

Environmental Sociology in India from Thought to Discipline

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Abstract

Environmental sociology began in the United States and was subsequently introduced to Europe. Although environmental issues have been discussed and debated in India since the 1970s, sociologists in India have not paid as much attention to environmental issues as they have in other countries. This paper comprehensively analyses sociological viewpoints on India-specific environmental concerns and themes using the United States and Europe as references. For this purpose, it analyses environmental concerns using historical and comparative methods, academic research, and institutional frameworks. This paper examines how this conceptual framework might be used to review environmental sociology in the Indian context. Based on a comprehensive analysis of the relevant literature, this paper recommends expanding environmental sociology in India to the level of natural sciences as practised in the United States and Europe and concentrating on emerging climate change concerns.

Keywords: Environmental Sociology, Climate Change, Ecological Modernisation, Gandhian view.

Introduction

Every new field of study progresses through a succession of stages. New phenomena and information serve as the discipline's subject matter throughout the first phase (Schneider, 2009). We shall study the timeline of the early stages of environmental sociology in India in this paper (broadly between 1970 to 2005). The environmental sociologies of various countries and continents, including India and small island nations, differ greatly (such as Japan). Because of the interconnectivity of climate problems and their repercussions, these inequities are also

converging. Yet, this raises the question of whether we need a unifying framework for environmental sociology that considers challenges relating to climate change and global warming in countries such as India. For this purpose, this paper analyses the emergence of environmental sociology, growth, and main themes in the subject matter.

Environmental sociology is defined as “the study of the interaction between the environment and society” (Catton and Dunlap 1978a:44). On numerous occasions, it has been shown that sociologists (such as Karl Marx, Max Weber, Emile Durkheim, and Georg Simmel) were deeply concerned about the built and natural environment, resource depletion, and the conversion of raw materials that occurs within the factory system (Humphrey et al., 2002). Schnaiberg (2002) argues that both Marx and Weber held an interest in environmental sociology. Durkheim's assertion that social fact should be defined in relation to other social facts only was challenged by Catton and Dunlap (1978) while defining the scope of Environmental sociology (McLaughlin, 2023). Marx's *Man and Nature* is regarded as a forerunner of an anthropocentric approach to the environment. 'Realists' have acknowledged Marx's ideas (Dickens, 1992). Weber's (1905) “The Protestant Ethic and the Spirit of Capitalism” attempted to establish a connection between Protestant ethics and the development of the concept of capitalism in Northern Europe. In his reflexive sociology, economic sociologist Pierre Bourdieu emphasises economic externalities in terms of environmental degradation caused by 'habitus' and capital (Bourdieu, 1992). Human ecology has done well in the US because of the influence of the Chicago School and the strong Parsonian/functionalist social theory (as shown in IPAT and POET theoretical models). Environmental sociology can be traced back to the 1980s in the United Kingdom due to the contributions of scholars such as Redclift (1994) and Cotgrove (1982). Reflecting the emergence of an anti-nuclear energy campaign across Europe, neo-Marxist studies in Germany focused on the negative consequences of widespread technical systems (Ullrich, 1979).

Academically, Environmental sociology expanded and contributed to the establishment of the journal, *Organization & Environment* (O & E), in the United States in 1987. Using the “New Ecological Paradigm (NEP)” and the “Human Exemptionist Paradigm (HEP)”, Dunlap and Catton defended the legitimacy of environmental sociology with the parent field of sociology (Catton and Dunlap, 1978a, 1978b; Dunlap, 2008). European environmental sociology too, reflected on the HEP-NEP debate (cf. Spaargaren, 1997). European sociologists have contextualised the field within contemporary sociological theory; for example, Bauman (2011) argues on the ill impact of modernity, Giddens (1997) observes environmental damage as a consequence of modernity, and Latour (2004) analyses the shifting networks and relationships among actors and object. European environmental sociology largely employs the “Theory of Ecological Modernization” and the “Theory of the Risk

Society” (Beck,1992). Many European environmental sociologists asserted the importance of the social sciences and sociology by positioning themselves as environmental natural scientists (cf. Newby, 1991). Burns (2016) asserts that surveys (Dunlap, 1994), lifestyle and behaviour studies (Spaargaren and Vliet, 2000), and environmental movements (Brulle, 2000; Shiva, 1992) were the most common early environmental and sociological methods and tools.

Environmental Sociology in India

India, due to colonial rule, does have British-type sociological standards in ecological studies due to the large deforestation done for railway construction (Das, 2011). An English urban designer named Patrick Geddes applied ecological considerations to the growth of Indian towns like Indore, Lucknow, Patiala, and others at Bombay University in the 1920s (Munshi,2000). Geddes used the ideas of Comte and Le Play in his evolutionary approach to the social sciences. The plan for ecologically sustainable cities and villages was simultaneously developed by European and Indian scholars. Guha (1992) brings out the work of Mukherjee, Geddes, Elwin, and Kumarappa (a Gandhian), which has been completely ignored as a precursor to Indian environmental sociology. In his work titled "The Prehistory of Indian Environmentalism," he discusses the origins of Indian environmentalism. Some earlier accounts of ethnographic writings also reflect on the policy-oriented work in northeast India. For example, Elwin (1989) talked about how tribal groups and forests have a mutually beneficial relationship in terms of culture. Post-independence Guha dubbed the decade in India's history “ecological innocence” since the political and intellectual worlds gave environmentalist ideas so little traction. In the academic sociology of the United Kingdom and colonial India, Geddes belonged to a school of civics sociologists that aimed to reaffirm the significance of environmental elements in human evolution. Geddes used a sociological method to study urbanisation. He divided the industrial age into two stages, referring to the earlier stage as “Paleotechnic” and the emerging one as “Neotechnic” (Abercrombie, 1933). The first stage was seen as a depletion of energy and natural resources. In contrast, the second was seen as an effective utilisation of resources and populations to benefit humans and their environment (Geddes, 1915).

It took until the 1970s for environmental sociology to be discussed in India, just like it happened in the USA (Arnold and Guha, 2009). Earlier, Mukherjee (1920) proposed the concept of a "region" to synthesise sociology and environment (Guha 1992:62). From this very concept came out a theory of “social ecology” (Mukherjee 1942). The writings of Guha (1992, 1995) and Gadgil (1995) illustrate the juxtaposed consequences of ecological and societal changes brought about by the “Green Revolution”, in which agriculture underwent a major

technological change. Although they were from different fields, their work had a significant impact on how environmental sociology was thought of in India.

In India, Gandhi ardently acknowledged the need for environmental protection. As a man with a strong ecological perspective, Gandhi's influence can be seen in the many schools of environmental thought that have emerged around the world. The founder of deep ecology, Arne Naess, also acknowledges that his studies on Gandhi and Spinoza led to his work on "ecosophy", or the philosophy of ecology. Gandhi believed that a lifestyle dependent on an infinite supply and the indiscriminate appropriation of raw materials from other nations was the primary cause of environmental destruction. Petra Kelly, the founder of the German Green Party, claimed that Gandhi had a direct influence on the Green Party in this regard in 1990 article."

Baviskar (1997) calls the early environmental studies as "Developmental and environmental dichotomy" largely articulated by Ecological Marxists, a few of them were mobilised under a private organisation for environmental degradation the "Centre for Science and Environment" (CSE), to prepare the "State of India's Environment: Citizen's Reports". This report presented an entirely distinct viewpoint to raise public awareness and bringing the attention of the government (Jackson, 1983). The state took cognisance of the gravity of environmental issues, and the department of environment was set up in 1980.

According to ecological Marxists, development programs in India faltered because the same elite class kept controlling the means of production. The state, the rich industrialists, and the capitalist farmers controlled most of the means of production. Because of this, decisions about technology, production, and income equality were all compromised. For mending this failure, environmentalists supported the concept of "sustainable development" which is a criticism of ongoing development (Burns, 2016).

Environmentalists were seen to be imposing narrow agendas that made it difficult for developing countries like India to provide for the basic needs of their populations. This viewpoint was expressed by Indian Prime Minister Indira Gandhi in her statement that the "poor was the worst polluter" at the 1972 Stockholm Conference. In countries like India, environmental issues were apparently seen as whim borrowed from the West and environmentalists as being "anti-development" (Baviskar, 1995). Undeniably, sociology has been slow to recognize the problems associated with climate change (Liu and Szasz, 2019).

Coexistence of Developmental Sociology and Environmental Sociology

Ecological Marxist believed that developmental and environmental concerns were complementary, since social justice should be the focus in developmental process. Because economists and sociologists were

concerned about the difficulties that the newly independent country would face, development sociology focused on the existing problems and the required solutions. Development sociology started with this problem-solving approach. How can a poor, traditional country achieve industrialisation, urbanisation, and modernisation? The development of environmental sociology has followed the same pattern. Baviskar (1995) opines that normative needs in environmental sociology were set by discussions in the Western countries during the 1970s around issues like rising population, the limitations to unending development and the depletion of tropical rainforests in the 1980s. The way people thought about the environmental crisis changed because of these discussions. There are plenty of studies on the social and environmental effects of displacement due to infrastructural and developmental activities. International financial aid organisations have had a considerable influence on the course of these studies (Rao, 1998). In the 1980s, many collaborative initiatives were taken with the aid of these international organisations and a greater emphasis was placed on social forestry (due to concern over deforestation) and fallow land development; in the 1990s, state and local community participation in the form of joint forest management was promoted (JFM). This has helped environmental sociology acquire a general attitude towards policy formulations and objectives of international financial institutions (Bottrall et al., 1993; INTACH, 1989). This later influenced the construction of specific sociological concepts. However, in India, environmental sociology lagged significantly behind developmental sociology (Singh and Burra, 1993).

Empirical Dimension of Environmental Sociology in India

The impact of colonial policies on managing traditional commons (pastures, forests, and water) in India cannot be ignored. Historians have conducted many empirical studies before the sociologist (Arnold and Guha, 1997; Chakravarty and Kaul, 1996; Fisher, 2004; Guha, 1989a). Sociologists later studied these commons' control, management, and use patterns with an empirical dimension. Social antagonism over privatisation, particularly in forests and fisheries, widened the scope of these studies. As a result, environmental sociology was created to analyse how development harmed forest people, especially Adivasis (Baviskar, 1995). These empirical studies revealed that the process of modernising India by constructing dams and other projects was detrimental to a large section of society and the environment. On many occasions sociologists have disregarded India's macro-frameworks of development, like industrialisation and urbanisation. Many micro-studies have examined the effects of infrastructure development projects, particularly the internal displacement of the people (Khagram, 2004).

The interest towards empirical studies in India is attributed to both international aid organisations and social movements. Academics paid attention to the Chipko and Narmada Bachao andolan, the news coverage of protests converting Netarhat into a field firing range, and government initiatives like aquaculture in the Chilika Lake. The second wave of environmental justice took place in the aftermath of the 1984 Bhopal gas disaster, in which millions of people suffered as a result of toxic gas leakage from Union Carbide, a US-based multinational corporation (Chouhan et al., 1994). Environmental Protection Act 1986 was the immediate response of the state to this tragedy.

The empirical studies have shown that environmental groups had mostly attracted middle-class professionals, including lower-income individuals and trade unionists, according to British survey results from 1979 (Cotgrove, 1982). Similar findings were made in 1992 American studies, which indicated that urban, younger, liberal, well-educated, and non-forestry and non-farming individuals supported environmentalism (Dunlap, 1994). On the other hand, in India, the poor and local communities such as the people in Chipko movement had concerns over social justice and environment protection. Some environmental movements, like the Silent Valley movement in Kerala, are good examples of how Gandhian and Marxist philosophies could coexist (Guha, 2001). However, the majority of the works regarded environmental issues as social issues, as opposed to institutionalized behaviours or practices (Lewis and Humphrey, 2005).

Ideological Strands of Environmental Sociology in India

Gandhian philosophy has had a profound influence on Indian environmental sociology. Embracing Gandhi's legacy, Shiva (1988) challenged the dominion over nature philosophy that underpins Western scientific knowledge. This ideology was clearly directed at the environmental sociology stream as a critique of modernity. Evidently environmental movements in India are inherently manifestations of Gandhian non-violence and ecological harmony. With the Chipko movement, environmentalism as the movement took off in India in the 1970s. Indian environmental movements stood for "environmentalism of the poor," in contrast to western environmental movements that were led by the upper and middle classes (Arnold and Guha, 1995). Peasants and indigenous people, particularly women, frequently took the helm of these movements (Baviskar, 1997). However, many basic philosophical tenets of Indian environmentalism are shared by environmental justice groups in the United States (CSE, 1982). Like the United States, the dominant environmental discussion in India has centered on access to public goods and the presence of public bads (Gadgil and Guha, 1995). Besides ecological Marxism and Gandhian non-violence strategy, which were applied in the developmental debate over the silent valley, India had witnessed the presence of other strands too.

Three different types of orientation among the Indian people developed towards the environment, according to Gadgil and Guha: "the omnivores, the ecosystem people, and the ecological exiles." Ecosystem people have their basic needs met by the environment, whereas ecological exiles are the displaced, exploited, and disadvantaged tribes (Guha,1997).

The three ideological orientations: Crusading Gandhians, Ecological Marxists, and Suitable Technologists in Indian environmental activism gave rise to many environmental movements. Gandhians advocated for social and ecological justice in line with pre-capitalist and pre-colonial village communities. The appropriate technologists looked for a method to use technology to bring together the best elements of large and small businesses, agriculture, and western and eastern traditions. The ecological Marxists largely rely on science. Guha cites Kerala Sasthra Sahithya Parishad's (KSSP) writings as an example of ecological Marxism. Ideologically, Gandhi believed that modern industry was the biggest contributor to environmental deterioration, but Marxists believe that capitalism is the main cause. However, in practice, India chose a sustainable development model that emphasizes both the Gandhian model and sustainable capitalism (Radjou et al., 2010).

Environmental Sociology: Emerging Themes

Climate change is the focus of environmental sociology in the United States and Europe because it is considered as having the potential to impact the world's social and political structure. Beck calls this change a "metamorphosis" (Beck,2015). Owing to climate change, a new form of socioeconomic disparity and nation-state boundaries are likely to emerge, completely bringing in a new way of thinking about the world and one's chances of surviving there. Global climate risk could usher in a rebirth of modernity (Beck, 2015). The development of "social constructivist perspectives," "actor-network theories," postmodernism, risk society literature, consumer studies and the work on ecological modernization are all examples of new perspectives on looking at environmental sociology in Europe (Buttel,2000). Brulle (2000) and Fisher (2004) have both recently employed a "Critical theory method". Famous work of sociologists such as Beck (1992, 2009), Giddens (1990, 2011), Ritzer (2001), Bauman (2011), Castells (2010), and Urry (2011) have called attention on how environmental issues, hazards, and reforms should be incorporated into general sociology and sociological theory (Lidskog et al., 2014). American environmental sociology largely follows the realist tradition (Goldman and Schurman, 2000). In the United States quantitative empirical study on environmental attitudes, behaviours, and justice is more common (Dunon,2003). Recently urban sustainability as a part of environmental sociology has been incorporated in USA in many state universities (Christiansen and Fischer, 2010). Having recognised the dynamic and reflective nature of the

discipline, researchers call for incorporating environmental themes in Sociology (Burawoy, 2009; Cohen and Kennedy, 2013). This relatively new discipline recognizes the need to integrate regional environmental sociologies and collaborative learning (Mol, 2006) as well as contextualised knowledge (Calhoun et al., 2012).

Towards an Integrated Environmental Sociology

We examined the environment specific strands of sociology with a specific focus. Environmental issues are undoubtedly diverse. The emergence of new classes of inequality and "haves" and "have-nots" of natural assets must be looked at through a sociological lens to see how it affects marginalised communities, classes, and, most importantly, countries. Environmental sociologists in India still lags academically to from a crystalised discipline as compared the US, and Europe which have contributed significantly.

Environmental sociology in India must incorporate its climate policy knowledge post-Kyoto protocol. New narratives and realities must be explained. For example, Nora Haenn's study on Mexico's Calakmul tropical forests exposes a new reality (Haenn,1999) of restoring commons with the help of community participation. The discipline needs to have regard for the natural environment for society as a distinct discipline, which otherwise remains an incomplete view. Globalization and global warming have led to a diversification of environmental concerns. Increasing sea levels and carbon emissions impose new socioeconomic concerns, including carbon inequality and climate-induced migration. India is the seventh worst hit nation due to extreme climate change events (Eckstein et al., 2018). Under these scenarios, environmental sociology assumes new roles focussing on regional climatic issues. From an environmental standpoint, it is necessary to bridge the knowledge gap between natural and social sciences. The distinctiveness of this field lies in its research domain, methodology, and value orientation of community and government, as discussed in this paper. The study areas are diverse and promising, covering not just environmental concerns but also the relationship of society and the environment, as well as environmental consciousness in our social actions. Regional environmental sociological studies can help India understand global differences and demands on environmental sociology. In their own words of Durkheim and Giddens, "New Rules" for global environmental sociology must include regional priorities. Scholars from India should be proactive to collaborate on regional aspects of environmental sociology. These opportunities promise substantial collective benefits that have not yet been realized.

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Notes

- i. In the early 1970s, two scientists named Ehrlich and Holdren suggested model as a method for calculating the influence of people on the environment. IPAT is a framework for studying the effects of population (P), wealth (A), and technology (T) on the environment (I). $I = PAT$ or $I = P \times A \times T$ is an equation that expresses the concept that environmental impact (I) is the product of three factors: population (P), affluence (A), and technology (T).
- ii. POET-Duncan (1961) proposed an ecological model that highlights the interdependence of four variables: population, organization, environment, and technology. The P.O.E.T. Model is a frequently used framework for putting a country into perspective by analyzing its various elements.
- iii. Petra Kelly quoted in Claude Markovitz, *The Un-Gandhian Gandhi: The Life and Afterlife of Mahatma* (New Delhi: Permanent Black, 2004), 72
- iv. Beck defines the process of metamorphosis as continuous and open; it is unpredictably and unintentionally inclusive, and it is open to anyone and everyone.

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