

## MODULE I

### ENVIRONMENTAL SOCIOLOGY

#### 1.1 Emergence, development, nature, significance & scope of environmental Sociology

##### 1.1. a) Emergence of environmental sociology

In the 1970s, environmental sociology arose as an area of study in reaction to growing societal awareness of environmental issues and the resulting social mobilization in support of environmental protection. Early sociological studies concentrated on the emergence of environmental degradation as a social problem, including the origins, composition, and activities of the environmental movement; the levels and social bases of public support for environmental protection and the dynamics of government policymaking. These initiatives comprised sociology of environmental concerns, which involves applying established sociological concepts to environmental issues.

Samuel Klausner's 1971, book *On Man in His Environment* is widely regarded as the first explicit use of the term "environmental sociology." Dunlap recalls first encountering the word in Klausner's work a few years later. Klausner, a sociologist, and clinical psychologist conducted a series of studies on human behaviour under stress in the 1960s. The demands of the different issues covered make environmental sociology a varied field. There is no single point of view that is followed, but there are many similarities throughout the many approaches that allow for a deeper investigation of the subject.

The 1973–1974 energy crisis supported growing claims of “growth limits,” and sparked a new dimension in sociological

work on environmental issues. Some sociologists investigated the relationships between modern industrial societies and their physical environments as resource-based growth restrictions became more prominent, as well as quickly accumulating evidence of the importance of environmental contamination. Concerns about how modern societies affect their environments, as well as how these societies might be affected by changing environmental conditions, prompted studies of societal-environmental relations and heightened recognition of the need for a true "environmental sociology."

Human ecology offered as one entry point for sociologists with a growing interest in what would become a new subject, and environmental sociology did not evolve in a vacuum. There was also a body of work written by rural sociologists on natural resources. Agriculture, forestry, recreation, mining, and other primary industries have been studied by rural sociologists for decades. However, each of the three popularly regarded 'founders' of the subject of sociology- Durkheim, Weber, and Marx – addressed some part of nature and society in their work, but this was not conclusive.

Dunlap and Catton distinguished between "environmental sociology" and "real environmental sociology." The former represented a "normal science" approach to environmental themes, such as public attitudes toward environmental issues and the environmental movement, in which typical sociological viewpoints were applied. The latter was reserved for the then-rare studies of "interactions" or "relationships" between environmental and social phenomena, such as analyses of the societal impacts of energy shortages or the relationships between social strata and environmental degradation, which defied the disciplinary norm of ignoring nonsocial variables.

The rise in popularity of environmentalism and the environmental movement had re-ignited social interest in environmental issues by this time. *Silent Spring* (1962), Rachel Carson's best-selling expose of ecosystem devastation caused by agricultural pesticide use, had been a major trigger for this a decade previously.

The environmentalist movement can be linked to the growing awareness about environmental issues as a sociological topic. The release of Rachel Carson's book *Silent Spring* in 1962, which revealed the effects of toxic pesticides on birds and other animals, is usually seen as the start of the movement. Later in the 1960s, the 'hippy' movement emerged as the first large-scale popular subculture to incorporate environmental themes.

Environmental studies had begun to awaken some sociologists to the realities of environmental problems and ecological restrictions by the mid-1970s. This appeared to necessitate rethinking commonly held sociological-domain assumptions, such as the apparent insignificance of physical settings non-interpreting social behaviour.

In the late 1970s, Catton and Dunlap embarked on a crusade to persuade sociologists to adopt their New Ecological Paradigm (NEP), which was intended to bridge the gap between sociological theory's established divides. This new paradigm was an academic parallel of green thinking in general, advocating a less "anthropocentric" (human-oriented) and more "ecocentric" (environment-oriented) approach.

According to Buttel, Catton, and Dunlap point out the environmental sociology field stagnated during the Reagan era. While Buttel dismisses environmental sociology as merely "another sociological specialization," Catton and Dunlap argue that the resurgence of interest in environmental issues in the

1990s, particularly those with a global scope, has sparked renewed interest in environmental sociology both in the United States and internationally.

Riley Dunlap and his coauthors, William Michelson and Glen Stalker mention the ‘diversity’ and ‘richness’ of sociological work on the physical environment in their *Introduction to the Handbook of Environmental Sociology*. Human ecology, political economics, social constructionism, critical realism, ecological modernization, risk society theory, environmental justice, actor-network theory, and political ecology are among the opposing paradigms.

Most early work on environmental problems in Europe was concerned with environmentalism and the environmental movement, which was sparked by the development of the ‘greens’ as a political force. The relationship between society and nature was weighed against conventional sociological viewpoints on social class and industrialism in Britain, where environmental interest tended to be expressly theoretical. However, by the 1980s, empirical environmental research was flourishing in the UK, in part to the incentive provided by the Global Environmental Change Programme.

The Environmental Justice Paradigm gained prominence in the United States during the 1990s, resulting in new growth potential for environmental sociology. This has paralleled the emergence of the Environmental Justice Movement in many ways. That is, just as the Environmental Justice Movement expanded by adopting frames from the labour, civil rights, and social justice movements and re-contextualizing them into a new environmental justice identity, so too has the Environmental Justice Movement grown by appropriating frames from the environmental justice movement.

Environmental sociology has been practiced in Japan and Korea since the early 1990s. Nobuko Iijima, who did her Master's thesis on the impact of Minimata disease on the local community, was one of Japan's earliest environmental researchers. In Korea, the Research Group for Environmental Sociology was founded in 1995 as a result of a 1993 international conference titled "Environment and Development."

Ulrich Beck's book, *Risk Society*, is one such theoretical soliloquy. Beck has studied the topic of environmental dangers from a macro-sociology of social change standpoint. Buttel identifies one 'big idea' in sociology generated by environmental sociologist Schnaiberg's, 1980, 'treadmill of production,' as well as two other environmental sociological notions – Foster 1999's 'metabolic rift,' and Mol, Arthur, P J, 1997's 'ecological modernization,' as promising.

Environmental sociology, in our opinion, at its best, encompasses extensive assessments of both environmental and social processes. Each feature incorporates theoretical and practical factors into the explanation scheme and methods employed. Such study is unusual among sociologists because it necessitates a deep understanding of the environments being investigated as well as attention to the theoretical and methodological needs for conceptualizing and measuring them empirically. Environmental phenomena must be combined with social causes and explanations insofar as this is still a sociological examination.

### **1.1. b) Nature and Scope of environmental sociology**

Environmental sociology acknowledges that physical settings can impact human cultures and behaviour. As a result, environmental sociologists reject the traditional sociological assumption that social facts can only be explained by other social

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## 1.1 INTRODUCTION

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The term *environmental sociology* is a compound of two words — ‘environment’ and ‘sociology’. *Environment* comprises a close interconnection between people, other living beings, land, water, air— all that is essential for physical life on earth. *Sociology* is the systematic study of the society we live in. It is about people, groups, institutions, interactions between them and the resulting processes and structures in the society — all that is essential for social life. Therefore, *environmental sociology* is the study of relations between human societies and their physical environments, or according to R. Dunlap and Catton, ‘societal-environmental interactions’ (Dunlap and Rosa. 2000. Encyclopedia, 2000). These interactions, at the interface of society and environment have a reciprocal influence on each other. However, environmental problems or concerns emerged as a consequence of these interactions. Some of the glaring environmental concerns being — global climate change, soil degradation, declining biodiversity, ozone layer depletion, solid waste problem, pollution, acid rain, water scarcity, and many more.

The unit will start with an account of the emergence context of Environmental Sociology as a discipline. Following which we will examine some of the theoretical accounts of the nature of the relationship between humans and their environment. Underlying these environmental problems is the recognition of detrimental impact of industrialisation, urbanisation and the continuing globalisation on the bio physical environment. Acknowledging the pervasive environmental degradation has led to recognition of exercise of power and the consequent conflict deriving from environmental issues. Since, exercise of power tends to operate unequally in the society, conflicts in the realm of environmental problems tend to highlight the significant role of social inequality. Thus leading to the emergence of environmental activism through the various environmental movements (like, Chipko, Narmada Bachao Aandolan, Earth Hour, Environmental Justice Movement, Greenpeace, etc.) which try to bring about a balance in the relationship between society and environment, which has become highly skewed in favour of society apparently, but does not favour either society or the environment in the long run.

Hence, the emergence of a new field of Environmental Sociology “...out of the intellectual and political ferment generated by movements for social reform and change.” (Hannigan, 1995).

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## 1.2 EMERGENCE OF ENVIRONMENTAL SOCIOLOGY

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Thinking about the environment, prior to the emergence of discipline of Environmental Sociology, lay at the door of Conservationist (like George Perkins Marsh, Gifford Pinchot, Aldo Leopold and others) and

Preservationists (like John Muir, Robert Marshall and others) who highlighted the fragility of the biosphere and the attendant ecosystem. However, with the advance of industrialisation, specially its rapid pace after the Second World War, led to not only unsustainable encroachments on the natural environments, but even over-exploitation through resource extraction and waste addition, such that they increasingly underwent depredations and environmental degradations and even destruction in some instances.

#### Box 1. Environmental Concern landmarks

- The term ‘environmental sociology’ was coined by **Samuel Klausner** in his book *On Man in His Environment* (1971).
- 22<sup>nd</sup> April, 1970 was celebrated as the ‘**Earth Day 1970**’, a debut of the modern environmental movement.
- 1970’s was identified as the ‘Environmental Decade’.
- Publication of *Silent Spring* (1962) by **Rachel Carson**, an expose of ecosystem damage consequent to the use of agricultural pesticide.

Prior to the 1970’s, American interest in environment was restricted to ‘rural sociology’, with a two-pronged interest in – communities dependent on nature for their livelihood, and in parklands as wilderness areas. However, 1960’s and 1970’s turned out to be environmentally turbulent decades – socially, politically and economically, which compelled the intellectuals and academicians to rethink their academic standpoints in terms of the environment.

#### Box 2 Silent Spring (1962)

Is an environmental science book written by Rachel Carson after almost a decade of research on the adverse environmental impact of indiscriminate use of synthetic pesticides, like DDT. The effects of these pesticides are not simply limited to eliminating pests from the natural ecosystems, but are also harmful to human existence.

Not only did this book bring environmental concerns to the forefront of American public, but it brought about numerous policy changes and led to the creation of the US Environmental Protection Agency (EPA).

Riley Dunlap and William Catton, founders of the field of ‘environmental sociology’ in US and other key contributors to this field have made a distinction between – ‘Sociology of environmental issues’ and ‘environmental sociology’. Sociology of environmental issues is, “ the application of traditional sociological perspectives on public opinion, social movements and formal organisations to topics such as the characteristics of environmental activists, and the tactics and strategies employed by environment groups” (Hannigan, 1995). Whereas, “Environmental

Sociology' focused on the study of environment- society interaction...[i.e.] the underlying relationship between modern industrial societies and the physical environments they inhabit." (Hannigan, 1995)

### Box 3. Love Canal Debacle

Love Canal is a neighborhood in Niagara Falls, New York, US. It came into prominence subsequent to an environmental disaster befall the community living there. During the 1940's, the Love Canal became a landfill for dumping chemical wastes by the Hooker Chemical Company. As the population increased gradually, the landfill too became inhabited. However, during construction of various buildings the dumping sites were partially exposed, such that during and after the rains the chemicals started seeping above ground into people's homes and backyards and started adversely impacting their health and wellbeing. Result of blood tests showed high white blood cell count, a precursor to leukemia, and chromosomal damage among the residents up to 33%, and many other ailments.

By the 1970's, the Love Canal became the most appalling environmental tragedy in American history. It was identified as a 'federal health emergency' by the then US President, Jimmy Carter. Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) in 1980, also known as the Superfund Act, in response to such environmental hazards. Simultaneously, environment ('greens') became a political force to be reckoned with, on the European Continent through activist non-governmental organisations, green political parties and environmental movements. In Britain, though initially, interest in the environment tended to be theoretical, linking classical sociological perspectives to the relationship between nature and society. However, by the 1980's, due to the establishment of Global Environmental Change Programme, empirical research in the field of environment flourished. Unlike Britain, in Netherlands research in environmental sociology focused on agriculture and risk assessment, thereby searching for practical solution to the problem of inundation, as 26% of Netherlands land area falls below sea level.

Environmental Sociology as a discipline established in the early 1990's in the East— Japan and Korea. However, in Japan, research in the field of environment had begun in the 1950's, subsequent to the identification of Minimata disease as a man-made environmental casualty. In 1992, Japanese Association for Environmental Sociology was established. Even though, the Korean Association for Environmental Sociology was established in 2000, research in and teaching of the discipline of 'environmental sociology' began in the early 1990's in Korea.

**Box 4. Minimata Disease** is a neurological syndrome, caused by severe methyl mercury poisoning. Symptoms include, ataxia, numbness in hands and feet, general muscle weakness, narrowing of the field of vision and



damage to hearing and speech; and many other depending upon the severity of poisoning. Minimata disease is caused by the daily consumption of large quantities of fish and shellfish, which were heavily contaminated with methyl mercury. Methyl mercury is a toxic chemical waste generated by the chemical factories during the process of production of acetaldehyde ( a raw material of octanol, a chemical used in polyvinyl chloride manufacturing, much in demand in international markets ), which was then dumped into the sea.

The first case of Minimata epidemic occurred in the 1950's in the Southern coastal area of the Yatsushiro Sea in the Minimata Bay, Japan. And, the second epidemic occurred in 1960's in the basin of the Agano River, Japan. Minimata disease is caused by environmental pollution due to industrial activity. (Noriyuki Hachiya, 2006).

### Check Your Progress 1

Complete the following sentences by filling in the blank spaces:

- 1) Environmental sociology is the study of relations between .....
- 2) Some of the glaring environmental problem are (give at least three) .....
- 3) ..... is the sustainable use and proper management of the biosphere.
- 4) Research in environmental sociology in Netherlands focused on .....

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## 1.4 CONCEPTUALISATIONS OF SOCIETY – ENVIRONMENT RELATIONSHIP

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Deriving our understanding of 'society - environment relationship' from the definition of environmental sociology given above, as societal-environmental interactions – includes the ways in which human actions in the society influence the environment, and the environment modified as a consequence of human actions influence the society, reciprocally. This relationship also includes the manner in which such interactions are socially construed and acted upon. However, these interactions gain significance due to the value of biophysical environment for the survival of humankind. This necessitates an understanding the nature of relationship between the biophysical environment and the society undergoing a continuous change due to imperatives of development.