

## **Module-11**

# **SOCIOLOGY OF ENVIRONMENT**



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# **SOCIOLOGY OF ENVIRONMENT**

## **INTRODUCTION**

Environment can be defined as the physical surrounding of man/woman of which he/she is a part and on which he/she is dependent for his/her activities like physiological functioning, production and consumption. His physical environment stretches from air, water and land to natural resources like energy carriers, soil and plants, animals and ecosystems. The relationship between physical environment and the well-being of individuals and societies is multi-fold and multi-faceted with a qualitative as well as a quantitative aspect to it. The availability and use of natural resources have a bearing on the outcome and the pace of development process. For an urbanized society, a large part of environment is man-made. But, even then the artificial environments (building, roads) and implements (clothes, automobiles) are based on an input of both labour and natural resources. The term 'Environment' is commonly restricted to ambient environment. In that view, the indoor environment (home, work place) is regarded as isolated piece of environment to be treated on its own terms. The indoor environment usually is under the jurisdiction of the Public Health authorities. Health risks are mainly linked to space heating, cooking and lighting: low grade fuels, insufficient ventilation are often the main problems. Additionally, there may be problems connected with moisture, light, incidence, hazardous substances from building materials, lacquers and paints. Problems with drinking water, sewage and waste are not linked to the dwelling as such but rather to lack of appropriate infrastructure.

## **ENVIRONMENTAL DEGRADATION**

Environmental degradation is the disintegration of the earth or deterioration of the environment through consumption of assets, for example, air, water and soil; the destruction of environments and the eradication of wildlife. It is characterized as any change or aggravation to nature's turf seen to be pernicious or undesirable. Ecological effect or degradation is created by the consolidation of an effectively substantial and expanding human populace, constantly expanding monetary development or per capita fortune and the application of asset exhausting and polluting technology. It occurs when earth's natural resources are depleted and environment is compromised in the form of extinction of species, pollution in air, water and soil, and rapid growth in population.

Environmental degradation is one of the largest threats that are being looked at in the world today. The United Nations International Strategy for Disaster Reduction characterizes environmental degradation as the lessening of the limit of the earth to meet social and environmental destinations, and needs. Environmental degradation can happen in a number of ways. At the point when environments are wrecked or common assets are exhausted, the environment is considered to be corrupted and harmed. There are a number of different techniques that are being used to prevent this, including environmental resource protection and general protection efforts.

Environmental issues can be seen by long term ecological effects, some of which can demolish whole environments. An environment is a unique unit and incorporates all the living and non-living components that live inside it. Plants and creatures are evident parts of the environment, but it also includes the things on which they depend on, for example, streams, lakes, and soils.

Environmental surroundings get to be divided when technological advancement splits up areas of land. Some examples of this can include streets which may slice through woods or even trails which wind through prairies. While it may not sound all terrible on the surface, there are bad results. The biggest of these results are felt by particular animal and plant groups, the vast majority of which are specific for their bio-region or need a large area in order to make sure that their genetic lines are kept intact.

### **Causes of Environmental Degradation**

Some environmental life species require substantial areas to help provide food, living space, and other different assets. These creatures are called area specific. At the point when the biome is divided, the vast patches of living space don't exist anymore. It gets to be more troublesome for the wildlife to get the assets they need in order to survive. The environment goes on, even though the animals and plant life are not there to help sustain it properly.

1. Land Disturbance: A more basic cause of environmental degradation is land damage. Numerous weedy plant species, for example, garlic mustard, are both foreign and obtrusive. A rupture in the environmental surroundings provides for them a chance to start growing and spreading. These plants can assume control over nature, eliminating the local greenery. The result is territory with a solitary predominant plant which doesn't give satisfactory food assets to all the environmental life. Whole environments can be destroyed because of these invasive species.

2. Pollution: Pollution, in whatever form, whether it is air, water, land or noise is harmful for the environment. Air pollution pollutes the air that we breathe which causes health issues. Water

pollution degrades the quality of water that we use for drinking purposes. Land pollution results in degradation of earth's surface as a result of human activities. Noise pollution can cause irreparable damage to our ears when exposed to continuous large sounds like honking of vehicles on a busy road or machines producing large noise in a factory or a mill.

3. Overpopulation: Rapid population growth puts strain on natural resources which results in degradation of our environment. Mortality rate has gone down due to better medical facilities which has resulted in increased lifespan. More population simply means more demand for food, clothes and shelter. You need more space to grow food and provide homes to millions of people. This results in deforestation which is another factor of environmental degradation.

4. Landfills: Landfills pollute the environment and destroy the beauty of the city. Landfills come within the city due to the large amount of waste that gets generated by households, industries, factories and hospitals. Landfills pose a great risk to the health of the environment and the people who live there. Landfills produce foul smell when burned and cause huge environmental degradation.

5. Deforestation: Deforestation is the cutting down of trees to make way for more homes and industries. Rapid growth in population and urban sprawl are two of the major causes of deforestation. Apart from that, use of forest land for agriculture, animal grazing, harvests for fuel wood and logging are some of the other causes of deforestation. Deforestation contributes to global warming as decreased forest size puts carbon back into the environment.

6. Natural Causes: Things like avalanches, quakes, tidal waves, storms, and wildfires can totally crush nearby animal and plant groups to the point where they can no longer survive in those areas. This can either come to fruition through physical demolition as the result of a specific disaster, or by the long term degradation of assets by the presentation of an obtrusive foreign species to the environment. The latter frequently happens after tidal waves, when reptiles and bugs are washed ashore.

Of course, humans aren't totally to blame for this whole thing. Earth itself causes ecological issues, as well. While environmental degradation is most normally connected with the things that people do, the truth of the matter is that the environment is always changing. With or without the effect of human exercises, a few biological systems degrade to the point where they can't help the life that is supposed to live there.

## **Impact of Environmental Degradation**

- 1. Impact on Human Health:** Human health might be at the receiving end as a result of the environmental degradation. Areas exposed to toxic air pollutants can cause respiratory problems like pneumonia and asthma. Millions of people are known to have died of due to indirect effects of air pollution.
- 2. Loss of Biodiversity:** Biodiversity is important for maintaining balance of the ecosystem in the form of combating pollution, restoring nutrients, protecting water sources and stabilizing climate. Deforestation, global warming, overpopulation and pollution are few of the major causes for loss of biodiversity.
- 3. Ozone Layer Depletion:** Ozone layer is responsible for protecting earth from harmful ultraviolet rays. The presence of chlorofluorocarbons, hydro chlorofluorocarbons in the atmosphere is causing the ozone layer to deplete. As it will deplete, it will emit harmful radiations back to the earth.
- 4. Loss for Tourism Industry:** The deterioration of environment can be a huge setback for tourism industry that rely on tourists for their daily livelihood. Environmental damage in the form of loss of green cover, loss of biodiversity, huge landfills, increased air and water pollution can be a big turn off for most of the tourists.
- 5. Economic Impact:** The huge cost that a country may have to borne due to environmental degradation can have big economic impact in terms of restoration of green cover, cleaning up of landfills and protection of endangered species. The economic impact can also be in terms of loss of tourism industry.

## **ENVIRONMENTAL MOVEMENT IN INDIA**

The contemporary India experiences an almost unrestricted exploitation of resources because of the lure of new consumerist lifestyles. The balance of nature is disrupted. This has led to many conflicts in the society. An environmental movement can be defined as a social or political movement, for the conservation of environment or for the improvement of the state of the environment. The terms 'green movement' or 'conservation movement' are alternatively used to denote the same. The environmental movements favour the sustainable management of natural resources. The movements often stress the protection of the environment via changes in public policy. Many movements are centred on ecology, health and human rights. Environmental movements range from the highly organized and formally institutionalized ones to the radically

informal activities. The spatial scope of various environmental movements ranges from being local to the almost global.

The genesis of concern for environmental protection in India can be traced back to the early twentieth century when people protested against the commercialization of forest resources during the British colonial period. It was only in the 1970s a coherent and relatively organized awareness of the ecological impact of state-monolithic development process started to develop, to grow into a fully fledged understanding of the limited nature of natural resources and to prevent the depletion of natural resources. Thus, the emergence of environmental debate in contemporary India and renewed scholarly attention towards environmental topics can be attributed to the factors such as the influence of international events/agencies concerning global environmental conditions, growing official recognition of certain environmental problems in the country, and the emergence of environmental movements in India.

The major environmental movements in India are:

1. Bishnoi Movement- It was started in 400 years ago by a Sage known as Sombaji. In Rajasthan, a large number of trees are still worshiped by devotees. People resisted the cutting of such tree & advocated movement against deforestation.
2. Chipko Movement- It was started in 1973 in the Chamoli district of Uttaranchal, Chipko movement was against deforestation. Sunderlal Bahuguna, Gauri devi & Chandi Prasad Bhatt were prominent leaders of this movement.
3. Narmada Bachao Andolan - It is a movement against building multi-purpose dam over Narmada river which will ultimately result in flood & water logging in large area covered by about 1,00,000 people. the movement is led by Medha Potekar, Baba Amte & Arundhati Roy.
4. Silent Valley Movement - It was a movement against a hydro-electric project on the river Kuthipuzha, tributary at Preiyar river. in fact, the project site is covered by evergreen forest which is a home of many rare species of plants & fauna which many be destroyed by submergence.
5. Baliyapal Movement- It is a movement against testing of missiles on the land of Baliyal villagers which may lead to interfertility of soil.

### **Bishnoi Movement**

In the year 1471 A.D., there was a severe drought in a village called Pipasar of Rajasthan. The drought lasted for three years. Every bit of grass and plants were chopped to feed the animals. Children starved, cattle were dying and there was not a drop of water. People left their homes to search for water. At that time, there was a man called 'Jambeshwar' who was acutely pained at the tragedy but wisely learnt a lesson. He noticed that, unlike in the past, the land was not able to withstand the destruction from the drought as a large number of trees had been felled. If life was

to survive, people must understand the value of environment. He preached that the way in which we lived should be in harmony with nature and not against it. He came to be known as Guru Maharaj Jambaji. Jambaji put down his thoughts into 29 principles which are followed by his disciples who are known as Bishnois (20+9) or twenty-niners. According to the religion preached by Jambaji, there was strict ban on: - Killing of any animals or bird; and Felling of a green tree.

The unique religion of conservation was taken up by a large number of people in Rajasthan and the number of Bishnois increased to the entire village communities. This helped to make villages greener and restore the natural ecosystems. Vegetation naturally helped to recharge the ground water. About 300 years after this religion was founded, the soldiers of king of Jodhpur tried to cut trees in a Bishnoi village of Khejadali so that a new place may be built for the king. The Bishnois tried to reason with them and stop them but in vain. But true of their religion, the Bishnois hugged the trees to protect them. The soldiers attacked them to overcome the protest and 363 Bishnois were killed. When the king heard of this massacre and the unique religion, he was overcome by people's devotion. He ordered his men to withdraw, gave the religion state sanction and ensured that the wishes of Bishnois were respected in future. Even today, after many generations, Bishnois continue to protect the trees and animals. One can spot a Bishnoi village easily as being more green and abundant in wildlife. The population of Black Buck, which is in the list of endangered species, is found to be in greater number in Bishnoi villages than

### **Chipko Movement**

In the 1970s, an organized resistance to the destruction of forests spread throughout India and came to be known as the Chipko movement. The name of the movement comes from the word 'embrace', as the villagers hugged the trees, and prevented the contractors' from felling them. Not many people know that over the last few centuries many communities in India have helped save nature. One such is the Bishnoi community of Rajasthan. The original 'Chipko movement' was started around 260 years back in the early part of the 18th century in Rajasthan by this community. A large group of them from 84 villages led by a lady called Amrita Devi laid down their lives in an effort to protect the trees from being felled on the orders of the Maharaja (King) of Jodhpur. After this incident, the maharaja gave a strong royal decree preventing the cutting of trees in all Bishnoi villages.

In the 20th century, it began in the hills where the forests are the main source of livelihood, since agricultural activities cannot be carried out easily. The Chipko movement of 1973 was one of the most famous among these. The first Chipko action took place spontaneously in April 1973 in the village of Mandal in the upper Alakananda valley and over the next five years spread to many districts of the Himalayas in Uttar Pradesh. It was sparked off by the government's decision to allot a plot of forest area in the Alaknanda valley to a sports goods company. This angered the villagers because their similar demand to use wood for making agricultural tools had

been earlier denied. With encouragement from a local NGO (non-governmental organization), DGSS (Dasoli Gram Swarajya Sangh), the women of the area, under the leadership of an activist, Chandi Prasad Bhatt, went into the forest and formed a circle around the trees preventing the men from cutting them down.

The success achieved by this protest led to similar protests in other parts of the country. From their origins as a spontaneous protest against logging abuses in Uttar Pradesh in the Himalayas, supporters of the Chipko movement, mainly village women, have successfully banned the felling of trees in a number of regions and influenced natural resource policy in India. Dhoom Singh Negi, Bachni Devi and many other village women, were the first to save trees by hugging them. They coined the slogan: 'What do the forests bear? Soil, water and pure air'. The success of the Chipko movement in the hills saved thousands of trees from being felled. Some other persons have also been involved in this movement and have given it proper direction. Mr Sunderlal Bahuguna, a Gandhian activist and philosopher, whose appeal to Mrs Indira Gandhi, the then Prime Minister of India, resulted in the green-felling ban. Mr Bahuguna coined the Chipko slogan: 'ecology is permanent economy'. Mr Chandi Prasad Bhatt, is another leader of the Chipko movement. He encouraged the development of local industries based on the conservation and sustainable use of forest wealth for local benefit. Mr Ghanasyam Raturi, the Chipko poet, whose songs echo throughout the Himalayas of Uttar Pradesh, wrote a poem describing the method of embracing the trees to save them from felling.

### **Narmada Bachao Andolan**

Narmada Bachao Andolan is the most powerful mass movement, started in 1985, against the construction of huge dam on the Narmada River. Narmada is the India's largest west flowing river, which supports a large variety of people with distinguished culture and tradition ranging from the indigenous (tribal) people inhabited in the jungles here to the large number of rural population. The proposed Sardar Sarovar Dam and Narmada Sagar will displace more than 250,000 people. The big fight is over the resettlement or the rehabilitation of these people. The two proposals are already under construction, supported by US\$550 million loan by the world bank. There are plans to build over 3000 big and small dams along the river. It is a multi crore project that will generate a big revenue for the government. The Narmada Valley Development plan is the the most promised and most challenging plan in the history of India. The proponents are of the view that it will produce 1450 MW of electricity and pure drinking water to 40 million people covering thousand of villages and towns. Some of the dams have been already been completed such as Tawa and Bargi Dams. But the opponents say that this hydro project will devastate human lives and bio diversity by destroying thousand of acres of forests and agricultural land. On the other hand it will overall deprive thousands of people of their livelihood. They believe that the water and energy could be provided to the people through alternative technological means that would be ecologically beneficial.

Led by one of the prominent leader Medha Patkar, it has now been turned into the International protest, gaining support from NGO'S all around the globe. Protestors are agitating the issue through the mass media, hunger strikes, massive marches, rallies and the through the on screen of several documentary films. Although they have been protesting peacefully, but they been harassed, arrested and beaten up by the police several times. The Narmada Bachao Andolan has been pressurizing the World Bank to withdraw its loan from the project through media. The strong protests throughout the country not only made impact on the local people but has also influenced the several famous celebrities like film star Aamir Khan, who has made open efforts to support Narmada Bachao Andolan. He said he only want that those who have been rendered homeless should be given a roof. He pleaded to the common people to take part in the moment and come up with the best possible solutions.

### **Silent Valley Movement**

Save Silent Valley was a social movement aimed at the protection of Silent valley, an evergreen tropical forest in the Palakkad district of Kerala, India. It was started in 1973 to save the Silent Valley Reserve Forest in from being flooded by a hydroelectricproject. The valley was declared as Silent Valley National Park in 1985. Kuntipuzha one of the major rivers takes its origin in the flush green forests of Silent valley. In 1928 the location at Sairandhrion the Kunthipuzha River was identified as an ideal site for electricity generation. A study and survey was conducted in 1958 of the area about the possibility of a hydroelectric project of 120 MV and one costing Rs. 17 Crore was later proposed by the Kerala State Electricity Board.

The Kerala State Electricity Board (KSEB) decided to implement the Silent Valley Hydro-Electric Project (SVHEP) centered on a dam across the Kunthipuzha River in 1973. The resulting reservoir would have flood 8.3 km<sup>2</sup> of virgin rainforest. The proposal was enquired by National Committee on Environmental Planning and Co-ordination (NCEPC) and suggested 17 safeguards to be implemented in case the project implemented. A shortage of funds delayed activity. Even then from 1974 to 1975 a very large number of trees were felled in the area.KSEB announced its plan to begin dam construction in 1973. After the announcement of imminent dam construction the valley became the focal point of "Save Silent Valley", India's fiercest environmental debate of the decade. Because of concern about the endangered lion-tailed macaque, the issue was brought to public attention. Romulus Whitaker, founder of the Madras Snake Park and the Madras Crocodile Bank, was probably the first person to draw public attention to the small and remote area. In 1977 the Kerala Forest Research Institute carried out an Ecological Impact study of the Silent Valley area and proposed that the area be declared a Biosphere Reserve.

In 1978 Smt. Indira Gandhi, the Honorable Prime Minister of India, approved the project, with the condition that the State Government enact Legislation ensuring the necessary safeguards. Also that year the IUCN (Ashkhabad, USSR, 1978) passed a resolution recommending

protection of Lion-tailed Macaques in Silent Valley and Kalakkad and the controversy heated up. In 1979 the Government of Kerala passed Legislation regarding the Silent Valley Protection Area (Protection of Ecological balance Act of 1979) and issued a notification declaring the exclusion of the Hydroelectric Project Area from the proposed National Park. Kerala Sasthra Sahithya Parishath (KSSP) effectively aroused public opinion on the requirement to save Silent Valley. They also published a Techno-economic and Socio-Political assessment report on the Silent Valley Hydroelectric project. The poet-activist Sugathakumari played an important role in the silent valley protest and her poem "Marathinu Stuthi" (Ode to a Tree) became a symbol for the protest from the intellectual community and was the opening song/prayer of most of the "save the Silent Valley" campaign meetings. Dr. Salim Ali, eminent ornithologist of the Bombay Natural History Society, visited the Valley and appealed for cancellation of the Hydroelectric Project. A petition of writ was filed before the High Court of Kerala, against the clear cutting of forests in the Hydroelectric Project area and the court ordered a stop to the clear cutting.