UNIT 2: ENVIRONMENTAL SOCIOLOGY: AN INTRODUCTION

UNIT STRUCTURE

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2.1 LEARNING OBJECTIVES

After going through this unit, you will be able to-

- understand the relationship between environment and society
- explain the role of social structure in allocating natural resources
- explain the role of social institutions towards environment
- discuss the emergence of Environmental Sociology in India
- analyse the scope of environmental sociology and its importance.

2.2 INTRODUCTION

In the previous unit, we have learned about the meaning of environment, ecosystem and ecology. Environmental Sociology, as the term indicates, is concerned with the reciprocal relationship between environment and society. It is also generally accepted that this is, in important ways, different to'sociology of the environment' based on the application of mainstream sociological concepts to environmental conflict, politics,movements and knowledge claims.Dunlap and Catton (1994) have argued that conceptualizing environmental sociology as the study of

environment-society relations enables a shift of analytical focus from the symbolic construction of environmental problems to material explanations of their causes, consequences and potential solutions. In this unit, we shall discuss about the emergence of Environmental sociology, its scope and importance. While reading this unit, we shall also get to know why Environment is a sociological issue. Further, this unit will also help us understand the emergence of environmental sociology in India.

The role of industrialism in generating environmental degradation; the structural and social origins of environmental movements, the environmental implications of urbanization and globalization, the problem of securing sustainable development and wider theoretical issues such as possible conflict between non-exploitative approach to nature and the continuous commitment towards enlightenment-values such as democracy, human rights and the pursuit of progress are some unavoidable dimensions of our life that should be dealt with sociological consideration. The resource allocation (mainly water, land, fisheries, pastures, forest and minerals), their use and their exploitation or abuses are some inevitable phenomena in every social structure. Social relations based on environmental resource allocation process always have a good story to be depicted within society. The way demographic transition is affecting natural environmental fabric and the way environment is affecting the human relationship, should be viewed in a critical lexicon. The 'global risk society' always talks about the global order of our security that includes ecological risks which previous generations did not experience at all. The increasing populations that threaten the ecosystem with inadequate fertilization, deforestation, depletion of resources, pollution, unequal consumption, poverty, global warming, 'extreme weather', competition among different groups for resource, technological advancement for faster production, new technological tools of agricultural production process, congestion, overdevelopment, rapid rise of cities and metropolis, growth of individualization and also individualism, breakdown of family structure as a consequence of urbanization and capitalism, massive climate change etc. often leave a gloomy risky future for the next generation.The relation among population, health and environment has also become a matter

for great concern. The need to create the awareness among socially and economically backward groups about the benefits of utilizing the health care services is highlighted in many discussions that often require environmental structure and developmental stage and goals related to growth. Thus all these issues helps one understand why it is very important to understand the relationship between environment and society and the need to study environment in a societal context.

2.3 CONCEPT OF ENVIRONMENTAL SOCIOLOGY

Environmental sociology or 'environmentally oriented sociology' suggests that the inclusion of 'ecological infrastructure' at the base of broad categories of sociologist's 'model of society'- such as economy, social structure, polity, and arranged in a pyramid fashion will incorporate ecology.Environmental sociologists have had a long held ambition to transform sociology - to outgrow our sub-disciplinary niche and redefine the mainstream. Many sociologists strongly believe that environmental sociology requires us to rethink the foundational principles of sociology and indeed the very concept of 'social sciences'. Theybelieve that rethinking is critical to the ongoing relevance of the social sciences in an era of global environmental change.

There is little doubt that environmental problems will be one of humanity's major concerns in the twenty-first century, and it is becoming apparent that sociologists can play an important role in shedding light on these problems and the steps that need to be taken to cope with them. While the study of environmental issues is an inherently interdisciplinary project, spanning the natural and social sciences as well as humanities, the crucial role of the social sciences in general and sociology in particular are increasingly recognized.

2.3.1 Why Environment Is A Sociological Issue

It is a matter of concern that why environment has become a great concern for the sociologists. One may question that 'Isn't the impact of human beings on nature a physical one, created by modern technologies of

industrial production?' Yes, but modern industry and technology have come into being in relation to distinctive social relations.

- Rescuing the global environment will thus mean social as well as technological change. Given the vast global inequalities that exist, possibility is very less that the poor countries of the developing world will sacrifice their own economic growth because of environmental problems created largely by the rich countries. Yet, the earth does not have sufficient amount of resources for everyone on the planet to offer a living standard in the industrialized societies which is often taken for granted. Hence, if the impoverished sections of the world have to catch up with the richer sections, then the richer people should have a revision of their expectations about constant and rigorous economic growth. Some 'green' authors suggest that people from rich countries must react against consumerism and they have to return to simpler ways of living if ecological disaster has to be stopped.
- The most threatening problem faced by humanity today is population growth. Thomas Malthus has told regarding it that population growth tends to outstrip the resources to support it. Until and unless people control the sexual urge and limit their frequency of sexual intercourse,excessive population growth will ensure a future of darkness and misery.
- Prior to industrialization, both birth and death rates were high. During the beginning of industrialization, because of the decrease in the death rates, population growth happened. Birth rates took longer to decline. Finally equilibrium situation was reached with low birth-rates balancing low death rates.
- There are many sources of environmental threat, for instance, air pollution, acid rain, water pollution, unrecyclable solid waste, depletion of renewable natural resources, reducing biodiversity etc.
- Most environmental issues are closely connected with risk because they are the result of the expansion of science and technology. Global warming, acid rain, carbon footprintetc. are some such examples.

- Genetically modified crops are produced through the manipulation of a plant's genetic composition. Genetically modified foods or genetically engineered foods or bioengineered foods are those foods produced from organisms whose DNA has been altered through genetic engineering. GM foods are controversial: it may have benefits for the immediate relief of hunger and malnutrition, but the new technology can carry huge risks for human lives and natural environment.
- Eco-efficiency refers to technologies that generate economic growth at minimal cost to the environment. Ecological modernization is the belief that industrial development and ecological protection are not incompatible.

These issues clearly show how human society is related to environment, thereby making environmental a sociological issue.

2.3.2 Emergence of Environmental Sociology

In contrast to the larger society, mainstream sociology in the 1970s was almost the least concerned about the significance of environmental problems. Earlier, people neglected environmental matters in social settings. For example, Durkheim has emphasized on social phenomena while explaining 'social facts'. In that period, people mostly focused on biological and geographical 'determinism' that had led sociologists to ignore the biophysical world. To legitimize society as a discipline, it was quite essential to move away from traditional explanations; for example, racial and cultural differences in terms of biological and geographical factors respectively. It was supposed to be replaced with 'socio-cultural determinism'. To defy an environmental phenomena, only geographical and biological variable are not sufficient but 'social variables' should also be considered.

This disciplinary tradition got strengthened by sociology's emergence during an era of unprecedented growth and prosperity, which made limits to resource abundance and technical process unimaginable. Moreover, increased urbanization reduced direct contact with the natural environment. Due to the increasing emergence of industrialization and modernization,

sociology has come to assume that the exceptional features of homo-sapiens (i.e., language, technology, science and culture) have made the societies 'exempt' from the natural constraints and, thus, reluctant to acknowledge the societal relevance of ecological limits.

The concern for environmental sociology stems from growing awareness of the fact that environmental problems are fundamental social problems. They result from human social behavior; they are viewed as problematic because of their impact on humans and because their solution requires societal effort. It is, therefore, not surprising that sociologists have shown growing interest in environmental issues in recent decades and that environmental sociology has become a recognized field. Yet sustained sociological investigation of environmental problem did not come easily, and is a relatively recent development in the field.

Although there was scattered sociological attention to both urban problems and natural resources prior to the 1970s, environmental sociology developed in that decade as society's own response to the emergence of environmental problems on the public agenda. At first, sociologists tended to limit their attention to analyze societal response to environmental problems, rather than examining the problems themselves. But as sociologists gradually paid attention to environmental issues, some began to look beyond societal awareness of environmental problems to examine the underlying relationships between modern, industrial societies and the biophysical environment they inhabit. The result was the emergence of environmental sociology as a field of inquiry.

2.3.3 Scope of Environmental Sociology

Ecological methods have been employed successfully in many branches of Sociology, for example, in the study of social evolution and adaptation.Through the development of some social theories, the ecological approach seems to become gradually significant.RadhakamalMukerjee, in his essay 'Ecological Approach', has mentioned about the balance between natural environment and the vegetables andalso the animal environment, including the human.It is maintained by chains of actions and interactions,

which link man with the rest of his living realm, reaching up and down and all around as his invisible biological and social destiny.We can discuss about some inevitable concepts that clearly talk about human-environment relationship, as part of the scope of Environmental Sociology.

- **Deep ecology:** The concept of 'deep ecology' was initiated by Norwegian philosopher Arne Naess. It talks about human beings with their values and well-being as essential part of ecology where non-humans also have similar values. There is always a diversity and richness of life forms. Ethically human beings have no right to reduce this richness and diversity except to satisfy the food chain for survival. Currently, human beings are found interfering excessively with the non-human world. Therefore, non-humans must be protected through some changes in the policies. In return, it will be fruitful in economic, technological and ideological structures in the long run. We shall read in details about this in Unit 4.
- **Climate change:** Anthony Giddens in his book ThePolitics of Climate Change has explained the environmental problem, particularly leading to global warming and massive climate change. The green thinkers are lamenting on excessive growth models, resource depletion and pumping toxicity. They disagree with the model of Gross National Product (GNP) as an indicator of welfare. On the one hand, the prices of oil and gas are growing up gradually, whereas at the same time there is intensified global warming and climate change. Therefore, a greater attention is required for responsibility and accountability of the policy-makers.
- **Limits to Growth:** Many people have been worried by the harmful impact of human beings on the natural world. Public concern about the environment has led to the emergence 'green' movements and 'green' parties (for example, Friends of the Earth and Greenpeace) that campaign around environmental issues.

  The basic idea of the 'Limits to Growth' was that there are both social and natural influences limiting how far the earth can absorb continuing economic development and increasing population growth.

The rise of the 'green' movements can be traced back to a famous report first published in the early 1970s-'The Limits to Growth' published by the club of Rome. The 'green' philosophers suggest that economic development should be severely curtailed in order to protect the environment. Anthony Giddens also supported the idea of limits to growth while he discussed about climate change.

- **Eco-feminism:** It talks about the interrelationship between ecology and feminism. It sees the oppression from patriarchal outlook. It sees the connection between women and nature since in patriarchal society both women and nature have faced oppression in general and in western countries in particular. It says that scientific knowledge is controlled by men; they provided the concept of medicalization of child birth which is dependent on specialized technologies and experts. Agriculture of today's era is also totally dependent on technological input including industrially produced seeds and fertilizers. Here the patriarchal structure justifies the dominance through religious and scientific orientation. Women have a special connection with environment; particularly in small-scale societies they worship trees and they nurture them also. Local knowledge should be given priority in order to sustain the productivity for which eco-femiinism is more effective. Eco-feminism will be discussed in details in Unit 3.
- **Sustainable development:**There is a clear relation between ecology and culture in human societies. Specifically, in small-scale societies, this relation is more clear and particular. Sustainable development means that growth should , at least ideally, be carried on in such a way as to recycle physical resources rather them deplete them, and to keep levels of pollution to a minimum(Giddens). The term 'sustainable' development' was first introduced in a 1987 report commissioned by the United Nations, 'Our common future'. This report is known as Brundtland Report' since the report was chaired by Mrs. G. H. Brundtland. Sustainable development was defined as

the use of renewable resources to promote economic growth, the protection of animal species and biodiversity, commitment to maintaining clean air, water and land.

Sustainable development has come as a sigh of relief in the light of large-scale of forest cover. Brundtland Commission firmly puts forward that all must ensure that sustainable development meets the needs of the present without compromising the ability of future generations to meet their needs.We shall be able to learn more about sustainable development in Unit 6.

Poverty is antithetical to sustainable development. As poverty increases, the environment is degraded. When environment is degraded prospect for further livelihood decreases. Environmental degradation generates more poverty, thus accelerating the cycle.

- **Green party:** It is an urbanized political party based on principles of green politicssuch as social justice, grass-roots democracy, non-violence and environmentalism. Green party is a group of philosophers who emphasize on environmental causes and they believe that for establishing world peace, the ideology of people towards environment should be taken into consideration so that resources are allocated without harming others.
- **Ecological significance of Caste:** The Indian caste system, has mostly talked about human where the social relationship is based on hierarchical structure. It also discusses the endogamous orthodoxy of caste system on natural environment. The methods of allocating resources by the tribal and caste groups play a significant role in traditional knowledge about ecology and environment. The traditional practices of land ownership and production and also allocation of the resources always depict a picture of 'resource partitioning' everywhere in Indian society. The endogamous nature of caste emphasizes on territorial exclusion. Competitive exclusion in terms of geographical distribution through land ownership is very prevalent among the caste societies. Moreover, we can see the impact of modernization on caste system to see environmental

impact on it. The collapse of the resource base, the replacement of the old traditional system of production and subsistence economy by modern money economy, has led to a destroyed social relationship among various castes in the Indian society. The persistence of the caste system, with loss of its traditional complementarity has, therefore, led to an increasing level of conflict among different castes.

The spatial scope of various movements related to environment ranges from being local to almost global.

2.4 ENVIRONMENTAL SOCIOLOGY IN INDIA

Sociology, being a very young discipline in India compared to economics and political science, has embraced ecology and environment as a younger sub-field. In India, the picture of this emerging discipline traces the origins and contours of environmental sociology mainly to the social protest movements. In India, the concern for 'sociology of environment', 'ecological anthropology' or 'environmental sociology' or 'social ecology' can be traced to recent developments.Ramchandra Guha (1994), a social historian who must be credited for firmly establishing and fostering this field in India, chooses to follow an illustrious sociologist, Radhakamal Mukerjee, in calling this field 'social ecology' (Baviskar: 2014).

In the 1920s, it was Radhakamal Mukerjee who proposed a specific 'region' which allows a synthetic study of sociology and ecology. According to Mukerjee, "any human group must be considered in relation 'not merely to temperature, humidity, sunshine, altitude, etc but also to their indirect effects, the interwoven chain of biotic communities to which it is inextricably linked, the plants that it cultivates, the animals it breeds and even the insects which are indigenous to the region." He defines 'the region' as 'at once an ecological aggregation of persons, an economic framework and a cultural order'.

While Radhakamal Mukerjee was the first Indian scholar to highlight the links between the social and the biophysical worlds, his footprints on the

sands of Indian sociology are rather faint. Patrick Geddes, a remarkable urban planner who brought ecological sensitivities to bear on the development of towns such as Indore, Lucknow, Patiala, Dacca, was a Professor of Sociology and Civics at Bombay University in the 1920s.

Initially, Indian sociologists basically shared an understanding of the links between environment and development. Most of them were engaged with the enterprise of social and economic reconstruction for an independent India. In fact, Guha said that the first decades after independence were an age of 'ecological innocence' and that is how intellectual and political life got little significance to environmentally-oriented thoughts. Guha said that they had to wait till the 1970s for a systematic development of environmental sociology. But one can go back to the 'Bishnoi movement' (1700), led by Amrita Devi along with Bishnoi villagers, who rescued the sacred trees.

The revival of interest in environmental sociology in the 1970s happened due to the emergence of various environmental movements. An environmental movement can be defined as that movement that favors the sustainable management of natural resources. This often stresses the protection of the environment via changes in public policy. It is worth mentioning that ecological concerns in India emerged in opposition to development priorities. For example, in Chipko and the Silent Valley, there was a sharp distinction between those who supported 'development' over 'environment' and those who supported 'environment' over 'development'.The Silent Valley power project was promoted by the Government of Kerala- and was given up by the Centre because it threatened tropical rainforests. 'Chipko movement' (1973), was led by SundarlalBahuguna, Gaura Devi, Sudesh Devi, Chandi Prasad Bhatt, Govind Singh Rawat,, DhoomsinghNegi, Shamsher Singh Bisht and GhanashyamRaturi in Chamoli and Tehri-Garhwal district of Uttarkhand.Their objective was to protect the trees on the Himalayan slopes from the axes of contractors of the forest. There was another movement called 'Jungle Bachao Andolan'(1982), led by the tribals of Singhbhum district of Bihar. They fought against Government's decision to replace the natural sal forest with teak.

We can mention about 'Appiko movement' (1983) in Uttara Kannada and Shimoga districts of Karnataka. Pandurang Hegde helped in launching the movement. They were against the commercialization of natural forest and the ruin of ancient livelihood. Then we can talk about 'Narmada Bachao Andolan' (1985) at Narmada River which flows through Gujarat, Madhya Pradesh and Maharashtra, led by MedhaPatkar, Baba Amte, human right activists, adivasis and farmers. They led a social movement against a number of large dams being built across the Narmada River. We can mention about 'Tehri dam conflict' (1990), led by Sundarlal Bahuguna on Bhagirathi river near Tehri in Uttarakhand. The protest was against the displacement of town inhabitants and environmental consequence of the weak ecosystem. It is expected that environmental sociology in India would contribute to our understanding of the ecological dimension s of the transition from a system based on state-led public investment to a liberalized economy. Although Ramchandra Guha and Madhav Gadgil have pioneered the broad study of ecological impact on economic development, there have been no detailed study on ecological impact on national economic development. But neither Guha nor Gadgil was directly from a sociological background. Gadgil was an ecological scientist and Guha was a historian.

Gadgil and anthropologist K C Malhotra should be credited for their attempt to offer an ecological analysis to the Indian social structure. They basically focused on caste system and environmental relation to caste system in India. In one of their essays, they have described caste system as a set of tropic levels in which different castes occupy ecological niche marked by division of labour and resource partitioning. But their account was criticized because of its strong functionalism and has been attacked for seeming to justify the caste system.

Development sociology in India has tended to concentrate on processes internal to the nation-state. The relationship between nation-states and global circuits of capital has not received much attention in India. Regarding environmental sociology, international processes and discourses have not been examined in much detail by Indian scholars even though

post-colonial Western discourses on population explosion, deforestation, genetic diversity and intellectual property rights, cultural rights of 'indigenous people' have been enormously influential in shaping Indian debates.

Although it is very young, Environmental Sociology is not a marginal specialization. It firmly holds the potential to change our perception about all the social phenomena. Sensitivity towards environmental factors does not limit us to a fragmented treatment of forests, water, soil, pastures, but compels us to rethink about the continuities in the practice of natural resource used differently among urban and rural people, men and women, and among adivasi and caste Hindu. Environmental sociology should study how ecological factors shape material practices. It is relevant to the entire field of sociology to study the ideas and practices with which people try to shape their surrounding environment.



CHECK YOUR PROGRESS:

Q 1: What is Chipko movement all about?

Q 2: What do the Green philosophers do?

Q 3: What do you understand by sustainable development?

Q 4: What is an environmental movement?



2.5 LET US SUM UP

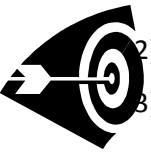
- Environmental sociology is the systematic study of the reciprocal relationship between human being and the environment.
- Prior to industrialization, both birth and death rates were high. During the beginning of industrialization, because of the decrease in the death rates, population growth happened. Birth rates took longer to decline.

- Genetically modified crops are produced through the manipulation of a plant's genetic composition. GM foods are controversial: it may have benefits for the immediate relief of hunger and malnutrition, but the new technology can carry huge risks for human lives and natural environment.
- Eco-efficiency talks about human beings with their values and well-being as essential part of ecology where non-humans also have similar value. There is always a diversity and richness of life forms.



2.6 FURTHER READING

1) Bharucha, E. (2005). Textbook of Environmental Studies for Undergraduate Courses. Hyderabad: Universities Press.
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2.7 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: Chipko movement (1973) is a movement led by SundarlalBahuguna along with several renown people

for instance Chandi Prasad Bhatt etc and occurred in Chamoli district and later at Tehri-Garhwal district of Uttarakhand.. Their main aim was to protect the trees on the Himalayan slopes from the axes of contractors of the forest.

Ans to Q No 2: Green party is an urbanized political party based on principles of green politics such as social justice, grass-roots democracy, non-violence and environmentalism. Green philosophers believe that for establishing world peace, above mentioned issues are always interlinked.

Ans to Q No 3: Sustainable development means that we all must ensure that sustainable development meets the needs of the present without compromising the ability of future generations to meet their needs.

Ans to Q No 4: An environmental movement can be defined as that movement that favors the sustainable management of natural resources. This often stresses the protection of the environment via changes in public policy.



2.8 MODEL QUESTIONS

Short Questions (Answer each question in about 150 words)

Q 1: What is GM food?

Q 2: What do you understand by the term 'eco-efficiency'?

Q 3: How poverty is antithetical to environment?

Q 4: What is Narmada Bachao Andolan?

Long Questions(Answer each question in about 300-500 words)

Q 1: How can you justify environment as a sociological issue?

Q 2: What are the sources of environmental threat that lead to a darker future?

Q3: How did the concern for ecology grow in India?

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