
AWARENESS OF WOMEN REGARDING ENVIRONMENTAL POLLUTION AT HOWLY A STUDY IN BARPETA DISTRICT, ASSAM

NIRMALI MALAKAR

Abstract: The natural environment encompasses all living and non-living things occurring naturally on Earth or some region thereof. The natural environment is contrasted with the built environment which comprises the areas and components that are strongly influenced by humans. A geographical area is regarded as a natural environment.

Environmental pollution is major global concern of the day. In India too we are facing lot of environmental problems. Common public in general and young generation in particular should come forward to reduce this burning issue of pollution and to protect our environment. To achieve this goal a mass awareness campaign should be started. In this context the present curriculum gives much importance to the topics such as pollution, its causes, and control measures to be taken etc.

The grand industrial development, the success of Green Revolution, the transport explosion, the rapid growth of cities and haphazard management of natural recourses has adversely affected environment balance. Environment pollution in India has increased manifold, one of the greatest problems confronting the modern civilized world is pollution, which literally means fouling the natural habited and environment. Air pollution, water pollution, land pollution, noise pollution are some types of pollution.

Nearly 175 million hectares of land (35% of India's total land area) has subjected to serious environmental degradation. Hardly 10.12 percent of the total area is under adequate tree cover. In fact deforestation, siltation, water, air and noise pollution, sanitation- all are threatening not only the quality of rather the very survival of human beings.

It is doubtless that industrialization has done a great good to mankind. It has also led to urbanization. But the haphazard growth of modern cities, industrial cities, migration of rural population to the cities in search of work has created and unhealthy environment. It has given rise to overcrowding, slums, juvenile delinquency, inadequate air amenities, addiction to drugs and alcohol and crime are some results. People living in big cities no longer breathe the fresh air and see any green, open spaces, There is not of noise pollution in big cities and it is almost impossible to get rid of this. There should be a regular check on the use of loud speakers, indiscriminate use of horns by the motorists. Medical experts have warned that the excessive noise pollution can lead to deafness and create other health problems which can do irreversible damage to the well being of man.

The theoretical foundation of this study, which comes from different sources of thought, informs about the role of media regarding environmental pollution as the major factor to promoting rapid environmental change and the scale of human interference in environmental pollution. After a discussion of the theoretical aspect and there is a need to promote environmental awareness to control and prevent environmental pollution. In other words, the study is concerned with an examination of the actual and potential role of the media in environmental pollution to create and effective or to protect environment or under to enhance the implementation process to improve the quality of the environment.

Introduction: Environmental pollution: Pollution means contamination of environment as a result of human activities. The term pollution refers primarily to the fouling of air, water, and land by wastes. In recent years it has come to single a wider range of disruptions to environmental quality. Thus letter, billboards and auto junkyards are said to constitute visual pollution; noise excessive if considered noise pollution; and waste heat that alters local climate or affects fish population in rivers is designated thermal pollution.

The world today is confronted with the great problem of environmental degradation and pollution. The fast depleting forest, rapid industrialization, mining, soil erosion etc. have created great ecological imbalances in recent years. Man's quest for economic

development has been mainly responsible for the ruthless exploitation of nature. In face, man has exploited nature almost to the point of no return. Being unable to distinguish between utilization and exploitation of natural resources man has endangered his own existence. So conservation and protection of environment is the urgent need of the hour. Man must realize the fact of life on this planet earth has been possible only because of its environment. Environment comprises everything around us. The term environment has been derived from Latin word 'Environ' meaning 'En' stands for 'In' and 'Viron' stands or 'encircle' or to surround.

The 20th cent has been pollution approach crisis proportions throughout the world. At issue is the capacity of the biosphere to disperse, degrade, and

assimilate human wastes. The biosphere is a closed ecological system with finite resource and maintained in equilibrium by grand-scale recycling. Under natural conditions organic and certain inorganic materials in the biosphere are continually recycled by processes including photosynthesis and respiration, nitrogen fixation and denitrification, evaporation and precipitation and diffusion by wind and water action. But the introduction of massive quantities of waste at any point in the biosystem may "overload" it, disrupting the natural recycling mechanisms.

According to chamber's Dictionary, 'Environment is a surrounding or condition influence development or growth'. It can be defined as a system which includes all living things viz air, water, soil, vegetable plants (flora) animal (Fauna) including man as an important factor. Environment consists of the sum total of the stimulation that the individual receives from the conception until death. It is the surrounding or external condition influencing development and growth of people, animal or plants.

According to International Encyclopedia of social sciences Environment is aggregate of all external condition and influences affecting the life and development of an organism. In the words of Anastasi, environment is everything that effect the individual. The wider meaning of environment is nature which creates man. Man gets all the basic needs for survival like air, water and sunlight, mineral and habitat from nature. Since the evolution of man the earth are had been dependent on the environment. Initially his number was small and needs limited. But as the time passed human dependence on environment increased; and for the satisfaction of his greed he started exploiting the nature. As a result there's environment crisis in man's life. It is very unfortunate that people are indifferent to their environment in spite of having the knowledge about the importance of environment in their lives.

The term environmental pollution refers to ways by which people pollute their surroundings, air with gases and smoke poison the water with chemicals and other substances and damage the soil too with too many fertilizers and pesticides. Also pollute the surroundings in various other ways.

Environmental degradation is a result of dynamic interplay of socioeconomic, institutional and technological activities. Environment changes may be driven by many factors including economic growth, pollution growth urbanization intensification of agriculture, rising energy use and transportation. Poverty still remains a problem at the root of several environmental problems.

The pollution is widespread in the country and can be broadly categorized as flux type of pollution and sink type of pollution. The former refers to the pollutants

dumped into the environment, either to air or in water while the later is caused by accumulation either in soil or riverbed or also in ground water.

Causes of Environmental Pollution: The different regions of the earth have different environment. With the advent of civilization man has adopted modern scientific method to monopolize the management of all natural resources which has brought unfrequented ecological disaster. As a result the world today is facing serious environmental problems. Some of the most important (environmental) problems which needs immediate attention to save our environment are enumerated below-

Deforestation: According to a UN report 1 crore 70 lakhs ha of forest cover was removed from the earth in 1991 for various human activities. Man is destroying the forest, vegetation for obtaining timber, fiber and wood also to use for agricultural & industrial purpose. As a result it threatens the existents of certain flora and Fauna and some of the species are on the verge of extinction. Cutting down of plants results in soil erosion, climate change, floods, and droughts. Ultimately it disturbs the ecological balance and created environmental problem.

Population Explosion: Another problem is population explosion in India, growing population is threatening the ecological balance we do not have the technological to feed the hungry millions without damaging our ecology. Increasing population creates pressure on the environment as every year more houses to petroleum products to be used, and more land is required to construct the houses.

Form of pollution: Pollution we hear it every other day at school, college and read about it in newspaper. So what is it? Pollution occurs when pollutants contaminate the natural surroundings; which brings about changes that affect our normal lifestyles adversely. Pollutants are the key elements or components of pollution which are generally waste materials of different forms. Pollution disturbs our ecosystem and the balance in the environment. With modernization and development in our lives pollution has reached its peak; giving rise to global warming and human illness.

Pollution occurs in different forms; air, water, soil, radioactive, noise, heat/thermal and light. Every form of pollution has two sources of occurrence the point and the non-point sources. The point sources are easy to identify monitor and control, whereas the non-point sources are hard to control. Let us discourse the different types of pollutions, their causes and effects on mankind and the environment as a whole.

1. **Air Pollution:** Air pollution is the prominent and dangerous forms of pollution. It occurs due to many reasons. Excessive burning of fuel which is a necessity of our daily lives for cooking, driving and

- other industrial activities; releases a huge amount of chemical substances in the air everyday; these pollute the air.
2. Smoke from chimneys, factories, vehicles or burning of wood basically occurs due to coal burning; this releases sulphur dioxide into the air making it toxic. The effects of air pollution are evident too. Release to sulphur dioxide and hazardous gases into the air causes global warming and acid rain; which in turn have increased temperatures, erratic rains and droughts worldwide; making it tough for the animals to survive. We breathe in every polluted particle from the air; result is increased in asthma and cancer in the lungs.
 3. Water Pollution: Water pollution has taken toll of all the surviving species of the earth. Almost 60% of the species live in water bodies. It occurs due to several factors; the industrial wastes dumped into the rivers and other water bodies cause an imbalance in the water leading to its serves contamination and death of aquatic species.
 4. Also spraying insecticides, pesticides like DDI on plants pollution the ground water system and oil spill in the oceans have causes irreparable damage to the water bodies. Eutrophication is another bid source; it occurs due to daily activities; this forces detergents to go into water which blocks sunlight from penetrating, thus reducing oxygen and making it inhabitable. Water pollution not only harms the aquatic being but it also contamination the entire food chain by severely affecting humans depending on these water borne disease like cholera, diarrhea have also increased in all places.
 5. Soil pollution: Soil pollution occurs due to incorporation of unwanted chemicals in the soil due to activities. Use of insecticides and pesticides absorbs the nitrogen compounds form the soil making it unfits for plants to derive nutrition from. Release of Industrial waste, mining and deforestation also exploits the soil. Since plants can't grow properly, they can't hold the soil and this leads to soil erosion.
 6. Noise Pollution: Noise pollution is caused when noise which is an unpleasant sound affects ears and leads to psychological problems like stress, hypertension, hearing impairment etc. It is caused by machines in industries, loud music, etc.
 7. Radioactive Pollution: Radioactive pollution is highly dangerous when it occurs. It can occur to nuclear plant malfunction, improper nuclear waste disposal, accidents, etc. It causes cancer, infertility, blindness, defect at the time of birth; can sterilizes soil and affect air and water.
 8. Thermal/heat pollution: Thermal pollution is due to the excess heat in the environment creating unwanted changes over long time periods; due to huge number of industrial plants, deforestation and air pollution. It increases the earth's temperature, causing drastic climatic changes and extinction of wildlife.
 9. Light pollution: Light pollution occurs due to prominent excess illumination of an area. It is largely visible in big cities, on advertising boards and billboards, in sports or entertainment events at the night. In residential area the live of the inhabitants is greatly affected by this. It also affects the astronomical observations and activities by making the stars almost invisible.
- Effects of pollution:**
- Environment Degradation:** Environment is the first casualty for increase in pollution weather in air or water. The increase in the amount of CO₂ in the atmosphere leads to smog which can restrict sunlight from reaching the earth. Thus prevents plants in the process of photosynthesis. Gases like sulfur dioxide and nitrogen oxide can cause acid rain. Water pollution in terms of oil spill may lead to death of several wildlife species.
- Human health:** The decrease in quality of air leads to several respiratory problems including asthma or lung cancer. Chest pain, congestion, throat inflammation, cardiovascular disease, respiratory diseases are some of disease that can be causes by air pollution. Water pollution occurs due to contamination of water and may pose skin related problems including skin irritations and rashes. Similarly, Noise pollution leads to hearing loss, stress and sleep disturbance.
- Global Warming:** The emission of greenhouse gases particularly CO₂ is leading to global warming. Every other day new industries are being set up, new vehicles come on road and trees are cut to make way for new homes. All of them, in direct or indirect way lead to increase in CO₂ in the environment. The increase in CO₂ leads to melting of polar ice caps which increases the sea level and pose danger for the people living near costal areas.
- Ozone layers depletion:** Ozone layer is thin shield high up in the sky that stops ultra violet rays from reaching the earth. As a result of human activities, chemicals such as chhorofluoro carbons (CFCS), were released in to the atmosphere which contributed to the depletion of ozone layer.
- Infertile land:** Due to constant use of insecticides and pesticides, the soil may become infertile. Plants may not be able to grow properly. Various forms of chemicals produces from industrial wastes is released into the following water which also affects the quality of soil.
- Pollution not only affect humans by destroying their respiratory, cardiovascular and neurological systems, it also affects the nature, plants, fruits, vegetables, rivers, ponds, forests, animals etc. on which they are

highly dependent for survival. It is crucial to control pollution as the nature, wildlife and human life are precious gifts to the mankind.

Description of the areas: Howly is located at 26.43° 90.97° E. It has an average elevation of 43 meters (141 feet). It is a town situated in the district of Barpeta and in the state Assam. People speak Assamese, Hindi, and Bengali as the major language.

As of 2001 India census, Howly had a population of 15,958. Males constitute 52% of the population and females 48%. Howly has an average of 59.5% male literacy is 69% and female literacy is 56% in Howly, 14% of the population is under 6 years of age. Majority of the people belong to Muslim community of this town.

Need of the present study: Today there's environment crisis in man's life due to over consumption of natural resources, over population, urbanization, industrialization and unscientific attitude of human being. It is necessary for everyone to be aware of the problems, arising out of the environment pollution. In Howly Town a place in Barpeta District a large number of schools, college and shops are there. These people of the town should also be made aware of pollution issues. At this time if they are aware of pollution issues, only then can influence other with their decisions in matter of quality living. Therefore, it is necessary to study the awareness of people belonging to this town about environmental degradation. Moreover it is equally important to know the role of mass-media creating Environmental awareness in this area. If effective procedure and methods are employed in conducting research it leads the researcher to achieve his goal. Actually the effectiveness of any research mainly depends of the methods and procedure adopted in investigation.

Statement of the problem: The topic of the present study "A study on Awareness of Women Regarding Environmental Pollution at Howly" The advent of civilization man has adopted modern scientific method to monopolize the management of all natural resources' which has brought unprecedented ecological disaster. As a result the world today is facing serious environmental problems. Some of the most important (environmental) problems like deforestation, population Explosion, water pollution and Air pollution etc. which needs immediate attention to save our environment are enumerated below-

Scope and Delimitation: Howly is the very large town of Barpeta District. There are a lot of scopes for research work in the field of Environmental pollution. Research on exploring the condition of environment, factors polluting environment, effectiveness of various measures used in different industrial for controlling pollution should get utmost attention. 50

people included in my topic study on pollution at Howly town.

Objectives of the present study:

1. To study rate of pollution in the area of Howly Town.
2. To study the awareness of women towards environment pollution of Howly.

Location and communication: A study on Environmental pollution at Howly town is taken my area of for study, Howly is located at 25.43° N 90.97° E. It has an average elevation of 43 metres (141 feet). It is a town situated in the District of Barpeta and in the state Assam. On the national Highway of No. 31 away from the town almost 500 hundred metres. It is located 7 K.M. of the south of Barpeta Road.

Howly bears the similar tones of Bihu with other towns in Assam, but Polly get and jatraagan are popular in this town festivals. Howly Rash Mela is may be the biggest festivals of this. Besides this major festivals like Durga Puja, Saraswati Puja, Laxmi Puja & Eid are celebrated by the people.

Methodology: The study has been taken with the help of the descriptive survey method. A self structured questionnaire was developed and applied for collecting the relevant data.

Population and sample: A population refers to any collection of specified group of human beings or of non human entities such as objects, educational institutions, and geographical areas.

It is a small proportion of a population selected for the observation and analysis. In this study the sample has been taken 50 women from the area with the help of simple random sampling technique.

Sources of the study: Both primary and secondary sources of data have been taken out for the present study.

Findings and interpretation of data: From the questionnaire we have found different opinions of women about the environmental pollution and major findings are shown below in table.

Table No. IV. I

Mass industrialization is the main cause of environmental pollution

Yes	%	No	%
45	90	5	1

From this table it is seen that out of 50 women 90% are agreed with the statement and 10% are not.

Table No. IV. II

The effect of noise pollution

Yes	%	No	%
47	94	3	6

The study reveals that out of 50 women 94% are agreed with the statement and 6% of are not.

Table No. IV. III

Deforestation is the main cause of environment imbalance

Yes	%	No	%
43	86	7	14

From this table it is found that out of 50 women 86% think that deforestation is the main cause of environmental pollution and the rest 14% women do not think.

Table No. IV – IV

Urbanization is responsible for environmental pollution.

Yes	%	No	%
40	80	10	20

From this table it is seen that out of 50 women 80% supported that urbanization is responsible for environmental pollution and 20% are not supported the same.

Table No. IV – V

Nuclear experiment should be banned to get rid of environmental pollution.

Yes	%	No	%
43	86	7	14

From this table No. IV. V reveals that 86% women believe that Nuclear experiment should be banned to get rid of environmental pollution 14% are not agreed.

Table No. IV – VI

Man is solely responsible for environmental pollution.

Yes	%	No	%
48	96	2	4

From this table it is cleared that 96% women are agreed with the statement that, Man is solely responsible for environmental pollution and 4% are not agreed.

Table No. IV – VII

Use of energy in production of electricity increase pollution.

Yes	%	No	%
49	98	1	2

This table implies that 98% women are agreed with this statement that use of energy in production of electricity increase pollution and 2% are not agreed with the statement.

Table No. IV – VIII

Chemical fertilizer and pesticide is the main cause of soil pollution.

Yes	%	No	%
39	78	11	22

From this table it is cleared that 78% women are agreed with this statement that chemical fertilizer and pesticides is responsible for soil pollution and 22% are not agreed.

Table No. IV – IX

Population explosion is the main cause of environmental pollution.

Yes	%	No	%
44	88	6	12

From this table it is cleared that 88% women are in favour of population explosion is the main cause environmental population and rest are not in favour of 12% not agreed.

Table No. IV – X

Green house effect is responsible for increased temperature of atmosphere.

Yes	%	No	%
35	70	15	30

From this table it is found that 70% women believe that green house effect is responsible for increased temperature of atmosphere and rest does not believe so.

Table No. IV – XI

Leather and fertilizer industry is responsible for water pollution.

Yes	%	No	%
44	88	6	12

It is evident from this table 88% women agreed that leather and fertilizer industry is responsible for water pollution and 12% are not.

Table No. IV – XII

Cement plants chemical plants coal-fired power plants are responsible for air pollution.

Yes	%	No	%
42	84	8	16

This is found from table that 84% are agreed with the statement and 16% are not agreed with the statement.

Table No. IV – XIII

Release of waste products and contaminants into surface runoff into river drainage is cause of water pollution.

Yes	%	No	%
39	78	11	22

It is found that 78% is agreed with the statement and 22% are not agreed with the statement.

Table No. IV – XIV

Aircraft noise is the cause of noise pollution.

Yes	%	No	%
40	80	10	20

From the upper table we found that out of 50% women, 80% agreed that aircraft noise is responsible for noise pollution and 20% are not agreed with the statement.

Table No. IV – XV

Throwing plastics and polythene to soil is the cause of soil pollution.

Yes	%	No	%
46	92	4	8

From the upper table we found that out of 50% of women 92% agreed with the statement and 8% are not agreed with the statement.

Table No. IV – XVI

In the heavy traffics vehicle horn are blow loudly and cause noise pollution.

Yes	%	No	%
49	98	1	2

From the upper table we found that out of 50% women, 98% people of agreed with the statement and 2% is not agreed with the statement.

Table No. IV – XVII

Vehicle smoke is responsible for air pollution.

Yes	%	No	%
48	96	2	4

It is found that 96% people agreed that vehicle smoke is responsible for air pollution and 4% are not agreed with the statement.

Table No. IV – XVIII

Participation on environmental awareness programmes to control environmental pollution.

Yes	%	No	%
50	100	0	0

It is found that 100% women agreed that statement.

Findings: According to these findings of the study, Mass-Media especially T.V. and Newspaper and college teacher has affective role in prevention of environmental pollution among the people.

It is found that almost all the statements have general knowledge about the cause of environmental pollution.

It is also found the women participation in prevention of environmental pollution of this area by different agencies is not satisfactory.

It is also found that the role of N.G.O. and Govt. agencies of Howly I controlling and prevention of environmental pollution is not satisfactory.

Suggestion: India is a tropical country. It had at one time dense forests and was very rich in flora and fauna. But the rate at which the denudations of the country's rich forest cover has been continuing it may not be left with any priest cover by the end of this country commercial felling of trees over gassing and

over cultivation land starved peasants all these are factors that have been responsible for the shrinkage of the forest cover consequently leading to climate changes. Destruction of forests has also led to extinction of many rare species of wild life; turned into fallow waste land.

We should be brave to protest against pollution. In fact it is easy and important to preserve air environment from our daily life.

As long as we are concerned about our environment we shall have a better environment.

As long as we are bravely express our option of preserving environment and pollution away.

In fact we are able to prevent garbage pollution in our daily life, such as don't use things produced with stero from; to carry, bags when shopping; to classify the garbage and don't burn garbage at ones own will.

As long as we put our garbage in trast cans after going on a picnic and don't kill wild animals at one's will, we will own beautiful sceneries.

As long as we don't destroy forests; don't catching fish with bad ways, on the contrary we plant flowers and trees we will own a better environment.

As long as we remarks waste papers retrieve useful resources and have a good opinion of "Throwing is the cause of Garbage; Retrieving is the sources of Resources" gradually; the option of preserving environment will root in everyone's mind let us support the activity of retrieving useful resource and let the virtue of frugality be kept.

We believe candidates who support the activity of preserving environment will win and they will be responsible of moving the activity of preserving environment will be enlarged everywhere.

From the suggestion of preserving environment above, we hope everyone to be ambitious of being a soldier of preserving environment; being a solver of problem of any pollution; and being a defender of natural environment.

References

1. Anderson, A. 1887 : Media, Culture And Environment London: UCL Press.
2. Adger, W.M., Hug, S; Brown, K.D. and Hulme, M. 1998: Adaptation to climate change in the developing world progress in Development studies 3 (3): 195-179.
3. Allen, S. 1999.: Institution change and leadership in greening the campus Berlin: Peter Lang.
4. Arcury, T. 1990 : Environmental attitudes and environmental Knowledge. Istanbul: Tesevpress.
5. Baker. 2007 : Rediscover of traditional ecological knowledge as adoptive management.
6. B. Commoner, Science and Survival (1996) and the closing circle.
7. Burton, I. 2002 : From impacts Assessment to adaptation policy: The shaping of Adoption policy on climate change Hammondsport: Penguin Publishing Ltd.
8. Belay, T. 2000 : Processes and causes of accelerated soil erosion on cultivated field of wollo. East African Social Science research reviews. 16 (1): 5 - 19.
9. Buell, L. 2005 : The environmental imagination : The nature writing and the formation of American culture Cambridge : Baknap Press.

-
- 10. Coress, E. : The Negotiable Desert export knowledge in the negotiations of the conference to combat desertification. Stockholm : Linkoping University Press.
 - 11. Cleaver, D. : 1997 Reveersing the Sprial : the population agriculture and environment. Washington, D.C. McGraw- Hill.
 - 12. Cutter, S. : 1996 Environmental risks and hazards Englewood Cliffs, NJ : Prentice Hall.
 - 13. C.S. Silver (1988) : One earth, one future.
 - 14. J. Marte et al (1991) Toxics A to Z.

Nirmali Malakar/Assistant Professor/Department of Education/B.H. College/Howly/