Chapter - 2

Theoretical Expositions, Methodology
And Reflections on Fieldwork
Environmentalism in Marxist Thought

It is a matter of fact that there is considerable ground of co-relation between historical materialism and a concern for environment. But the emphasis in the early political economy, principally derived from Marxist versions, was on the separation between Marx's analysis of political economy and development context, i.e., development has failed to incorporate the environmentalist concern with sustainability (Michael 1984:5-60).

For Marx, industrialization was a progressive force which harnessed technology to natural resources and permitted a reduced dependence on agriculture (see Marx 1974, vol.3, 617). In his writings, Marx emphasized that the environment, particularly the rural environment, was transformed through the appropriation of capital. According to him, the environment performed an enabling function, but all value was derived from the exploitation of labour power. In fact, there was no contradiction between man's mastery of nature and his ability to exploit science for his own needs. From a historical materialist perspective it was society, not science, which placed restrictions on human potential. Moving further in this direction, Engel's argument was that (in his writing "Introduction to the Dialectics of Nature", 1970 and after the publication of Darwin's Origin of Species in 1859), 'man alone had succeeded in impressing his stamp on nature and, by better understanding the laws of nature, was capable of reacting to what he had done'(Engels 1970 a:74-5 ).Secondly, in his second essay: "The part played by labour in the transition from Ape to Man", Engel expounded his view that ' economic growth need not damage man's harmony with nature' (1970 b :362). In his view 'the knowledge of science is the best guarantee
that the natural consequences of at least our day-to-day production activities are brought under control’.

Thus, Marxist writing about the development process simply accorded a secondary role to the natural environment. The focus of attention in Marxist approach was more on labour rather than on natural resources. There are debates over Marxism and ecology. Marx identifies production conditions (nature, labour power, and communal conditions of production) which capital cannot produce for itself as commodities. The state mediates, and hence politicizes, conflicts around these conditions (environmental movements, feminism and social movements) in an effort at maintaining capitalist accumulation.

Such debates can be analyzed in more detailed form through a critical discussion by contradictory thinkers of new green social movements of post-capitalist society called as exponents of ecological Marxism.

**Ecological Marxism or Socialist Ecology**

Socialist ecology offers an eco-economic analysis of the interaction between capital and nature and the transition to a post-capitalist society. In other words, it encourages an analysis of the dialectics between economy and ecology and between nature and history. For the ecological Marxists, the creation of an environmentally just society is a logical pre-condition of social and ecological harmony. This incorporation of the capital / nature analysis into Marxism which contradicts traditional Marxist analysis of social conflict is spearheaded by economist James O’Connor, Watts and others who have tried to bring ecological concerns into a Marxist analysis of political economy.

James O’Connor’s theory of capital and nature is grounded in the traditional Marxist dialectic between the forces of production (technologies) and the relations of production (exploitation of labour by capital). This dialectic is the first contradiction of capitalism which leads to economic crisis and the breakdown of capitalism (Merchant 1992: 147). Just as nature has increasingly become a commodity, so has been the human labour. Labour works with nature to produce value, only to have it appropriated by owners of capital. This unequal relationship has been enforced by
authority of the state, based ultimately on its monopoly over violence (quoted in Baviskar 1995: 37).

The coercive aspect of the state power has been concealed behind the institutions of liberal democracy. However, O'Connor equally emphasizes a second contradiction within capitalism, that between production and environmental conditions of production. Traditional Marxists used the term conditions of production to encompass human resources (labour), natural resources and space. In ecological Marxist theory, these conditions of production came into conflict with the forces / relations of production. This second contradiction of capitalism leads to eco-economic crisis, initiating the transition to ecological socialism.

This second contradiction of capitalism is also seen in the writings of Amita Baviskar in her work when she puts forth:

"in the name of development, national elites, through the institutions of the state and market and often in collaboration with foreign capital, have appropriated natural resources – land, minerals, forests and water – for conversion into commodities. The circulation of goods which this had brought forth has taken place primarily among the already affluent owners of capital and other elites. Elites, who have the desire and the power to profit and consume, have thereby impoverished the earth of its natural wealth and, through degradation and pollution, have rendered it unlivable for future generations. This has been called the second contradiction of capitalism – a contradiction between the ever-expanding-circulation of capital which has no limits and a nature which has many" (quoted in Baviskar, 1995: 36).

However, the neglect of an ecological perspective in Marx's own work is not an oversight. Marx's core concept of labour process under-represents the significance of natural conditions which cannot be manipulated and it also over-represents the role of human intentions and powers for transforming nature (Benton 1989: 64, quoted in Baviskar 1995:38). In sum the above discussion of ecological Marxist approach clarifies that:

1. In traditional Marxist theory, the first contradiction of capitalism leads to over production of goods. There is a decreased demand among consumers for the product. In ecologist Marxist theory, however, the second contradiction of capitalism leads to underproduction. Capitalism creates its own barriers to growth
The New Ecological Paradigm: ‘Catton and Dunlap’

The new ‘ecological or environmental paradigm’ was developed by US sociologists Catton and Dunlap in 1978. They defined this field as ‘the study of the interaction between the environment and society’ (quoted in Irwin 2001:17). This new ecological paradigm presents human beings as just one part of a larger ecosystem and considers that human affairs are influenced by nature as well as society. By making this approach Catton and Dunlap hoped to facilitate a sociological approach that would consider the impact of resource issues on society, i.e., the impact of the natural upon the social, and also the opposing relationship, how social processes affect the natural world around us. In doing so, Catton and Dunlap advocated an analytical framework, which gave due emphasis to categories such as population, technology and environment. Here, when one moves beyond an ‘exemptionalist’ paradigm and recognizes the intimate link between people and the natural world, the relevance of the physical environment to humans can be fully recognized. Hence, Dunlap suggested that sociologists must acknowledge not just that ‘human activities are causing a deterioration in the quality of the environment’ but also that ‘environmental deterioration in turn has negative impacts on people’.

Since the present study is based upon the environmental movement of Chilika Lake which is the major thrust of this thesis, our further discussion, therefore, will move on towards providing a theoretical base to the study in the field of social movements from two different paradigms- the Resource Mobilization Paradigm and Identity Oriented Approach to social movements. After that a detailed account of the notion of environmental movements as ‘New Social Movements’ (NSMs) in Europe and India will be discussed as part of the theoretical analysis of the present study.

The Resource-Mobilization Paradigm of Social Movements

The resource-mobilization paradigm emerges in the United States during sixties and seventies and it assumes that social movements involve contestation between organized groups with autonomous associations and sophisticated forms of communication (networks, publics) (Cohen 1985:674). This paradigm studies the
social movements from the perspective of strategic instrumental rationality of collective action and gives emphasis on 'such' objectives-variables as organization, interests, resources, opportunities and strategies to account for large scale mobilizations. Olson, the famous economist, is regarded as the pioneer of the individualistic approach with McCarthy and Zald. He maintains that, 'without constraint or selective incentives (i.e., the prospect of individual material benefits), the rational individual will not contribute resources or time to collective action'. Olson further adds that, 'collective action lies outside the rational self-interest of the average person even if individual and group interests coincide. Without selective incentives or constraints, collective action, according to him, becomes impossible or irrational.

The organizational approach analyses movements from the perspective of their organizational forms through which the resources, both human and non-human, are mobilized to achieve the goal. For the resource mobilization paradigm, however, the object of analysis is not the social movement in this sense, but collective action between groups with opposed interests. In other words, in spite of having differences, this paradigm of social movements analyze collective action in terms of the logic of strategic interaction and cost-benefit calculations.

Identity Oriented Approach to Social Movements

Among the theorists of social movements who have provided the broadest theoretical framework for an identity-oriented paradigm, is Alain Touraine. Touraine emphasizes a new dimension to social movement, i.e. reflexivity regarding the creation of identity and norms, emphasis on the democratization of society, self-limitation and focus on cultural issues. His work moves on two analytical levels:

i) the elaboration of a theory of the structural and cultural dimensions of contemporary society and

ii) an action theoretical analysis of the conflictual processes of identity formation of collective actors.

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3 ibid
4 ibid:675
5 ibid:676
6 ibid
In addition, he focuses on the social dimension of collective action, in part by reviving the concept of civil society.

Touraine defines social movements as “normatively oriented interactions between adversaries with conflicting interpretations and opposed societal models of a shared cultural field” (Touraine 1981:31-32). He views social movements as the carriers of historical projects and the central theme of his approach is the “collective will formation, the ways through which movements came to recognize themselves as collective actors with a historical project. The process of collective will-formation involves totality, identity and opposition. In other words, he puts it as, ‘the identity of a social movement emerges in the totality of a social field of action, always in opposition to an historical other (Eyerman and Jamison 1991:26). Moreover, he goes on emphasizing the issue that the new dimensions of the identity of contemporary actors in the movements of post-industrial society, and what makes them radically discontinuous with earlier movements, are thus, not their action repertoire but the level of reflexivity and the changed locuses and stakes of struggles that correspond to the emergence of a new societal type (quoted in Cohen 1985:702).

**Environmental Movements as New Social Movements (NSMs)**

In India among the many struggles against development’, one has received increasingly scholarly attention in the last fifteen years—resistance in the form of Social Movements. Luke Martell has defined social movement as ‘a collective attempt to further a common interest or goal through collective action outside established institutions (Martell 1994: 108). There are, according to him, three key points which receives the attention most. They are:

i. first, the movement is collective, it involves a collective interest or goal and collective action in pursuit of it,

ii. secondly, it is based on a shared interest or goal,

iii. thirdly, it pursues change outside established institutions, so differing from a political party.
i) Location: Old social movements tend to be located in the polity in political parties (Labour and Social Democratic Party, for instance), whereas the New Social Movements (NSMs) are autonomous movements outside conventional political institutions.

ii) Aims: The aim of old social movements are to secure political representation, legislative political reform and rights associated with citizenship in the political community, the NSMs, however, want to defend civil society against political power and redefine cultural and lifestyle in civil society rather than pursuing legislative change through the state.

iii) Organization: Old Social Movements adhere to formal and hierarchical modes of internal movements organizations whereas the new social movements go for informal unstructured organization or 'networks' built-up from grassroots participation rather than structures of authority.

iv) Medium of Change: The Old Social Movements are oriented towards political institutions through which change can be achieved. The new social movements go for newer and more innovative forms of direct action and work on redefinitions of meaning and symbolic representation in culture rather than change through the political apparatus.

The NSMs have been contextually located in a society which has been variously defined as 'post-industrial society' (Touraine 1981), 'late capitalism' (Habermas 1976) and 'advanced capitalism' (Melucci 1980). Melucci locates the emergence of NSMs in the increasing intervention and impact of capitalist development on all the spheres of society and which has increasingly intervened in symbolic systems, individual identity, needs and social relationships. Hence, the newness of NSMs lies in the reinterpretation of earlier older issues in the present day context (Turner 1969), differentiation in types of movement, means of action, demands raised, interaction patterns between different movement (Nedelmann 1984). The specific issues raised by the NSMs are students' rights, civil rights, anti-nuclear energy, disarmament, ecology, women etc. Meanwhile melucci points out that the NSMs are not focussed on the political systems as "they not oriented towards the
conquest of political power or of the state apparatus, but rather towards the control of a field of autonomy or of independence vis-à-vis the system (Melucci 1980: 220).

Luke Martell raises the question by putting arguments of various scholars. Is the green movement new? It has many features which fit the ‘new mould’. Fierce debates have emerged in the movement about the usefulness of participation in the political sphere and the pursuit of change through political institutions (Martell 1994: 113).

Many greens prefer grassroots based decentralized forms of participation or lifestyle politics through green consumerism or communes. Green politics have sprung up throughout the developed world aimed at getting into political power even if only through coalitional alliances or at non-national levels. While many greens want to pursue radical democratic forms of internal movement organization, this has not been a one way battle. They have come up against so called ‘realists’ who see formal leadership structures and hierarchies as the most effective way to pursue political change through conventional institutions.

Moreover, Crook et al (1992: 151, 162) breaks NSMs into three main components: value content, socio-cultural basis and organizational form. On value content they suggest that appealing to universal values and principles, as the new movements do, is nothing new. Such appeals are typical of modern enlightenment ideas (quoted in Martell 1994). On organizational form they suggest that the new movements may well ‘normalize’ to make institutionalized and conventional forms in accordance with cycles of social movement formation of the sort highlighted by Scott. But they argue that such movements are ‘new’ in terms of their socio-cultural bases, breaking radically with old social movements in the shift from class and economic interest to social, cultural and value bases.

Luke Martell also sees that value of action explanations for the rise of environmentalism by suggesting that environmental concern and the green movements are not simply products of political, economic, social or cultural structures, but that they are articulated and popularized by social and environmental groups. The

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10 ibid.
emphasis here is on action rather than structure and subjective agency rather than external determination\textsuperscript{11}.

Philip McMichael argues that the NSMs such as the greens, feminism and grassroots or biomass politics, share criticism of the development project. Where the development project advocated state economic management, the new movements tend to reject centralism and stress community empowerment instead. Where the development project emphasized industrialism and material abundance, the new movements tend to seek post – or pre-industrial values of decentralization, flexibility and simplicity and where the development project championed state and market institutions, the new social movements seek grassroots autonomy and the reassertion of cultural values over these of the market. In short, the NMSs, are distinguished by their expressive politics and their challenges to the economism and instrumental politics of the ‘developed society’ model. They have grown as the institutions of the welfare state (including labour organizations) have receded and they have contributed to the declining legitimacy of the development project (McMichael 1996: 217).

Sethi, asserts ‘what makes out recent struggle generated by the conflicts even natural renewable resources as both new and different is the mix of actors, modes of intervention, issues that they raise and their eventual impact in terms of redressal, policy shifts and consciousness (Sethi 1993: 136).

However, among all the NMSs, it is the environmental movements which have had most enduring influence upon society. These movements are conceived as broad networks of people and organizations engaged in collective action in the pursuit of environmental benefits (quoted in Rootes 1999:2).

\textbf{Third World Environmentalism and NSMs in India}

Recent social movement’s theory has moved away from what are frequently found to be the restrictions of classical (Marxist) theories. The New Social Movements (NSMs) in the Third World have created a new social reality which in Evers’s (1955) terms “lies beyond the realm of traditional modes of perception and instruments of interpretation” (quoted in Richard and Watts 1996: 33). Moreover, their argument

\textsuperscript{11} Martell, 1994, p. 119.
goes further that radical theories found in these movements potential for a new political hegemony constructed through the direct action of the masses. Nevertheless, it remains the case that Third World people’s movements rather than First World worker’s movements are seen as potentially transformative of the existing social structures.

One possible explanation for the rise of environmentalism or new environmentalism in the 1970s and 1980s, argues Luke Martell is that, it is based on the growing significance of a social class group especially sensitive to post-materialist environmentalist issues – the ‘new middle class’ (1994: 127). The new middle class is perceived to have arisen out of changing in occupational structure such as the growth, with the division of ownership and control, of managerial occupations and with the rise of the welfare state and the service sector, of public sector white Collar employment. In this case, ecology is seen widely as the predominantly middle-class issue which only the middle classes have the luxury to be concerned with and the green movement is popularly seen as being composed mostly of middle-class activists. However, in case of South Asian countries the majority of environmental movements consist of relatively small, temporary coalitions of local groups formed to oppose exploitation of the natural resources by outsiders or to protect their immediate environment against pollution (Kalland and Persoon 1998:18). As compared to the Western World, the Asian ones focus (in general) far more on local issues. The reason that they hope, by combining local people’s needs with those of the environment and by enabling them to gain more access to the natural resources will lead to more sustainable resource use. Although the general history of environmental movements in Asia is still largely unwritten (as argued by Kalland and Persoon 1998), there still exists some good case studies and general literature an environmental movements and environmentalism in some of the Asian countries. The case of India is therefore, not an exception in this regard.

Here the question arises in this context: Irrespective of having all these characteristics and similarities (to some extent) with that of its counterparts in the European Green Movements, Can these movements (environmental movement) be seen as 'new' in the Indian case? Since, environmental movements are viewed as the fallouts of the post-industrial society, they are called as new and in case on India, they are perceived to have emerged in response to a persisting general social crisis in all the political, economic and social institutions (Guha 1989).

Baviskar argues social movements in India continue to centre on the conflict over production relation. While the European experience has been called a shift from 'red' to 'green' – that is, from Marxism to environmentalism, the Indian political process seems to be tinted in both hues. Drawing the arguments from O'Connor she explains that the struggle over nature also provides resources which are the bases of production. Moreover, Guha argues that, unlike Europe, where ecological crisis is perceived equally as a threat to biological survival in global terms, in India conflicts over nature tend to closely follow the battle lines between those who produce and those who own the means of production. (Guha 1988: 2578).

Ramchandra Guha noted that the ‘Indian environmental movement’ is an umbrella term that covers a multitude of local conflicts, initiatives and struggles where the poor confront the rich in order to protect the scarce, diminishing natural resources that are needed for survival (Guha and Martinez-Alier 1998:4). Beginning within the Chipko movement in the Garhwal Himalaya in the 1970s and reaching global prominence with the movement against the Narmada dams in the next two decades, India has witnessed a series of popular movements in defence of community rights to natural resources (Baviskar, unpublished paper). According to Guha, “most of these conflicts have pitted rich against poor, logging companies against hill-villagers, dam builders against forest tribal communities, multinational deploying trawlers against traditional fisher-folk in small boats. In other words, Guha pointed that “our resources

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13 Baviskar argues that intellectuals of Indian Social Movements share with their counterparts in the European Movements a critical unease about party politics, a wariness that has been expressed in self conscious deliberations about the relationship between parties and movements. (See Baviskar, 1995).

14 O’Connor points out that the meanings attributed to nature are not exhausted by its uses as natural resource; ecological politics are about ‘class issues even though they are more than class issues’ (O’Connor 1988: 37, quoted in Baviskar 1995: 40).
are being transferred from the poor to the rich” (quoted in Kalland and Persoon 1998:10). Here, one party (e.g. loggers and trawlers) seeks to step up the pace of resource exploitation to service an expanding commercial-industrial economy, a process which often involves the partial or total dispossession of those communities who earlier had control over the resource in question, and those own patterns of utilization were (and are) less destructive of the environment (Guha and Martinez-Alier 1998: 5, also see Guha 2000: 99-124). Since the agents of more intensive resource exploitation are supported by the state, local communities have no recourse except direct action in protest against injustice (see Baviskar 1995). Hence, Guha argues that, ‘these movements address a new form of class conflict, one rooted in a lopsided, iniquitous and environmentally destructive process of development in independent India’ (1998: 17).

Gail Omvedt argues: While talking about NSMs in India that “the environmental movement arose because the people of India in both the cities and villages, of all castes and classes and genders were affected by the ecological destruction of world capitalism. But they were affected in different ways, and their responses were different. The first expression of Indian environmentalism was as diverse and localized movements, of peasants (tribals and non-tribals) and other sections of the rural poor fighting for the specificities of their own situation (Omvedt 1993: 146).

The NSMs in India are perceived to have emerged in response to a persisting general social crisis in all the political, economic and social institutions. (Guha 1989). These movements are located in civil society and operate almost wholly outside the traditional party system and aim to “protect the autonomy and dignity of diverse individuals and groups”15. Guha locates the newness of the NSMs in the articulation of the issues which were not recognized earlier by the oppositional movements and highlighted the necessity of the creation of new services like in health care and science education in rural areas. Omvedt (1993) identifies their newness in the sense of self definition, generation of specific ideologies, etc. She again considers NMS in India to be composed of groups which are neglected or exploited by traditional Marxism and

15 As commented by Kalland and Persoon 1998.
capitalism and are left un-conceptualized while discussing about Chipko Movement and protest over silent valley in Kerala. Again Omvedt asserts the Gandhians of formulating the ‘Indian deep ecology, versions and holds that the Gandhians neglected the exploitation in development process and of having idealized pre-British Hindu feudal caste factors and values. On the other hand Guha highlights the changed stance of Gandhians who earlier functioned outside the state apparatus and later changed to the opposition stance of government’s policies and programmes (Guha 1989). Above all, while talking about the environmentalism in North and South or in ‘first’ world and ‘third’ world. Guha sharply contrasted the ‘environmentalism of the poor’ with those of the first world environmentalism by arguing that environmental movements have emerged in a post-industrial or post-materialist society in case of North where as questions about quality of life are not rooted in the politics of production but in the forms of consumption. Thus nature is not primarily valued as the source of material subsistence but in terms of its aesthetic, spiritual and moral questions, which have been promoted through the wilderness movement. Writes McMichael ‘the First world environmentalism attempts to regulate the environmental implications of the market economy, where as the southern environmentalism questions the benefits of unregulated market forces (see McMichael 1996: 216). In North while in 1980s, the NSMs flourished because of the articulation of environmental demands with national sovereignty claims, whereas in South and particularly in case of Third World countries like India the articulation of environmental demands with developmental demands. In case of NSMs in India, the techniques of direct action relies on traditional networks of organization, the village and the tribe, and traditional forms of protest, dharna and bhoom hartal (hunger strike). In contrast, NSMs, in North relies rather more heavily on the ‘Social Movement Organization’ – such as Sierra club on the friends of the Earth – with its own cadre, leadership and properly united sources of funds (See Guha and M-Alier 1998: 17).

16 ibid., p. 147
17 ibid., p. 147.
18 Ramachandra Guha terms ‘Indian Environmentalism’ or Environmental Movements as ‘Environmentalism of the Poor’ as they are the movements for subsistence and survival upon natural resources. (See Guha and M. Alier 1997).
However, apart from all the above distinctions between Western and Indian environmentalism, the environmental movements, which constitute a part of the NSMs have emerged in a specific context in India.

The beginnings of the environmental movements in India are conventionally dated to the early 1970s, more notably to the Chipko movement in the Garhwal Himalayas. However, prior to 1970s, Indian environmentalism was at its infancy since, the works of four sociologists - Radhakamal Mukherjee, Patrik Geddes, Kumarappa and Elwin - influenced its origin and emphasis on Indian society and regarded as the pioneers of human ecological thinkers in India or the pre historical thoughts of India which is also called as pre history thinking of Indian environmentalism. A few glimpses of their work would be more valued to be discussed here in the context of Indian environmentalism before proceeding further which is also referred as pre-history of Indian environmentalism.

Radhakamal Mukherjee was the first Indian scholar to highlight the links between the social and the biophysical worlds. In 1920s, he proposed the ‘region’ as a concept that would allow a synthesis of ecology and sociology and human group, he wrote, 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, and even the insects which are indigenous to the region. (Guha 1992: 62). The region, again he wrote, “is at once an ecological aggregation of persons, an economic framework and a cultural order.”

Patrick Geddes (whom Mukherjee greatly admired), the remarkable urban planner, brought ecological sensitivities to bear on the development of town such as Indore, Luckow, Patiala, and Dacca (Baviskar 1997: 194). Geddes states that, in order to enhance the beauty of the city and the health of its inhabitants, “the case for the conservation of the nature and for the increase of our accesses to her”, going on to prescribe, the careful preservation of upland watersheds outside cities and forestry and park-making within them. In his Indian town plans, his ecological approach is reflected in the concrete recommendations for open space for recreation, tree planning.
and protection and most importantly, for the provision of sustainable and safe water supply (Guha 1992: 59).

J.C. Kumarappa, another Indian ecologist and the Gandhian economist developed the blue print for an ecologically sustainable village - centred economic order. He remarks that ‘there can be no industrialization without production’, while agriculture is, and ought to be, ‘the greatest among occupations’, in while ‘man attempts to control nature and his own environment in such a way as to produce the best results’

He does not make emphasizes on the water as the only natural resource to be conserved, rather dwells on the importance of maintaining social quality by checking erosion and water logging. Finally, Varrier Elvin in his work on the Baiga (1939), with its poignant account of a community torn from its moorings by the colonial ban on shifting cultivation, on the Agaria (1942), a tribe of charcoal iron makes, are classics which are still read and which have influenced the sensibilities of a number of sociologists working on tribal communities. In his ethnographic writing and policy-oriented work on the North-East, he dealt on the cultural symbiosis between tribal communities and forests – a symbiosis which had to be recognized and respected by scholars and administrators (Baviskar 1997: 195).

The works of these scholars (all in 1920s) are known as the work of pre-history of Indian environmentalism as they, in their own ways, share an understanding of the links between environment and development and their contribution are understood to a larger debate on social and economic reconstruction in an independent India. The optimism of those times is reflected in their work which Guha narrates in precise way:

“Kumarappa could be hopeful that a free India would restore the social land natural integrity of the village (something colonial rule had gravely undermined); Geddes that Indian urbanization would build upon long standing architectural and town planning traditions while being in harmony with the countryside; Elvin that the forests would and the life world of the tribals would be once again united; and Mukherjee that social theory and planning would benefit alike from a fundamentally biophysical and ecological approach (Guha 1992: 62-63)”.

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19 ibid: 58.
However, the works of these four pioneer thinkers have been forgotten in India although they, in rational, reflective mode provided insights into people's relationship with nature.

According to Guha, the first decades after independence were an age of the 'ecological innocence', a circumstance that helps explain why environmentally-oriented thinking found such little resonance in intellectual and political life (Guha 1992: 63). We had to wait till the 1970s for a systematic development of environmental sociology (see Baviskar 1997). Thus, the rebirth of environmental sociology in India and revival interest in environment sociology starts in later part of the 1970s due to the emergence of environmental movements which brought issues of 'environment' and 'development' on public agenda, for example, Chipko and Silent Valley in Kerala and they also have received scholarly attention in the new social movements as they have had the most enduring influence upon Indian society. At this stage there as a sharp distinction between those who supported 'development' over 'environment' and those who argued for 'environment' over 'development'. Environmentalists were accused of forcing their elitist fads on a poor nation whose foremost priority should be to meet its citizen's basic needs. At the time of the United Nations Conference on the Human Environment as Stockholm in 1972, India's then Prime Minister, Indira Gandhi articulated this belief when she said that 'poverty was the worst polluter'.

However, the post 1972 Scenario in case of Indian environmentalism was the creation of prevention and control of pollution laws which began with the Water Act of 1972 and the establishment of administrative procedures and system. In 1980s, the Central Government set up department of environment, which became a part of new Ministry of Environment And Forests in 1985. This led to increased government action in the planning, coordination and promotion of environmental programmes and such action itself became a focus of environmental activism (Krishna 1996: 33). At the same time, the magnitude of India's environmental crisis was being recognized which was the point of more concern in 1990s. And by the time of 1992 Earth Summit (United Nations Conference on Environment and Development) at Rio De Janeiro,
Brazil, Global Environmental concern – climate change and biological diversity – had been acknowledged up front. At the same time, the idea of ‘sustainable development’ became the central theme of the debate.

In recent years, in India, the vigour of the environmental debate has been based not so much on analysis and understanding – but on the growing strength of protest movements among the people who are most affected by ill-planned and badly-executed development projects.

The present study proposes to study the emergence of environmental movement by locating it in the ‘development’ context through the process of liberalization and shrimp aquaculture project. The environmental movements (Henceforth, NSMs) genesis is rooted in the ‘development’ process which is perceived by the people to threaten their survival and environment. In this study, the movement has been studied from a purely ecological base to a base created by the havoc like liberalization, globalization, development or in other words, it concentrates on the resistance movement of the poor against rich elites and against the policy of liberalization as well as the so-called model of development adopted by the state – a form of development which threatens to leave them destitute and exiles them from land which has supported them and co-existed with them for centuries. Here, in this context, we can see that, how in the name of development ‘people have been pushed off the land; their forests and water have been taken over by the state and the market, so that they have been deprived of everything except their labour power’ (quoted in Baviskar 1995: 36-37). Moreover, the development intervention has had considerable impact of the social structure, especially at the local level. The victims or target population perceive that development has disrupted the existing social structure and destroyed the existing social relations, identities, culture and economy. Therefore, since the agents of more intensive resource exploitation are supported by the state, the result is that the local communities have no recourse except direct action in protest against injustice.

The preceding discussions and analysis about NSMs in India and its relevance to the present study again requires some theoretical framework which needs to be discussed for practically demonstrating the contextual emergence of the movement.
and formulating the research hypothesis in the thesis. Thus, our further discussion deals with the analysis of theoretical expositions which are to be fitted in the context of environmental movement of Chilika Lake in Orissa (CBA).

The Ideological Dimensions of Environmental Resistance

As discussed earlier Indian environmental movements involve the poor and the disadvantaged victims of environmental degradation and therefore involve struggles of ecosystem people. Environmental movements or ‘ecological conflicts in other worlds, in India are referred to as continuing struggles over production and extraction. Most of these conflicts on struggles have pitted rich against poor; logging companies against hill villagers, dam builders against forest tribal communities, multinational deploying trawlers against traditional fisherfolk in small boats. Here one party (e.g., loggers and trawlers) seeks to step up the pace of resource exploitation to service an expanding commercial-industrial economy, a process which often involves the partial or total disposition of those communities who earlier had control over the resource in question, and whose own patterns of utilization were (and are) less destructive of the environment (Guha and Martinez Alier 1998: 5, Guha 2000: 99-124).

According to Gadgil and Guha, this pattern of development can be attributed to the dominance in Indian society of an ‘iron triangle’ of politicians and bureaucrats who use public resources to extend patronage to, and receive support from industry, large landowners and urban middle class populations. They in other words, present an original theoretical framework which innovatively combines political economy with ecology for study of environmental conflicts in India and emphasizes a forward-looking agenda for environmental reform in the Third World. This framework outlines three broad ecological classes of modern India, the ‘Omnivores’, ‘Ecosystem People’

21 Guha and Gadgil have referred the Victims or marginalized community of Indian environmental movements as ‘ecosystem people’ or ‘ecological people’ (see Guha and Gadgil 1995). These people are called so because they live a life of self reliance, in harmony with nature and they derive their sustenance from the natural resources. Their lives are originally tied to this earths from which they derive their knowledge and experience of sustainable practices. It is their survival which is by character ecological.
and ‘Ecological Refugees’. ‘Omnivores are the beneficiaries of the development process – the big land owners, modern entrepreneurs and workers in the organized sector including urban professionals and employees in Government, Semi-government and Government aided Organizations. ‘Ecosystem people’ are those in the subsistence sector – rural landless, small land holders, rural artisan, herders, fisherfolk, tribals etc. ‘Ecological refugees’ are those who are forced to migrate due to economic compulsions or displaced in order to make room for large development projects – the urban slum dwellers, hawkers, and domestic servants, migrant farm labour, peasants and tribals displaced by dam and mines etc. These categories might be distinguished by the size of their respective resource catchments or by their relative ability to transform nature into artifact. They may also be distinguished by their widely varying powers to influence state policy or by the degree of control they exercise over their own lives. It is contended that these are thus categories both ‘ecological and sociological’ and are a great improvement on the more conventional ones of ‘class’ and ‘interests group’ and provide a further and more convincing interpretation of economic and environmental change in contemporary India. Moreover, Gadgil and Guha point out that this ‘Iron triangle’ of ‘Omnivores’ govern the resource use pattern in Indian-alliance of these favoured by the state (industry, rich farmers and city dwellers), those who decide on the size and scale of those favours (politicians) and those who implement their delivery (bureaucrats and technocrats) and this alliance prevents the working of democracy in favour of the majority consisting of ‘ecosystem people’ and ‘ecological refugees’. In other words, these resource ‘Omnivores’ live on islands of prosperity at the cost of India’s vast number of ‘ecosystem people’ who are submerged in a sea of poverty. They again argue that there is a ‘State sponsored resource capture’ and large subsidies have created this, ‘Iron triangle’ of components of Indian society benefiting from administering and deciding upon state patronage. In other words,’ by centralizing state power in the hands of technical and scientific experts, justified in the name of ‘national interest’ India’s rich traditions of decentralized governance, especially in the sphere of natural resource management, have been dismantled (Gadgil and Guha 1995: 34-45). When threatened ecosystem

22 ibid, 1995.
people unite and mobilize to assert their rights to resources, they challenge not only the
distribution of resources, but the very premises of power and knowledge on which
state policies are based. These structures of decision-making and the form of
knowledge that they privilege are again questioned by the environmentalism of the
poor. Here, at this point it is again argued that collective action over natural resources
not only raises questions about ownership and control, but often also claims to respect
a different way of relating to nature, one that repudiates the cultural values enshrined
in the ideology of capitalist development. To quote E.P. Thompson, ‘every
contradiction is a conflict of values as well as a conflict of interest’ (quoted in

According to Guha, in India the environmental critique of the values of
development builds upon three ideological streams (Guha 1988). The first strand,
which he calls, ‘Crusading Gandhians’, relies heavily on a religious idiom in its
rejection of the modern way of life. It upholds the pre-capitalist and pre-colonial
village community as an ideal of ecological and social harmony. It criticizes the
domination of modernist philosophies such as rationalism and economism and
propagates an alternative philosophy which has roots in Indian tradition. Gandhi’s
own innovation of Ram Rajya (the benign rule of king Rama) is here being taken
literally, rather than metaphorically. In this regard crusading Gandhians frequently cite
Hindu scriptures as exemplifying a traditional reverence for nature and life forms. The
second strand, the palm opposite of the first is Marxist in inspiration called as
‘Ecological Marxist’. For ecological Marxist, the creation of an economically just
society in a logical precondition of social and ecological harmony (Gadgil and Guha
1995: 108). In the Indian context they are most closely identified with the People’s
Science Movements (PSMs) while include various Naxalite and radical Christian
group and their initial concern in taking ‘Science to the people’ become widened to
include environmental protection.

The third and last strand is called as ‘appropriate technology’. Less strident in
its opposition to industrial societies, it strives for a working synthesis of agricultural
and industry, big and small units, and western and eastern (or modern and traditional)
technological traditions. Both in its ambivalence about religion and in its unequivocal
criticisms of hierarchy in modern and traditional society, it is markedly influenced by western socialism. It in other words, empathizes the liberating potential of resource conserving, labour-intensive technologies. While conceptually separate, these three ideologies have an influential power in modifying each other. The Gandhian critique of modern science has muted the celebration of technicism by the Marxists, while the Marxist analysis of exploitation has compelled the Gandhians to incorporate a more egalitarian perspective on social change. The result of this cross-fertilization is an environmentalism which builds upon the struggles of these different ideologies to construct a far reaching critique of the values underlying ecologically destructive development (Baviskar 1995: 43).

Guha’s categorization of these three ideological strands of environmentalism in India represent the most forceful strands in the environment-development debate in India. However, along with these ideologies we can extend another stream of ideology which carries the values of Gandhian strand although rooted in a different tradition: that is the traditional and cultural beliefs of indigenous communities and their traditional practices of conserving nature which also constitutes a critique of ecologically destructive development and provides an alternative vision of sustainable human-nature relationship. The following discussions highlight this theme.

Indigenous Knowledge System and Resistance

The ecological or ecosystem people (in Guha’s ideological term) who live a life of self reliance in harmony with nature are referred also as indigenous community and their traditional knowledge as indigenous knowledge system. In their farming and their faith, indigenous people exercises vital stewardship over the earth’s resources and environment. Their traditional agricultural methods promotes land conservation and biological diversity. Their religious practices often involve setting aside forests and other lands as sacred preserves for wild life, spirits and deities.

The term indigenous is rather controversial as it is hard to differentiate indigenous knowledge from scientific knowledge system and the concept of indigenous community and its role in development are problematic issues too in the present context of ecology and development perspective. To avoid this controversy, although I have used this term more or less in this study whenever I feel required, I rather prefer using the term traditional fishing community and their traditional ecological knowledge practices in the place of indigenous knowledge system.
Where most of the humankind tends to seek dominion over the natural world, indigenous people generally favour a holistic approach that is the very essence of sustainable development – development which meets the needs of the present without compromising the ability of future generations to meet their own needs. Warren outlines the following characteristics of indigenous knowledge system in a paper prepared for the Word Bank:

“indigenous knowledge is an important natural resource that can facilitate the development process in cost-effective, participatory, and sustainable ways. Indigenous knowledge is local knowledge – knowledge that is unique to a given culture on society... it is the basis for local-level decision making it agricultural, healthcare, education, natural resource management and a host of other activities in rural communities. Such knowledge is passed down from generation to generation, in many societies by word of mouth. Indigenous knowledge has value not only for the culture in which it evolves, but also for scientific and planning striving to improve conditions in rural localities” (Warren, 1991: 1, quoted in Agrawal 1995: 416).

In this context Vandana Shiva and J.Bandyopadhaya speak of the cultural lessons of diversity and dramatic pluralism learnt by Asian societies ‘modeled on the forest’. They claim that:

“the forest as the source of life also means that forests and trees must be treated as sacred. The sacred is inviolable: its integrity cannot be violated. If Asian civilizations have survived over centuries it is because they learnt to be like the forest, sustaining both the forest and the culture through time..... for these cultures, all life, both human and non-human, is in symbiosis. Human society is not predatory but in rhythm with the forest” (see Shiva and Bandyopadhyaya 1990: 67-77, also quoted in Baviskar 1995: 45).

However, identified, ecological knowledge of the ‘indigenous communities’ contribute immensely in the success of the organisation of the environmental movements in India. The knowledge and practical wisdom of these ecosystem people provide considerable motivation for care and sustainable use for the natural resources. This view is gaining increasing recognition that over centuries having lived sustainably with nature (according to Shiva and Bandyopadhyay) indigenous communities have acquired a deep knowledge and understanding of the ecological
processes so that they become ideal natural resource managers. And this knowledge, which the indigenous people retain is an important factor in participation of these people in case of Chilika’s environmental movement. This indigenous knowledge is, however organized and expressed and finally shaped by intellectuals and agencies into what we known as environmental movements. This signifies that the indigenous ways of knowing, which people are unable to articulate or even be conscious of, are expressed ‘on their behalf’ by intellectuals.

The above definition made by Warren highlights about indigenous knowledge and its significance; however, contrast it to western knowledge, but offer less information on the dimensions along which it actually differs from western knowledge. The scholars of social movements in India say that ‘rural women and indigenous people… still retain the aranya Sanskriti (forest culture) which is based on the creative interdependence between evolution and the protection of forests (Parajuli 1991: 179).

Dei defines indigenous knowledge as the ‘common the common sense knowledge’ and ideas of local peoples about the everyday realities of living:

“indigenous knowledge includes the cultural traditions, values, beliefs and world views of local peoples as distinguished from western scientific knowledge. Such local knowledge is the product of indigenous people’s direct experience of the workings of nature and its relationship with the social world.” (Dei 1993: 105, quoted in Agarwal 1995: 418).

The contradiction that ‘indigenous peoples can make to sustainable development’ and the link between ‘sustainable development and the need to respect the human rights of indigenous peoples’ are subjects to gain considerable attention during 1993, the international year for the world’s indigenous people24. The year was proclaimed by the United Nations General Assembly in order to strengthen “international co-operation for the solution of problems faced by indigenous communities in areas such as human rights, the environment, development, education and health”.

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The wisdom of “indigenous people” is thought to have contemporary relevance, for it is believed to be inherently ecologically sound, as proved by their sustainable survival strategies (Redclift 1987:153). This wisdom, again forms the philosophical foundations of present day social movements of people who resist and challenge the dominant ideology of development. The ‘New Social Movements’ often are... sites of creating and regenerating the subjugated knowledge... of ingenuous people, women and other marginalized groups (Baviskar 1995: 46).

**Development, Deprivation and Displacement**

The environmental degradation and those who face displacement is a direct product of the dominant model of economic development (like big industrial units, big dams etc.). Such a model depends largely on the intensive and extensive use of natural resources. The extractive process (like mining and clear-felling of free in forests) has an adverse effect on the poor like the tribals, the forest dwellers and women who heavily depend on them as primary source of their livelihood. Thus, such “extractive process sets into motion on destructive, dynamic that force them to either became migrants or move on to increasingly fragile lands” (quoted in Seth 1997: 201). As SmitU Kothari observes:

“This concentration of large numbers of people on increasingly fragile ecosystems most often leads to further unsustainable use of resources” (1996: 1479).

In such a context she further adds, local communities are deprived of their age-old habitats and vital subsistent resources, and the long term sustainability of the natural resources is also endangered.

Writes Amita Baviskar in her work:

“in the name of the development people have been pushed off the land: their forests and water have been taken over by the state and the market, so that they have been deprived of everything except their labour power” (1995: 36-37).

Several studies on displacement started in India around the late 50s and early 60s, but gained prominence after 1970s. And it was started mainly because of the fact that the question of dam building and the associated displacement of the indigenous
people from their traditional habitat became linked up with the issue of human rights (Patnaik 1996: 27). In the state of Orissa in India, however, some of those studies draw scholarly attention in this context like: Behura’s (1989) study of relocates of Rengali dam in Orissa insightfully analyses the rehabilitation policy, highlights the economic problem and socio-cultural consequences, Baboo’s (1992) study attempts to reconstruct the socio-cultural life of the oustees of the Hirakud Dam who underwent traumatic experiences in the 1950s because of displacement, Mahapatra (1992) highlights the rehabilitation process and problems of the displaced tribals of Orissa in the comparative perspective of the situation in some other states in India. However. When such kind of problems crop up, there is an wider awareness and pressure among the local traditional people to preserve their right to development which have prompted them to initiate ecological movement as the outcome of such negative consequences development process and expression of protest against the destruction of their natural habitat through development. Write Vandana Shiva: “the neglect of the role of natural resources in ecological processes and in people’s sustenance economy, and the diversion and destruction of these resources for commodity production and capital accumulations are the main reasons for the ecological crisis and the crisis of survival in the Third World (Shiva 1991: 342). She again adds that, “the solutions seems to lie in giving local community’s control over local resources so that they have the right and responsibility to rebuild nature’s economy and through it their sustenance. The present study, however, will be studied from this angle based on the above conceptual paradigm and attempts will be made to understand the issues of displacement (occupational) which is due to the impact of environmental degradation through modern shrimp culture method in Chilika Lake area.

Common Property Resource (CPR) and Problems of CPR

Common property resource subsumes a set of social conventions, norms, legally enforceable rules and procedures for regulating its use (see Singh 1994). It has been argued that where nation states have stepped in to control natural resources,
what in current literature are referred to as 'the commons' (Sethi 1993: 122). When commons are degraded by over-use, the result is frequently an economic and ecological crisis (Kurien 1993:36).

There is degradation of CPRs due to destructive competition among the users when a group of users is unable to control the use of its CPR under changing circumstances. That is, when co-owners of a CPR usually failed to co-operate in using the CPR optimally, the problem of non-co-operation arises. This eventually is generally characterized as the "tragedy of the Commons" (Singh 1994).

Historically, the rural communities have treated the natural resources in India as common property. Chatrapati Singh of the Indian Law institutes writes:

"it is evident that till the end of the last century and in all historical periods, that at least 80% of India's natural resources mere common property, with only 20% being privately utilized... (see Singh 1982).

However, in India, after independence, lack of appropriate environmental policies and in-effective enforcement of existing policies have led to degradation of CPRs. The international trade and aid policies generally tend to promote free market, privatization, entrepreneurship and export-led growth all of which led to over-exploitation of CPRs for commercial purpose. Singh argues in his paper "The Legal Economies of Natural Resource Management and Sustainable Development" that much of the CPR discourse is rooted in the historical experience and behavioral logic of western sociology and this discourse, in real terms, ill serves India.

Common Property in natural resources may be understood in terms of the category of 'Property as lived experience' by Rita Brara in her paper 'Grazing Lands: Negotiating custom and Law' to investigate the 'commonness' of grazing resources and the rules that govern inclusion and exclusion in Lachhmangarh tehsil of Rajasthan. Brara differentiates between property as lived experience and property as legally constituted; and she draws the conclusion that the ideology of rights in common is a response to the imperative of ecologically sound animal and crop husbandry (Sinha and Herring 1993: 1426).

The impact of state and market intervention on community-level cooperation in terms of common property has been focused by Chopra et al in the paper titled ‘Guhls- A Traditional Irrigation System in Garhwal’ (co-authored with Rajesh Kumar and Debashish Sen). The paper delineates the focus that state intervention is market-led and harmful to local resource management institutions; it also destroys local commons and local environments.

In the present study, the traditional poor fishing communities who are the inhabitants of the Lake’s natural resources have treated it as a Common Property. They have been now affected by the Lake’s sharp deterioration due to overfishing and shrimp farming and due to advent of the capitalist ventures. The affected ecosystem people have thus directed their movement into a language of rights over common resources. The struggle and resistance movement, thus in the study may be understood and is discussed to be a movement of the people over the right they have over the Lake’s resources which they consider their own.

The Formulation of Hypotheses

The hypotheses or research questions have been formulated in this study by the preceding theories as discussed above. The resistance of the traditional fishing communities of Chilika Lake have come together in a form of social movement collectively against the appropriation of natural resources by the state, market and local elites.

The resistance of these communities, in other words, shapes relationships, strategies and identities with a social movement by analyzing a case of the people's struggle as seen in case of Chilika. My expectation goes on to show the extent to which these communities try to save themselves and their habitat from the clutches of aggressive engagement done by state power and powerful elites in the traditional zones of economy, society and culture in India. Their fight against the shrimp aquaculture project in and around the Lake vicinity appear to be intrinsically an environmental movement by raising the issue as do they not use nature sustainably and abide by the cultural values tied on this? This intricate relationship between nature,
culture and community throws light on the ethos that discuss the ecological insights and religious idioms that are rooted among these communities as essentially being part of their very culture. When this very nature has been threatened by the authoritarian state and commercial interests- the decentralized, grassroots mobilization results in the form of protest as a challenge to the authority of the state to act on behalf of the people. The ‘Save Chilika Movement’ promotes the unity and values of the traditional fishing communities and represents the cohesiveness for their values of the community life, sustainability and respect for nature against the hazardous actions in the pseudo name of development by the state. My fieldwork experience to the area of the movement (which has been described with more vigorously in the next unit) on the lives of the people and their ties with their nature as well as their ongoing struggle against the state and outside interest for the protection of their land, community culture and livelihood led me to ask the following research questions in this study:

i) How the communities who depend on their natural environment for sustenance are now increasingly finding themselves difficult to survive on the land?

ii) How the environmental movement of Chilika results out of LPG (Liberalization-Privatization-Globalization) paradigm inaugurated in the state since 1990s?

iii) What are the new profiles of state, market, community and mass mobilization interrelations in the context of Chilika’s environmental movement?

iv) How these people have to share a common identity and perceive the state as the common enemy? What is the role of the state after all and its relationship with the marginalized fishing community?

v) How do the various business groups and corporate houses ( if there is any) operate in the Lake area and what is the role of the state in promoting/dissuading these groups?

vi) How the movement organizes and mobilizes its participants so as to provide an effective opposition to the state?

vii) How the developmental critique represents these traditional communities whose struggles are the subject of theories and notions of social change who are ecologically noble savages living in harmony with nature and who are the direct participants of these environmental movements of contemporary India?
Research Methodology

In the present study I have preferred the inductive analysis method rather than the method of deductive analysis because such analytical method allows theory to emerge from the data of the movement. As per the survey conducted initially, it was proposed to divide the proposed universe of the study i.e., Chilika Lake into five different regions on the basis of the geographical positions and situation of villages in the Lake. In the detailed field survey conducted there after, it was decided to design this said universe of the study by dividing these regions on the basis of fishing activities, caste, sub-caste, language, cultivation etc.

Universe/ Coverage of the Study

The study was conducted in two phases—Pilot Study and In-depth Study. Since, the objective of the study was to analyze the socio-economic and environmental factors related to the social movement that has grown in the area for the last few years, it was planned to select various households from the selected villages through a method of stratified sampling.

Since the objective was to cover all the regions in and around Lake Chilika, in my study, Chilika Lake was divided into five regions on the basis of the geographical location of villages situated in / around the Lake.

They were:

1. North-east
2. North
3. West
4. South and
5. South-east

North East

The North-east region includes in Brahmagiri block and a part of Krishnaprasad block in Puri district. The villages under these two blocks are near the
outer channel of the Chilika lake. In this region both the fishermen and non-fishermen are engaged in fishing.

**North**

The northern region includes the villages of Kanas in Puri district. This region is connected with Chilika through rivers such as, Daya, Makara etc. In this region, only fishermen are engaged in fishing activity.

**West**

The western region covers the villages of Khurda, Tangi, Chilika and Banapur blocks of Khurda district. This region is by the side of the western bank of Chilika and only fishermen are engaged in fishing activity. They are near to South eastern Railway, Calcutta-Madras Line and NH-5.

**South**

The Southern region covers the villagers of Khallikote and part of Ganjam blocks in Ganjam district. Only fishermen are engaged in fishing activity in this region. It is also near to South eastern Railway Calcutta-Madras line and NH-5.

**South-East**

The South Eastern region covers the villages of Krishnaprasad block of Puri district and a part of Ganjam block of Ganjam district. A number of islands are found in this region. Both the fishermen and non-fishermen are engaged in fishing activity for their livelihood in this region. This area has become a place of conflict between the fishermen and non-fishermen in recent years.

Moreover, while the northeast region is dominated by the fishermen, the dominance is more profound in the South east region by the non-fishermen.

**Objective of the Field Study and Selection of Villages**

The objectives of the field study were as follows:

1. To find out and measure the degree of dependence of various groups of people in the resource base of Chilika.
2. To portray the socio-economic conditions of the people living in the villages in and around Chilika.

3. To examine the government lease policy and its impact on the socio-economic conditions of the people.

4. To analyze the demographic profile of the people of the area including caste composition, language and problem of immigration and migration.

5. To investigate the causes of environmental pollution in and around the Lake.

6. To study the income and ownership pattern of productive assets.

Selection of Villages

Before the in-depth field survey, a small pilot survey to the area was made initially in order to correct some of the errors in the interview schedule for the purpose of gathering real data. During the pilot survey I had visited five villages of two districts- Khurda and Puri districts of Orissa. The purpose of the pilot survey was to collect background data for the formulation of detailed study design. Therefore, I had surveyed the villages and conducted pilot interviews in order to get a detailed and thorough picture of the number of villages of all the regions and districts covered Chilika Lake and other inter-related aspects such as geographical area, different occupational groups, different types of fishing, different types of people engaged in fishing, different sub-castes of fishermen, different groups of fishermen (such as Oriya, Telugu, Bengali etc.) and persons engaged in trade. After the pilot survey was done, the main and final field survey was begun. Since the purpose of the study was to know about the nature of the movement and socio-economic condition of fishing community of Chilika, the villages were selected from all the regions in such a way that it could cover all the representative areas in and around Chilika. Villages were taken as fishermen, Non-fishermen and both. Fishermen mean predominantly fishermen, non-fishermen mean only non-fishermen, both means fishermen and non-fishermen in more or less equal proportion. Again the selection was made purposively to include various interrelated aspects such as various geographical area, different occupational groups, different types of fishing, different types of people engaged in fishing, different sub-castes of fishermen, various groups (such as, Oriya, Telugu,
Selection of Households

The number of households from each selected village was drawn on the basis of the size of the village. The selected villages had been divided into two categories, big and small. A village having 100 or more households was considered as a big village and less than 100 was considered as small village. Tentatively, 8-10 households were planned to draw from big the village and 5-6 households from the small village as sample for survey. In that way, the total number of sample households collected were from the fifteen villages including fishermen, non-fishermen and both and in that way the total no of households were 105 out of which 62 were fishermen and 43 were non-fishermen. However, since the objective of the study was to find out the social movement or the people's movement initiated in the region and its popular character, my aim was not confined only collecting the household survey data. Because I had to collect a more extended and reliable response to proof my hypothesis and an accurate picture of validity. Therefore, irrespective of household survey, data were collected from some of the specific persons from specific areas associated with the movement. Therefore, I collected data from four categories of people—

1. Household survey from different villages surrounding Chilika Lake mentioned above (in table 2.2).
2. Main activists of the movement.
3. Alleged businessmen/ groups associated with the shrimp culture or who are otherwise called as shrimp merchants

(A detailed sample of Interview Schedule of the four categories of respondents interviewed has been attached in Appendix IV).

Reflections and Experience in the Field: An Informant Relationship

I preferred to give a descriptive note of my personal experiences in the field because I felt that the importance of self-analysis by the researcher becomes very valuable not only for herself, but for others in the absence of standardization of fieldwork techniques. In this way, our accounts of field experience tell us something about the nature of Indian society and culture apart from books and written journals.
Moreover, the encounter and experience in the field presents certain kind of distinctive features between the researcher and her field in the area.

I was exposed to the field in 1999 when I was doing my M.Phil in Sociology at the Dept of Sociology, Delhi School of Economics, University of Delhi, although the formal and official field survey started in the year 2002-2003 during my Ph.D. In the initial period (though informally) I visited to the field to know about the issue of Chilika’s environmental problems caused due to the practice of intensive/ extensive shrimp culture by the outsiders and the mass based movement as the outcome of such a cause. During the initial phase, I was not able to mingle with the villagers, local people and could not be able to associate myself to won their confidence. I was taken by the villagers who believed that I was a representative of government who have come to provide solutions to their problems. That’s why rapport building with them was extremely difficult at the initial phase of field survey (Pilot Survey during September-November 2002).

However, when I clarified that I had come from the university for the purpose of my research thesis, I found and perceived a lot of resentment and frustrations in them. That time the whole atmosphere was surcharged with tension, apprehension and collective insecurity. However, things took a different turn at the second, third and final phase of the field survey (April 2003-June 2003, October 2003-March 2004 and finally May – July 2004) the periods during which I started the in-depth and intensive field survey. Some of the experiences of those survey conducted in the villages during these periods have been expressed and explained in simple words as the day-to-day happenings of the process which is narrated below:

14th April 2003

“'I have reached Balugaon, the centre place of the Chilika in Khurda district and 100 km away from the Capital city of Bhubaneswar, my residential area and the main shore as well as market place of the locality. I am sitting near the shore and waiting for the person named Umakanta Maharana of Baulabandha , a member of the village panchayat and also the member of the movement’s campaign who promised to accompany me to visit the villages of Chilika and Tangi blocks of Khurda district.
These are the blocks from which I have to survey five villages. The wind is blowing cool and dusty. Its morning time... 8.00 Clock. The sight of the Lake's shore is so beautiful...the blue dancing waves, the fishermen in their boats away in the Lake coming from the deep sea with their catches... the rocky mountains surrounding one side of the Lake... all these sights are so beautiful that my spirits soared- a never ending scenic beauty- the place- big, peaceful and empty.

The time is 10.30 am. Mr. Maharana is still not reached. I am looking for the members/ secretary of the Chilika Mastyajivi Mahasangha without wasting my time. All these offices are in Balugaon market place. But, no one is there, the office is locked. May be it takes some more time to start the work. Yes, fortunately I met Mr. Maharana I contacted him before coming for the village survey and he agreed to introduce me into the villages.

It is time 4.30 in the afternoon, I am traveling with two villagers of Baulabandha village towards the shore of Chilika after being interviewed with the villagers and into the village with the help of Umakanta. I am traveling in the boat with two fishermen of Keuta subcaste of that village and going into the Lake site (see the Photo- Appendix IV). I am near the Neli Jala (Blue Net/ Net Enclousure) inside the Lake (around 3-5 kms inside Chilika from the village shore). The two accompanied fishermen are telling me about the adverse effect of blue net upon the Lake environment and how it creates problem for them for catching fish and getting any output (see the photos in Appendix-IV). Two hours later, we are in the main street of Baulabandha, nearer to market. There is little crowd in the market. It is evening time. The music of oriya bhajans and sounds of Sankha, Mrudanga is coming from the village temple. I am going to meet the village headman, Sri. Sudama Charana Behera as well as few household members of the village...."

While taking the interview of household members of fishermen, I found difficulty in noting down their responses as per my interview schedules arranged much earlier. Because, even if I was interviewing one member (the headman), of the family, there was a huge crowd around me from among other fishermen families of the village and the circumstance turned into a group interview/focused group discussion matter instead of individual taking response. However, I allowed them to narrate their
responses, problems, sufferings, ideas and frustrations openly without putting any pressure upon them.

There was, in fact a free-flow kind of discussion among the researcher and informants without any bias. In that situation I preferred to record their responses through audio tape instead of noting down what they narrated. In that way, it also helped me to recall the responses to my memory again and again, whenever required, which in turn made my analytical survey more accurate and descriptive.

I spent nearly, two weeks in the Khurda district to survey five villages of two blocks - Chilika and Tangi. The most important of this phase of village survey was the survey conducted in ‘Sorana’ village of Chilika block. This was the village where a huge agitation was carried out in between fishermen and prawn mafias and a ‘Do or Die’ movement of fishermen had started in May 1999 against the government because of not taking any action for demolishing the shrimp gheries and a brutal police firing leading to four lives among fishermen community.

14th May 2003

"It's '9 O'clock in the morning. I have reached Sorana village along with Umakanta Maharana, 15 kms away from Baulabandha. Last night I contacted to Tapan Behera, the present secretary of Chilika Mastyajivi Mahasangha. He is waiting for me with some of the villagers (fishermen) who are eager to hear me as they perceived me someone who has come to participate in their problems and for finding out the solution.

Today, I stayed in this village, where more than 75% persons belong to the fishermen community. I met the village headmen, asked him about the present scenario of the movement. I was told by the secretary that there is a big village meeting going to be conducted in the village based upon the agenda of starting the mass based agitation and rally against the recent government policy and assembly bill presented in the state assembly regarding leasing out of the fishing areas of the Lake to the fishermen and non-fishermen. As I was present in the village at that time I was warmly invited by the villagers to participate in the meeting."
common areas of discourse, about their personal problems so that exchange of ideas can take place where I told them about my society, they told me about their society, likes and dislikes and individual preferences. I shared their agony, sorrow, joy with then and this helped me, in turn, in developing an idea that I was taking interest and paying respect to their feelings. They took me to their confidence and liked my presence and individual identity to some extent. Such an act contributed to a positive evaluation of myself in the eyes of the narratives.

Moreover, during my visit to Krushnaprasad block of Puri district in the second phase of field survey (October 2003-March 2004), I participated in some of the village rituals and customs of the fishermen community like Makar Sankaranti during which period the fishermen community stop fishing for ten days and worship the Lake, the boats and nets and there are elaborate rituals performed during these periods. Some of these rituals celebrated at the level of household and community were also observed during the field survey”.

It we recognize that knowledge is socially constituted, historically situated, and informed by conflicting values, we are compelled to acknowledge that research cannot be the search and discovery of a single universal truth. Instead, analysis has to be conceived as a process that mediates between at least two different, yet mutually conditioned, subjective views – those of the researcher and those of the people who are being studied (Baviskar 1995: 2). The experience of the research in the field and her interaction with the respondents, therefore, present the picture of inter-subjectivity by making the explicit connections between ideology and research methods and by critically examining the relations between researcher and researched. Hence, through the field survey, we come across several untold realities. There are multiple realities, constructed by people in different ontological positions, inquiry into these multiple realities does not seek to discover a unified truth but is aimed at enriching our understanding of divergent, socially-situated truths (Lincoln and Gube 1985: 37-42, also quoted in Baviskar 1995:3). Therefore, as the researcher, I adapted a more self-conscious attitude towards the objects of inquiry, recognizing the dialects of my relationship with the villagers. Truths that are contextual can only be known through intimate engagement with the perspective of those whose lives are the objects of
inquiry. Therefore, people's versions of reality are apprehended, interpreted and presented by the researcher who has her own preoccupations and presumptions. As Baviskar writes in her work (1995), "we are not 'outside' the object of inquiry but are intrinsic to it".

Although my study is basically, a field survey and not based on ethnographic methods, still I preferred to use quasi-participant observation method in special cases of intensive field work (for example, during village meeting, during Andolan rally, during the rituals and festivals observed in the village etc.). Since participation by an anthropologist or sociologist can never be complete and full, (as Patnaik writes in his work on displacement, see Patnaik, 1996), therefore, one should be very careful not only in using the term 'participant-observation' or non/quasi-participant observation but also practicing it. In this field survey, since it was not possible to participate in all the happenings and daily life of the village life, I collected the data regarding the socio-economic situation and principle of the households through interviews and 'interview schedules'—some noting down their responses and some through recording. This technique also helped me as a powerful instrument in eliciting information pertaining to psychological frustration, collective disgust and the reaction towards the government programmes. The interviews, however, varied from group to individual, completed unstructured to relatively structured and also from general type to focused and depth interviews. Sometimes the help of an interview guide was taken and sometimes the interviews were taken in a free-flowing way.

The final phase of my field work (May – July 2004) was characterized by both data collection in the field and identification of the problems, cross-checking some of the primary data (government records, court judgments) as well as the solutions of which could be included in the action programme. My participation and interaction in the field made me to feel and think the necessity of moving from interpretation to action. By intermingling with the people, their problems and issues in village life showed me that along with open-ended interpretation a theoretical concern also needs to be grounded and its implication also has to be relevant to people's lives. This reveals to me to find out the interaction between 'data' and 'theory' from the field survey which actually I found in the field.
variable being studied in the survey. Since it is an accurate method for field data analysis as a subsequent or homogenous method to random sampling, it has been used in the study for maintaining accuracy.

Thus, for the selection of samples from each fishermen village, the households were first divided into different stratum on the basis of their sub-castes. From each stratum, samples were drawn by using stratified sampling technique. Moreover, for collecting data from politicians and government officials purposive sampling technique method was followed.

During the second phase of field survey, an in-depth study was conducted among the fishermen and non-fishermen and other neighboring communities. Data were collected through observation method. Among the techniques of observation methods data collected through both structured and unstructured observation method in such an exploratory kind of study. During the initial field survey, the villagers were hesitant to answer the questions and the researcher was also present in that situation without having something specific in mind. However, rapport building with them became slowly developed through the conversation in a friendly and more cordial way by taking interest into their socio-economic problems of everyday life. The data collected were in a natural field setting and those observed were aware about the situation and purpose of being observed. The technique of observation was also used to collect data pertaining to community’s dependence on Lake, methods of fishery, inter-caste relations and the ecological degradation due to misuse of the Lake by the outsiders.

Data collected from one source was cross checked and verified at multiple points. During the interview method of data collection, both group and individual interviews were conducted. Basically, the respondents under study from the villages were administered on the basis of interview schedule method. An ‘Interview Guide’ also was followed during the interview. The interview of the respondents was based on free-floating conversations and informal in character. Both structured and unstructured interview schedule was used in such a field survey. Moreover, focused and group interview methods were also conducted (in some cases), on both men and
women respondents of the villages. The respondents were allowed to act and give their responses without any barrier or bias and without imposing any kind of structure or pressure upon them. Since the schedule was un-structured, the responses were open-ended. By doing this I tried to go through an in-depth exploration of the matter and objective of my field survey. I followed this technique mainly in case of main activists of the movement and villagers of Chilika region. However, data also were collected from politicians, government officials and shrimp merchants of the state through using structured interview method.

The data have been collected from both primary and secondary sources.

Primary Sources
1. Assembly debates over shrimp aquaculture in Chilika, Orissa Assembly, Bhubaneswar.
2. Census of India, Survey of Indian Office, Bhubaneswar.
3. Directorate of Fisheries, Cuttack.
7. District Collectorate Office, Berahumpur.
8. Court Decessions (both High Court and Supre Court), Orissa High Court, Cuttack.
9. Primary Reports of the main Activists of ‘Save Chilika Movement’.
10. Leaflets and Pamphlets distributed by both fishermen and non-fishermen organizations.

Secondary Sources
1. Books
2. Journal Articles
3. Newspaper Clippings
4. Other Secondary Documents and Reports related to Chilika.
Analytical Tools

In order to analyze the primary data (collected from field survey and government documents) I have used simple tabular analysis based on percentages and averages in some cases in the present study. Apart from this, the personal experiences of the researcher have often been used as key events and have been analyzed as data too. Therefore, the data collected in this study are a source of well-grounded, rich descriptions and explanations of processes occurring in local contexts. In my study I have tried to preserve chronological flow of the issues, assess local causality and tried to derive fruitful explanations from the data collected through field survey. Because by doing so, leads to the researcher to serendipitous findings and to new theoretical integrations.

Limitations of Study

The limitations of the study are that it is not possible to cover all the villages (137) of all the districts around Chilika. The analysis of data has been done from the perspective of the movement, still the effect of shrimp culture economy and its adverse impact upon the whole area and upon the whole fishing population as well as the movement’s impact could not be studied and covered due to loss of time factor and resources. Since the present study is mainly based on sociological and socio-economic ground, it studies only the cultural, social, economic, political and ecological (to some extent) aspect of the Lake from the perspective of the movement. However, a significant aspect of the Lake that is the scientific, environmental and biological aspect of the Lake’s cosmology and ecology has not been looked into in this study, which is mostly the task of the environmental scientists and not social scientists or sociologists.

Structure of the Thesis

The whole thesis is divided into seven chapters. The first chapter discusses the subject matter, aim/objectives and scope of the present inquiry. This chapter situates the present study in the broader context of development, globalization and environmental movement in Chilika on the paradigm of society and ecology.