollution among Female students is greater than that of Male students.

Discussion

Among the Higher secondary students it is observed that the level of cause of environmental pollution differs on the basis of Gender. Female students have greater awareness than the male, because they adopt more eco-friendly practices because they are more perseverant towards their families and environment. Moreover, female have a special connection to the Environment through their daily interaction with it.
Findings

The awareness about causes of Environment pollution differs significantly on the basis of discipline of Higher Secondary School Students.

The awareness of causes of Environmental pollution among the Higher secondary students belonging to Science and Commerce; and Arts and Science discipline shows significant difference.

The awareness of causes of environmental pollution among the higher secondary school students belonging to Arts and commerce discipline shows no significant difference.

Discussion

The awareness of the cause of Environmental pollution is higher among the Higher secondary Science students compared to Commerce and Arts students, as the science students give more importance on their curriculum framing pattern. Their curriculum is framed in such a manner that it is more Environmental oriented. The teaching in Science subject is correlated to environment. Arts students learn subjects like History, Psychology, Philosophy, etc. where linking the subjects with environment becomes very difficult. Similarly Commerce students learn subjects like Book Keeping, organisation of Commerce, S.P., etc. where less number of topics which are related to Environmental problems is introduced in the curriculum.

AWARENESS OF CONSERVATION OF ENVIRONMENT

Findings

The awareness of Secondary School student about conservation of Environment does not significantly different on the basis of Gender and Education at different board.
Discussion

The need for conservation of the environment and how it has to be conserved does not significantly differ on the basis of gender and education of different board among secondary school students. Since the curricula of EVS are taught in the similar way, gender difference does not affect Environmental conservation and there appears to be no rationale for the gender difference in the conservation of environment.

The education at different board does not affect the awareness of conservation of environment as the syllabus is treated almost equally and students recognise and analyse various factors and by using skills and techniques make decision to solve and conserve environmental problems.

Findings

The awareness of conservation of environment among the Higher secondary students does not significantly differ on the basis of Gender.

Discussion

How to conserve environment does not significantly differ among the male and female students of Higher secondary school as gender difference did not affect environmental conservation. The Higher secondary school students are in the growing stage of their life, they are more aware of the problems around them and consider that saving the planet Earth is the only solution to save the future generation. Hence they try to save the planet without any gender difference.

Findings

The study of awareness of conservation of environment among the Higher secondary students on the basis of discipline shows significant difference.
The awareness of conservation of Environment among the Higher secondary students belonging to Commerce and Science and also Arts and Science shows significant difference.

The awareness of conservation of Environment among the Higher secondary students belonging to Arts and Commerce discipline shows no significant difference.

**Discussion**

It is observed that Science students have more awareness of conservation of Environment rather than the Arts and Commerce students. As Science subjects are more practical in nature, which enables the students to establish link between daily life and activities which in turn makes the students understand the environment and various problems faced by the environment. Science students also have more scientific attitude towards environment. In case of Arts and Commerce students the topic in their syllabus are less correlated to environment

**STUDY OF ENVIRONMENTAL AWARENESS**

**Findings**

The overall environmental awareness of Secondary school students on the basis of the gender shows significant difference. The mean value for awareness of the environment of female students is greater than that of male students.

The environmental awareness of the Secondary school students on the basis of education at different board shows significant difference. The mean score for awareness of the environment of CBSE board students is greater than State board students.
**Discussion**

The overall awareness of the environment among the secondary school students on the basis of gender shows a significant difference. Female students have found to have more awareness than that of male students, as girls are more perseverant towards their families and environment. Nearness of female students to nature as a result of societal historical developments in which women because of their capacity of giving birth, child care their nature of love and affection are bound to nature in a special way. Hence they maintain a special bond with the nature and nurture the environment to a greater extent than the male.

The awareness of environment among the CBSE board students is greater than Maharashtra state board students. Even though the different boards have almost equalised the syllabus it is not exactly the same. The CBSE board have a better designed and comprehensive syllabus of environmental education across all the disciplines, relative to that of the state board and also presence of well trained teachers, improved teaching methodology and project based activities make the students more aware of the environment.

**Findings**

The environmental awareness among the Higher secondary students on the basis of the gender shows significant difference. The mean score of environmental awareness of female students is greater than that of male students.

The study of environmental awareness among the Higher secondary students on the basis of discipline i.e. arts, commerce and science shows significant difference.

The awareness of environment among the Higher secondary students belonging to commerce & science and also arts & science shows significant difference.

The awareness of environment among the Higher secondary students belonging to arts and commerce discipline shows no significant difference.
Discussion

The awareness of the environment among the Higher secondary school students is more among the female students than that of male students, as girls are more perseverant towards their families and environment. Moreover, female in general by virtue of their behaviour adopt more eco-friendly practices than the male.

Science students are found to have more awareness of environment, as science course is practically oriented and subjects like physics, chemistry, biology, geology etc. are well connected with environment. Science students are more exposed to environmental issues and therefore have more inclination towards protecting and conserving nature as compared to arts and commerce students as they feel that environment as a subject is more confined to science students in spite of knowing its importance.

STUDY OF LEVEL OF ENVIRONMENTAL ETHICS

Findings

The level of environmental ethics among the Secondary school students differ significantly on the basis of gender and education at different boards.

The mean score for the level of the environmental ethics is greater for female students than that of male students.

The mean score for awareness of environmental ethics of CBSE board students is greater than that of Maharashtra secondary state board students.

The level of environmental ethics differs significantly on the basis of gender among the Higher secondary school students. The mean value of score for female students is greater than that of male students.
The level of environmental ethics of the Higher secondary students on the basis of discipline (arts, science and commerce) shows no significant difference.

**Discussion**

Ethics is a branch of philosophy which tell us what is right and what is wrong on universal basis. Environmental ethics consider extending the traditional boundaries including human to non-human world. It is observed in the study that the level of environmental ethics among the Secondary school students differ on the basis of gender. Female students have greater level of ethics than the male students as the girls are found to be more homely. They are more eco-friendly, they understand the environmental issue more than the male students.

The level of environmental ethics among the CBSE Board students are more than the Maharashtra state board students. This may be attributed to well organised EVS syllabus, well trained teachers, teacher’s teaching methodology and the ability of the teachers to sensitize the school children for contribution to a cleaner environment. A number of project based activities are conducted, which inculcates values in the students and hence these students learn to preserve their environment for future generation.

Whereas, dearth of proper trained teachers, lack of proper training in environment education during the period of the teacher as a student teacher and curriculum development lead to low degree of environmental ethics among the state board pupil.

The level of environmental ethics among the Higher secondary school students does not differ significantly on the basis of discipline, this may be due to the fact that students from different discipline perceive EVS merely as a subject and does not provide equal attention as to other subject.

**Comparison of the awareness of causes of environmental pollution**
The comparison of causes of environmental pollution among the Secondary school students and Higher secondary school students shows no significant difference.

**Comparison of the awareness of conservation of environment**

The comparison of conservation of environment among the Secondary school students and Higher secondary school students shows no significant difference.

**Comparison of Environmental awareness**

The comparison of environment awareness among the secondary school students and higher secondary school students shows no significant difference.

**Comparison of level of Environmental ethics**

The degree of environmental ethics among the Secondary school students and Higher secondary students shows a significant difference.

The mean value of the score for the level of the environmental ethics is greater for Secondary school students than Higher secondary students.

Secondary school students are more obedient, disciplined, more attached to teachers, school and parents. They adhere to the teachings of their teachers and parents and thus maintain a high level of environmental ethics. As these students move on from Secondary to Higher secondary i.e. Junior college, they have a choice to decide their course for future study. They have an option to choose either arts, science or commerce discipline on the basis of their interest. Exposure to environmental issues are dealt differently in different discipline, and also lack of trained teachers to teach environmental subject leads to low level of environmental ethics among the Higher secondary students.
Correlation of environmental awareness and environmental ethics (Secondary school students) on the basis of gender:

The co-relation between environmental awareness and environmental ethics among the male Secondary school students shows positive significance. The co-relation between environmental awareness and environmental ethics among the female Secondary school students shows positive significance.

Correlation of environmental awareness and environmental ethics (Secondary school students) on the basis of education at different board:

The co-relation between environmental awareness and environmental ethics among the CBSE students shows positive significance. The co-relation between environmental awareness and environmental ethics among the Maharashtra state board students shows positive significance.

Correlation of environmental awareness and environmental ethics (Higher secondary school students) on the basis of gender:

The co-relation between environmental awareness and environmental ethics among the male Higher secondary school students shows positive significance. The co-relation between environmental awareness and environmental ethics among the female Higher secondary school studentssshows positive significance.

Correlation of environmental awareness and environmental ethics (Higher secondary school students) on the basis of discipline (arts, commerce & science):

The co-relation between environmental awareness and environmental ethics among theHigher secondary arts studentssshows positive significance. The co-relation between environmental awareness and environmental ethics among the Higher secondary Commerce students shows positive significance.
The co-relation between environmental awareness and environmental ethics among the Higher secondary science students shows positive significance.

CONCLUSION

Based on the study conducted the researcher has come to the following conclusion.

1) Awareness of causes of environmental pollution:
The awareness about causes of environmental pollution is found to be moderate among the Secondary school students and Higher secondary students. It is observed that female students have a greater awareness about causes of environmental pollution. Many of the students have not heard about the fact that nuclear reactor is also a cause of environmental pollution. They are not aware of the fact that nuclear disaster is worst disaster in the world. Majority of the respondents could not identify the fact that big dams, launching of satellites and rockets, refrigerators and jet aircrafts also causes environmental pollution.

These days environment education is being taught throughout India in all the schools, after an order passed by the Honourable Supreme Court in 2005. This order was passed so as to educate the people of India the various environmental problems faced by our planet Earth. Still it is observed that students lack environmental awareness.

Main reason for lack of awareness among students is due to the lack of awareness among the teachers who teaches the subject. Even though the Government has introduced the subject at the lower level more objectively, it has to be extended to the higher levels in an integrated approach with proper orientation for teachers of all disciplines at all levels.

Educating the student about environment is the role of the teacher. Teacher will be able to do this only if they posses the necessary level of environmental awareness. This level of environmental awareness among the teachers is possible only if government introduces and enriches environmental education programs in both pre service and in service teacher training program. So that teachers know how to integrate the same in their day-to-day class room situation.
Environmental education develops concepts and awareness about environmental literacy skills and knowledge and critical awareness about environmental action and skill. Students should be taken for nature visit so that they can see the nature and the importance of living creature in it by holding nature camps in various places students will come to know the abuses done on the environment by individual and industries and various kinds of diseases caused by pollution and what are its preventive measure. In this way through several activities students can be taught about environment without including it in their syllabus as a special subject and cuasing additional burden on them.

2) **Awareness of conservation of environment:**

There is a moderate awareness among the Secondary students and Higher secondary students about various methods of conservation of environment. Majority of the students are not aware of the fact that there are alternative arrangements for petroleum fuel which is an exhausting fuel. Use of wind energy, solar energy etc. should be encouraged to save electricity obtained from various other sources. Bio-fertilizers must be used instead of synthetic fertilizers. Though synthetic fertilizers increases the yield, soil fertility is lost in the long on-going process.

The lack of knowledge is because there is lack of teachers to teach environmental related problems during their professional education period. The professional education course in India doesnot include in their syllabus environment related topics and how to sensitise the students to contribute to a society of clean environment. When the professional education courses do not train the student teachers properly how will they train their students when they become teachers.

Most of the institutions do not have proper teachers to teach environmental studies. We find physical education teacher, drawing teacher, music teacher, craft teacher, computer teacher and even language teachers like Hindi & Marathi teaching EVS subject which results in lack of awareness of environment and conservation among students. Students do not give equal importance to E.V.S as other subject. Some students feel that environmental education is meant for science students only.
Teachers also do not feel the need to sensitize students towards environmental issues. If this is the attitude which is followed, then earth the planet will be completely destroyed, there will be severe climatic changes, global warming, ozone depletion resulting in U.V rays reaching the earth’s atmosphere. All the above changes are being seen in different parts of the world today. Hence it is the duty of all the heads of government to think seriously to a solution for these problems.

Even though, various summits have taken place, a final solution is not yet decided. Every individual will have to think seriously or else the future generation will blame us for extinction of various species on the earth. So, this is the right time to start otherwise it will be too late. Hence the state, education department, government have to pressurize the schools and colleges to sensitize the youth about various problems of environment, as they are the group which can change the world for tomorrow, or else the Gods created planet will be completely lost. So, save this beautiful earth by conservation of environment.

3) **Study of level of environmental ethics:**

“Environmental ethics refers to the responsibility to understand the environmental consequences of our consumption and need to recognize our individual and social responsibility to conserve natural environment and protect the earth for future generation”. Nature is not a gift to us from our forefathers, but a loan to bestow it to our grandchildren. Hence it is essential that, today every individual should know how to protect the environment for future generation and this level of environmental ethics is found to be very low among the Secondary as well as higher secondary school students.

Majority of the students are not aware of the fact that light, fans and all electric equipment’s should be switched off when not in use. In this era of computers and mobile, which according to students are never meant to be kept off, it is observed that students don’t bother about the wastage of electricity, which in turn has to be saved as it is national good.
The number of vehicles plying on the road is increasing day by day. Every individual tries to acquire a vehicle today, due to easy accessibility to loan facility. The growing generation is not able to calculate the fact that increase in vehicle results in pollution. Students are not trained properly in their schools and junior colleges that instead of using own vehicles, they should be encouraged to use common vehicles.

‘Sustainable’ usage of resource is a phrase well described in books but not in practice. Every individual tries to make maximum utilization of the available resources without thinking of the future generation which is turn cause depletion of the earth resources. This lack of awareness causes low level of environmental ethics among the students.

Plastic one of the major menace today is creating havoc in all the countries of the world. Plastic bags, plastic articles, thermocol articles etc. have become a part and parcel of human life. Considering to the fact that government have introduced various stringent laws against usage of plastic, many states have banned usage of plastic bags and imposed severe fine, still the usage of plastics is not been regulated.

Plastic is a major non degradable soil pollutant. A day may soon come when instead of soil on the earth we will have more plastic on the earth.

The main reason for low level of environmental ethics is due to lack of trained staff and curriculum developers. Very less project oriented activities like banning use of crackers, plastic bags, use of natural colours during Holi etc. have been implemented in their curriculum. Lack of knowledge by the teachers in linking the environment of the child and teaching is the other reason for low level of environmental ethics.

Hence it is a urgent need of individual and society to take best interest in presenting a high quality environment. In the present situation what is required is the change in the attitude among the public so that proper initiative can be taken today to save the environment from degradation.

RECOMMENDATIONS TO THE STAKE HOLDERS:
There are several stakeholders in the present situation and the roles and responsibilities of each towards securing a clean environment have to be recognized. The important stakeholders are the teachers, the schools, the children, the parents, the society, the education department and the state. If initiative is taken at each level, then we could hope for a safe environment for the future generation.

**Teacher**

1) Teacher is one of the most important keys who operate the educational system, hence it is necessary to see that they have strong and efficient professional skills.

2) Environment education shall begin from ‘self’. It should start with the teacher in all his/her walks of life.

3) Teacher should be a role model.

4) Teacher should consider the subject of environment education with holistic approach so as to develop holistic perspective on environment so that students understand the sensitive relationships among physical, biological and socio-cultural dimensions of environment.

5) They should develop self-learning modules or auto instructional package of environmental studies required for different levels of students.

6) They should provide project-based activities to students so that students are close to nature. Environmental issues should be taught by the teacher in an integrated manner.

7) Teacher should treat environment education as “utmost concern” rather than just as a subject for syllabus coverage and examination.
8) Teachers should have the ability not just to create or develop environmental knowledge/awareness/consciousness, but to convert it into attitude and action and later into “problem solving skills” among students.

9) Teachers must acquaint their pupil about pros and cons of environmental pollution.

**Children**

Children are the most powerful stratum of the society, who knows the importance of environment and nature substantially. Students should understand the need for protecting the environment and be prepared to fight against the contamination of the atmosphere as students are tomorrow’s future.

1) Children should participate in tree planting campaign in and around their schools and residential areas.

2) School students should take part in various environmental management seminars organized by the school.

3) They should travel by foot or bicycles to schools and other places.

4) Students should develop the habit of reading and writing in the day light and hence save energy.

5) Students should help the government and the non-government organizations in preventing pollution from the society by actively participating in programmes and by giving the information of those who pollute the environment.

6) Students should participate in all the environmental activities organized by the school such as cleanliness day, debate, elocution, quiz, poster making etc.
7) They can make campaigns in favour of environment.

8) They can form informal groups to protect the environment.

9) Children can protest the deeds of the offenders.

10) They can send petition to the authorities or editors of newspapers.

11) Children should contribute significantly in conserving the environment

**Parent**

The moment a child is born, their life is being shaped by those around them. The most impact is of course is their parents. Parents are considered to be the first educators to their children and home is their first school where positive attitudes are developed among the children. It is here they learn to take their first step towards environmental management. Parents influence the behaviour of the child. Hence it is the duty of the parents to inculcate good habits in their children regarding environment. They should teach their children the use of dust bins, how to keep their surroundings clean, narrate stories to children which has good moral environmental values thereby creating an impact of environment right from their home.

Every learning facility which the child gets in the childhood provides a positive contribution by establishing progress focussed on environmental education for sustainability. The use of any materials including play material should have environmental focus. Parents play a very important role at home in parents manage committee and at parents operated play group in developing environmental awareness and sustainability practice.

**School**
According to John Dewey “School is the miniature of the society”. So, it is the duty, responsibility and role of the school to inculcate better Environmental ethics because it is the greatest source of formal education.

1) Schools must organize different activities to promote environmental awareness, like tree plantation drive, making trees as friend, form environment club, visit slum areas, zoo, museum etc.

2) School must improve different audio-visual aids like chart, models, posters, slogans writing on environment, environmental poetry writing and preparation of transparencies.

3) Projects on the hazardous effects of environment pollution and measures to protect them from their fatal effects can be given to students.

4) Schools must organize debate, dramas and skit competition among students on topics of environment.

5) Concept of green school – helps school provide a healthier surroundings.

6) Concept of conservation ethics – conservation ethics is expressed by the four “R” (i.e. rethink, reduce, reuse and recycle).

7) Concept of excursion – by arranging field trips and not simply by lectures or explanations but first-hand experience is essential.

8) Concept of wild life club: Schools can have a wild life club in their school so that students may develop a relation, a feeling all living on this earth.

9) Conduct orientation program for teachers.

10) Value oriented education in the light of environmental pollution and environmental awareness should be provided by schools.
11) School must give special emphasis on students on at lower school level because they are tomorrows citizen and educating them means educating a generation.

**Education Department**

It is in the hands of education department the future of our country lies. For the country to march ahead, we need the younger generation who are well oriented with various environmental problems and the solution.

Hence they should develop:

1) New, innovative participatory, multisensory and action oriented interactive methods and approaches for imparting environmental values.

2) To revise the syllabus of environmental education and include latest problems which will ensure equitable contribution by the young students in sustainable development of the country.

3) To organize training programme to teach and orient teachers of all disciplines and at all levels, environmental education and how to integrate the same in their day-to-day classroom situation.

4) To conduct environment audit, environment documentation, environment accountability etc. strictly in all educational institutions.

5) Introducing environmental education as a subject in teacher’s training syllabus.

6) Conducting exhibitions, poster making competition, essay, debates on state level.

7) Broadcasting several environment related programmes through radio and television.
8) Develop syllabus in such a manner that at the primary level the emphasis should be made mostly on building up awareness through real life situation and by conservation. At secondary level, general and easy concept of environment, various environmental problems their solutions and various theoretical and practical content which increases the interest of students towards environment should be given preference in the syllabus. At higher level, the research work regarding different environmental problems, their reason, effect and solution should be given proper place in the curriculum.

State

1) It is the duty of the State to implement various environment-friendly jurisprudence in the state through the recognition of the principle of sustainable development.

2) To provide good governance free from corruption to protect the environment as clean air, clean water, greenery and open space are also the right of every citizen.

3) To set up village education committees and school development and monitoring committees and to sensitize them on environmental issues, especially local environment problems.

4) To sensitise and develop environment responsible behaviour and attitude among elder men of the society, administrator, policy makers, business people, industry, working personnel etc. on par with sensitized people.

5) To take stringent action against those breaking environmental laws.

6) To review the environment education books and modify it whenever required.

7) To organize in-service and pre-service training programme.

8) To introduce such scheme by which people in such a manner that they show environment friendly behaviour eg. Saving money.
9) To institute awards to those schools or colleges who does maximum work towards maintaining clean environment.

10) The Government must ban plastics at the production stage itself to encourage the use of biodegradable paper containers and cloth bags.

11) With the help of various mass media and modern means of communication, the concept of environment and its protection should be published and popularised.

12) To launch special programmes to develop awareness among the students.

13) To make environmental education a compulsory subject for all the streams.
SUGGESTIONS FOR FURTHER RESEARCHER

A study of environment awareness and environmental ethics among under graduate students and post graduate students.

A study of environment awareness and environment ethics among arts, science and commerce students of various universities.

A study of environment awareness among elderly people in Mumbai and their attitude towards environment.

A comparative study of environment ethics among state board CBSE Board and ICSE board students in Greater Mumbai and Thane district.

A study of environment awareness and environment ethics among aided and unaided secondary school students in Thane region.

A comparative study of environment awareness and environment ethics among higher secondary students in Tribal areas, rural areas and urban areas.

A comparative study of attitude of adult literate male and female towards environment.

SUMMARY OF THE CHAPTER

All creation of God, has got its own significance and function. Environment is a house for all living beings such as human, animal, birds as well as plant. Hence it is necessary to know and appreciate the importance of nature, its existence and its relation to human life.

With India poised to become one of the youngest nations in the world in the couple of years, it is the youth who shall have to largely shoulder the responsibility of saving the environment. This can be possible only if they start making smaller changes to their lifestyles that could lead to
ripple effect. Thus the study reveals that youth alone can save the beautiful planet from extinction.

Even though there is moderate awareness of environment among the secondary and higher secondary school students, the level of environmental ethics is very low among the students based on gender, education at different board and discipline. This may be due to the fact that nature and environmental education is not given much appreciation in the field of education. Students also try to take the subject of environmental education very lightly.

Even though large amount of effort is going on to strengthen environmental education activities, it is observed that there is a poor coordination due to which there is no maximum effectiveness. Hence it recognize the need of various stakeholders such as teachers, school, children, parents, society, education department and the state to work in partnership for a long term behavioural change towards sustainability.