

Environment, Development and New Social Movements:

The Political Ecology of Endosulphan Pollution in

Kasargod, Kerala

**Environment, Development and New Social Movements:
The Political Ecology of Endosulphan Pollution in
Kasargod , Kerala**

Dissertation submitted in partial fulfillment of the requirements for the
award of the degree of Master of Philosophy in Economics of the
Jawaharlal Nehru University

Silpa Satheesh
MPhil Programme in Applied Economics
2011-2013



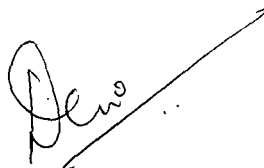
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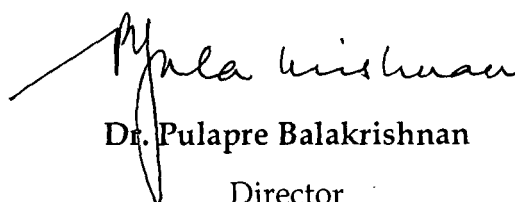
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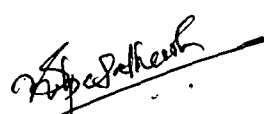
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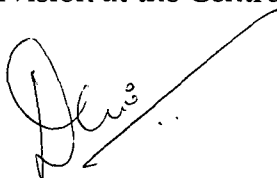
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Dedicated to the people of Kasargod

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Abbreviations

AWW	Anganawadi Worker
ATM	Automated Teller Machine
CHC	Community Health Centre
CPIM	Communit Party of India Marxist
DYFI	Democratic Youth Federation of India
DTE	Down To Earth
CSE	Centre for Science and Environment
EDC	Ecological Distribution Conflicts
ENVISAG	Endosulphan Victims Support Aid Group
ESPAC	Endosulphan Spray Protest Action Committee
EVRRC	Endosulphan Victims Relief and Remediation Cell
EVSS	Endosulphan Virudha Samara Samithi
GH	General Hospital
GO	Government Order
GoK	Government of Kerala
ICMR	Indian Council of Medical Research
ICDS	Integrated Child Development Services
JPS	Jilla Paristhithi Samithi

LDF	Left Democratic Front
LSG	Local Self Government
OBC	Other Backward Castes
PCK	Plantation Corporation of Kerala
PHC	Primary Health Centre
POP	Persistent Organic Pollutants
NGO	Non-Governmental Organisation
ENGO	Environmental Non-Governmental Organisation
NHRC	National Human Rights Commission
NIOH	National Institute of Occupational Health
NPRPD	National Programme for the Rehabilitation of Physically Disabled
NRLM	National Rural Livelihood Mission
NSM	New Social Movement
SEEK	Society for Environmental Education
SC	Scheduled Caste
ST	Scheduled Tribe
UDF	United Democratic Front

CHAPTER 1

INTRODUCTION

I. The Context

The proliferation of environmental movements in India¹, which added new dimensions to the Indian democracy and civil society, have challenged and questioned the dominant notions of the meaning, content, indicators, and patterns of development (Shiva and Bandyopadhyay 1988; Guha and Gadgil, 1994; Swain, 1995). The increasing intensity and range of ecology movements in independent India comes as response to the predatory exploitation of natural resources in order to feed the development process (Bandyopadhyay and Shiva 2011: 324). The history of resource conflicts in the country can be traced back to the forest conflicts against the resource management practices of the colonial government to regain and retain access and control over the local resources. The post-colonial state followed the colonial institutional framework of resource management without changing its essence, thus where colonialism ended, development stepped in (Shiva and Bandyopadhyay, 1988; Jayal, 1999; Guha, 2002). The Nehruvian developmentalism adopted by India in the post-Independence period brought back the inexorable logic of resource exploitation, exhaustion and alienation integral to classical model of economic development based on resource intensive technologies and this resource intensive model of development narrowed down the natural resource base for the survival of the poor and powerless (Baviskar, 1995; Guha, 2002).

The increasing grassroots responses to environmental degradation are changing the socio-political landscape of the country. In such conflicts, contrary to the popular perception of environmentalism as the aesthetic concern for pristine environment and wilderness (which Martinez-Alier termed as "full-stomach" environmentalism)

¹ The socio-political landscape of the country is extended and enriched by the presence of multiple environmental movements fighting to challenge the dominant model of development, against environmental injustice from the unequal distribution of pollution burdens, attempting to regain the lost access and control over the local natural resources. The history of resource conflicts in the country dates back to the forest conflicts during the colonial period

these responses form a variant which is entirely different, which Martinez Alier called 'the environmentalism of the poor' ("empty-stomach" environmentalism (Martinez Alier, 2002)). Usually, in these conflicts, large business corporations are pitted against local actors contesting over the use into which the resource under question is put to or, local actors often stand to lose from development projects of the state and are forced to report their response and initiate their struggle for justice. In other cases the unequal distribution of the burdens of environmental degradation has kindled new social movements where local actors who are directly and adversely affected by the ecological destruction have organized on principles of survival. These are ecological distribution conflicts (EDC) Martinez-Alier and O'Connor (1995), in which different and unequal actors which may include the state, are engaged in contest over the distribution, control and use of particular ecological resources, in which at least one of the actors is involved in a struggle for survival. Ecological distribution conflicts may involve contests over the distribution of benefits from resource use and/or the distribution of the burdens from it.

In the wake of these increasing instances of environmental resource conflicts reported across the country, where the local actors have initiated organized struggles against the state and its resource intensive model of development, the study of the power relations that mediate human-environmental interaction calls for rigorous analysis. The study explores the political economic underpinnings of an anthropogenic ecological disaster which has devastated the local bio-physical environment leaving thousands of people disabled with chronic health anomalies. The study examines such dynamics in the context of the health and environmental hazards caused by the continuous aerial spraying of endosulfan in Kasargod district of Kerala (for almost 25 years) by identifying the various actors and examining the processes by which the issue has been shaped, which exist and work at different levels (DTE, 2001).

The context of the study is the widespread debate around the environmental disaster and human health impacts in Kasargod district of Northern Kerala resulted from the

aerial spraying of Endosulfan which is POP², banned in more than 80 countries. The sprinkling was undertaken by the Kerala Plantation Corporation³, for almost 25 years in around 4696 Ha of cashew plantation owned by Kerala Plantation Corporation (PCK). The disaster left thousands of people with chronic illness including cerebro-nueral disorders which travelled across generations leaving many of the victims dead.

The dissertation aims not at documenting these events for humanitarian purposes by bringing out the details of the adverse health consequences suffered by the people in that regions as it has been comprehensively covered by both academic and non-academic works. The toxic impact of the pesticide has been substantiated by studies conducted by Centre for Science and Environment (CSE)⁴ and the more than 11 Committees appointed by the Govt. to look into the matter (Down to Earth, 2001; ICMR 2002; Govt. of Kerala, 2003; CSE, 2001). Thus the fact that there is presence of pesticide residue in the body of people living there and the regional ecology (including soil, water, flora and fauna) over and above the permissible rates is substantiated with evidence, both scientific and otherwise. The chronic health ailments reported in the area following the aerial spraying of endosulfan proves the fact that the use of the pesticide in the area without rotation completely disregarded the protocols to be followed while undertaking aerial spraying. Hence the study completely exempts itself from the attempt to prove the causality as it takes it to be established that the impacts are the result of the aerial sprinkling of the pesticide endosulfan. The existing body of literature also acknowledges the fact that the victims are largely the local poor, who occupy lower positions in the income ladder, which accentuates the socio-economic costs that they have to pay.

Instead, the study attempts to understand the issue as environmental distribution conflict, the political economy of which is central to its making. The struggle in

² Persistent organic pollutant-toxic

³ Public sector enterprise

⁴ NGO

Northern Kerala, organized to protest against the injustice done and to claim the rights over life and environment, can be seen as local resistance to the scientific and pesticide intensive commercial agricultural practices promoted at the national and international levels. It questions the ecological sustainability of pesticide intensive agricultural practices and the unequal distribution of the resulting environmental burdens creating extractive economies. The extractive economy, where the production undertaken extracts the economic benefits from the resources leaving back the ecological costs, leave the local population deep down in poverty and destroys the ecology (McNeish and John-Andrew, 2010). It has been pointed out that area which is net exporters of agricultural products experience degradation of their cultivated land due to the pressure of production on resources. (Martinez-Alier and Guha,1997). Export oriented production has greater potential for profits, but these profits are being won at the price of poisoning and pollution (Forsyth, 1998). In the present case, however, the conflict is not directly between pesticide producing corporations and local people; it also involves the presence of a state agency, the PCK, in a major way.

The resource under question here is the land, which the PCK approaches with strong economic interest whereas the local residents consider it as a means to sustain their life and livelihood. The economic return that PCK eyes is the revenue earned from the export of cashew produced and therefore the land-use pattern that it will follow will be one that would maximize the yield irrespective of other factors painting the economic vs non-economic trade-off straight. The people living around the plantation are the direct bearers of the costs of environmental degradation and hence they would want a pattern of land-use which is ecologically sustainable. Thus the existence of conflict of interest over the use of resource is thus clear. The study understands that power plays a crucial role in arriving at land-use decisions which makes it necessary to consider the these decisions as part of a wider political economic analysis.

In sum, the study aims at understanding the shaping of antagonistic interests in the region keeping the history of the region in purview and the political economy of peasant struggles. The case is made interesting by the active involvement of the state, as the polluter here is a public sector enterprise (PCK⁵), the presence of environmental NGOs, both local, national and global, the scientific community, and the pesticide manufacturing companies. The environmental hazard creating a change in the ecology is not natural, but the result of decisions arrived which have strong political-economic underpinnings.

II. Review of literature

The extensive literature on environmental distribution conflict around the world brings to light three key issues: (1) Environmental distribution conflict is directly related to the intensification of extractive capitalism around the world and comes up as a response to the dominant model of development that is resource intensive (Guha and Alier 1997); (2) the responses to such exploitation often takes the form of struggle around use of ecological resources i.e. environmental justice activism; (3) 'local' struggles are increasingly globalised.

According to Martinez-Alier (1997) most of current environmental conflicts in the global South are ecological distribution conflicts⁶ (EDC), born from social, spatial and temporal asymmetries in access to natural resources or the burdens of pollution. The environmentalism of the poor (Guha and Martinez-Alier, 1997) is the resistance of the losers of the ecological unequal distribution and means the defence of 'ace of a way of life which is highly dependent on the environment' (Martinez-Alier, 2004) expressing underlying valuation conflicts, where the actors deploy different languages to affirm their right to use a safe environment (Martinez-Alier, 1997).

⁵ Plantation Corporation of Kerala

⁶ Even though Martinez-Alier observes that the concept of "environmental conflicts" is used by sociologists and in ecological economics the term "ecological distribution conflict"⁶ would be preferred, he uses the terms "ecological distribution conflicts" and "environmental conflicts" interchangeably and calls the study of EDC, political ecology.

Demaria (2010) observes that EDCs are rooted in the unequal distribution of benefits and burdens⁷ due to an international and national uneven distribution of power. To sum, EDCs refer to struggles over the burdens of pollution or over the sacrifices made to extract resources, and they arise from inequalities of income and power (Martinez-Alier and O'Connor, 1996; Douguet et al., 2008; Roman, 2009).

The study of ecological distribution conflicts belongs mainly to political ecology⁸ as it focuses on the exercise of power in environmental conflicts: it enquires the question, who has the power to impose decisions on resource extraction, land use, pollution levels, biodiversity loss and power to determine the procedures to impose such decisions (Martinez-Alier, 2001; Robbins, 2004). Industrialists and governments who are often troubled by the strength of the environmental movement, they defend using strategies based on 'weak sustainability' that is, money compensation for damages and substitution of the lost environment by manufactured capital. It should be noted that these conflicts arise not only from the driving forces of economic growth and the search for profits, and from the different interests and values of the stakeholders involved, but also from the distribution of scientific and technical uncertainties and related risks (Martinez-Alier, 2010).

The diverse ways in which environmental conflicts unfold is most profoundly reflected in the different valuation languages these actors employ while arguing for or against alternative resource use such as economic benefits, local development, territorial rights, environmental and social justice, livelihood and ecological integrity (as cited in Avci et al., Martinez-Alier 2002, 2009). According to Debal Deb, the poor

⁷ The concept of environmental justice become important in this context as it not only refers to the distribution of costs and benef

its but it also addressed participation and recognition claims (Schlosberg, 2007 as cited in Martinez-Alier 2004).

⁸ Joan Martinez Alier (2002) defines political ecology as the study of ecological distribution conflicts-by this he means conflicts over access to, and control over, natural resources particularly as a source of livelihoods, including the costs of environmental destruction.

are perpetually deprived of freedom and privilege in the course of development, because the freedom of the privileged few to exploit others excludes the freedom of the exploited to use the democratic apparatus of the state to protect their interests (Deb, 2006). Ecological degradation and economic deprivation generated by the resource insensitivity and intensity of the classical model of development have resulted in environmental conflicts. The ecology movements that have emerged as major social movements in India make visible the invisible externalities and press for their internalisation to the economic evaluation of the elite-oriented development process. The movements, which happen in the backdrop of limited resources and unlimited development aspirations, have initiated a new political struggle to safeguard the interest and survival of the poor and the marginalized (Shiva and Bandyopadhyay, 1988).

Martinez-Alier (2002) observes that this ever increasing use of energy and material inputs by the world economy at alarming rates combined with the production of wastes will drive the environmental load resulting in ecological distributional conflict⁹. Most of the social conflicts in the Third World have an ecological content, with the poor trying to retain under control the natural resources threatened by state and advance of generalized market capitalist system (Martinez-Alier, 1997). The 'treadmill of production'¹⁰, to meet increased consumption and increasing consumption to meet rising production, creates the 'ecological contradiction of capital' (Quaini, 1982) whereby the system gnaws away at the resource base which sustains it. The growth dynamics provokes continuing expansion of the resource base to meet the ever-extending range of goods and services on offer (Pepper, 1993). In its run for profits the global capitalist production saps "the original resources of all wealth- the soil and the labourer" (Quaini, 1982).

⁹ Alier and Guha (1997) define ecological distribution conflict as the social, spatial, and temporal asymmetries or inequalities in the use by humans of environmental resources and services, i.e. in the burdens of pollution.

¹⁰ Schnaiberg (1980, 228 cited in Pepper 1993) points the term to refer to the cycle of production under a capitalist system

Obi (2005) in his study observes environmental movements as the bearers of ecological critique of the political and economic monopolies that dominate the ecosystem in quest for profit and power. The environmental movements in sub-Saharan Africa emerge from and draw legitimacy from their immersion in social struggles directed at accessing power over the environmental space (Obi, 2005; Alier, 2002). People come up against local (state) and global hegemonic forces that exert power over scarce and shrinking environmental resources in a rapidly globalized world (Obi, 2005; Hilyard and Suliman, 1999). These conflicts are driven by dominant power relations¹¹ over the environment, which continue to benefit the "few" and threaten the survival of the majority. The groundswell of social mobilization in sub-Saharan Africa challenges both the hegemonic state project and modes of global accumulation that dispossess the people and degrade the environment (Obi 2005). Guha (1989) challenges Eurocentric theories which hold that peasants and peasant movements will disappear in the modern world citing the exceeding presence of grassroots uprising including the Chipko movement.

The exploitative practices-styled development, in the post colonial era by undertaking large-scale logging, mining, cattle ranching, cash-crop production etc combined with the enclosure of commons marginalized poor in the measure that their access to environmental resources are restricted or denied (Alier and Guha 1997; Bryant and bailey 1998). The emergence of grassroots organisations as a response to the resource intensive and extractive production is reckoned as a potentially revolutionary development in terms of the topography of a politicized environment of the Third World. The link between physical environment and grassroots livelihood is made significant by the absence of non-existence of opportunities for these people to simply move out of the degraded environment and depleted natural resources reinforcing their strength to challenge extractive and exploitative activities (Bryant and Bailey 1998). The movements, which are

¹¹ The relationship between society and nature is a dynamic one, defined by the distribution of power in society and the way in which such power provides access to, and control over, the natural resources needed for survival.

organized around the spirits of social justice and environmental equity, can be broadly clubbed under the environmental justice¹² movement, which follow a “bottom-up “approach combining aspects of both social justice and environmental movements. Identifying the similarity between the structural features that characterize environmental justice movement in the U.S, Laura Pulido (1996) uses the term ‘subaltern environmentalism’ to capture the connection between developed world environmental justice activists and developing world environmentalism (Dobson, 1998).

The environmental justice movement originated to challenge and fight against the disproportionate exposure to environmental hazards resulting from a set of ongoing social processes that structures the political economy of poor communities of colour (Foster, 1998). The movement points out that the distribution of environmental goods and bads takes place according to the ‘ability to pay’ principle. This implies that those who can afford protection alone can and will buy it (Dobson, 1998; Edward, 1995).

These studies also point out the ambiguity of the ‘local in the present, when resistance to extractive capitalism/ development are increasingly globalised. Martinez- Alier (2002) discusses instances of ecological distribution conflicts, the burdens of pollution and concludes that there is considerable activism around the world centered on environmental justice, movements which are not yet aware of its potential strength as a global movement. He examines instances of ecological conflicts such as in the Chipko movement in the Himalaya, the struggle against the Naramada dams, Chico Mendes’ fight in Amazonia, and the struggles by the

¹² The environmental justice movement emerged in USA in Love canal 1978 when the local residents resisted collectively against the toxic waste dump in the area which created health hazards. The movement unleashed a sea of such mobilizations across US by people of colour as it brought out the concentration of toxic waste dumps in areas where the Afro-Americans lived. The movement organized against the ‘environmental racism’ followed in U.S environmental policies was backed by a number of studies linking race with the location of toxic waste dumps and industries. (Bullard) , The movement initiated similar ones across the world where people fought for social justice and civil rights by linking both justice and environmental equity aspects (Foster 1998).

Ognoni, the Ijaw and other groups in the Niger Delta against the damage from oil extraction by Shell. Interestingly the participants of such conflicts rarely saw themselves as environmentalists. They were more concerned about their livelihood, and their struggle for environmental justice contributes to environmental sustainability of the economy. Martinez Alier (2002) calls these movements as the 'environmentalism of livelihood' where the actors express the defense of legally established old community property rights. Quite often, these struggles are connected to wider networks through the involving NGOs and propose policies of worldwide relevance (Martinez Alier, 2002). The literature suggests that understanding the formation of local activist initiatives require considerations of the area's social history (Guha, 1989). These movements with local origin are no longer spatially restricted but they spread and integrate with movements constituted, on similar grounds and principles, at various levels across the world (Bryant and Bailey, 1998).

III. Objectives

The study aims to follow the historical shaping and the present of the environmental distribution conflict at Kasargod around the endosulfan spraying to explore the power dynamics between the different actors involved, who are spread across and/or influence institutions at the global, national and local levels.

From existing accounts, it is clear that the environmental distribution conflict of interest has been a dynamic one- local actor who were powerless in the beginning gained power and influenced the course of the conflict significantly; it was also influenced by actors outside the immediately affected area at different points of time. Furthermore, each of these actors has a history that is relevant to the shaping of this environmental distribution conflict, which needs to be traced. Thus the objectives of the study may be specified more closely as the following:

1. Tracing back the history of formation of antagonistic interest by following the histories of the relevant actors in the region.
2. To understand the present dynamics of the struggle (a) by identifying the present spread and influence of the actors at various levels and the roles played by them in the environmental distribution conflict and (b) a recounting of the strategies of actors at various levels to discern their access to various types of resources, economic, political and cultural/moral, and their sources.
3. To understand the nature of the benefits distributed the response of the state – at local, regional and national scales through (a) an exploration of the social base of the victims (b) to understand who gains, with whose support?

IV. Analytical framework

The study adopts a **political ecology** approach to analyse the issue discussed above. The choice of the framework is justified by accepting the fact that environmental change or disaster here is not natural but has strong political economic underpinnings.

...the phrase ' political ecology ' combines the concerns of ecology and a broadly defined political economy. Together this encompasses the constantly shifting dialectic between society and land-based resources, and also within classes and groups within society itself (Blaikie and Brookfield, 1987: 17).

The conflict of interests and motives stay crucial in explaining the factors that created a chain of events which eventually culminated as the disaster. As political economy deals with economic distribution conflicts, political ecology deals with environmental distribution conflicts by understanding the unequal power¹³ relations. Martinez-Alier and Guha (1997) considers political ecology as a subset of

¹³ Power, a key concept in efforts to specify the topography of a politicized environment, is understood as the control that one party has over the environment of another party (Adams cited in Bunker 1985, cited in Bryant).

ecological economics, studying distributional issues. The origins of political ecology can be traced back to radical and development geography, cultural anthropology.

Political ecology is eco-centric with but seeks to reconcile material equity considerations and environmental conservation in the context of calls for an end to the global capitalist system (Pepper 1993; Norgaard, 1994 cited in Bryant and Bailey, 1998). The 'radical' credentials of Third World political ecology have been reflected over the years in research that has been grounded in neo-Marxist and post-Marxist theories which emphasise the analytical importance of social justice and equity issues (Hecht and Cockburn, 1992), but rather a manifestation of broader political and economic forces associated notably with the global spread of capitalism (Bryant and Bailey, 1998). It helps in integrating physical processes with socio-economic political processes to grasp the ecological problem in its full complexity (Blaikie, 1985).

The framework agrees with mainstream counterparts that the Third world is wrecked by environmental crisis but distinctly and radically differs from them by not falling into the trap of treating third world's 'environmental crisis' in isolation from the much wider developmental crisis to which it is inextricably linked. The idea of politicized environment recognizes the fact that environmental problems cannot be understood in isolation from the political and economic contexts within which they are created.

The mainstream, according to Bryant and Bailey, attempts to understand environmental change without reference to political and economic processes and criticizes their managerial 'problem solving' approach. The reason for the failure of technical solutions has mostly been due to the unwillingness to consider the political economy of environmental change. Political ecology, as a discipline, starts from the premise that environmental change is not a neutral process amenable to technical management.

It was initially base^d on Neo-marxist and post Marxist theoretical base which later got shifted to post-structural and discourse analysis. The framework though has a wide inter-disciplinary breadth the present study came to it as an extension to make up for the limitations of ecological economics to incorporate power. The study proposes to use the five different approaches suggested by Brynt and Bailey (1998) in political ecology and also will make an attempt to link ecological economics and political ecology as done by many other studies (Martinez-Alier, 1997; Takeda, 2008).

V. Why not the conventional methods?

In economics the mainstream approach towards dealing with environmental problems such as pollution is to^{pose} it as an externality and the solution proposed is the internalization of this cost by taking either the Pigouvian tax route¹⁴ or Coasian bargain¹⁵ where it is assumed that the process of internalization of costs will create disincentives for polluters, compensate victims and inspire innovations that reduce pollution. Here the primary concern is regarding the aversion of externalities on economic agents and that part of nature which has no economic significance has no relevance. The conventional approaches, choosing an anthropocentric approach, deal with pollution reductively is questionable. The mainstream environmental economics tends to treat the processes that shape that shape environmental distribution conflicts as merely complicated-i.e. reducible readily to component parts which may be quantified, modeled, and technically manipulated. In contrast, political ecology treats these processes as complex and dynamic-i.e. not reducible to component parts and even subject to change. The mainstream approach's valuation of the impact of pollution on health violates the ethical valuation of life as it emphasizes the bargaining power of the actors applying the "Lawrence Summers principle" of economic valuation of life based on income earned (2) valuation of life and liberty based on property contradicts the spirit of natural rights and amounts to

¹⁴ Where the imposition of tax on the polluter restricts further pollution

¹⁵ In the presence of transaction costs, the assignment of property rights should be in such a manner to facilitate the least cost solution.

subversion of liberal philosophy by neo-liberal markets¹⁶(Vijay, 2002; Martinez-Alier, 1995; Escobar, 2006). A related point is that neo-classical environmental economics fails to capture the unequal power relations between the actors involved.

In sum, mainstream approaches in economics towards environmental problems appear to be lacking as knowledge, ethics and politics. Political ecology, in contrast, promises a more adequate way of dealing with socio-economic complexity, a more ethical consideration of the value of human life, and a politics more oriented towards fairer distribution of resources.

VI. Methodology and data sources

The study uses of a mix of qualitative and quantitative approaches and the data sources include information from extensive secondary sources about the area and the extent and consequences of endosulfan spraying there which include government reports, the reports generated by NGOs and Govt. committees and media coverage. Extensive participant observation has been conducted in three of the affected panchayats Enmakaje, Mulyar and Karadka. Field visits and interviews were conducted across these three villages and the cases were selected with help of detailed discussions with local activists. The analysis is based on the in-depth interviews (50) with actors including individual activists and those belonging to various organisations, victims, NGOs and elected representatives collected during the field visit. The civil society documents published for over a period of 20 years were collected and examined to understand and map the course of the movement. Textual analysis of the documents, pamphlets, media reports and study reports published by both the government agencies and civil society were heavily relied upon to track the discourse and for identifying the phases in the movement.

The study has made extensive use of relevant village and panchayat records to ascertain the compensatory efforts from local bodies. Reports regarding its activities

¹⁶ When life and liberty are independent rights how can they be revalued on the basis of property based rights (Vijay 2002)

published by the PCK, especially the Annual reports from 1962 to 2012 and other government documents relevant to understanding the persistence of endosulfan spraying are relied upon heavily. Since the study has a historical orientation tracing the evolution of land use patterns in the region and the trajectory of state-people relations examining the village records, district gazette records and oral histories are also used wherever necessary. Secondary sources, the District Gazetteers in particular were used to understand the history of peasant mobilization, tenancy relations and political history in north Kerala.

VII. Chapter Scheme

The dissertation is arranged into six chapters, including a background chapter which introduces the context and regional specificities of Kasargod, and a conclusion.

Chapter two helps in constructing a background to the research questions to enable a vivid understanding of the analysis and observations in the following chapters by offering a history of the region and the shaping up of the ecological distribution conflict. In short, it contextualizes the issue of Endosulphan pollution by exploring the history of the origin of the district, the linguistic and cultural diversity and a brief on the disaster and the multiple perspectives on the happenings.

Chapter three explores Objective One mentioned above, and attempts to understand the shaping of antagonistic interests in the region by looking into the history of PCK in the region, its land management practices and relationship with the local ecology and people which has led to the diverse opinion and conflict of interest over the resource use pattern. The attempt is to widen the scope of understanding of the issue beyond a case of 'pesticide pollution' and trace the history of the actors to identify the origin of resource conflicts. The chapter offers a detailed examination of the spatial control mechanisms established by the PCK in restricting access and control rights to the local people. The chapter helps to understand the political economic underpinnings of the struggle in the following chapters by questioning the role of

state as a resource manager and the relationship with the local people their resource access and livelihood.

Chapter four traces the history of resource conflicts and local environmentalism in the region and reaffirms the proposition that the history of environmentalism in India dates back to the pre-independence period. The chapter aims at understanding the unfolding of the anti-Endosulphan campaign, its origin, growth, and dynamics-examining its transition from being an environmental movement to a campaign for compensation and victim's relief and the multiple actors participated in the struggle at various stages. The chapter offers a periodization of the movement for deeper understanding the actor dynamics. The chapter argues that environmental movements in the global south should not be reduced to merely 'livelihood struggles'; rather, they should be understood in their multi-dimensionality, which may unfold through different phases. In other words, the same movement can have aspects of old and new social movements that emerge and decline in different phases of the struggle.

Chapter five engages with the benefits scheme announced by the state to provide relief and rehabilitation to the victims of the disaster by critically examining the state response to the disaster at multiple levels-local, regional and national. The state's response by converting the victims into population categories is examined using the concepts of political society and technologies of governmentality, which transforms people from citizens to subjects. The chapter also examines the social base of the enlisted victims and their distribution across the panchayats. The chapter critically examines the monetary compensation offered to pollution victims, which is based on the principle of 'weak sustainability', attempting to internalize the externalities by bringing in the valuation debate and incommensurability from ecological economics.

In the conclusion, the dissertation questions the idea of development which is highly top-down in content, intensive in resource use and centralized in implementation. It places the study in the context of Kerala, in the history of its acclaimed public action models, democracy and decentralization, in understanding the relationship between

state, resources and people. It raises questions to these in the light of the Endosulphan disaster in Kasargod and examines the changes in the anti-endosulphan campaign as a movement in Kerala's contemporary socio-political landscape and the local-global dynamics of such struggles in the context of globalization and increasing local environmental conflicts.

CHAPTER 2

BACKGROUND: ENDOSULFAN POLLUTION IN KASARAGOD

If what is chronicled in the Silent Spring could shock the world awake off the suicidal path that pesticide use would lead humanity to, then here in these villages one can see the most horrid reality of Rachel Carson's fears come true (Thanal 2002: 6)

I. Kasargod: A Brief History

Kasargod-Hosdurg region, presently part of northern Kerala, was part of the ancient Tuluva, ruled by Tuluva/Alupa kings from around 7th century to 14th century. It is believed that before the Tuluva period the region formed part of Tamizhakam. The river Chandragiri or Payaswini formerly called Perumpuzha marked the traditional boundary between the Tulunadu and Malayalanadu. The region witnessed the rise and fall of several empires and kingdoms. During the period of Tuluva rule there are accounts about the presence and establishment of territorial control by Mooshaaka empire in the southern parts of Kasargod followed by Mahodhayapuram Perumals (Menon, 1972; Balan, 2006). There are evidences to believe that Vijayanagara kings were successful in extending their power and control till Kasargod. This period was followed by the entry and rule by Ikkeri Nayaks who built numerous forts in and around the region including the ones at Bekal and Chandragiri¹⁷, to secure their territorial control and fight foreign invasions. The Kolathiris who ruled the southern Kasargod annexed and united the region to form their kingdom in Neeleshwaram. There were continuous encounters between the Ikkeri Nayaks and Kolathiri to seize control over Kasargod and establish complete authority and monopoly over the control of resources in the region. Both Kumbala and Neeleshwaram fought against Tipu but later joined him in his fight against the British. Following the Anglo-

¹⁷ It is beived that Sivappa Nayak who was one of the prominent rulers of Ikkeri built these forts at Chandragiri and Bekal.

Mysore war in 1799 the East India Company took over the regions which were under the rule of Tipu Sultan and Kasargod came under the rule of the company. The regions which were under Tipu's rule joined the Bombay presidency and the regions of present Kasargod were formed into a taluk with headquarters at Bekal. There were anti-imperialist struggles led by Kumbala and Neeleshwaram kings during 1804. The region also witnessed peasant struggles in 1810-11 and 1830-31 against the Ryotwari settlement of revenue introduced by the company. In 1860 Bekal taluk was shifted from Bombay Presidency and enjoined with Madras Presidency with the new taluk headquarters at Kasargod (Menon, 1972).

The ryotwari settlement¹⁸ introduced by the British exploited the region and many of the academicians point to this colonial exploitation while trying to explain the present backwardness of the district (Kurup, 2001). The colonial government plundered local resources including forest produce, timber and crops from the region draining out the resource base. It is pointed out that the ports at Manjeshwar, Kumbala, Kasargod, Bekal and Neeleshwaram were once the symbol of the wealth and prosperity that the region once enjoyed. The travelogues of Arab travelers like Dimishqi (1325), Yaqut (1179-1229), Barbosa, Italian travelers like Delle Velle and Buchanan mention about the ports in Kasargod (Menon, 1972 ; Balan, 2006).

Kasargod is the land of seven languages¹⁹, thirteen rivers, more than eight forts and around fifteen indigenous tribal groups²⁰, richly endowed in cultural and linguistic diversity, the region well deserves to have a place in the world heritage map. The Chandragiri River which once separated the Tulunadu and Malayalanadu in the regions political history now divides the southern and northern parts of the district. The presence of eight forts in and around the district testifies the fact the region once amassed wealth to protect which the rulers then had erected forts (Balan, 2001;

¹⁸ A detailed discussion of agrarian relations and tenancy systems is included in the next chapter

¹⁹ Tulu, Malayalam, Kannada, Konkini, Hindusthani, Marathi, Byari are the seven languages used in the region.

²⁰ This includes, Koraga , a primitive tribal group mostly located in Badiadka Panchayath (Vijayan 2011)

Rahman, 2011). The district is also rich in biodiversity with tropical forests and the laterite hills which supports fragile ecosystems (Rahman, 2011).

There are distinct differences between the southern and northern Kasargod in terms of language, culture and society. The southern Kasargod, because of its proximity to Cannanore resembles Kerala much more than the northern part. The much acclaimed social development and public action models (Kannan and Pillai 2004; Parayil, 1996) that Kerala cherishes about are thus more visible in the southern region. The peasant struggles in the region explains the revolutionary and politically active social landscape in the south in contrast to the calm and relatively passive north (Field Notes, 2012). This difference is also reflected in the response of the victims and the people to the pesticide disaster.

II. Endosulphan Pollution in Kasargod:

The agriculture department began planting cashew trees on the hills of Kasargod in 1963-64 which was later taken over by the PCK²¹ in 1978. Since then the PCK has been using pesticides to counter the tea mosquito attack which affected yield. The PCK aerially sprayed the pesticide Endosulphan, an organochlorine and POP which is banned in more than 80 countries, continuously for 25 years without rotation of the pesticide used (Jayakumar, 2011; Acyuthan 2011). The recommendation for aerial spraying was to save labour cost as it is estimated that one day aerial spraying can save about 500 man days (Jayakumar, 2012). The spraying was conducted three times a year covering areas under 11 panchayats in Kasargod district.

There were warning signals from the beginning including the mass death of honey bees, fishes, frogs and birds in the areas where spraying was extensive (Down To Earth, 2001). The issue was brought to public light through a report about cows born with deformed limbs after aerial sprays of the pesticide in Enmakaje panchayat by a farmer and journalist Shree Padre (The Evidence, Dec. 25, 1981). Around the same period Dr.Y.S.Mohan Kumar, a doctor who has practiced medicine in the area since

²¹ Plantation Corporation of Kerala

1982 noticed disorders of the central nervous system among children of the area which included-cerebral palsy, retardation of mental and/or physical growth, epilepsy and congenital anomalies like stag horn limbs. There were also reports on cancer of liver and blood; infertility and undescended testis among men; miscarriages and hormonal irregularities among women; skin disorders, psychiatric and suicidal tendencies and asthma (DTE, 2001). It was soon realized that the presence of health anomalies among the people in these areas are due to the aerial spraying of the pesticide which was undertaken by violating all the protocols to be followed as stipulated in the insecticides act. The increasing instance of diseases among the people led to grassroots protests across the district which had sprouted simultaneously and took various forms. The repeated appeals from people, civil society groups and local self governments to the concerned authorities to stop the aerial spraying went unheard till 1998 when Leelakumari Amma, an Agricultural Officer challenged the act in the court requesting a stay on the spraying in her village.

“These people(PCK officials) were very negligent...they had to publish a notice in the local Panchayat before spraying the pesticide...they came with photocopied notices, which was then pasted in the panchayat walls only to be torn away by the peon who was paid by the PCK officials for doing the same”

Ex-Panchayat memeber, Swarga, 21.11.2012

Thus the spraying undertaken by the PCK has violated the protocols to be followed during aerial spraying as stipulated by the Insecticides Act 1968 (Rahman, 2011).According to Shafeeq (Solidarity Youth Movement), the stipulated height that was to be maintained by the copter during the spraying was hardly kept as many of the local electric posts and trees went much above that height. Shanti, an AWW(Anganwadi Worker) pointed out that when the protocol directed the PCK to finish spraying before 9 am in the morning, during most of the days the spraying

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started only around 10 am in the morning extending till 5 o' clock in the evening. The time stipulated in the Act is to secure the people from greater exposure but the situation in the region made the people all the more vulnerable to exposure (Field Notes, 2013). During the interviews it was pointed out that people often had to come back and change their clothes as they got drenched in the pesticide sprayed pointing out the direct exposure to the pollutant (Mohan Kumar 2011). The extent of curiosity and excitement that the spraying brought to the people during the initial days in the region further aggravating the disaster can be understood from the following narrative;

"I remember children of the nearby schools, during spraying would come out of the veranda with their plates to see the helicopter flying, once the helicopter passes by their plates would have kerosene like liquid mixed with rice soup which the students would end up drinking. They directly consumed the pesticide. Would not such an intake result in disaster like this? The plantation officials, most of who are from central or southern Kerala, would send their children back home during spraying."

(Mohammed Kunji, Pouval)

"Workers once told me that we are making unnecessary fuss out of this issue. After spraying we would go downstream take a bath and wash our clothes there, after sometime we also find plenty of dead fishes which we would take home and eat."

(K.Balakrishnan, KSSP, Kanhangad)

"The children were curious, they used to go out and get drenched in the pesticides as the exposure would leave white dots on the skin"

(Primary school teacher, Periya)

The PCK failed to close the water bodies or make proper announcements about the spraying in any of the villages (Padre, 2011). Interviews reported that in fact many of

the PCK workers fainted while they were mixing the pesticide for loading in the copter; the PCK was firm in directing these workers about being silent on the issue. The PCK has failed completely to meet the occupational health standards as many of the workers were asked to mix the pesticide with bare hands or wooden rods. The workers interviewed pointed out that the ratio of mixing the pesticide with water was often arbitrary and would vary (Field Notes, 2012). The valuation language used by PCK was highly monetary and the cost-benefit analysis therefore, included trade-offs between forgone export revenue and the ecological and human costs in the region. Even before the judiciary the PCK was referring to the loss it would incur from staying the spraying of the pesticide (Rahman, 2011).

The people had no idea about the extent of harm that the exposure could do to them as they were told that what is being sprayed is the 'medicine' not poison, to cure the cashew plants from tea mosquito attack²². Thus people were heavily exposed to the aerially sprayed pesticide and the topography of the region further accentuated the disaster as many of the rivers had origins within the plantation hills which washed the pesticides from the hills to the rivers and ponds in and around the region further spreading the damage. The spraying during periods of stronger wind currents took the pesticide farther away from 11 of the panchayats. Thus the bureaucratic and institutional negligence on the part of the state led PCK resulted in creating havoc in this region devastating the local ecology and lives of the people. The identification and realization of the extent of harm flared stronger protests from people against the spraying of the pesticide. The protestors challenged the negligence on the part of PCK in distributing the pollution burdens unequally over the people of the district. The difference in the language of valuation (Martinez-Alier 2006) between the people and PCK was evident from the beginning.

²² Khadeeja 4.1.2013

The struggle against the spraying of endosulphan has been one between players with highly unequal power²³ relations and with different languages of valuation. In this dissertation we conceive the pesticide disaster in Kasargod which resulted from the aerial spraying of Endosulphan as an Ecological Distribution Conflicts (EDC).

The disaster in Kasargod is perceived differently by different actors pointing out the multiple valuations—economic and non-economic—adopted by actors in an ecological distribution conflict (Martinez-Alier, 2010). If for a few it is confined as a pesticide disaster, for many others the disaster should be understood in a larger historical context of the resource intensive development path India chose to tread after independence, the exploitative green revolution strategies adopted in the 1960s, the exclusionary land management and spatial control mechanisms employed by the PCK and so on. The disaster conceived as the violation of environmental justice and human rights for the victims and people of Kasargod has a very different connotation for the PCK.

Interviews with PCK officials explained that 'the disaster for them has association neither with the pesticide endosulphan nor with the negligent application by the PCK but is 'due to socio-cultural aspect which promotes marriage among blood related people in the affected regions' (Field Notes, 2013). 'If that was the case then the entire Nair community in Kerala, which followed matrilineal Kinship system, should have suffered these anomalies much before this happened in Kasargod' opined M.A.Rahman a noted academician and activist²⁴. The conflict of interest among the actors is very clear.

²³ Power in this dissertation would mean the power of one actor to exercise control over the environment of other actors.

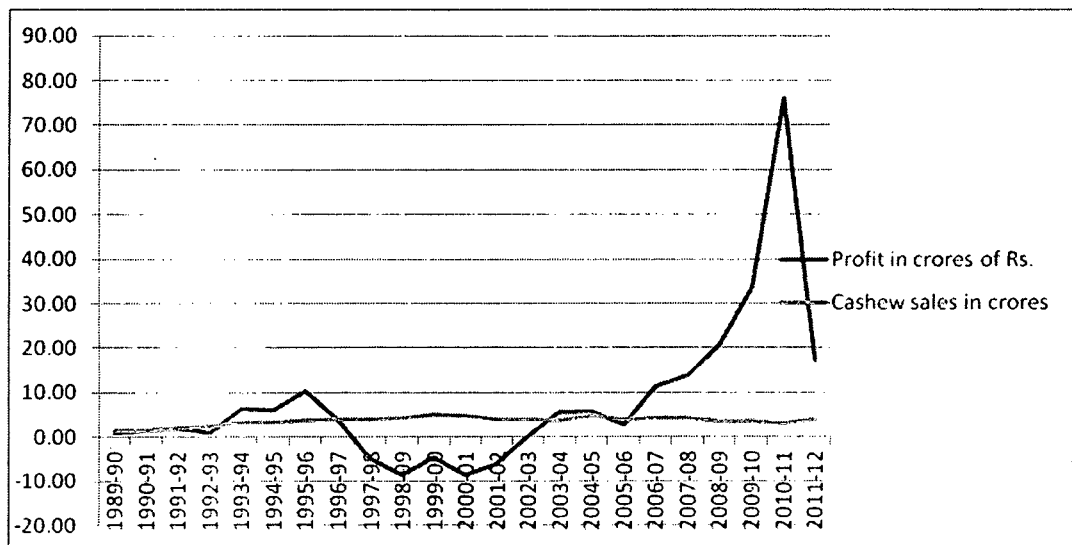
²⁴ M.A.Rahman, 21.11.2012

III. Life is Cheaper than cashew

The section offers a brief overview of the profits and sales position of the PCK to examine the claims raised by PCK regarding the alleged loss incurred due to a ban on the use of pesticide.

A detailed exploration of the profit figures of the corporation over a period of three decades point out that the PCK has been reporting losses continuously from 1997-98 till 2001-02, much before the complete ban on Endosulphan came into effect (Graph.2.1). If the losses incurred should be attributed to the absence of pesticide use then the corporation ought to have been to be running incurring heavy losses in the years after 2000-01. Quite surprisingly, the profit figures have started improving from 2000-01. There has been a steady increase in profits from around Rs. 6 crores in 2001-02 to 11.4 crores by 2007-08, further touching the highest ever profit , 76.16 crores in 2010-11 (Table.A.1).

Graph.3.1. Profits and Revenue from Cashew sales of PCK from 1989-90 to 2011-12



Source: Annual Report of PCK, Various Issues

It can be well argued that the profits reported can reflect higher earnings from other products and not cashew; therefore we undertake a detailed examination of the revenue earned from the sale of cashew. The examination of the data on returns from cashew sales explains the fact that the PCK has not really been incurring the loss it is talking about. The returns from selling cashew was 4.83 crores in 2000-01 which after suffering a slight dip, climbed up further to 4.8 crores in 2004-05 implying that not spraying Endosulphan was not reflected in cashew sales even after 3 years since the ban. If the ban on Endosulphan did indeed have a disastrous effect on the yield due to increased pest attacks, then the decline in sales would have to be continuous over the period under consideration (2000-2012). This is certainly not the case and the Table(2.1) makes it clear that the sales return has been around 3 to 4 crores from 1993-94 onwards and it continues so. Also we may well infer that the decline in sales return during the recent years if any is mainly due to the decline in cashew production, which again is mainly due to decline in area under cultivation.

The above discussion proves that PCK has not been suffering the alleged loss it has been suffering after the imposition of ban on the pesticide. The arguments put forward by the PCK regarding the spraying have involved a trade-off between profits and pollution. Hence, the buoyancy reported in the profits should be further enquired and questioned.

IV. Corporate, State and People

The value of endosulphan exports from India would come to the tune of \$ 40 million amounting to about 70 percentage of the total trade in the pesticide. India is most prominent among the countries which produce Endosulphan and the production is undertaken by three companies, one public sector (Hindustan Insecticides Limited) and two private sector companies (Excel Crop Care Limited and Coromandel International Limited). Endosulphan, a POP²⁵ is banned in around 81 countries

²⁵ Persistent Organic Pollutant

round the world. The ban in Cambodia, Brazil and Newzealand was largely influenced by the story of the disaster in Kasargod (Narain 2011).

The pesticide companies justify their act of production and application of Endosulphan on economic grounds. Despite the increasing scientific reports confirming the role of Endosulphan in causing the disaster in Kasargod, the pesticide companies still maintain the denial mode. The pesticide lobby is strong enough and had been successful in influencing the Dubey committee appointed by the central government in issuing a clean chit to the pesticide (DTE, 2004). The lobby has unleashed personal attacks against the organisation and individuals who have come up against them , spearheading the movement. The environmental NGOs like CSE has been facing continuous threats since their intervention in the Endosulphan disaster followed by the publication of a scientific study report on the level of pesticide residue in the sample collected in 2001 (Narain 2011, DTE 2004).

The case in Kasargod is conceived as an ecological distribution conflict (EDC) where the actors involved adopt multiple valuations. The struggle pits the affected people of the village and empathetic civil society against the state-led PCK, the state and the pesticide manufacturing companies. It is a struggle between actors with unequal power relations and the following chapters explore the history of the formation of the antagonism, the origin, growth and dynamics of the anti-Endosulphan struggle and the nature of the relief offered by the state to mitigate the harm. In the above created background the dissertation explores the ecological distribution conflict between the people of Kasargod and the PCK in the following chapter by tracing the history of the actors, the emergence of antagonistic interest in terms of resource use, the valuation languages, the growth and dynamics of the forms of resistance and the strategies of protest and opposition adopted by these actors.

CHAPTER 3

PLANTATION CORPORATION OF KERALA: THE NEHRUVIAN DEVELOPMENTALIST JANMI ?

The chapter argues that the pesticide disaster in Kasargod is the culmination of the extractive and landlordist resource management strategies followed by the state, a legacy of the development strategies that were identified as central to the project of modern nation-building in India during the mid-20th century and after. The vehicle of such development in this district was undoubtedly the public-sector PCK. There can be no doubt that the PCK holds the largest amount of natural resources in the district of Kasargod at present --more than one fifth of the total area of the district (4696 Ha).

In this chapter, I try to focus on the history of this institution over the decades since mid-20th century, to reveal the instrumental role the PCK has played in transforming the local land use pattern over the past decades and causing the shift of cropping pattern in favor of cash crop economy. Secondly, it also examines the history of agriculture in the region to especially bring attention to the shift and loss in local agriculture, in both knowledge and practices, with the invasion of scientific agriculture. Thirdly, the chapter throws light on the transformation of spatial control by the PCK, now the dominant land-holder in the area, through its establishment of centralized and authoritative rule over the territory through a variety of direct and indirect spatial control mechanisms in and around the plantation area. The exclusionary practices put in place calls for a comparison of it with that of the period of feudal landlord control in the region-- the erstwhile *Janmitham*. This chapter relies on a mixed set of methods: interviewing, analysis on news reports and other sources of information, and participant observation in and around the PCK area.

I. INTRODUCTION

The Nehruvian model²⁶ was celebrated as central to building the new 'modern India', guided by technology, large-scale development, and the scientific temper, and it has been indeed noted that this was wholeheartedly embraced by the modern-educated elite nationalist middle-classes. While opting for the Nehruvian model the alternative India rejected was the one offered by Gandhi and some of his followers, of crafting an agrarian society of village republics making low levels of demands on the resources of the earth by living close to subsistence (Kumarappa 1938, 1946, as cited in Gadgil and Guha 1995), which sounded rather radical at that time (Deshpande, 2003; Guha, 2007 ; Guha and Gadgil, 1995). This was hardly surprising, as the alternative promised no surplus resources that could be channeled to the elite. Rather, it called on the central apparatus of the state to surrender its powers in favour of the masses in the countryside.

²⁶ The model of development as modern industrial growth was derived from the historical trajectory of former colonial powers such as Britain, France and Germany and the pursuit of growth necessitated large injections of capital into the national economy for developing industrial infrastructure (Baviskar 1997). The ideology of the dominant pattern of development derives its driving force from a linear theory of progress. The linearity of history created the ideology of development that equated development with economic growth, economic growth with expansion of market economy, modernity with consumerism and non-market economies with backwardness. The notion of development as an ideology was based on the universalisation of the western economic tradition and of equating development with economic growth alone and its unquestioned acceptance as progress (Shiva 1991).

The Nehruvian model, inspired in part by Soviet communism, enshrined economy as that part of the nation which stands for the whole. The era demonstrated the centrality of the economy for the nationalism of the time (Deshpande, 2003).

The Nehruvian developmentalism put forward through the Second Five-Year Plan²⁸ document was resource intensive and admired mega- development projects like big dams, extractive mining industries etc. Nehru was fascinated with big dams so was he with the science. He chose the industrialization path for India's future where the state occupied commanding heights. The model was an attempt to bring together the commitments to building a modern industrialized nation with the impulse towards modernizing the national culture (Deshpande, 2003).

"There were obvious limitations to what could be achieved in the framework of a low-input agrarian economy, one no longer capable of yielding much of a surplus. The solution obviously lay in industrialization; in tapping the energy of coal and petroleum, of hydroelectric power, in producing steel and cement and using the resources so generated to promote manufacture. The way forward also lay in the intensification of agriculture, by irrigating large tracts of land under river valley projects and supplying them with synthetic fertilizer and pesticides. Such a process of development could create a substantial new base of resources whose surplus could support the urban-industrial sector and the rural landowning elite."

(Gadgil and Guha, 1995 : emphasis added)

The model of development that India adopted conceived agriculture in modern Indian as industrial and scientific, breaking away from the pre-modern traditions and practices. The Nehruvian period witnessed serious policy interventions aimed at changing the nature and characteristics of the agrarian system. Though the era started with promises to eliminate the structural inequalities through progressive land redistribution much of it ended as rhetoric. The origin of scientific and

²⁸The idea of economic planning in India can be traced back to the 1930s when the British officials in India had set up a planning committee in the United Provinces as early as in 1934. The publication of *Planned Economy in India* by M. Visvesvaraya and the formation of National Planning Committee by Indian National Congress in 1938 was followed by the 'Bombay Plan' in 1944, which invited a response from M.N.Roy in the form of People's Plan. The 1950s set the stage for pursuing the planning process with increased vigour under Nehru, marking the beginning of the Nehruvian-era in Indian planning process (Rammohan 1997).

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commercial agricultural policies in India can be traced back to the Intensive Agricultural Development Programme ²⁹(IADP) adopted during the Nehruvian era which was a 'package' approach to increase India's agricultural yields. Though there are clear shifts in the policies pursued during the Shastri interregnum, especially in the field of agriculture³⁰ (Djurfeldt and Jistrom 2005). During the Nehruvian era (1947-1964) the major emphasis was on the development of infrastructure for scientific agriculture. The steps taken during the period included the establishment of fertilizer and pesticide factories, construction of large multi-purpose irrigation-cum-power projects, organisation of community development and national extension programmes and, above all, the starting of agricultural universities and research institutions (Swaminathan 2007).

The Nehru-Mahalanobis model³¹ of centralized planning however faced serious criticisms from across which broadly can be put under the following heads- the free

²⁹ The IADP, set up in 1961 following the report published by Ford Foundation in 1959 (India's Food Crisis and Steps to Meet it) examining the problems of Indian agriculture, consisted of a combination of institutional, economic and technical innovations to be implemented at multiple geographical scales. Along with the technical components-improved seeds, fertilizers, irrigation, and pesticides- the package approach also stressed the importance of adequate credit facilities and technical advice. Though the programme attempted to guarantee price supports in some district it was unsuccessful and hence remunerative price did not form part of the implementation (Djurfeldt and Jistrom 2005).

³⁰ Even though the period witnessed the introduction of remunerative prices it was combined with the emphasis on the agronomic package concept earlier introduced during the Nehruvian era. The new strategy was embodied in the High Yielding Varieties Programmes (HYVP) and involved concentration of seeds, fertilizer, and extension in areas with high quality irrigation conditions and de-emphasized the institutional support in the credit and cooperative fields (cite). (Djurfeldt and Jistrom 2005)

³¹ The Nehru-Mahalanobis model is regarded as the model for the Second Five Year Plan and was intended to provide the analytical foundations for the project of raising the level of income via industrialization. The model conceived of the economy with two sectors, each producing capital and consumer goods, respectively. (Balakrishnan, 2007, Guha, 2007: 208)

market critique³²; the human capital critique³³, the Marxist critique³⁴ and the ecological critique³⁵.

By mid-1960s, however, it became clear that the beneficiaries of national development were the private commercial and industrial groups and bureaucratic and professional elites directly or indirectly connected to the political leadership rather than the majority of the population (Kohli, 1987). Baviskar (1997) argues that the model of development established since independence has fundamentally altered the way in which different social groups use and have access to natural resources, such changes in turn have created conflicts³⁶ over competing claims of to the environment. According to Deshpande (2003), the Nehruvian hegemony was the product of the synergistic union of the ideas of 'development' and 'nation' and their ideological cementing by the nationalist movement in India during the first half of

³² The free-market critique against the model in India was spearheaded by B.R. Shenoy, who was the sole economist in the panel of experts who disagreed with the basic approach of the second five-year plan. He opposed the 'general extension of nationalization on principle' and opined that the model overestimated the rate of savings in the Indian economy. Another major economist who reported strong objections against the model was Milton Friedman (Guha, 2007).

³³ Friedman, during his visit to India observed that the model is too mathematical, obsessed with capital-output ratio rather than by the development of human capital. B.V. Krishnamurti was another Indian economist who took up the neglect of education (Guha, 2007).

³⁴ The Marxists thought that the Mahalanobis model gave too much emphasis on the market. According to them, the second plan should have mandated a process of nationalization where the state in addition to starting industries should take private firms already in operation under its wings. They demanded for the inclusion of working class in the planning process (Guha, 2007).

³⁵ The ecological critique of the Nehruvian development model, which came primarily from the Gandhians, dissented from the conventional wisdom on agricultural policies. They argued that small irrigation systems were most efficacious than large dams, that organic manure was a cheap and sustainable method of augmenting soil fertility; that forests should be managed from the point of view of water conservation rather than revenue maximization. This early environmentalism was spearheaded by two of Mahatma's closest disciples, J.C. Kumarappa and Mira Behn (Madeleine Slade) (Guha, 2007:223).

³⁶ The conflicts include claims and worldviews, which involve different ways of valuing and using nature, which can be either for profit or for survival or a combination of the two.

the twentieth century. The era created and privileged a pan-Indian elite who spoke the idiom of secular nationalism, scientific technology and economic development. The process of intensification of resource use in independent India was executed by the bureaucratic apparatus inherited from the British – an apparatus, fashioned primarily to organize the drain of resources from the India countryside by the British who had no interest in the sustainable use of these resources. This colonial apparatus with its historical baggage was adopted and put to the service of a new set of political masters (Gadgil and Guha,1994).

In short, the Nehruvian developmentalist framework of development equated the process of development with the channeling of an ever more intense volume of resources, through the intervention of the state apparatus and at the cost of the state exchequer, to sub serve the interests of the urban and rural elite.

The Communist Party in Kerala pitched its idea of planning against the backdrop of nationalist development as envisaged in the Nehruvian developmentalism which the Indian planning process had envisaged during the 1950s (Rammohan 1996, Raman 2012). The objective of planning as envisaged in the 1959 Political Report³⁷ highlighted the need to employ the invaluable natural resources to appropriate such uses which generate maximum possible wealth and provide employment to the maximum number of people. Devika and Thampi (2012) argues that even though leaders like EMS Nambutiripad often espoused decentralized government, the left politics in Kerala remained wedded to Nehruvian developmentalism that emphasized large scale industries and centralized systems of government. Rammohan (1996) observes that the party then ‘was critical of the kind of development with its emphasis on the development of facilities for health and education’.

³⁷ This refers to the draft report on political matters presented at the state conference in November 1959(CPL, “State Committee Samarpikkunna Karadu Report” (Draft Report Submitted by State Committee), CPI, Kerala State Commjtte, for circulation only among members, Nov.1959 as cited in Rammohan 1996: 271, footnotes)

He quotes the 1959 Political Report:

The Governments in the past, instead of making appropriate use of resources and increasing wealth and facilitating employment, channelized development efforts to a few activities that were considered as signs of progress. For instance, instead of making use of our major resources, namely forests and sea, and promoting a string of small-scale industries and developing forest conservation and fishing, planning was oriented towards expansion of transport, education and healthcare facilities (as quoted in Rammohan 1996: 275).

The plan for industrial development in the state was in continuity of the new industrialization project of the Government of Travancore during the post-1930 period. The development projects³⁸ that were implemented in the state were not free from the environmental and livelihood risks inherent to some of these development projects and was hegemonic (Rammohan 1996; Raman, 2012).

In short, even though the developmental programmes that Kerala adopted differed from the State developmentalist thinking of the 19th century in the crucial role assigned to equity in the development processes; it was resource-intensive, hegemonic and insensitive to ecology-hence very much in accordance with the ideology of Nehruvian developmentalism. The model adopted by the state of Kerala continued the project of colonial modernity and gave prominence to increased wealth generation through the exploitation of natural resources. The development programme viewed resources; 'forests, sea and almost any physical object around 'as means for economic exploitation' and offered full-fledged approval to the 'plantation/modern industrial model of development' (Rammohan, 1996).

³⁸ According to Rammohan, the most revealing example of the "industrialization at any cost" policy of the state Government was the accord it reached with the G.D.Birla to establish a rayon pulp and fiber factory in northern Kerala. Forest raw materials were offered to the company at rates equivalent to one-eighth of the prevalent prices and extensive forests assigned for raising industrial plantations.

The present chapter is an attempt to see the constitution of Plantation Corporation of Kerala by the Kerala State in the early 1960s with the government of Kerala acquiring massive expanses of land for undertaking commercial agriculture cultivating cash crops. I try to examine this enterprise as a manifestation of the Nehruvian developmentalist vision in Kerala in the mid-20th century. The chapter aims at critically recounting the history of the acquisition of land for the PCK and the land management practices adopted by it. I claim that such an understanding of the history of resource control is vital to making sense of the present – the pesticide disaster which has engulfed the region in the present.

II. Agrarian Relations in Kasargod during the Colonial period

Kasargod shares a history of a highly exploitative system of agrarian relations burdened with heavy revenue assessment with other regions of the erstwhile South Kanara district of Madras Presidency. Therefore, to understand the land management practices by PCK in a historical perspective, we must have a glimpse of the agrarian relations between the landlords, tenants and agrarian workers under the colonial system of revenue administration and assessment in this region.

Kasargod was part of the South Kanara district which was under rule of Madras Presidency till independence. The land revenue system followed in Kasargod by Hyder Ali and Tipu Sultan and later by the colonial administrators was exploitative and led to the drain of resources away from this once mighty economy (Kurup 2000). The presence of eight forts in and around the district testifies the fact the region once amassed wealth to protect which the rulers then had erected forts (Balan 2001, Rahman 2011). The land revenue system in Kasargod was very different from that in Malabar and the region bore the burden of a heavily assessed land revenue system till independence. As distinct from the Malabar region, here the revenue assessment included even forest and waste land. The region never had any tenancy legislation favouring poor tenants, quite unlike in Malabar. (Kurup, 2000; Menon, 1972). The details of the land revenue and tenurial system in South Kanara have been presented in Appendix 3.1.

The Malabar land holder, known as the *Janmi*, claimed his land a hereditary possession and enjoyed absolute propriety rights. The forest and waste land comprised of his *patta* were not assessed by the colonial government; however, the *wargdar*³⁹ in Kasargod although he was a *Janmi* was quite inferior in status. His land was classified as 'Sarkar' and he had to obtain permit from the authority to quarry stones. The revenue realized from his land was higher than that of the revenue realized from same category of land in Malabar. He had to pay revenue for forest and waste land (Kurup 2000, Menon 1972).

To sum up, in the words of K K N Kurup:

The faulty system of land revenue under the colonial government placed peasants in miserable condition. Instead of land tax the government was realising a portion of rent. The impact of colonial land revenue system on the landlords and peasants in South Kanara was disastrous than that of any other parts in the Madras Presidency. To sum up the agrarian condition existed in the district under the British were never turned to be prosperous for the peasantry or the petty *wargadars*. Though the agrarian structure and the *ryotwari* settlement of revenue promoted the trends of a developing capitalist system in agriculture the colonial system abrogated its growth by maintain feudal tendencies and relations. The district mostly consisted of poor agricultural classes and artisans and the burden of the colonial system of revenue was on their shoulders (Kurup 2000: 103).

The exploitive nature of agrarian relations has been poignantly brought out by historians associating the rural poverty, agricultural backwardness and rural employment the region witnessed to the colonial policy towards the agrarian

³⁹ *Wargadar* and *Janmi* were not synonymous. *Janmi* was considered the absolute proprietor of the soil, the *wargadar* paid revenue for the forest and waste lands in his holdings. Further he paid much higher land revenue on the holding than in Malabar though the soil was not superior in productivity (Kurup, 2000).

classes⁴⁰. The policy never was helpful for capital or surplus accumulation for the middle and lower agrarian classes.

However, even under the feudal days the presence of commons ensured access to basic resources for the people in South Canara (Balan 2001; Pouchepadass, 1993). Though the land was owned by the landlord people had right to the resources in and around their homestead and could approach *Janmi's* property for collecting fuel wood and green manure. Indeed, there is evidence of resource conflicts in Kasargod in the pre-independence period between the landlords and the tenants in two different regions -- one against the colonial government and the other against a local landlord. The *Kaadakam Vanasatyagraham*, which happened during the early 1934 in Karadka panchayath was against the Forest Conservation Act passed by the colonial government which prohibited the entry and access to forests and forests resources (Balan 2001). The local people fought against the denial of access to resources which was the threat posed by the legislation. This implies of course that they were enjoying access rights till the time the act was announced.

The second well-known instance is of the famous '*Thol-Viraku Samaram*' (The fight for green manure and fuel wood) during the late 1940s. This was against a new landlord

⁴⁰ The long history of peasant struggles against the colonial administration brings out that nature of the highly exploitative system of revenue assessment and the resultant social unrest. The history of peasant revolts in the region can be traced back to 1810, the letters sent by South Kanara district collector Alexander Reed to the Board of Revenue during the period mention about the higher revenue default rates among peasants and the growing unrest in the region (Balan, 2001). Though there was some relaxation in the revenue assessment following the peasant uprising in 1810 it was restored back to the initial rates by 1811. The peasants raised strong protest series against this move across Southern Kanara, including Bekal in 1830, prominently known as the Koottakkalaapam (Gang roits). The Kalyanasawamy revolt in 1837 was another major struggle against the colonial administration and its exploitative system of revenue settlement. There were major peasant uprisings in the post independent period including the Kayyur riot () (Kurup, 1978)and Nelleduppu Samarams (seize the grain protests in 1948) are the major struggles reported in the post-independent period (refer Balan 2001 for a detailed account of the peasant struggles) .The organisation of Karshaka Sangham played an instrumental role in strengthening the nationalist movement in the region by unifying the peasant struggles. Thus the entry of plantations during the early 1960s was into a region which had been subjected to heavy exploitation and the social control mechanisms in the past decades, which had also generated a culture of subservience to the landlord (Balan, 2001).

who after gaining rights, decided to restrict local people's access to these basic resources. Both the instances make it clear that people did indeed enjoy access rights, as a matter of custom, to natural resources held by the landlords and that they were willing to put up resistance when they were taken away, either by the colonial government, or by the new landlords who did not respect established custom (Balan, 2001; Rahman, 2011). It is important to grasp the significance of this history of resource conflict: The presence of these resource conflicts change the popular western perception of activism against the commercial exploitation of ecological resources as a post 1960 phenomenon, it appears, needs to be qualified when we take into account questions of environmental justice. These questions will be taken up further in the next chapter.

III. Entry of Plantation corporation of Kerala

The Plantation Corporation of Kerala came into being in 1962 as part of the effort to revive the plantation sector of the state (cite from the annual report). The corporation owns around 4696 ha., of land in Kasargod district under three estates namely, Kasargod, Rajapuram and Cheemeni. The land under Kasargod estate is owned by the corporation itself, the land in Cheemeni is surplus revenue land handed over by the state government and Rajapuram estate functions on land taken out on lease from the State Forest Department. The Kasargod estate is the largest holding 2190 Ha., of land which includes four divisions viz -Muliyar, Perla, Adhur and Periya among which Perla division is the largest with around 783 ha., of land followed by Adhur (749 ha). The Rajapuram estate functions on 1526 Ha, of land taken on lease from the Forest department initially at a rate of Rs.250 per acre which was revised upwards to Rs.1300 per (Sivaraman Commission Report, 2003/ GoK 2003). The plantation however, has been defaulting the lease rent deeds and carries a heavy overdue over the period. The PCK holds almost one tenth of the total geographical area (cultivable as well) and hence the practices of PCK can have long standing effects on the local agriculture and agro-ecological conditions.

possession

typo errors in table

Table.3.1.Area under the ownership of PCK in Kasargod

Sl.No	Plantations	Area in Ha
I	Kasargod Plantations	
a	Muliyar Division	367.86
b	Perla Division	783.14
c	Adhur Division	749.00
d	Periya Division	290.00
	Total	Total
II	Rajapuram Plantations	1526
III	Cheemeni Plantations	980
	Total	4696

2190.00

Source: Sivaraman Commission 2003

The cashew plantations in Kasargod have been established with the aim of helping the workers employed in the cashew processing units in Kollam district. The concern for the labourers who were facing an acute input shortage then was projected as the rationale for the corporation. Also the entry was legitimized by the promise of local development and local employment generation⁴². The PCK has also legitimized its entry by making promises about local development and employment generation⁴³ (interview with M.A.Rahman, Jayakumar, Civil society documents, Rahman, 2011, Chairman Varghese George).

K.T.Rammohan (2008) points out that, "the persistence of colonial patterns of ownership of plantations in Kerala remains one of the enduring weaknesses of the land reforms programme of the 1970s in the state" (Rammohan, 2008). It must be noted that such skewed ownership is not confined to private plantations which retain vast tracts of land; it also facilitated the creation of large state-led corporations like the plantations corporation of Kerala. These latter plantations too hold vast

⁴² Rahman 9.11.2012

⁴³ Jayakumar, 15.10.2012;M.A.Rahman, 9.11.2012; Adv.Harish, 20.4.2013;Varghese George, 8.1.2013

expanses of land for undertaking mono-crop/cash-crop/plantation cultivation, and lie completely outside land ceiling laws. It is interesting to note that even the PCK which cultivates cashew, a crop which till recently⁴⁴ was not included under plantation crops (Interview with Adv.Harish, Jayakumar, Legislative records), could evade the land ceilings act over all these years (interview with Adv. Harish, legislative assembly archives, Jayakumar) .

The PCK thus holds 4696 ha., in a district where there are about 722 landless households which belong to the socially disadvantaged castes in the region (Study Report of KILA 2010 and Statistics of Tribal Development Department as cited in Prabhakaran Commission Report). The Prabhakaran Commission report⁴⁵ submitted recently brings out that there are 356 and 366 landless among the SC and ST households respectively.

But what is not revealed from this statistics, which became evident through my field visits and-depth interviews with the workers of PCK and people living in and around the plantations, was this: while the surplus land in the area was taken over for redistribution during the land reforms in Kerala of the early 1970s, it also enclosed the erstwhile commons in the villages which were freely available for use by the entire village community. Such commons were used heavily ^{by} local population for day-to-day resource requirements like fuel and green manure; people even made a living by selling the resources collected from there (Field Notes, 2012;Balan, 2001). The land reforms have resulted in the creation of private property with clearly marked boundaries and with the surplus land annexed to the government, most of which are currently under PSEs like PCK.

Taking into consideration these two effects of the land reforms -- the disappearance of village commons and the exemptions given to plantations - one may perhaps

⁴⁴ Till the year 2012 cashew was not declared as a cash crop (G.O,2012)

⁴⁵ Prabhakaran Commission Report, 2012, offers suggestion for the comprehensive development of Kasrgod.(District Panchayath,2012).

raise fresh questions to the popular view regarding the socialistic inclinations of the much-lauded land reforms in the state of the early 1970s. Patnaik (2000) argues that the land reform measures succeeded at most in eliminating very large zamindars, giving ownership rights to rich tenants, and thus created a relatively homogenous class of landowners, but it did not give 'land to the tiller'. The land reforms viewed from a resource-access perspective appears to have done greater harm by introducing the idea of private property as legitimized by the state as it necessarily kept the poor and socially disadvantaged groups away from the resources

"People living around would often come in to collect fuel wood and green manures...but we then had strict orders to restrict the entry to plantation lands and secure the boundaries...I felt it little difficult to be rude and restrict people from our own village but it was my job...we would hold back the tools which they bring along to chop down the wood or green manure so that they don't repeat it..."

(Sreenivasan, Enmakaje, 24.1.2013)

we are not allowed to enter their land and collect basic resources like fuel wood or green manure...imagine the land which had been all ours is out of bounds for us now...Once it so happened that a person in one of the households within the PCK land died, the officials did not even allow people to carry the dead body down to the road outside the check posts... this is how we live here..."⁴⁶

The surplus land handed over to the PCK has thus alienated the local people from basic resources over which they had complete access rights in the past. It should also be noted that absence of proper records delineating the boundaries of PCK has been often used by PCK to encroach upon the village commons and private lands. The territorial expansions of PCK have been questioned by the LSG bodies, but PCK has

⁴⁶ Madhavi, Sarppamala, Enmakaje, 24.1.2013

failed to furnish the necessary documents and land records required to confirm the area under its ownership (Field Notes, 2012).

The village commons that were open to all have been brought under ownership under an individual or state the access to which from there would be termed as trespassing.

IV. Displacement of Local people

The field visits and detailed enquiry revealed that there is a prior history of displacement of people including tribals from the land presently under the ownership of the PCK. Kasargod, which comes third in terms of the percentage of tribal population, has more than 15 indigenous groups including a primitive tribal group called Koragas. Oral histories collected from Enmakaje points out that the entry of Brahmins has displaced the tribal to the up-hill regions when the Brahmins occupied settlements on river banks (Interview Sreenivasan, Rahman 2011). The tribals who were displaced to the uphill settlements following the entry of Brahmins and other later settlers, most of which later got converted to plantations are among the groups who benefitted the least from the land reforms act.

“I still remember incidences where PCK ousted many families from their lands and annexed the property to their estates...some of them resisted the move but many did not. The PCK used brutal forces including the police to evict them out of their land. They the people) had lost everything, the land on which they had been living for over generations, the farm lands and crops they had cultivated, everything”

(K.S.Abdullah, Karadka)

Also, the plantation workers have themselves formed a large class of landless people in this region - as argued by the exclusion of the plantation sector putting vast geographical area of highlands and midlands outside the purview of land reforms had adverse implications for plantation workers as the question of their landlessness

was overlooked (Rammohan 2008). When the government annexed the surplus land in the district following the implementation of land reforms , many of the tribals were ousted from their habitat (Rahman 2011), as the Kerala Land Reforms Act had no provisions to give homestead rights for populations inhabiting plantations (Raman 2011). There seems to be definitely a prior history reaching back from before PCK, judging from popular memory. The interviews with local people, many recounted the popular memory that the land under Rajapuram plantations which has been leased out from the Forest Department, was inhabited once by the indigenous people. That they no longer reside there may point to the fact that they have been victims of the forest conservation acts during the colonial period and under the post-colonial state. In short, the ownership of land by the Agricultural Department and later by the PCK has offered continuation to a history of landlordism by reshaping it to form a state-led corporate landlordism in the area by holding more than 4696 Ha., of land in the district. When the taking over of commons restricts access to the hitherto common resources the displacement of people removes them from resources. In either ways the people loss access to basic resources on which they survive.

But besides usurping the commons, the PCK also put into place a series of practices of land management that have intensified the exclusion of local people from natural resources in the region. The next section tries to list out some of these.

V. The Land Management Practices employed by the PCK

The section attempts to elaborate land management practices employed by the PCK as it tried to maximize profits from its agrarian and non-agrarian activities with these lands. The section argues that historically, the land management practices adopted by the PCK have been highly exploitative and exclusionary with complete disregard to the local ecology, economy and development. This is argued by presenting five aspects of the resource management practices that emerged in the course of field work, through the analysis of narratives from field visits, government documents, media reports and civil society documents.

In this section I try to trace the new forms of spatial control instituted by the PCK, through examination of specific instances in which they became evident, collected mostly through interviews with local residents and anti-Endosulphan activists, and from accounts they have published in the press.

(1) Control over free movement of people: the spatial control mechanisms placed across the boundaries restricting the local people from using roads within the area has ignited protest mobilization by tribal groups.

- In Rajapuram Thottodi, (estate under the ownership of PCK) tribals had to pay tolls to pass the check posts established by the PCK. For every passage through which the tribals had to pay a sum of Rs.100 and this had caused agitations organised by 'Malavettuva youth movement' (a tribal youth organization) as early as 2005 and the media also intervened bringing the issue out into the public discourse. The State Human Rights Commission sent notice to the PCK in 2010 and had ordered the corporation to open up the check posts. The opening of the check post thus put an end to 35 year long struggle for access to public roads.(Rahman 2011)

Table.3.2. Number of Houses within the plantations owned by PCK

Estate	Land	Number of Houses	
		Inside	Outside
Kasargod	2190	210	1593
Rajapuram	1526	36	225
Cheemeni	980	46	208

Source: Sivaraman Commission 2003

The above incident should be understood in its gravity by looking at Table 2 showing the number of households within the plantation area owned by PCK. There are almost 292 households located inside the area covered by the three estates and the spatial control mechanisms put around the area restrict these households from leading a normal life enjoying constitutionally guaranteed rights and freedoms.

In an interview⁴⁷, Sreenivasan, ex-member of Enmakaje Panchayath, pointed out that the PCK from the very beginning has acted with hostility towards the local population. People were threatened from entering the PCK area even for collecting fire-wood or green manure. The plantation has watch-guards around the area who stop people from crossing the boundaries and often confiscate their tools -- knife or sickles --to cut down firewood. There is the widespread view evident in the interviews with local people, that it was a common practice for the local people, especially children, to get inside these plantations, collect cashew and sell them out to earn their pocket money. Narratives from people living near the plantations and activists elicited the stories where such kids who 'trespassed' into the property were taken into custody and severely punished by the watch guards(Field Notes, 2012, 2013). Dr.Y.S.Mohan Kumar, a doctor and one of the activists who played an instrumental role in spearheading activities against the plantation and Endosulphan, remembers in a newspaper interview how he was mistreated and tied down to a tree by one of the watch guards for entering the plantations and collecting some cashew nuts (Mohankumar, 2011).

Not surprisingly, Shafeeq a young activist in the Muslim organisation Solidarity which was active in the anti-pesticide campaign, used the word "imperialistic", "to describe the resource management practices adopted by PCK in his interview. He was vocal in accusing Plantation Corporation of transforming the area and households as its colonies and "ruling them with all might and power". The entire scheme of management, he felt, was one of colonization-when an external agent comes in, appropriates the resources and rules the people who actually are custodians and owns these resources.

One of the earliest activists in the anti-Endosulphan movement, M.A.Rahman, has indeed written at length about the colonial forms of resource management strategies followed by the PCK, ignited public discourse through his articles in popular magazines and newspaper. He refers to an incident where a family was denied the

⁴⁷ Sreenivasan, Enmakaje, 24.1.2013

right to have a vehicle inside the plantation corporation for carrying a dead body of one of the inhabitants within the area. The people after prolonged arguments had to carry the dead body on their shoulders. The author has accused plantation of practicing *corporate apartheid* (Rahman 2011: 32)

These narratives seem to indicate spatial practices of the PCK which are not unlike those attempted by the colonial government and the new landlords in the region just before independence, which were strongly resisted by local people then. The PCK functions as typical plantation economy which produces solely with profit motive, eyeing international markets, and it rests upon specific spatial, resource, and labour control mechanisms.

(2) Limiting local self-government and local development

The strategy of limiting access to resources and mobility of not only the local people, but also the local self-governments (LSG) has been another way in which the PCK has sought to assert its control over land and delineate its area as 'separate space', only partially under the purview of the local bodies. For instance, much evidence can be produced for its consistent denial of land for development projects put forward by the local self government bodies in the region. The PCK influences the local development initiatives by refusing to release land for such projects which it does not see as fit. A few instances:

- In Muliyar panchayath the LSG had to pay Rs.5000 for every electric posts laid for almost 150 posts laid within the plantation area for bringing electricity to the interior villages. The Public Works Department (PWD) had to pay money to the PCK for building a road inside the plantations (Interview, Field Notes).

The irony of such 'development' does not go unnoticed, especially by elected representatives: Mohammed Kunji, ex-president of Muliyar Panchayath said that the entry of PCK as a public enterprise was welcomed by all as it was expected to

provide employment and ensure crop improvement but it ended as a “company model” .

“It is upsetting to see in a panchayth like Muliyar around 367 ha., of land is held by PCK, other 400 ha., by the forest department then how will we find land for local development initiatives like a school or a health centre...they have failed to produce proper records till this date...Therefore, we request PCK to do resurvey, draw their boundaries clear and hand over the remaining area to the panchayath...”

(Mohammed Kunji, Pouvval)

The PCK had also turned its back for requests for release of land for the proposed medical college and also for the present Central University campus(Rahman, 2011). At the same time it announced a project for a Cashew Processing Unit on the same land. It is clear, however, that the PCK is not entirely averse to granting land, and this seems to be driven by not so much concern for local development as by other calculations: for example it did allot 1600 acres of land in Cheemeni for a proposed Power Plant. However the project was scrapped due to popular protests and the land was kept aside for Adivasis (350/2002/TRDM)(Rahman, 2011). It is striking that while the acquisition of land for the central university of Kasargod has been stricken by procedural delays from the PCK, the land for a proposed thermal power plant (which never took-off) has been released in no time.

(3) Land lease violations and outstanding lease rents

Besides the Rajapuram estate, the PCK has a number of other estates that have been leased out from the Forest Department. Interestingly, for the PCK, the leasing of forest land is a strategy that allows it to extend its control over land through converting forest land into commercial plantations and in fact, to rubber plantations, even(Rahman 2011). The following table gives the area of forest land held under each estate.

Table.3.3: Forest land with PCK

Plantation	Area in Ha
Koduman	1300
Chandanappally	1600
Thannithodu	699
Kallada & Athirappally	4056.5
Nilamboor	555
Perambra	1230
Mannarkkadu	513
Rajapuram (Illegal)	1522

why not PCK sources or CAG reports?

Source: Furnished by a legal activists, also available in <http://keralabhumi.blogspot.in>

In these conflicts, the PCK asserts itself - not just against the local people and the LSGs, but also against another government department --and precisely around the question of natural resources. Here again the peculiar immunity the PCK seems to enjoy in such decision-making is interesting indeed.

One such confrontation led to a court case filed by the local forest rancher against the PCK for planting rubber violating lease agreement (which stipulated the planting of only cashew and no other crops on the forest land taken on lease by the PCK) and illegal felling of trees in the forests. The petition accused the PCK of planting rubber (after felling cashew) in Rajapuram forest area against the license stipulation, thus violating the Central Forest Conservation Act on the 43.13 Ha it has been holding on lease from the Forest Department from 1977).

Also, the license permits only the cultivation of cashew and does not permit felling of trees or planting any other plant/ tree variety in the forest land leased out (MoEF, year). The complaint document says that the PCK has felled around 9134 cashew trees and 16 other trees (forming part of natural forest). The plantation has started a shift to rubber converting one fifth of the total area into rubber and has already converted 100 Ha in Chokkamoola (Muliyar) and 100 Ha in Sarppamala (Perla) into

rubber.(The reason given has been the losses incurred in cashew cultivation following the ban of Endosulfan). Given the fact that HYV rubber is notorious in bringing ground water tables down we can expect acute water shortage and crop failure in the coming years (Rahman 2011, Keralaabumi.blogspot).

The PCK has around Rs.848.19 Lakhs of outstanding lease liabilities towards the Forest Department which it presently is contesting in the court, asking for a waiver⁴⁸ (Annual reports 2008, 2009).

Include Hareesh's Interview here: which claims that it is better to close down the PCK as the liabilities of the corporation is much more than the profits.

(4) Transforming the Nature of the Land

In this section we examine the agrarian history of the region to understand the shift in cropping pattern in the region; from a rich multi-crop farming system to a monoculture cash crop economy, over the years.

The history of cash crops in the region can be traced back to the Dutch and Portuguese, as they were instrumental in the spread of commercial cultivation of cash crops across Kerala. The initial success of European planters in raising coffee and tea justified conversion of forestlands into plantation of cash crops and also trade rights on the spices of Malabar Coast were coveted by colonial powers. Teak was viewed as important resource as it was heavily used for building mercantile and warships (Amruth, 2004). The expansion of road networks in the 1920's made the forest accessible for timber work and for immigration and inhabitation. The immigration from Southern and Central Travancore has also played an instrumental role in expanding the cash crop cultivation in the region. The control of Malaria in 1948-50 and the encouragement given to land reclamation for growing more food

⁴⁸ In the annual reports it has been made clear that the PCK has not being paying the rent from 1999-2000 due to paucity of funds and against such continuous defaults the Forest Department has claimed penal interest of Rs.848.19 Lakhs for not remitting lease rent in the increased rate of Rs.1,300/- per Ha., as stipulated by the G.O.(MS) No.11/89 dated 20/01/1989.

Francis ?
crops in the face of food scarcity created by the post-war conditions gave a boost to in-migration and encroachment.

The travelogue by James Buchanan leaves a rich account of the types of crops cultivated in the region during his visit. The Madras District Manual of South Canara, offers a detailed description of the crops cultivated in the region and brings out the multi-crop agrarian system of the region which cultivated cereals like rice, ragi and samai; (year) pulses included dhol, green-gram, black-gram, cow-gram; orchards and garden d plantains, vegetables and cocomuts; condiments and spice included chillies, cardamom, pepper, ginger, turmeric, betel leaves, arecanut and sugar; sesame and gingerly oil and lamp and castor oil formed the oil seeds along with tobacco, coffee and other crops (Stuart, 1983).

To quote from the District Manual (1983)

Rice is by far the largest crop, about four-fifths of the cultivated area being under it. Next comes the cocoanut palm, which occupies an extent of nearly 25,000 acres. This palm is a favourite object of cultivation among the inhabitants of South Canara and of the adjoining district of Malabar and numbers of trees can be seen in front of every house. The dry grains including the pulses, occupy the next place; the only one which is grown to any considerable extent is ragi and the average area under the crop during the last six years was only 3,289 acres. The acreage under pulses varies from 41,150 acres in 1889-90 to 35,803 acres in 1891-92. Of special crops the most important are pepper and the arecanut, the normal acreage under them being about 4,000 and 9,500 acres respectively. The area under arecanuts has fallen slightly, viz from 9,818 acres in 1887-88 to 9,257 acres in the last year of the series. (Stuart, 1983:p.162)

This clearly brings out the agrarian system of the region which was dominated by food crops, and the agricultural practices included the slash and burn or shifting cultivation practices by the local tribes, *Punam* or *Kumeri*. The colonial policies of

resource management has been detrimental to the traditional agricultural practices and the Forest Act imposed severe restrictions on the Punam cultivation pointing out that the activity is ecologically destructive (Pouchepadass 1993, Amruth 2004). Thus the colonial system of resource management had initiated the process of transforming the region into cash crop and monoculture economy.

The colonial legacies of resource management were followed by the post colonial state by establishing the PCK in the region in early 1960s for the promotion of cash crop cultivation in the region. Perhaps the most potent instrument of spatial control with which the PCK not only managed space but in the process, transformed its very nature, was the cropping pattern it introduced to the region. The instrumental role played by the state-led agricultural development policies in destroying the local agricultural economy which was self-reliant producing innumerable food crops including local variants of cereals, pulses and vegetables has been much studied by now. The traditional agricultural practices in the area have been destroyed and replaced with pesticide- intensive scientific agriculture. The cropping pattern followed by the PCK has been uniform, confined strictly to cash cropping leading to a system of monoculture in the entire area brought under cultivation. The ecological after effects of mono-cropping is becoming increasingly evident over the years by the lowering water table, increasing atmospheric temperature (V.S.Vijayan 2010).

Examining the land use pattern by the PCK we can see that after the imposition of ban on the use of endosulphan in the area which came into effect during the 2000-01, the conversion has been from cashew to rubber as mentioned above. The shift from cashew to rubber by PCK has been made citing the losses the corporation had been incurring due to the decline in productivity and yield from the cashew estates following the ban of the pesticide use (interview with PCK staff and media reports). A closer examination of the data on the sale of cashew by the corporation however, does not show any declining trend neither in profit nor in sales figures during the period (after 2000-01 till present) of the ban on Endosulphan (refer Table 3.4).

The recent trends in cropping pattern

The data from the latest Prabhakaran Commission Report (2012) points out that the cropping pattern in the district is heavily skewed towards the cash crops. The table below (Table 3.4) reveals that the area under almost all the crops has reported a decline over the decade (from 1999-00 to 2010-11) except for rubber, arecanut and vegetables.

Table.3.4. Changing trend in the area of crops between 1999-00 to 2010-11, Kasargod

Crop	Area(in hectare)	Area(in hectare)	Reduction in area (%)	Increase in area (%)
	1999-2000	2010-11		
Coconut	56,183	56,174	0.02	
Rubber	22,248	31,740		42.66
Arecanut	12,738	18,039		41.62
Cashew	19,962	6,803	65.92	
Paddy	8,386	4,155	50.45	
Pepper	7,051	6,830	3.13	
Banana	3,235	2,283	29.43	
Vegetables	954	1,024		7.34
Sweet potato	78	44	43.59	
Tapioca	1,280	335	73.83	
Ginger	129	22	82.95	

Source: Prabhakaran Commission Report 2012, Chapter 2

The decrease in area has been highest from Ginger (82.95%) and Tapioca (73.83%) followed by cashew (65.92 %). The decline in area under paddy by almost 50% is alarming considering the persistent decline and destruction of wetlands in the state and its ecological ramifications (cite other studies). A crop like sweet potato, which has been part of the traditional agrarian system and had made its entry to Buchanan's travelogue, 1802(Buchanan) about the region while describing the local crop varieties, has reported a decline of almost 43%. From the field trips across the district and discussions with agricultural officers and local farmers, it appears that the conversions has largely been from cashew to rubber, following the PCK's

decision to chop off cashew trees and replacing them with rubber. The returns that rubber fetches from the improved market situation at present explains these massive conversions and there are now a large number of rubber nurseries in the district selling high yielding varieties of rubber samplings. The huge dip in land prices in the Endosulphan-affected areas – the collapse was a result of the sale of land by the ecological refugees of Endosulphan pollution -- has also contributed to the further acceleration of destructive pesticide-intensive commercial crop farming, mainly of rubber. Prices have been very low, considering the high prices of land elsewhere in Kerala. In some parts, the price is as low as Rs 1000 per acre, and the buyers, majorly, are planters and real estate agents from central and southern Kerala. Many areas mostly in the border districts of northern Kasargod have been converted completely to rubber plantations after being sold off this way. Around 400 acres of land in Enmakaje panchayath alone is being planted with rubber. Thus the PCK not only intensifies destructive monocropping and pesticide and fertilizer overuse through its shift to rubber, it also contributes indirectly to it. The ecological disaster of Endosulphan that it caused has effects that contribute indirectly to the fresh revival of monocropping there through private plantation owners' planting rubber in the land abandoned by the Endosulphan victims.

The disaster could have been used as an opportunity to revive the local ecology by effecting a shift from cash crop cultivation to local and indigenous crop varieties, food crop cultivation and mixed cropping practices with fruit bearing trees, replacing a mono-crop agriculture system with a more diverse, multi-crop farming system with livestock support. However, despite all the evidence of its destructiveness, the PCK's major instrument of land transformation seems to have found a fresh lease of life through rubber now. To sum up this section on the PCK's spatial dominance in Kasaragod, we have seen that the PCK maintains its control over a very large chunk of land in this region through strategies and mechanisms that control over the mobility of local people and their access to resources, and restrict the activities of local self-governments. Keeping local people thus at bay, it further seeks to extend its control over land by usurping forest land and turning it

into plantation lands. Lastly, its strongest source of dominance over land has been pesticide-intensive commercial agriculture, which it extended over land that had been hitherto unaffected by it in Kasaragod, and which it continues to wield to entrench itself further in the region in the wake of the ecological disaster.

VI. The Developmentalist Janmi

The history of plantation societies provides eloquent testimony to the proposition that “rational” economic behaviour by profit-seeking firms, depending on the circumstances, actually serves to prevent social economic development even as the individual businessmen prosper (Mandel 1972).

The state-led plantation corporation of Kerala has been undertaking a typical plantation economy production system⁵⁰ as defined by Mandel (1972)⁵¹ which has

⁵⁰ According to Mandel, the plantation as a unit of production is characterized by very low incomes for the bulk of the population at the same time yielding profits, low labour productivity, continual and generally successful search for improved technology and reduced costs of production and a system of labour force control which has extended from slavery to other mechanisms where there is contrived absence of alternatives to which the labour force could turn.

⁵¹ The use of extra-market means of congregating and utilizing labour distinguishes these plantation-dominated economies from capitalist ones, where they rely on the market to allocate labour. Plantation economy as a production system has strong colonial roots where the production is for the international market and with clear profit motive, hence has strong non-feudal propensities, but the nature of labour force control through non-market mechanism makes it impossible to classify as capitalist. Therefore, Mandel tries to define plantation economies as, ... regimes which can be considered neither capitalist nor feudal and which have their own dynamic pattern based upon the technology and social relations which inhere in the plantation as the dominant unit of output (page 57).

Wolfe points out that the plantation is an instrument of force, wielded to create and to maintain a class-structure of workers and owners, connected hierarchically by a staff-line of over-seers and managers (p.136). He argues that wherever risen, the plantations have destroyed antecedent cultural norms and imposed own dictates either by persuasion or compulsion, often entering into conflict with the cultural definitions of the affected population. However, this author ignores the importance of labour control mechanisms; Mandel however highlights this and argues that the productivity of plantation is determined by the availability of low-wage undifferentiated workers, the supply of which is ensured by the planter-regime's harsh and brutal methods of congregating and disciplining labour, either by disrupting indigenous societies or importing whole new populations. To obtain the requisite number of workers at profitable wage rates the plantation owners resort to non-market mechanisms of labour force mobilization to achieve the desired level of output (Mandel 1972, Wolfe 1959).

aspects of both feudal and capitalist production system. The above mentioned cases throw considerable light on the institutional power that the PCK embodies. The above cases point out that the state-led PCK has been following a highly feudal and exploitative resource management strategy which has excluded the local population and exerted territorial and spatial control mechanisms over the region resembling neo-colonial or neo-feudal forms of resource management and exclusion.

The PCK has been extending its territorial and spatial control by putting in place neo-feudal forms of security systems including guarded check posts and toll booths in and across the area under its ownership. The practices employed for extending power, control and rule by the corporation make the area resemble an internal colony⁵² of the bureaucracy and management ruling the corporation. Following Peter (2001) we could argue that decolonization in the present case has only resulted in the mere replacement of foreign owners by local ones who enjoy key advantages of direct access to the centers of political power. . Indeed, there is much that indicates that the PCK has been engaging in what may be called as “recolonization” which Powes Parkop views as *the modern form of colonialism* (Parkop 1998) and Bugotu who uses the term synonymous with ‘neo-colonialism’ also draws connection to being a part of a development project (Bugotu 1975 as cited in Bargh 2002).

From the above discussion, I argue that the public-sector PCK, the rationale for which was clearly crafted from within the broad ideological horizons of Nehruvian with its mandate of , modernization, has functioned producing political effects that hardly be regarded as ‘modern’ in the idealized sense. On the one hand, it is certainly embedded in modern capitalism – it has been functioning with strong profit motive, eyeing both domestic and foreign markets and destroying the antecedents of culture and tradition in agriculture. However, it continues to exhibit strong semi-feudal characteristics, like the presence of strong non-market labour,

⁵² The term internal colonization is used here to designate the process by which large parts of many southern states are still in effect being colonized by their own ruling elites (Peter 2001).

social and resource control mechanisms. make the system non-capitalistic as well. Therefore, following Mandel (1972) and adding resource control and social control mechanisms to his definition, the PCK may be characterized as a manifestation of the plantation economy which often perpetuates underdevelopment in its area of operation.

VII. Conclusion:

The chapter argues that through the PCK, the Nehruvian-developmental state, despite its stated aim of economic modernization, refurbished colonial legacies in the economy, promoting plantation economy, extending it into hitherto-unaffected areas and at the expense of rich and diverse local agrarian tradition. The extension of plantation economy has created extractive economies where the state engages in production with the sole motive of making profit, the product is exported, and the ecological degradation stays back and falls heavily on the local people. Fieldwork in the areas of Kasargod district where Endosulphan spraying has wrecked havoc reveals these operations of power are sensed by local people who have protested against the PCK's role in the disaster. It has also revealed the extent to which specific spatial control mechanisms and strategies have helped to entrench the PCK and ensure it an enormously dominant position in the resource conflicts in Kasaragod since its formation in the early 1960s. This chapter has briefly examined four such strategies/mechanisms. However, the semi-feudal nature of the PCK is also evident from the relation between the PCK and its workers, as the last section reveals. In sum, this chapter has tried to probe the institutional power of the PCK - the history of its entrenchment in Kasargod - in the hope that it will help understand the ecological disaster from Endosulphan spraying not as the coincidental result of a random decision, but as the outcome of a certain model of planned development that eschewed ecological insight and rested on semi-feudal props.

Appendix 3A I

Land Revenue system

Kurup points out that the

The dawn of nineteenth century marked a major change in the political history of South India due to the liquidation of the Mysore Kingdom. The territorial possessions of Tipu Sultan after his demise at the battle of Seringapatnam were partitioned among the British, the Nizam and the Peshwa. The fertile and strategic province of Kanara with coastal lines was annexed by the English East India Company. The southern most regions of Kanara, adjacent to Malabar, were later formed into a separate district known as South Kanara consisting of Korial (Mangalore), Bekal (Kasargod) and Neelisaram (Nileshwar). It was the first time that this region passed into the sovereignty of a foreign nation and experienced colonial policy of surplus extraction (p.1)

After the taking over the region Captain Thomas Munro was deputed as Settlement Officer and Collector of Kanara. Despite being aware about the impropriety of the settlement made by the Mysoren authorities in Kanara he followed the same in making the first settlement under the British. A detailed examination of the Kanarese system of revenue assessment made by Munro brought out that the foundation of the revenue system was laid by Harihar Raya during 1334 and 1347 based on *beejavari* for rice lands. He also examined the system introduced by Hyder Ali and Tipu Sultan and criticized their revenue policy for heavily assessing the waste land cultivation and states that if such an assessment continued in ancient times, "Kanara would long ago have been converted into a desert." (26. Munro 1800)

Munro's revenue settlement followed the revenue policy of Col. Read and declared the settlement as "fixed" or "permanent". The system followed was ryotwari, where the state is brought in direct contact with the owner of land and collects revenue through its own servants without the intervention of an intermediate agent such as Zamindar or farmer and this would, an authority stated, create peasant proprietors. (28)

Land tenures

The exclusive right to hereditary possession of usufruct of the soil was termed *warga* in South Kanara meaning separate and independent property in land. Being an original title to the land, the tenure is known as *Mulewarga* and the land holder a *Wargadar*. The landlords further rented out the land to a large number of inferior holders or tenants known as *ganies*. The system was not share cropping but tenancy on the basis of written or oral contract. The tenants were of two distinct classes viz., the *Mulagenies* or permanent tenants and the *Chaleganies* or temporary tenants. The lands were further classified as *kadim* and *hosagama*.

The right enjoyed by a *Mulegani* could not be sold by a land lord but he could mortgage it. It was more like a permanent alienation of land in favour of a tenant for his investment of capital and labour. They either directly cultivated the land or sub-rented to temporary tenants or *Chaleganies*.

The *Chaleganies* were numerous than the *Mulagenies* who hel land lease for a fixed period either from *Mulagenies* or *Wargadars*. They could be evicted or removed after the expiry of the period of lease. Midway between *Mulagani* and *Chalagani* there existed a tenure known as *Vaidagani* or lease for a specified period.

The mortgage of land with possession was known as *arvar* and a simple mortgage as *adavu*.

Besides these various tenure holders, there existed a class of landless agricultural labourers in the production process. **They were but dwellers and exposed to extra economic coercive force of local landlords.**(cultivation was carried out by hired laboureres (*kulia lugalu* and hereditary serfs (*mulada lugulu*)).

There was concentration of land with few hands or big landlords under then thousands of temporary tenure holders of different types functioned as real cultivators producing revenue for the state and rent for the landlord. Kurup (2000) observes that even under the present proprietors land monopoly continued and

mulewargadars controlled big tracts of land under the category as peasant (Kurup 2000).

The faulty system of land revenue under the colonial government placed peasants in miserable condition. Instead of land tax the government was realising a portion of rent. The impact of colonial land revenue system on the landlords and peasants in South Kanara was disastrous than that of any other parts in the Madras Presidency. The petty landlords were pauperized and their estates were attached and sold under the revenue recovery act.

The restriction of Kumer or shifting cultivation citing concerns over forest destruction (which provided the colonial government with valuable timbre) further restricted the scope for expansion of occupational means to an increasing population to the traditional cultivating system of *kumeri/kumari* in South Kanara.

The price of the commodity was never guaranteed by the government. In order to ensure the revenue the wargadar took all possible steps to get more rent from his property and leased out the land to the highest bidder.

The rural poverty, agricultural backwardness and rural employment were the result of the colonial policy towards the agrarian classes. The policy never was helpful for capital or surplus accumulation for the middle and lower agrarian classes.

It should be noted that during the latter half of 19th and first half of 20th century ,when tenancy legislations were introduced across colonial India no tenancy acts came forth in South Kanara in favour of the tenants but there certainly were acts which helped the land lords to realize more rents from the tenants

The colonial state was forced to change its policy towards the agrarian classes when the national movements gained pace and was strengthened by mass participation and often faced peasant resistance. The British left a system which was complicated and was capital was hardly available. The constant drain through revenues made South Kanara one of the backward districts in agriculture, capital formation and

development. The system offer prosperity to a handful of wargadars favored heavily by the colonial policies and legal instruments were a parasitic class in the district. According to Kurup they also benefited by the growing capitalism under the Raj (Kurup, 2000).

Appendix 3A. II

Table 3A.1. Profit and Cashew sales of PCK from 1989-2012

Year	Profit in crores of Rs.	Cashew sales in crores of Rs.
1989-90	0.89	1.38
1990-91	1.41	1.48
1991-92	1.94	1.92
1992-93	1.01	2.37
1993-94	6.31	3.19
1994-95	5.99	3.14
1995-96	10.35	3.79
1996-97	3.62	3.96
1997-98	-4.98	4.09
1998-99	-8.69	4.19
1999-00	-4.64	4.93
2000-01	-8.68	4.83
2001-02	-6.17	4.00
2002-03	0.10	4.12
2003-04	5.59	3.73
2004-05	5.73	4.81
2005-06	2.62	3.93
2006-07	11.40	4.24
2007-08	13.87	4.18
2008-09	20.78	3.49
2009-10	33.66	3.44
2010-11	76.16	2.97
2011-12	17.12	3.98

Source: Annual Reports, various issues, Plantation Corporation of Kerala

CHAPTER 4

Is Anti-Endosulphan Campaign a New Social Movement: Exploring Actors, and Scale of the Movement?

In this chapter I am examining the emergence of the anti-Endosulphan campaign against the Endosulphan pollution which unfolds in the backdrop of the history of antagonism prevailing between the people and PCK in the region as discussed in the previous chapter. The chapter also traces the history of resource conflicts and local environmentalism in the region by exploring the details of the forest conflicts against the colonial administration fought in the pre-Independent period. The chapter aims at understanding the unfolding of the anti-Endosulphan campaign, its origin and growth by conceiving it as a new social movement. A detailed exploration of the growth of the movement traces the expansion of the movement to multiple actors, domains of action and geographical scales. The attempt here is to understand the dynamics of the anti-Endosulphan campaign which emerged as an environmental movement challenging the development model of the PCK and fighting for the internalisation of the negative externalities generated. The chapter engages in periodisation of the movement to decipher the changes in the nature of the movement over the period.

I. Introduction

One of the key features of political and economic struggles of the late 20th century in India is the emergence of ecological movements which attempt to challenge and redesign the process, pattern and extent of natural resource utilization, away from the dominant model of resource-intensive development⁵³ (Bandyopadhyay and

⁵³ The ideology of the dominant pattern of development derives its driving force from a linear theory of progress. The linearity of history created the ideology of development that equated

Shiva 1988). The burgeoning of ecological movements has been a major political development in the global South aim at social equality, distributive justice, economic efficiency and ecological sustainability (Bandyopadhyay and Shiva 1988; Guha and Gadgil 1994; Karan 1994; Swain 1997). These movements question the validity of hegemonic concepts, processes and indicators of development⁵⁴, which have almost remained monolithic in the post World War II period (Bandyopadhyay and Siva 1988, Gadgil and Guha 1994; Baviskar 1997). However, unlike in the North, the conflicts here are not so much over how the environment should be used but over who should use and benefit from it (Gadgil and Guha 1995 as cited in Dwivedi 2001). The political economy approach to resource struggles attributes the rise and growth of environmental movements in the south to the predatory exploitation of natural resources that feeds the process of development in postcolonial societies, the non-local production relations governing natural resource use and transformation and inequality in resource distribution (Bandopadhyay and Shiva, 1989).

According to Parajuli (2001), the ecological crisis is caused by the uneven distribution of resources among different strata of population in a given ecological niche. According to Dwivedi (2001), environmental movements in Third World have been considered as actions by the marginalized poor to protect their environmental

development with economic growth, economic growth with expansion of market economy, modernity with consumerism and non-market economies with backwardness (Shiva, 1991)..

⁵⁴ The notion of developing certain regions of the world began to take institutional form during the immediate postwar period. The Bretton Woods Conference of 1944 established a new architecture of development where the IMF (International Monetary Fund) was entrusted with the responsibility of regulating rules of commercial and international regulations between states while World Bank was responsible for economic development. The UN was created in 1945 to promote cooperation and prevent international wars. These institutions have been criticized for their bias against poorest countries pointing out at the workings of global political economy and the hegemonic powers that maintain it (Goldman, 2005; Bebbington et al. 2004). The hegemonic power of World Bank Crewe and Axelby 2013

The concept of development was constructed and continues to be used in political economy based on an implicit standard of Western economic growth, measured by the yardstick of industrialization and urbanization (Deb 2009). Escobar (1995), observes that development has penetrated, integrated, managed, and controlled countries and populations by creating a type of underdevelopment which is politically and economically manageable. The hegemony of development discourse

means of livelihood and sustenance. Environmental resources such as land, water and forests constitute the material basis of production and reproduction of the economically- poor. When they are destroyed, movements against growing encroachment and degradation by the richer and better-off sections of the society started emerging. This, according to many scholars, is what distinguished Third World environmentalism from that in the First World (Martinez-Alier 1992). However, Dwivedi raises strong objection against this classification of ecological movements in the global South as only 'livelihood struggles' (Redclift 1987); instead, he stresses the diversity and contextual specificity of environmental movements in the South. He points out that Third world environmentalist struggles ought to be perceived in their multidimensionality, as inclusive of a broader corpus of actors, themes, stakes and practices (Dwivedi 2001). The existing studies on Southern environmental movements have a tendency to see these movements as local manifestations of resource conflicts generated nationally or globally, with the locally situated victims of the environmental degradation taken to be the main actors, Very often; these movements are also understood as essentially 'anti-science'⁵⁵. They are associated with 'new visions of development' based on new productive rationalities, environmental sensibility, and cultural pluralism.

However, these tendencies stand contested in recent literature, mainly because not all of these struggles remain local resource conflicts in any permanent sense. Rather, they become struggles that are played over interest, knowledge, values and meanings in local as well as national and global arenas; thee actors include not just the 'affected poor', but a variety of action groups spread across the local to the global ,engaged in diverse practices and networks. The reliance on professionals, experts and the knowledge class in general also signifies their 'science-base' (Buttel and Taylor 1994, Castells 1997 as cited in Dwivedi 2001). Attributing a prior

⁵⁵ Since science is characterized as a western, homogenizing, alienating and centralizing force underlying modernization and development, these movements against the dominant model of development as modernity is considered 'anti-science' (Shiva 1991).

environmental awareness to such mobilizations is untenable mainly because being affected by a particular problem need not necessarily engender a willingness to take collective action with respect to a range of issues. It is also possible that the environmental concerns in the struggles feature in as part of a larger set of political and cultural stakes (need not be material always).

Environmental movements have generally been viewed as part of a certain generation of political movements that followed the rise and decline of class-based struggles for social justice, commonly referred to as the 'New Social Movements'⁵⁷

⁵⁷ According to Habermas (1981 as cited in Canel 1997) NSMs represent defensive reactions seeking to retain or re-create endangered lifestyles. Offe points out that the emergence of new actors is the result of growing intervention of state (steering mechanism) in regulating economic and social life whose identities are constituted in the intersection between state and civil society. He explains the rise of new movements within the context of the crisis of legitimation resulting from the new relationship between state and society in late capitalist societies. The emergence of NSMs must be understood as reaction against the deepening, broadening and increased irreversibility of the forms of domination and deprivation in late capitalist societies (Offe as cited in Canel 1997).

Touraine relates the rise of NSMs to the emergence of a new societal type, post-industrial society, which has brought 'a new culture and field for new social conflicts and movements' (Touraine 1985: 781 as cited in Canel 1997). A central concept in Touraine's sociology of action is historicity, which refers to the capacity of society to 'act upon itself' in order to reshape the set of cultural models that guide social practices. Touraine points out that the increased reflexivity of post-industrial society regarding the social construction of reality is demonstrated through the emergence of new actors struggling over non-economic, non-political themes and non-material themes. In short, Touraine's view separates the social from the political. In contrast to this Laclau and Mouffe assert primacy of political articulation and the broadening of politics (Laclau and Mouffe 1985: 76-7 as cited in Canel). They argue that identities and interest do not have a pre-discursive existence and they are contingent upon the political processes, also they do not derive unity from a single economic logic.

Laclau and Mouffe explain the emergence of new social movements in reference to the availability of the democratic discourse, creation of new antagonisms and the consolidation of a 'new hegemonic formation' following the end of the Second World War (Laclau and Mouffe 1985: 76-7 as cited in Canel). The new formation brought about fundamental changes in production, in the nature of state and in culture, which resulted in an increased commodification⁵⁷, bureaucratization⁵⁷ and massification⁵⁷ of social life, creating new social forces. The NSMs emerge out of these new conditions that are given by reorganization of the production process and the expansion of capitalism into wider areas of social life (commodification), the emergence of new type of state (bureaucratization) and new mass culture (massification).

(NSMs). In a context in which the conventional assumptions about development have reached an impasse, new social movements (NSMs) around the issues of gender, ecology, identity, ethnicity and sexuality are challenging statist indicators of growth and asserting livability, sustainability, and equality as new parameters of development (Canel 1997, Parajuli 2001; Laclau and Mouffe 1985: 163-64). The emergence of new social movements coincides with the declining hegemony of the development discourse (Kothari, 1988; Nandy, 1987; Shiva 1988 and Chatterjee, 1986) Kothari 1988; Nandy 1987; Shiva 1988; Chatterjee, 1986). In India the environmental critiques of development is built around three ideological streams⁵⁸: 'Crusading Gandhian', 'Appropriate technology' and 'Ecological Marxism' (Guha, 1988).

NSMs challenge the state's authority and its claims to represent the people and are distinctly different from the old anti-systemic movements as their focus is not to capture state power but to transform the nature of politics. NSMs in India and elsewhere, 'dispel the myth of a vanguard' (Parajuli 2001, Singh 2001, Baviskar 1997, Castel 1995) as antagonisms are expressed not through class but multiple 'sites of power' such as gender, ethnicity, caste and regional identity. The emergence of NSMs has served to expose the twin myths of development⁵⁹— that it promotes internal equality, and that it enable the underdeveloped to 'catch up' through fostering economic growth. They have also brought to light the loss of popular confidence in the government and parties, the breakdown of the cultural

⁵⁸ When the crusading gandhian upholds the pre-capitalist and pre-colonial village community as na ideal of social and ecological harmony, the Appropriate technology emphasizes the liberating potential of resource-conderving, labour-intensive technologies and the 'Ecological Marxism' holds that political and economic change must be prior to ecological concerns , and collective action aimed at systemic transformation must come first (Baviskar 1997).

⁵⁹ The new social movements reject the idea of growth and development, the ideological wheels on which capitalism, materialism and modernity run but anchor their ideological conceptions to the assumption of a diminishing civil society, where the social space suffers a shrinkage and the controlling ability of the state erodes the 'social' of the civil society. The NSMs emerge as the 'self defence' of the community and society against the expansion and encroachment of state and market into all aspects of citizens' life (Cohen 1985, Singh 2001).

mechanisms, and so on (Escobar 1992). Escobar argues that the demise of old models of social movements has been brought about by the failure of developmentalist state to bring about lasting improvements and of political mechanism, on either Left or Right, to deal with that failure'. The "new" on the contrast is based not on structures but on social actors⁶⁰; the promotion of democratic, egalitarian and participatory styles of politics; and the search not for grand structural transformations but rather for the construction of identities and greater autonomy through modifications in everyday practices and beliefs (Escobar 1992:31). The NSMs shift the field of social conflict from the political sphere to civil society and the cultural realm, transforming civil society by creating 'new spaces, new solidarities and new democratic forms' (Touraine 1985, Melucci 1985: 789, Cohen 1983: 106,). NSMs 'focus on grass-root politics and create horizontal, directly democratic associations that are loosely federated on national level' (Cohen 1985:667). They address themselves to the need for the democratization of the structures of life, and focus on the form of communication and collective action. According to Cohen, the new movements are transforming civil society by creating 'new spaces, new solidarities and new democratic forms' (Cohen 1983: 106)

In sum, the 'concomitant displacement of spaces and identities' by an expanding state and market which encroaches into the public and private spheres of life brings into existence these new movements (Escobar 1992, Singh 2001), and the actors of

⁶⁰ The structure of NSM is defined by the plurality of pursuits and purposes, goals and orientations, and by the heterogeneity of social bases. NSMs are loosely articulated networks of participatory democratic organizations permitting multiple membership and part-time or short-term participation and demanding personal involvement both inside and outside the organisation. These organizational forms and modes of action de-emphasize other traditional dichotomies, such as the distinction between leaders and led, members and non-members, private and public roles, means and ends, instrumental and expressive action (Offe 1985: 830, Melucci 1985).

NSMs attempt to reclaim their lost territory⁶¹ from a developmentalist-integrationist state. They offer a reappraisal of civil society (Escobar 1992) by trying to create models of pluralist democracies (Escobar 1992, Parajuli 2001, Singh 2001, Cohen 1985). Further, new social movements are also sites of creating and regenerating subjugated knowledges. They are 'autopoietic', in the sense that their presence is established by their own action, rather they produce themselves and the larger social order through their own organising (Escobar 1992). However, the differences between the 'new' movements in West and India are quite evident, as the former stand for 'quality of life' issues disregarding the issue of distributive justice, whereas the basic thrust of movements in India's ecological and women's movement is to stop the 'monopolistic control of the rich over their natural resources' (Parajuli 2001). Critique this position

It has however, been critiqued that NSMs underestimate the enduring effects of advanced capitalism in shaping the trajectory of the new social movements. Though not entirely economic the movement addresses political economy and hence it is difficult to view them as a reflection of post-industrial and post modern societies

Baviskar (1997), argues that in the case of Indian environmental movements struggles over nature has an inherent class dimension because nature also provides resources which are the bases of production⁶². The unexamined preassumption, she argues, that conflict over forest and water is environmental and that over agricultural land is not, stems from the class background of the scholars who tend to see forests and rivers as 'wilderness' and not primarily as a source of livelihood. The inseparability of, and continuity between 'red' and 'green' agenda is emphasized by Ramachandra Guha when he observes that ecological specificities limit and modify

⁶¹ Expansion and encroachment of state and market to increasing sphere of individual life, both public and private, has created the emergence of new movements to reclaim the contested terrains (Singh 2001).

⁶² According to O'Connor, the meanings attributed to nature are not exhausted by its use as natural resource; ecological politics are about 'class issues even though they are more than class issues' (O'Connor 1988:37 as cited in Baviskar 1997:40).

social relations therefore a better understanding of movements should include the economic landscape and ecological landscape within which it is placed (Guha 1989).

Kerala well known for its much acclaimed model of development in the international arenas has a strong history of public action which has played instrumental role in terms of achieving the present heights in social development and in creating a progressive political society (Krishnaji, 2007 ; Kannan and Pillai, 2004; Parayil, 1996). The instrumental role played by the political left in creating the social space in the state to fight for political rights and civil liberties has been well accepted across the world (Krishnaji, 2007; Kannan and Pillai, 2004). The progressive social movements which Kerala has staged , however has consistently neglected the issues affecting the populations standing at the margin jeopardizing discourses which articulate for the rights of adivasis, fisherfolk ,women, ecology or other identity based social movements (Kurien 1995, Devika 2010). It is to be noted that the space left vacant by political parties, by paying a blind eye to the issues of ecology, gender, caste, ethnicity and sexuality, has been occupied by civil society groups who have introduced these of non-class based grievances of communities and groups into the socio-political landscape of the state. Devika (2008) observes that there has been critical shifts occurring in the political space occupied by the organized left as well: the demise of *leftist 'political society'*, apparently imminent, seems to be offset by the formation of a *liberal welfarist 'civil-political society'*.

Devika and Thampi (2012) point out a shift in civil society in Kerala between 1970s and 1980s-creating an oppositional space to challenge the exclusions of organized politics and the developmentalist state. The shift provided 'a space in for diverse movements challenging developmentalism and its other concomitants.'(Devika and Thampi 2012). According to them, the new new movements questioned the three cultural pillars of political society in Kerala; 'faith in the desirability of large-scale development; the notion of social justice rooted in the rhetoric of class struggle and the consecration of the ideal of a consumption-oriented bourgeois domesticity as the best arrangement for shaping of productive subjects'.

The history of environmental movements in the state can be traced back to the struggle against Grasim where the people organised themselves to fight against the pollution caused by a factory (George and Krishnan 2002, Raman, 2012). They point out that the origin of the struggle dates back to 1962, even before the publication of Rachel Carson's 'Silent Spring' (which is regarded as the origin of environmentalism in the west, post war period). Environmentalism in the state took deeper roots with the Save Silent Valley campaign (1976) led by the KSSP calling for protection of an evergreen tropical forest in Palakkad and the Save the Western Ghats movement (1987). The state also has its share of popular environmental conflicts, highlighting survival, livelihood and justice in their protest vocabularies ; the Plachimada anti-coca cola struggle (Bijoy 2006), , the movement against mechanized trawling by the traditional fisherfolk (Kurien) and the Anti-Endosulphan movement in Kasargod and the ongoing struggle in Vilappishaala regarding urban waste disposal and environmental justice. In short, environment has strongly figured into the vocabulary of popular movements, though the mainstream political parties have kept increasingly away from joining these ecological distribution conflicts. However, in most of these environmental conflicts the LSG bodies have taken a proactive step in mitigating the harm and solving the issue. This should be better reflected upon in the context of the home-grown democratization programme, the PPC (Veron, 2001).

II. The History of Local Environmental Struggles in Kasaragod

The history of Indian environmentalism and resource conflicts date back to the colonial period when people reported organised protest to regain and retain their control and rights over local natural resources. The British policies introduced changes in resource endowments and entitlements which came in conflict with the local people's age old rights and practices to natural-resource utilization. The Indigo movement in Eastern India, Deccan movement for land rights or the forest

movements⁶³ in many parts of forest areas of the country, including the Western Ghats, the central Indian hills, and the Himalayas, were expressions of protest generated by newly created conflicts. The history of such resource conflicts raises questions to the proposition that environmentalism is a post-industrial, post-material-society phenomenon. The longer lineage of environmentalism and resource conflict distinguishes Southern environmentalism from the Northern variant, which traces the history of global environmentalism back to the 1960s, after the publication of Rachel Carson's *Silent Spring* (1962). Portraying environmentalism as a post-industrial, post-material phenomenon visible in late capitalistic societies, which raised mainly quality of life issues would be to obscure the Southern variant and highlight the Northern variant at its expense (Guha, Singh 2001, Canel 1997). The Southern variant, referred to as the 'environmentalism of the poor' includes struggles against environmental degradation and denial of resource access rights which put the livelihoods and survival of these resource dependent population at stake (Guha and Martinez-Alier 1997). Environmentalism of the poor combines a concern for the environment with an often more visible concern for social justice due to the inseparability of social and environmental concerns in the Southern countries. The local environmentalism and resource conflict⁶⁴ in the Kasargod region of the 20th century dates back to the *Kadakam Vanasatyagraha*, which happened during pre-independent period (1930) in Karadka village of Kasargod, against the Forest Conservation Act passed by colonial government which had denied the age-old resource access and control rights to the local people. The policy which prohibited the entry and collection of forest resources and produce was met with stiff opposition from the local community. The Act was implemented to secure colonial

⁶³ The Kumaun forest movement of the 1921 and the Mulshi satyagraha during the same year, to mention a few (Guha and Gadgil 1994).

⁶⁴ Environmentalism is not concerned simply with nature per se, it is concerned with the sustainable use of nature. The low intensity use of nature to meet basic needs is ecologically sustainable, for it maintains the regenerative capacities of natural resources. Thus Baviskar argues that the struggles of rural communities for retaining control over natural resources for subsistence can be interpreted as embodying a 'green' agenda of environmentalism (Baviskar 1997)

economic and military interests, of ensuring the continuous supply of timber for the construction of warships and sleepers for railway coaches. As noted by Puchepadoss the development of railway construction had been a menace to the Indian forests as the building of the railway network required around one million sleepers, they on an average had to be changed every 10 years. The pressure thus put on the forests of India is evidently considerable, and he points this out as the reasons for the creation of the Forest Department (Pouchepadoss, 1990). The implementation of the act prevented people from collecting forest produce including honey, wax, twigs and firewood. The Act put the life and livelihood of the people at stake, especially the tribal communities who were heavily resource dependent. During the period forest conflicts in the form of *Vanasatyagrahas* happened across the country including Karnataka, Maharashtra and Central Province and the Congress Committee in Kasargod decided to protest against the Act by choosing Kaadakam as the site of protest. The volunteers entered the forest premises in violation of the act and were arrested and removed. The repertoires of protest included entering the forest and felling sandalwood trees and getting arrested. The Naaranthatta tharavadu [homestead of a joint family] in Kadakam had been the camp for the Satyagrahis. Some of the people who spearheaded the Satyagraha include Adv.Umesh Rao, Manjunatha Hegde, Ramahegde, A.V.Kunjambu, Naranthatta Krishnan Nair, krihna Manolithaya, Chettisankaran, Karicheri Charadan Nair and N.Chaatthu Nambiar. The Satyagraha tried to expose the anti-people nature of the Forest Act and inspired the people of the region to come upfront against the colonial government. After the event Kadakam became one of the power centers for the nationalist movement and later for the communist movement.

The *Vanasatyagraha* forms a milestone in the history of public action in the region and played an instrumental role in expanding the social base of the nationalist movement in Malabar and people's familiarity with Gandhian protest modes (Balan 2001). The Satyagraha saw the mass participation of people across the social groups including local land lords, tenants, agricultural workers including local tribes people. The protestors were arrested by the police and were dropped at faraway

places from where the activists would walk back to the protest site by next day morning (Balan, Interview with Abdulla 18.11.2012). The movement marks the culmination of the collective protest against the resource use policies of the colonial government and marks the origin of resource conflicts in the region.

The Thol-Viraku [Hides-and-Firewood] Samaram during the late 1940s, which again was a forest resource conflict, not against the state but the local *Janmi* who had restricted access rights to the people in and around. The people were heavily dependent on the resources like fire-wood and green manure and the people reported organised protest against the *Janmi* who denied access. The movement turned successful in terms of gaining access rights and was popular for the participation of people from across the realms of society including many nationalist leaders.

The conflict emerged when in 1942 almost 6036 acres of the land owned by Thazhekattu Mana and Kuttamathu Kunniyoor families were sold out to Thomas Kottukappally, a planter from Central Kerala who converted them into cashew plantations. The sold property included forest land on which the local people were heavily dependent for their resource requirements including green manure, leaves to thatch roofs and fire-wood. They had enjoyed free access rights to these till the property was handed over to the new owner. Many of the people living in and around the region eked out a living by selling the forest produce collected from Cheemeni forests. The traditional rights enjoyed by farmers and agricultural labourers over the forest (Cheemeni) were denied by the new owner. The situation was further aggravated when the nearby forest lands owned by the government were also annexed by private planters and they then prohibited entry and resource access to the local people. The people had considered this their right; they rose up in protest on 15 November 1946 to regain a customary access rights over these resources. The protest was strengthened by the participation of leaders like K A Keraleeyan, and is regarded as a continuation of the Kadakam Vanasatyagraha.

The farmers entered the forest land in groups, and marched inside the region raising revolutionary songs and slogans. The private landlord called the police to suppress the protest, which saw also saw huge participation from women. The police unleashed violence on the protestors and T.K.Chandan, one of the leaders was brutally assaulted. The police was however forced to withdraw when larger groups of people including both men and women started pouring into the region and released the arrested leaders. The police charged case including the leaders T.S.Thirumumbu, T.K.Chandan, C.Krishnan Nair, U.Narayanan Nair, Nappaya Kunhambu, T.K.Kumaram, but was forced to drop the charges when the farmers reported strong agitation. These protests are part of the history of peasant rights movement in the region and they were notable also for the significant participation of women. The land which was under Issac Kottukapally was later distributed among the landless in the 1970s during the implementation of land reforms (KLRA) (Balan 2001).

In addition to the above mentioned there were also many peasant movements and revolts which can be 'draped in the cloth of environmentalism' (Guha), including the Nelleduppu samarams [Seize the Grain Campaign] in the southern regions of Kasargod including Karinthalam, Ravaneeshwaram, Pullur and Madikkai during 1948.

III. The Anti-Endosulphan Movement

The anti-Endosulphan campaign in Kasargod must be placed in the backdrop of the history of resource conflicts in the region. When the resource conflicts in the pre-Independent period portrays the antagonism between local people and the colonial state over the resource use pattern, the anti-Endosulphan campaign against the PCK brings out the conflict of interest between the local population and the developmentalist state. The detailed accounts in chapter one points out that the disaster has been the culmination of the exclusionary resource management practices of the state. The establishment of PCK and the spread and intensification of scientific and pesticide intensive agriculture in the region can be well identified as part of the developmental projects executed by the state in keeping with the

Nehruvian spirit of scientific temper and modernization. The campaign throws up a case where the local people report organised response to the ecological distribution conflict where the people bear the burden of pollution inflicted by the exploitative resource management practices and negligent use of the pesticide by the PCK.

The anti-Endosulphan movement which had grassroots origin grew into becoming a popular struggle against the pesticide has sent ripples across the national and global domains. The section traces the origin, growth and dynamics of the movement, actors and organisations involved. The period analyzed is the rough 30 year-period from 1979, when the article⁶⁵ written by Shree Padre first appeared in local newspapers and weekly through which the ill-effects of the pesticide were first identified, until the present (2012), in which Endosulphan has been banned globally in the Stockholm Convention, and locally, in Kerala, and compensations began to be given to victims.

The intention here is not to recount empirically the events during the period of interest,. It is more of an attempt to identify the phases and breaks in the movement's trajectory. I argue that the movement changed in the course of this period from being a NSM with a non-class, non-party and non-material orientation to one where there are strong, political-party preferences, and market oriented welfarism which highlights monetary compensation over environmental rights.

Understanding the anti-Endosulphan movement

The movement which originated as local resistances reported by multiple grassroots actors and organisations against the spraying of the pesticide, simultaneously from different village pockets, came together to constitute the Anti-Endosulphan movement which was later joined by many organisations, across the civil and

⁶⁵ Life is Cheaper than Cashew, The evidence, 1981. Though the first article came out around 1979 in Kannada weekly *Udayavani*, which was not could not make much impact. The articles in the same Kannada weekly during 1981 along with the one in The Evidence have played instrumental role in drawing public attention to the disaster in Kasargod, which was under making then as the PCK continued spraying the same pesticide for 10 more years after this report was published (Pooppalam, 2011).

political realms of the society. The movement is constituted by organisations and actors including civil society organisations like ENGOs, local environmental clubs, activists, the people's science movement, political organisations and mainstream political parties.

In order to have a comprehensive understanding of the movement including the time line I attempt a periodisation of the movement, dividing it into four phases on the basis of the nature of participants, domain(field of action), demands raised and the strategies used to achieve them. I use the term civil society and political society as defined by Partha Chatterjee(2011), where he defines civil society as the narrow domain/space of the state where citizens are related to state through the mutual recognition of legally enforceable rights and political society⁶⁶ as the wider domain where governmental agencies deal not with citizens but with populations to deliver specific benefits or services through a process of political negotiation, while analyzing the field of action of the movement..

IV. Periodisation of the anti-Endosulphan movement

The grassroots and civil society origins of the movement is clear from the nature and characteristics of the initial participants in this struggle. The movement since then has grown to a popular struggle with the participation of multiple organisations⁶⁷ and actors who differ in terms of objective, ideology, resource mobilization, political affiliations and modes of protest.

⁶⁶ According to Chatterjee(2004) the most significant site of transformations in the colonial period is that of civil society and in the post-colonial period the transformations are in the political society. Political society is built around the framework of modern political associations such as political parties (Sanyal, 2007). The mediation between population on the one hand and political society and state on the other hand happens either when the developmental state which seeks to relate to different sections of population through the governmental function of welfare approaches them or when the political society (parties, movements, non-party political formations) through democratic mobilisation tries to channelize and order popular demands on the developmental state (Sanyal, 2007)

⁶⁷ A detailed discussion about the organisations are given at the end of the chapter as Appendix

To understand the growth and development of the anti-Endosulphan movement further we periodize the movement and divide it into four phases (period under consideration 1981-to present).

Phase I: 1979(81) to 1997 - inactive phase

Phase II: 1997 to 2004 –civil society fighting against the state (till the Collectorate March of 2004)

Phase III: 2004 to 2011 –field of action is shifted to a space between state and civil society with entry of political parties

Phase IV: 2011 to the present –movement in the terrain of political society where many of the initial civil society participants have withdrawn from the protest.

Phase I: The identification of problem

The period largely remains as a silent phase (except for a couple of articles published by Shree padre in Malayalam and Kannada weeklies) when people started identifying the existence of health and environmental impacts in their neighbourhood. The linking of health anomalies and environmental impacts to the aerial spraying of the pesticide Endosulphan in the region is a milestone in shaping the struggle against the pesticide and in determining its future course.

The initial phase of the movement begins with the publication of articles by freelance journalist Shree Padre⁶⁸ (Padre,Enmakaje) in Kannada weeklies, *Udayavani* (*Why this Negligence?*), *Sudha* (*Cow born handicapped due to pesticide exposure?*) and in Malayalam

⁶⁸ Shree Padre, then was an active freelancer, had done a story on Hantigodu syndrome. Hantigodu is a village in Shimoga Taluk, Karanataka, where there was increased incidence of health anomalies among the socially disadvantaged people. The story on the syndrome written by Shree Padre was published in Udayavani and the article suspected the role of the pesticide Entex which was sprayed there, A local person in Enmakaje noticed this article on pesticide and shared his anxiety about cows born with deformed limbs with Shree padre. A visit to the person's house confirmed the doubts on the role of pesticide in effecting the local environmental changes and he further took the enquiry to the PCK office. But during the interview Shree Padre pointed out that never in his wildest dreams had he thought that what we saw in cattle will have some impacts on humans.

newspaper *Kerala Kaumudii*, suspecting the role of Endosulphan spraying by PCK in causing deformities reported in animals in and across Padre village. His article in *The Evidence* weekly by the title *Life is Cheaper than cashew*, published in 1981 played an important role in gaining visibility to the issue.

“People had a craze for pesticides then, I mean this has been so throughout the country, I was surprised to find that where ever you go in India you can find that pesticides are termed as ‘marunnu’[medicines] in all the languages...now I understand this as part of a massive brain wash..”

I went to the PCK office in Muliyaar to enquire more about the pesticide sprayed because nobody then had any idea about what was being sprayed over them...I had been tactical in approaching the official and asked him *kya kamala karte hein aap log?* and enquired about the magic done by PCK in producing picture perfect bunches of cashew...he was elated and praised the pesticide ‘Endosulphan’ for the better yields in PCK plantations...he also narrated the story of a person who wanted to taste Endosulphan but could only write the three alphabets BIT (which he assumes bitter) before succumbing to death, in order to explain the strength and toxicity of the pesticide”

During the same period Dr.Y.S.Mohan Kuamar, a medical practitioner in Vaninagar started noticing the abnormal rise in cerebro-neural diseases and health anomalies among his patients. The village level interactions between the actors corroborated their doubt about the aerial spraying of the pesticide by PCK (the name of the pesticide was not known to them then) being the cause behind the anomalies observed. The stage marked the introduction of the pesticide ‘Endosulphan’ to these villages through constant research by these actors, which by now has become a household term, about which they were not aware till that point. The conversations between Shree Padre and Dr.Mohan Kumar confirmed many of their doubts regarding the pesticide and the adverse effects of its spraying in the ecology and people.

“Field visits to the houses on the banks of Kodengiri river revealed to us the intensity of the disaster and we realized that we had been dealing with the tip of the ice berg till that date” When Shree Padre and Dr. Mohan Kumar started identifying the environmental and health impacts from the pesticide spraying in Enmakaje, Leelakumariamamma, an Agricultural Assistant official in Periya had started noticing health problems within her family consequent upon the spraying. The actors largely remain disconnected and their research and interventions are confined to the grassroots level. The movement originated with strong roots in civil society, during this phase the protest vocabularies reflected the rights discourse, they demanded penalization of the polluter and securing of legal and ecological rights to the people, also giving due regard to the ecological harm and the need for restoration.

Phase II: Emergence of an Environmental Movement

The second phase starting from 1997 initiates the struggle against the PCK's aerial spraying of Endosulphan. The origin of the struggle is marked by the legal petition filed by Leelakumari Amma with the Hosdurg Munsif court requesting a stay on the spraying of pesticide in her village (Leelakumariamamma 2011a, 2011b). The period witnessed the simultaneous, emergence of grassroots resistance across the areas where spraying was undertaken in the district. The period marks the beginning of a movement organised by the civil society against the state, the people fighting against aerial spraying of pesticide by the state led PCK. The initial phase of the protest was 'defensive' in nature, as the primary demand of the agitations was a stay order on the ongoing spraying.

The period saw the change in the scale of protest from local to regional, when multiple forms of protest and actors tried to draw attention from across the local and national society to the issue. The case filed in the court was followed by agitations from local people who withheld the helicopter filled with pesticide leading to scuffle between the police and protestors⁶⁹; this was the first-ever protest reported by the

⁶⁹ This happened in Muliya and in Enmakaje. (field notes), interview 17.11.2012, 18.11.2012). In Enmakaje Panchayat the protest was led by (refer CSE)

people against the spraying and the news caught media attention and helped in unifying the protests across the district by helping them to identify the common cause, the spraying of Endosulphan. The period also saw the origins of a scientific discourse debating the role of Endosulphan as the potential cause behind the disaster, through a letter written by Dr.Y.S.Mohan Kumar to the *Kerala Medical Journal* in 1997, pointing out the health anomalies reported from the village and called for further research and expert intervention. Though the letter was ignored by the concerned, it was the first of such initiatives which put the issue into the scientific realm. The scientific battle was further strengthened by the scientific information supplied by Thanal⁷⁰ which proved the acute toxicity of Endosulphan. Thus the phase saw the emergence of the legal, popular and scientific battle which later formed the most important forms of protest under the anti-Endosulphan movement later.

During the period the protest grew from being a grassroots local resistance movement organised to a mass-based civil society movement against the state. The wider social base of the actors and organisations reflects 'the non-class, non-party and non-material orientations of the struggle' (Singh 2001, Canel 1997). The participants during the period included local activists, clubs (Punchiri⁷¹), ENGOs

⁷⁰ The intervention of ENGO Thanal has been instrumental in terms of providing with the much needed initial scientific information which substantiated and almost confirmed the role of Endosulphan towards causing the disaster in Kasargod. Many of the documents were secured from global organisation like PAN (AP) (Pesticide action network (asia pacific)).The scientific data base which proved the toxicity of the pesticide Endosulphan was followed by wider circulation of the information in the forms of pamphlets and comparative studies undertaken by organisations by Thanal and KSSP and the scientific study by CSE brought out the extent and gravity of the disaster and confirmed the role of Endosulphan in causing them. The facts on the toxicity of the pesticide ignited the sense of injustice, and the movement started gaining the vigour as it now has documents as evidence to support.

⁷¹ Punchiri, a socio-cultural club in Bovikkanam, (Muliya Panchayat) entered the protest against Endosulphan following the issue of abnormal increase in the OP(Outpatient) cards issued in the local PHC. The club tried to trace the reason for such an increase in morbidity and organised a couple of medical camps in the region which pointed to Endosulphan spraying as the potential cause of the health anomalies observed. The club has been one of the few initial organisations which attempted to resist the spraying of Endosulphan by the PCK. The club had made

operating at the local, regional and national scales (like SEEK⁷², Neythal⁷³ (local), Thanal (regional) and CSE⁷⁴ (national)), people's science movement (KSSP)⁷⁵, environmental organisations and activists including the Jilla Paristhithi Samithi⁷⁶ (District environmental committee), and the media⁷⁷. The identity of the actors was

unsuccessful attempts to disrupt the spraying procedures by stopping the pesticide loaded helicopter from taking-off (date) but were removed from the site by police.

⁷² Society for Environmental Education in Kerala (SEEK) An environmental group based in Kannur(Edattu), which has been very active in anti-Endosulphan campaign from the beginning. The publication by SEEK; *Suchimukhi* has played an important role in leading the struggle.

⁷³ A local environmental organisation based out Thaikadappuram. P.V.Sudheer Kumar who is a member of the organisation has played an instrumental role in the growth of the movement during the initial stages.

⁷⁴ Centre for Science and Environment (CSE) is an environmental NGO based out of Delhi has been active in the Endosulphan affected region from the very beginning, and has produced documents which have been instrumental in turning the course of the anti-Endosulphan campaign (civil society documents). The Study report published by CSE confirmed the presence of pesticide residue in the samples of water, soil and blood samples collected from the victims in levels much above the permissible limits. The Down to Earth magazine published by CSE has been following issues related to the disaster since then and the reports has helped in gaining support from across the country and has put pressure on the state to intervene. It was CSE's reports which brought the nexus existing between the government and pesticide companies, unveiling the role of pesticide lobbies in turning many of the government appointed committees against the people of Kasargod.

⁷⁵ The people's science movement of Kerala (Kerala Sastra Sahithya Parishad) has actively intervened in environmental issues in Kerala right from the Silent Valley movement during the early 1960s) (Karan , Swain), later joining the protest against Gwalior Ryons (Guha and Gadgil 1994).The KSSP has been part of popular struggles against ecological degradation and has always held environmental sensibility in all its activities as a progressive social movement.

⁷⁶ Jilla Paristhithi Samithi(JPS) formed in 1998 has been actively engaging and intervening in environmental issues in and around the district. The committee has been active in the conducting studies and protest activities. It has played a crucial role in terms of putting forward the idea of an umbrella organisation like EVSS unifying the activities of the multiple organisations fighting against the disaster.

⁷⁷ The Malayalam weeklies *Mathrubhumi* and *Madhyamam* have been discussing the disaster and has created public discourse on the issue through the articles and photos published over the years .Many other newspapers including the most popular ones like *Mathrubumi* and *Malayala Manorma* and local ones in both Malayalam and Kannada have carried extensive reposts on the disaster and has been following the issues ever since. In addition to print media, visual media has

not identified by their class background and they were not fighting a class war. The participants were brought together by their environmental consciousness, the sense of ire against injustice – physical harm -- being done to all living beings⁷⁸. This phase can be further sub-divided into two, from 1997-2001 and from 2001-2004. The initial period from 1997-2001, saw the gathering of these village level organisations, actors and protest action groups but the activities were not co-ordinated enough to form a popular movement, which happened only in 2001 with the formation of the Endosulphan Virudha Samara Samithi⁷⁹ EVSS (Anti-Endosulphan protest committee) which brought together the organisations from across the district under a single head. The period from 2001-04 saw mass-based and active protests organised by the anti-Endosulphan movement which reached its peak with the 'collectorate march' in 2004, which became the largest of the protest organised by civil society till then. The march received favourable media coverage and popular support to the movement. The period initiated a public discourse against the green revolution technologies, and pesticide-intensive agriculture and in favor of movement by the people of Kasargod, in which the media played a very key role.

also played its part in making the movement popular. The role played by Indiavision Channel deserves special mention here. The Ban Endosulphan campaign initiated by the channel was the first of that kind in the history of Kerala's visual media.

⁷⁸ The sense of injustice grew out of the information on the acute toxicity of the pesticide, Endosulphan which was sprayed continuously for 25 years by the state led PCK with complete negligence. The information regarding the toxicity of pesticide was outside the reach of people till then. The civil society organisation played an important role in providing them with 'knowledge' that later strengthened their fight against the state and the state-led corporation.

⁷⁹ The Endosulphan Virudha Samara Samithi[EVSS] (Anti-Endosulphan Protest Committee) formed during 2001-02 in Periya , unifying the activities of individual organisations and actors fighting the pesticide and disaster across the district, extended activities to other regions of the district by 2004. The EVSS functioned as the unifying agency of all those political-social-cultural organisations that formed part of the anti-Endosulphan movement. The committee has been successful in organizing many events including the *Secretariat yatra* organised from Kasargod to Trivandrum by the protest activists calling '*In search of the Chief Minister*' in 2005 and reported strong protest to government committees that give clean chit to Endosulphan despite the mounting evidence by burning the C.D.Mayee report in Kanhangad (2005). It organised various programmes including the National Convention after the global ban on the pesticide was called for in the Geneva Convention in 2011.

The phase saw the creation of 'new spaces, new solidarities and new democratic forms' in the civil society, the domain of action were confined to civil society (Touraine 1985, Cohen 1983). The phase is also marked by the absence of local and mainstream political parties, including the political left and non-left parties.

"Political parties who take the name of poor thrice or more in a sentence have never really been active in this struggle...barring a few party affiliates, who even came as an individuals rather than representing the parties...it is interesting to observe the presence of almost all the political parties in the scene now, making claims to transform the struggle into a popular movement..."

It is however, not surprising considering the history of hostility of political parties to popular movements which raise issues like environment (Guha 2000) till they grow to a stage wherein political mileage can be reaped of is the reality in Kerala (Bhaskar, Mathrubhumi 2012).The elected representatives, who participated in the struggle, during their interviews pointed out that they came well outside the party boundaries and took part in the issue as an individuals. The demands of the movement for government intervention were largely ignored, and among the arms of the state, only the judiciary paid some heed. The movement was not successful in convincing the government about the presence of a crisis there during this phase, and it strongly defended the pesticide till 2001, when it first issued a G.O (government order) prohibiting the use of Endosulphan for agricultural purpose in the state unless and until an order otherwise was issued (Pooppalam 2011).

"When a case of Plague gets reported somewhere in Calicut and if a person 'x' dies of the disease , the news footages start creeping in and would show the Health Minister visiting the place and issuing a statement...but what happened in Kasargod did not invite any response from any of the state institutions despite reporting so many deaths, whatever may be the reason,

they could have at least visited us...what reason would you attribute to this indifference...is it ignorance?...or intelligent blindness?"⁸⁰

This was how an activist responded when asked about state response. It will not be correct to say that all arms of the state were unresponsive because the LSG institution has been well attentive to the local issue when the state and central governments turned their backs on the issue. The interventions done by the District Panchayath during the early 2000s must be well lauded. The latter half of the period saw the involvement of groups like the Solidarity Youth Movement⁸¹ with the movement, which from then played a remarkable role in organizing the protests and offering relief and rehabilitation to the victims.

However, it must be noted that the movement is not led completely by the victims, in fact the participation rates of the victims has been low till very recently⁸². It was dominated by the members of the progressive civil society and the middle class (Offe 1985) who share environmental concerns and offers solidarity and empathise with the local situation. Thus unlike many other environmental movements in India, the anti-Endosulphan movement is not one organised by the affected victims⁸³.

The state-wide ban imposed by the Kerala High Court in 2003 was one of the important turning points during the period.(Rahman, 2011). The visit made by the then opposition leader V.S. Achuthanandan (CPIM) was another important event that has helped the movement in gaining further mileage across the state. But this

⁸⁰ 21.12.2012

⁸¹ Solidarity is the youth-wing organisation of the political party Jamat-e-Islami formed in 2003. Since its formation in 2003, the organisation has been active in the anti-Endosulphan movement. The organisation has conducted a parliament march in 2010 which has helped immensely in drawing national attention into the issues and region. The relief and rehabilitation package designed and implemented by Solidarity under the name 'Santhwanam' has played an unmatched role in terms of alleviating the problems of the victims. The organisation has been very successful in striking a balance between both protesting against the pesticide and offering relief and rehabilitation to the victims at the same time.

⁸² Personal Interview, 20.1.2013

⁸³ Asheel, 21.11.2012 ; Jayakumar 15.9.2012 ; M.A.Rahmna,9.8.2012 ; Narayanan Periya, 14.12.2012 ;K.Balakrishnan, 19.12.2012;Shafeeq 13.12.2012,

again must be noted that V.S. Achuthanadan's visit was not one reflecting the stand his party had on the issue then. The visit also saw the beginning of political forces entering the movement, which later slowly enabled the shift of the movement from the civil society to political society in the next phase, with which the government initiated a 'negotiation settlement' (Chatterjee, 2011) with the people. The next phase saw the movement changing from 'civil society against the state' to a plane intermediate between state and civil society.

During the phase the movement can be categorised as a non-class, non-party and non-material one, with plurality of thoughts and multiplicity of participants and the movement occupied the civil society space.

Phase III: Between the civil, state and political society

The period from 2004 to the global ban of the pesticide in 2011 marks the shift the field of action to a terrain inhabited by the state and political society along with civil society. The state had started responding to the grievances put forward by the anti-Endosulphan campaign towards the end of the last phase. Both the central and state governments appointed committees one after other from 2001 to 2011 and this continues (interview 19.12.2012). In 2005, the Kasargod District panchayath held a workshop (Aug.5-6) for arriving at an action plan aiming at the comprehensive relief and rehabilitation of the victims of the disaster. The 'state' as a blanket term hides the laudable initiatives undertaken by the District Panchayath⁸⁴ and the elected representatives there in securing justice and relief to the victims

⁸⁴ The study by Chathukulam points out the instrumental role played by the District Panchayat in mitigating the disaster in the district. He explores the features of the four major initiatives envisaged and implemented by the District Panchayat; the EVRRC, for coordinating the welfare activities carried out by different agencies; *Athijeevanam*, a comprehensive rehabilitation project for the Endosulphan victims, *Punarbhava* Self Employment programme for improving self employment activities with disabled people in the district and *Thanal* Housing project, for providing housed to hoseless families with bed-ridden children in Endosulphan affected areas. The study highlights the organizational capacities and good governance practices employed by the District panchayat in offering the post disaster recovery and rehabilitation to the victims.

Of all the arms of the state the LSG has been the most responsive-. I reflect on the division of the political field in Kerala after decentralization, where the burden of sustainable development falls on local governance and the world of high politics is increasingly involved in paving the way for neoliberal growth and gaining concessions for predatory capital.

The village panchayaths in the area had passed resolutions preventing the use of pesticides at an earlier stage and it was the District Panchayath which took the initiative to offer a solution to the crisis. The proactive role played by the village panchayats and the Kasargod District Panchayat in responding to the disaster by offering post disaster recovery and rehabilitation for the victims requires greater exploration in the context of home-grown decentralisation campaign of the state, the PPC⁸⁵. This calls for further inquiries into the role of local self government institutions in mitigating environmental resource conflicts in Kerala, especially when the new Kerala model implemented through decentralized participatory planning made explicit claims about achieving environmental sustainability along with productive development and social improvements.(Veron 2004; Issac and Harilal, 1997). Devika and Thampi (2012) argues that

The struggle for compensation can be seen as located in the political society as the pesticide is still not banned in the country from use. Interviews with local activists point out that till mid 2000s the government had issued strict directives to keep the name of the pesticide Endosulphan away from the government documents and records, poster and banners used during the medical camps or disbursement of relief to the victims. This implies that the government had been attending to the issue not because it acknowledged the disaster in the region as one caused by the pesticide Endosulphan. This brings the struggle to a phase where the victims and the campaigners fall outside the civil society, to the political society waging 'unconstitutional struggles' but forcing the state to intervene and offer them relief. Like very much pointed out by Chatterjee, for the state the 'moral

⁸⁵ People's Plan Campaign

The next important achievement was when the NHRC visited the site during the 2010 and recommended compensation to the victims on the basis of categories. And finally, the movement succeeded in achieving institutional outcomes by effecting ban at the state level.

The participating organisations in general can be divided into two-those participating in protest activities and others who offer relief and rehabilitation to the victims by mobilizing financial resources from Kerala and abroad. The resource base and mobilization strategies also varied across the organisations. In order to counter the criticism regarding the absence of victims from the protest activities the Endosulphan Peeditha Janakeeya Munnani was constituted in 2008. The organisation conducted relay Satyagraha by the mothers of the victims in Kasargod, thus bringing the victims to the forefront of the movement. There were also sprouting of other organisations during the period, the ENVISAG is one such organisation which aims at a comprehensive and sustainable rehabilitation of the victims and emphasizes the importance of livelihood security to the victims. The period also witnessed the inflow of maintram political parties into the campaign, the DYFI

The period witnessed the movement gaining visibility at both national and international realms. From the very beginning the movement has benefited extensively from international support offered in terms of providing information about the toxicity and diseases that are likely to be caused by Endosulphan. The dissent reported by Indian delegates against the decision taken by POPs review committee of the Stockholm Convention to include Endosulphan in the list of deadly pesticides must be understood in the backdrop of a district fighting for the ban for more than a decade. The Indian state, was vocal in its support for the Endosulphan manufacturers in the country in an international forum. It must be also noted that India joined the dissenting countries when 24 out of the 29 delegate countries accepted the ban on Endosulphan in 2011(Rahman 2011, Achyuthan 2011,

Jayakumar 2011). The disaster in Kerala had been one of the worst incidents of pesticide disasters caused by Endosulphan. The only country that has fought against the pesticide has been Philippines where the gravity of the disaster was much less. It should be noted that the disaster in Kasargod was understood and accepted by the international community, when countries took the incident as a reason to ban the pesticide in their home country (Brazil)⁸⁶ The supporters of anti-Endosulphan movement had to fight in a global platform for justice, often reporting open dissent against the stand taken by the Indian government delegates. The global joining the local in its fight for justice, against the national is visible here. During the period the movement crossed local boundaries reaching the global platform and framed the conflict globally (Touraine). Glocalization is a tactical decision of the anti-Endosulphan movement in order to access political opportunities and it constitutes a common strategy of many current communitarian movements in the South (Escobar, 2001). The banning of the pesticide by then has become part of a global discourse against pesticide intensive agriculture (Jayakumar 2011).

In short, the disaster in Kasargod was understood and accepted by the international community and the disaster played an important role in the decision to impose a global ban on the pesticide, while the pesticide is still under use except for the states of Karnataka and Kerala in India. The local-global linkages make the anti-Endosulphan movement not just a livelihood struggle organised by the affected poor as having multiple dimensions (Dwivedi 2001). The open alignment of the Indian state with the pesticide manufacturers, against the people of Kasargod questions the role of state, the nexus between state and cooperates who manufacture the pesticide.

The LSG played an instrumental role in offering support to the victims, the state government despite being late in intervening started associating with relief programmes from 2007, it must be however noted that even in 2011 when the news about the disaster in Kasargod had crossed national boundaries the Central

⁸⁶ Interview, 19.3.2013

Government was not ready to accept a ban citing the possible loss incurred by companies from not using the stock under custody.

The “tree of signature’ campaign which was organised during the Stockholm Convention in 2011 has people from across Kerala to Kasargod to offer support for their fight for justice. The Satyagraha by V.S.Achuthanadan, the then Chief Minister of Kerala received global attention mainly because a Chief Minister, of a state was in protest against the pesticide, the ban of which was opposed by the Indian government delegation at the global platform at Stockholm.

The period towards the end saw a shift in the domain of action from the civil to the political, joined by political parties followed by the Kerala state government entering to negotiations to arrive at settlements. The period saw the transformation of the issue from being an individual concern to one that of a ‘population’ categorized by state as affected to intervene, hence we can see a shift from the civil to the political society. The struggle has shifted away from civil society domains to political society, which according to Partha Chatterjee⁸⁷ occupies the space between the state and civil society. The shift away from civil society has changed the status of the victims from citizens to population groups, where the developmentalist state intervenes with welfare offers to the people.

Phase IV: Political Parties, political society and changing discourse

The phase marks the period after the global ban of the pesticide where the movement shifted its domain from civil to political society. The movement during the post-ban period is dominated by mainstream political parties, who have created victims unions on party basis (field notes and interviews). Many of the initial actors who had associated with the movement have stepped back. The distribution of compensation by recommended by the NHRC through the EVRRC has seen an increasing inflow of political parties to the scene taking the issue completely away

⁸⁷ The separation of civil and political by Chatterjee and his idea of political society has been subjected to serious critiques. For detailed discussion see (Gudavarthy, 2012)

from the civil society spaces where they enter into direct confrontations with the state. The movement over the years have lost 'environment and ecological restoration' from its vocabularies of protest. The movement no longer fights against the polluters but fight for matters regarding the compensation, the inclusion of victims in the listed categories etc.

In other words, the dominant discourse within the movement today is no longer an environmental one which considered the right of ecology along with human beings; it has changed to one where the 'rights discourse' of human beings dominate.

V. Forms of Protest

The struggle unleashed by the multiple actors and organisations who form part of the movement can be broadly categorized into three the- legal, popular, scientific and cultural-forms of protest.

(1) Legal Battle against the PCK

The case filed by Leelakumariamamma in the Hosdurg Munsf court marks the beginning of the **legal battle**. Litigation has been main institutional tool used during the initial stages of the struggle. The judiciary is the only organ of the state that has identified the existence of a disaster in the region from the very beginning and intervened in favour of the victims starting with the temporary stay order issued by the Munisif Court in 1998 which prevented the aerial spraying of the pesticide in Periya division of PCK. The judgments issued by the courts reflected the gravity of the issue and the injustice done towards the people and environment of the region by the activities of PCK. The judiciary has been strong in its remarks against the "run for profit from a state-led corporation like PCK, completely disregarding the protocols, procedures and the rights to a safe and healthy life of people and ecology in the region" (The Mathrubhumi Weekly, 2010). The judiciary has further intervened at various stages during 2002, when the Kerala High Court ordered a permanent stay on the use of Endosulphan in the state of Kerala (cite the judgement) and in 2003 when the Kerala high Court banned the pesticide from use in the state.

Thus the judiciary had been the only state apparatus which recognized the existence of a problem and offered legal justice to victims of this pesticide by issuing judgments that had often called for holding back the use of pesticides on precautionary grounds from the very beginning.

(2) Popular protest- seeking state's intervention, action against PCK, stop spraying, compensating the people and nature

The **popular protest** followed the case filed in 1998 and has grown since then to a popular protest with wider social base fighting for the rights of the victims. The popular form took origin in the village pockets in the form of local resistances offered by local clubs and people against the spraying when increasing cases of health anomalies started getting reported from across the district. The scale of protest since its beginning as a grassroots movement has grown further reaching the regional, national and global levels. The movement has transverse the boundaries of local and regional to reach its voices heard at the global level, through the POPs review committee in Stockholm Conventions for almost ten years until the pesticide was banned in 2011. It should be noted that a cause which the local governments and the state refused to acknowledge has been recognized in an international forum. The Indian state delegates to the meeting have often entered into open fights with the delegates from Kerala who argued for a ban on the pesticide citing the disaster in Kasargod. The state here has disassociated itself from the people and had subscribed to a view which is not supported by the people it represents. The repertoire of action (Tilly, 1978) include litigation, protests and diffusion activities⁸⁸ (Urikidi 2010) in addition to the Gandhian methods like Satyagraha, dharnas, mass rallies (Guha) as observed in most of the environmental movements in India. The justice arguments were reinforced with the help of networks created with other communities in conflict and collaboration with NGOs (CSE) reinforced justice arguments.

⁸⁸ Transnational activism has focused on diffusion activities includes massive mailings, activists presentations in other countries and meetings with collaborating organisations

(3) Scientific battle

The movement from the very beginning was involved in the scientific struggle with state institutions contesting the toxicity of the pesticide Endosulphan. The scientific study report published by CSE in *Down to Earth* (2001) based on the blood samples collected from the Kasargod found out the presence of pesticide residue way above the permissible limits. The report marked the beginning of more than a dozen studies appointed by the both the state and central governments to look into the issue. The Committees came out with mixed results, while some confirmed the role of Endosulphan in causing the disaster, some other kept the possibility under doubt while some other issued clean chit to the pesticide which was already banned in more than 70 countries by then (Jayakumar 2011, Shree Padre 2011). The scientific battle to prove the toxicity of the pesticide brings out the knowledge-power linkages involved in the movement. It is however, clear that unlike other environmental movements in India which are generally categorised by some scholars as 'anti-science' (Shiva 1991), the anti-Endosulphan movement has a strong scientific base through the involvement of both national and international professionals and experts at multiple stages (Dwivedi2001) The scientific information offered by the civil society groups have been the pillars around which the movement was built up. Hence, the movement mayn be regarded as one where 'science' was used by the people in their favour to fight against the state, PCK and the pesticide lobby. (4)

Cultural forms of protest

The **cultural forms** of protests range from the documentaries produced to the symbolic "Tree of signature" campaign organised during the Stockholm Convention of 2011. The literary works including a novel which topped the list of best-sellers *Enmakaje* by Ambigasuthan Mangad helped in initiating a discourse among the cultural and progressive civil society, writers and to the academic and student communities. The paintings created by artists for the cause,

The movement which started as singular protest events in these villages came together and formed an umbrella organisation called the Endosulphan Protest

Action Committee (Endosulphan Virudha Samara Samithi, EVSS) in 2001 in Periya which later spearheaded the struggle extending its activities to the other 11 affected panchayats. Thus the movement was transformed into a popular struggle joined by multiple organisations and actors. The movement since its origin has passed through various phases before reaching the present state of affairs, during the period many old actors have left and new enthusiasts have joined. The movement has made significant achievements beginning from the stay order secured by Leelakumari Amma in 1998, to the intervention by NHRC, the ban of the pesticide in 2001 by the state high court, the global ban on the pesticide the compensation package announced for the victims (Pooppalam 2011, John 2011).

These protest show that the ideology and value orientations of the movement are plural and placed in the moral and cultural realm.

The anti-Endosulphan movement Vs PCK workers Union

The emergence of trade unions especially those allied with the political as the major opponent of the movement should be discussed in detail. The emergence of Plantation Samrakshana Samithi organised by the workers of PCK to counter and offer stiff opposition to the struggles of the anti-Endosulphan campaign pits the victims against the workers union in the conflict. The left often has been essaying the role of the protector of workers and making itself visible in suppressing progressive movements organised outside the realms of class struggles. The left coming against the popular land struggle in Chengara (Devika 2008), the anti-coca cola campaign in and here in Kasargod in the name of working class demands greater attention. The crisis of left in approaching and solving environmental issues has been well discussed and debated in the literature:

The promethean rationale running through Marxism and its pro-industrial development stand blind it from perceiving the problems of the environment. The over indulgence with working class and with the monolithic identity of labour prevents the political left from understanding ecological issues and initiating

sensible debates. This makes ecological issues problems of non-sense for the left even today. The over indulgence with working class sympathies prevent them from exploring larger environmental and developmental issues. The emphasis on economy and production restrict Marxian political economy within the boundaries of the system of production (Canel 1997,1995; Buechler 1995).

VI. Why are the victims so few among the participants?

“People in North Kasargod less vocal, they are not aggressive...very recently some media people had come for an interview...during the interview none of the victims referred anything related to ‘rights’ or ‘who is responsible’, they take this as fate, and they end up talking about suicides...”

The participation rates of the affected people in the anti-Endosulphan campaign is lower when compared to other new social movements. The history of the region must be considered to understand the relative passivity of the local people to the resistance movements..The anti-Endosulphan movement has been one led by people who are not directly affected but who are strong sympathizers. They include mostly activists of environmental NGOs (local and regional), intelligentsia, cultural activists, self-help groups and youth organisations.

The history of politics in the region probably gives us a clue into the curious passivity of the victimized people in comparison to the largely-middle-class intelligentsia which has taken to protest on their behalf.. Particularly revealing are the lingering remnants of submissiveness to feudal control (Kurup, 2001, discussed in Chapter 3). It must be remembered that a large portion of the affected area falls outside the part of Kasaragod which was heavily politicized from the 1940s onwards. Secondly, the nature of the harm done by the pesticide is such that the mobility of the victims - and their care-givers - is heavily restricted and especially so when they happen to be poor. Together, these factors have created a population of dependents, The extent of harm in terms of health anomalies has no parallel to any other instance except Bhopal disaster which again was an accident (cite). The nature

of the health anomalies has created a population of dependents restricting the mobility of the people and putting their incomes at strain forcing them not to choose agitation over work.

It must also be pointed out unlike many other ecological struggles which defend the the resource under threat, the resource here has already been destroyed, say, in the case of Koodankulam or Narmada. This reduces the participation rates even further. The lower levels of social development reflected in the lower levels of literacy (Prabhakaran Commission Report 2012) coupled with the linguistic boundaries have also resulted in lower association of the people across the district with these fights.

The socio-cultural landscape of the area is distinctly different from that of that of the mainland Kerala and a deeper understanding of it will help in better understanding the situation and response mechanism. The linguistic barrier, economic backwardness, superstitions and poor literacy rates poses serious impediments to the generation and spread of awareness about the issue.

VII. LSG, Decentralisation and resource conflicts

The Endosulphan spraying in the district continued for more than two decades, despite strong opposition from the local people including the panchayats point fingers at the much lauded home grown democratic-decentralisation campaign of the state, PPC. It must be well noted that the LSG bodies have always been proactive in their response to local resource conflicts⁸⁹ in both indentifying the resource problem and in reporting quick response.

Though the efforts on the part of the LSGs are commendable it must be noted that the environmental governance model in the state is still top-down and least participatory. The local population is left with very little voice regarding the local-

⁸⁹ In the Plachimada struggles for water rights , launched against the Coca-Cola company, the Perumatty Panchayat has The Perumatty Panchayat in Plachimada refused to renew the license issued to the Coca-Cola company after complaints about water shortage and ground water pollution were reported by the people. The Panchayat has spearheaded the struggle against the multinational corporation along with other organisations.

resource use patterns which are imposed from the top following dominant models of development conceived in the national interest. The disaster in Kasargod shows that despite the proactive role adopted by the LSGs the district had to wait more than two decades for the intervention from the Kerala state government. The inaction of both the state and central governments point finger at the centralized system of resource management and environmental governance which does not reflect the local interests so far as the use to which the resource is put to is concerned. The chapter argues that there should be greater decentralisation of powers to the LSGs regarding matters of local resource use patterns in order to make it participatory and bottom-up.

VIII. Conclusion

The chapter argues that a movement which was largely confined to the civil society⁹⁰ is now located largely in the political domain. The movement shows that local movements are increasingly globalised, where the local along with global fight against the national for the ban of pesticide. The chapter challenges the 'anti-science' categorization of southern environmental movements and argues that the anti-Endosulphan campaign has used science to sharpen the arguments by obtaining evidences in favour of the movement from scientific professionals and NGOs- the 'knowledge as power', where the movement has been strengthened with the scientific info on the toxicity of the pesticide. The movement which had strong environmental sensibility during the initial years, determined by the participants during this stage have failed to maintain that and suffers from not being able to suggest an alternative development path. The movement has lower participation of the victims; this could be due to the passivity of the population passed on from a history of exploitative agrarian relations in the region, low literacy and linguistic barriers, as well as the consequences of the physical harm the people there have suffered. The environmental and non-party orientations enhanced with pluralistic and democratic orientations have changed with the presence of strong party, and

⁹⁰ Chatterjee 2011

materialist orientations lately. The movement faced hostility from state and mainstream political parties during the initial phases of struggles. The state and parties have stepped in only after the media intervenes and start engaging in creating a popular discourse and placing the issue out for public debate. The same movement can have aspects of old and new social movements figuring in and out during the period of struggle. The detailed and close examination of Endosulphan disaster in Kasargod and the resultant movement points out that the straight jacketing of movements into old and new compartments can be quite misleading in understanding the real vibrancy and dynamics of the movement and the actors.

APPENDIX 4A

ESPAC

The Endosulphan Spray Protest Action Committee has been the first grassroots organisation that has been formed to fight exclusively against the aerial spraying of pesticide in the district. The Committee was formed under the supervision of Shree Padre in Padre, Enmakaje during the year 2000. The attempt by a few local youth to prevent the helicopter from spraying the pesticide has resulted in a schuffle between the local people and the police and it was suggested that there should be more organised ways of protesting to fight the pesticide and PCK down. The committee has also issued a white paper against the C.D.Mayee Report in 2006. Later the committee joined the EVSS which co-ordinate the activities of groups across the district.

Thanal

The environmental NGO based out of Trivandrum has intervened first offering help to Leelakumari Amma to fight her case against the pesticide in higher courts after she obtained the stay from the Hosdurg Munsif court. It provided with academic support and scientific information required to counter the false claims made by the PCK and several government committees which gave clean chit to the pesticide in their report. It was Thanal's intervention that brought out the details of the toxicity of the pesticide and it was confirmed that the pesticide in itself is deadly (included in dirty 13) and could result in causing the health anomalies as the ones reported in Kasargod.

The online campaign initiated by Thanal, *Ban Endosulphan*, has grown popular and played an instrumental role in taking the movement to a global level. Thanal as an organisation attend the Stockholm Convention on POPs(Persistent Organic Pollutants) continuously for the past twelve years. It has played a major role in

drawing international attention to the disaster in Kasargod and in securing the global ban of the pesticide in 2011.

Centre for Science and Environment

CSE is an environmental NGO based out of Delhi, it undertakes scientific research on issues that are in the interest of people. It was started by Anil Agarwal and Sunita Narain, and famous for the 'The Status of India's Environment: A citizens report' in 1982 . The organisation engages in issues related to environment and development, approaches them scientifically and attempts in offering sustainable solutions.

The organisation has been active in the Endosulphan affected region from the very beginning, and has produced documents which have been instrumental in turning the course of the anti-Endosulphan campaign (civil society documents). The Study report published by CSE confirmed the presence of pesticide residue in the samples of water, soil and blood samples collected from the victims in levels much above the permissible limits. The Down to Earth magazine published by CSE has been following issues related to the disaster since then and the reports has helped in gaining support from across the country and has put pressure on the state to intervene. It was CSE's reports which brought the nexus existing between the government and pesticide companies, unveiling the role of pesticide lobbies in turning many of the government appointed committees against the people of Kasargod.

Jilla Paristhiti Samithi (District ecological committee)

The JPS formed in 1998 has been actively engaging and intervening in environmental issues in and around the district. The committee has been active in the conducting studies and protest activities. It has played a crucial role in terms of putting forward the idea of an umbrella organisation like EVSS unifying the activities of the multiple organisations fighting against the disaster.

Kerala Sashtra Sahithya Parishad (people's science movement)

The KSSP has been associating with the anti-Endosulphan campaign from the very beginning. The people's science movement has published a study report and numerous pamphlets against the pesticide.

Solidarity Youth Movement

Solidarity is the youth wing organisation of Jamat-e-Islami which has been intervening in the political-social-environmental issues in the state (Pooppalam 2011). Since its formation in 2003, the organisation has been active in the anti-Endosulphan movement. The organisation has conducted a parliament march in 2010 which has helped immensely in drawing national attention into the issues and region. The relief and rehabilitation package designed and implemented by Solidarity under the name 'Santhwanam' has played an unmatched role in terms of alleviating the problems of the victims. The organisation has been very successful in striking a balance between both protesting against the pesticide and offering relief and rehabilitation to the victims at the same time.

SEEK (Society for Environmental Education)

An environmental group based in Kannur, which has been very active in anti-Endosulphan campaign from the beginning. The publication by SEEK; *Suchimukhi* has played an important role in leading the struggle.

Endosulphan Victims Forum

The first of the organisations where the victims have directly participated in the struggle, was formed in 2010. It has participated in the sittings of NHRC and has helped in reaching the victims to the medical camps organised.

ENVISAG

Endosulphan Victims Support Aid Group was formed in 2011 April 7th, led by M.A.Rahman who has been active in the movement since early 90s.

His documentary has been instrumental in generating public sympathy and in making the issue known to the outside world . the documentary was screened in and across the country and has resulted in huge aid flowing in for the victims especially from the Gulf malayalis. He has been able to strike a balance between protest activities and offering financial relief to the victims received from the Gulf malayalis. The new organisation however, aims at a comprehensive solution to the disaster which calls for sustainable rehabilitation initiatives, return to organic and multiple crop agriculture to protect the local ecology, diversity and the people.

EPJM (Endosulphan Peeditha Janakeeya Munnani)

The EPJM, relatively late entrant, was formed by some of the members in the EVSS when they felt the vigour of the strike as coming down. The protests and demonstrations conducted by the organisations had seen higher participation levels from victims, especially women. The campaign started by the organisation with the mothers of the victims entering into relay Satyagraha for almost 300 days had massive impact on the Kerala society. The demands of the organisation are largely confined to the victims relief and rehabilitation talking less about ecological restoration. The leadership hold affiliation to the CPI(M)L, and includes erstwhile revolutionaries like Ambalathara Kunhikrishnan in the front. The organisation was in news recently regarding the protest Satyagraha launched from February 18th which saw participation from across Kerala, including the leaders of Eloor Samaram, and environmentalist Mohan Kumar of the Western Ghats Protection Group fame. It must be however, noted that the protest vocabularies are confined largely to securing monetary compensation to the victims.

In addition to the above mentioned groups there have been many other smaller and larers groups that associated with various stages of the movement. Neythel from Kannur, the students of the schools and colleges across the district and the state, Cultural clubs, youth organisations of both political left and right, religious organisations etc.

The media both print and visual has always been following the movement, the creative and productive interventions by them during the Stockholm Convention has informed the Kerala society and created a perspective against the agricultural development model that relies heavily on pesticides.

CHAPTER 5

VICTIMS AS POPULATION CATEGORIES: EXAMINING THE STATE'S RESPONSE TO THE DISASTER

I. Introduction

The present-day Indian state may be characterized as an interventionist state with a developmental⁹¹ and not welfarist thrust. When the development initiatives of the state are directed to the modern, dynamic industrial and commercial sectors, the welfarist initiatives are often directed towards the redressal of inequalities generated by growth. Thus they are compensatory in nature and negative in character⁹² (Jayal, 1994:20-1;1999). The hostility towards gratuitous relief which came as part of the ideology of laissez-faire was reflected in calls for non-interventionism as part of minimal state. The replacement of a benevolent welfare state by a developmentalist one and the withdrawal of the state from those realms where it had once played a proactive role have raised serious debates about the changing role of state in the neo-liberal era (Kothari, 2001; Nandy, 2000). It should, however, be noted that though the withdrawal of the state is seen with greater apprehension, initiatives in the form of gratuitous relief can also be seen as disabling, as creating entrenching dependence rather empowering people. This offers a different ideological dimension to state provisioning that may be appreciated as welfare or deplored as control through charity (Jayal 1999; 2001).

⁹¹ The term interventionist, developmental and welfarist are used in the same sense as it has been used by Neeraja Gopal Jayal (1994:20). The common line of separation between the interventionist-growth oriented and development-welfarist state is diluted, and development here is narrowly defined to include those activities undertaken by the state aiming at higher levels of economic growth.

⁹² The case of poverty alleviation programmes can be brought in as an example in this context where the programmes are often negative in character as they aim at ridding rural society of poverty instead of seeking to enhance, much less maximize, welfare (Jayal, 1999).

Be it from the perspective of welfare or charity⁹³, it has been pointed out that, the initiatives rests squarely with the state, without leaving much space for right-based claims. According to Jayal (1999) even the growing passivity among population groups can be attributed to this dependence on state charity. In short, the doling out of welfare can be disempowering mainly because it fails to recognize the right of the people as citizens of the country taking it outside the domain of civil society, rather it functions in the domain of political society where populations are connected to governmental agencies pursuing multiple policies of security and welfare (Chatterjee, 2004). The political society considers people--refugees, landless people, day labourers, households below the poverty line--all as demographic categories of governmentality (Chatterjee, 2001; Foucault 1982).

The distinction between citizens who occupy the domain of civil society and populations who occupy the political society helps us to gain better understanding of the intervention of the state in political society dealing with population categories with technologies of governmentality⁹⁵. According to Chatterjee (2004) citizens inhabit the domain of theory whereas populations occupy the domain of policy⁹⁶. The concept of citizens carries the ethical connotation of participation in the sovereignty of the state whereas the concept of population makes available to government functionaries a set of rationally manipulable instruments for reaching large sections of the inhabitants of a country as the targets their "policies"--economic

⁹³. Welfare as charity deprives people of their rights and entitlements that accompany citizenship (Jayal 1999; 2001)

⁹⁵ Technologies of governmentality often predate the nation-state, especially where there has been a relatively long experience of European colonial rule. In South Asia, for instance, the classification, description and enumeration of population groups as the objects of policy relating to land settlement, revenue, recruitment to the army, crime prevention, public health, management of famines and droughts, regulation of religious places, public morality, education and a host of other governmental functions has a history of at least a century and a half before the independent nation-states of India, Pakistan and Ceylon were born. The colonial state was what Nicholas Dirks has called an "ethnographic state." Populations there had the status of subjects, not citizens (Chatterjee, 2004).

⁹⁶

policy, administrative policy, law and even political mobilization (Chatterjee,2004; 2011).

Unlike the concept of citizen, the concept of population is wholly descriptive and empirical; it does not carry a normative burden; they are identifiable, classifiable and describable by empirical or behavioral criteria and are amenable to statistical techniques. It has been argued that the contemporary regime of power is a certain 'governmentalization of the state' where the regime secures legitimacy not by participation of citizens in matters of state but by claiming to provide for the well being of the population. The objects of governmentality has always been multiplicity of population groups , requiring multiple techniques of administration. Post-colonial states like India have followed the classificatory criteria used by colonial governmental regimes continued into the postcolonial era, shaping the forms of both political demands and developmental policy. From the point of view of governmentality a population group is only a usable empirical category that defines the targets of policy (Chatterjee 2004).

In the previous chapter I have argued that over the years the anti-Endosulphan movement has shifted the domain of action from civil society to political society. This shift in the field of action from civil society to political society reflects on the nature and structure of the scheme of benefits announced and disbursed to the victims of Endosulphan disaster in Kasargod. The present chapter argues that the state has managed the protest generated by the anti-Endosulphan campaign by casting the victims in the mould of a target group, thereby converting them into population categories for doling out welfare. The chapter observes that the benefits disbursed are highly individualized and create new rationalities among the population groups. Thus the state's response towards offering relief and rehabilitation should be understood not as a move to make the polluter culpable but rather as a kind of welfarism which reduces the Endosulphan victims into demographic categories on the basis of severity of illness and doles out the relief in the form on monetary, health and other benefits. The chapter also points at the

limitations of internalizing externalities in monetary terms by discussing the issue of incommensurability(Martinez-Alier, 1995).

II. The history of state¹⁰¹ intervention in mitigating the Endosulphan disaster

While discussing the response by the 'state' in resolving the Endosulphan disaster by offering relief and rehabilitation to the victims, we refer to the states at multiple levels-local, regional and national.

The Local State

Although the ill-effects of the pesticide began to be reported from as early as the 1990s, serious efforts for relief and rehabilitation came only in 2004-05. As we have seen in the previous chapter, the District Panchayat was the first state machinery to intervene in the issue and provide relief to the victims. During 2003-04 specialist medical camps were organized by the District Panchayat and Health Department, aimed at identifying and treating the people from affected areas. The idea of a special purpose cell in the district for co-coordinating the efforts made by various agencies towards relief and rehabilitation of Endosulphan victims was suggested during the study congress organised by the District Panchayat in 2005. Following the suggestion a consultative workshop was organized from Aug5-6 which prepared the Vision document and Action Plan for intervention (Sudheer Babu, 2012;Vanimel 2012). The EVRRC¹⁰² was subsequently formed in 2006 by a decision of the District Panchayat and the state government which earmarked Rs.50 lakhs in the Budget for 2006-07 for the functioning of this cell. The cell functioned through the sub-committees on health, education, social welfare, agriculture and civil supplies. The cell started functioning from February 2007 with 18 initial members who included bureaucrats, elected representatives and civil society members. The EVRRC was

¹⁰¹ We use state not as a homogenous entity but it includes the state at multiple levels-the local, regional and national refer Jayal 1999

¹⁰² Endosulphan Victims' Relief and Remediation Cell

decentralized further to have committees at both Panchayat and ward levels to ensure better implementation and monitoring of its activities.

The State Government of Kerala

The history of regional state (government of Kerala) response towards providing relief and rehabilitation to the Endosulphan victims can be dated back to 2006 during the LDF rule under the Chief Ministership of Shri.V.S.Achuthanandan. The LDF government which came to power intervened in the region for the first time in three decade long history of struggle calling for the attention of the state government (Vanimel, 2012). The government distributed Rs.50, 000 to the next of kin of the victims dead and around 178 families were beneficiaries of the relief money offered, marking the beginning of state intervention in the provision of benefits to the victims. The allotment of Rs.50 lakh towards the functioning of the EVRRC happened during the same period and the Cell started its operations from 2007.

The Kerala state government introduced a system and infrastructure to identify and enlist the victims and provide them with compensation, monthly pensions and medical facilities (GoK, 2011). The identification and enlistment of the victims has been undertaken by linking the programmes with the NRHM programme. There have been so many agitations and protests in between challenging the implementation of the programmes and pointing out the flaws in the system, including the latest 'Satyagraha' by Endosulphan Peedditha Janakeeya Munnani (Endosulphan Affected People's Front) in 2013. The UDF¹⁰³ government responded to the protest with an announcement of a comprehensive package which included promises free treatment, ration and pension to the cancer patients, enhancement of pension amounts to bystanders, more medical camps for identification of victims who are not included under the present list, constitution of tribunal for loss assessment and a six month moratorium to the outstanding debts (The Hindu, Mar.23.2013). The state government since the year of intervention has made attempts to put an infrastructure in place to manage the situation and has been bringing the

programmes under the purview of programmes such as NRHM (National Rural Health Mission) and NRLM (National Rural Livelihood Mission) bringing it under the purview of the 'governance programme'.

The Union Government

In contrast to the district panchayat and state government, the central government has taken a hostile attitude towards the pesticide, and has been vehemently criticized by the judiciary and NHRC for not being able to recognize the situation on ground and intervene to mitigate the disaster. The central government has been firm in offering a clean chit to the pesticide and in arguing for the same in international realms (Jayakumar, 2012; Jayakumar, 2011 and Rahman, 2011). Despite continuous recommendations by the judiciary and NHRC to the government to offer financial assistance to the state government for carrying out the relief and rehabilitation package the central government has remained silent (GoK, 2013; Vanimel, 2012 and Nazrulla 2011). The NHRC report mentioning about the hostility of the central government observes thus:

The Commission found this deeply disturbing and asked the Government of India for its views. It has been informed by the Ministry of Agriculture that the Government does not believe endosulfan causes problems and as a State Party to the Stockholm Convention on Persistent Organic Pollutants, opposes efforts to have it listed as one of the Annex A Chemicals, which are those that must be eliminated...The Government of India claimed...in its response to the Commission, that there is no scientific basis for the action recommended by the experts of the Stockholm Convention or for the ban already imposed by other nations. The Commission is at a loss to understand the logic of this stand (NHRC Report, 2010)¹⁰⁴.

Further the NHRC report points out that "the present stand of the Government of India has led and will continue to lead to grave violations of human rights. Since

¹⁰⁴ <http://www.nhrc.nic.in/dispatchive.asp?fno=2175>

Endosulfan is a persistent organic pollutant, the dangers it poses will linger and multiply through the generations, causing harm on a scale that cannot presently be fully quantified”(page number?) thus the report openly criticizes the stand taken by the central government towards the disaster. The central government has maintained consistency by not offering financial assistance towards the implementation of the relief and rehabilitation package implemented by the state government. The response to the disaster in Kasargod by states at multiple geographical levels reiterates the need to understand state as non-monolithic.

The Committees appointed by the government have issued clean chits to the pesticide. The NHRC was the first institutional intervention from the national level which favoured the victims of the disaster barring the committees appointed by the central government among them barring the epidemiological study by NIOH most of the studies were quick in issuing clean chit to the pesticide¹⁰⁵.

The NHRC recommendations in 2010 have been significant in terms of offering monetary relief to the victims of the disaster. In the report the commission observed that the relief sanctioned by the Government of Kerala has made very little impact because it is meager, irregular and sometimes siphoned off before it reached the intended beneficiaries (NHRC, 2010).

The state government had come up with a list of victims before the intervention by the NHRC and had included three categories of victims for whom monthly pensions to the tune of 2000, 17000 and 1000 were released for the first, second and third category respectively. The announcement of NHRC recommendations with only two categories of victims has also created an air of confusion regarding the status of the third category that was in the state government's list. The EVRRC has put in efforts to resolve these concerns by re-categorizing the victims on scientific basis and clear guidelines including the analysis of case history for each patient.

¹⁰⁵ The Centre for Science and Environment (CSE), a Delhi based NGO has been coming up with continuous reports in its magazine Down to Earth (DTE) about the unholy nexus between the Indian state and the pesticide lobby (DTE 2002).

III. History of Identification of victims, enlistment and categorization

The absence of reliable data regarding the victims who required urgent attention was the primary challenge in reaching welfare to the victims. Hence the primary health centers were entrusted with the task of identifying victims through primary data collection which was then compiled with the help of medical officers in 2008. The initial list was prepared which included 1996 patients from 11 affected panchayats, when the actual numbers reported in media and by activists were well above 5000. The list classified victims under three categories and pensions were disbursed to them. However, this list was not based on a scientific survey or through medical camps and hence, later, efforts were made to rationalize the list by identifying patients with a history of exposure. This was done through (a) a health survey conducted from November 13-20 2010 the affected panchayats utilizing the services of the health workers (b) a socio-economic survey, with the help of ICDS workers in the and (c) specialist medical camps organised at different centers during December 2010 and January 2011. There were around 17 medical camps which identified around 4273 patients out of the 15698 patients attended. These camps had specialist doctors from various medical colleges in the state. The close scrutiny of the list further arrived at 4182 patients belonging to three categories (1) bed-ridden-514 (2) not bed-ridden but requiring full-time care givers-1939, and (3) others-1729 (Asheel, 2012 ; Babu 2012).

In 2001, taking cognizance of media reports about severe health hazards in Kasargod following the aerial spraying of the pesticide Endosulphan the NHRC(National Human Rights Commission) asked the Indian Council of Medical Research for a report. NIOH (National Institute of Occupational Health), a constitute of ICMR (Indian Council for Medical Research), submitted a report in 2002 after a thorough environment epidemiological study, conducted maintain rigorous scientific standards and which took into account earlier investigations and surveys. The study by NIOH concluded the higher prevalence of nuero-behavioural disorders, congenital malfromations in female subjecst and abnormalities related to male

reproductive system in the study group (Padre village, Enmakaje Panchaytah) as compares to the reference group (Miyapadavu village, Meenja Panchyath) (NIOH, 2002). The NIOH , following the conclusion made a series of recommendations including the postponement of Endosulphan use following the precautionary principle implied un the Principle 15 of the Rio Declaration of the Earth Summit¹⁰⁶ . The report also stressed the need to identify the patients with endocrine related ailments and should be provided with relief (NIOH). The NHRC intervened in 2010 following fresh reports from ICMR which reviewed the NIOH study which confirmed that the high incidence of the medical disorders recorded by NIOH continues even after ten years of the ban on the pesticide. The NHRC in its report put forward strong recommendations to establish Centrally Sponsored Palliative Care centers and health infrastructure in the district. The recommendations include the guidelines for providing relief for the disaffected. According to NHRC recommendation the Government of Kerala should pay at least Rs.5 lakhs to the next of kin of those who died and to those who are fully bed-ridden/unable to move without help including mentally retarded patients and Rs.3 lakhs to those who have got other disability. The commission also stressed that a panel of doctors may be appointed to assess the extent of physical disability to classify the categories of victims.

There were fresh medical camps in 2011 following the NHRC recommendations which also aimed at resolving the complaints regarding the omission of deserving patients from the list (to include the deserving victims who were not included in the previous list). Of the 3692 patients examined 698 were added on to the existing list of victims. There were medical camps from December 17-21, receiving around 4211 patients, the list of identified patients are yet to be finalized.

The camps conducted during 2011 has been categorised into four phases (Asheel, 2012). The first phase of medical camps extended from Dec 16 to Jan 12 2011. The

¹⁰⁶ NHRC Report accessed through the website
<http://www.nhrc.nic.in/disparchive.asp?fno=2175>

phase conducted one specialty camp in each of the 11 affected panchayats followed by a mop-up camp for two panchayats, taking the toll of the phase 1 camps to 17 (Asheel, 2012; Babu, 2012). The camps were attended by 15,698 patients of whom 3435 victims were identified. The second phase of medical campus identified 257 patients identified as suspected Endosulphan victims based on clinical features. The victims identified during the first two phases were added, taking the list to a total number of 4182. The preparation of list was followed by a three-level screening process as part of the third phase. The phase involved screening of 3692 patients at multiple levels including the PHC, District Medical Office and by a specialist team, and it identified 728 patients from the affected panchayats. The phase also identified patients from other panchayats but whose inclusion in the list will be confirmed only after assessing their history of exposure. The fourth phase of the medical camps was carried out in December 2011 which was attended by 4211 patients from across the district.

Distribution of enlisted victims across 11 of the affected panchayats

The re-categorization procedure that was underway resulted in the inclusion of victims who belonged to panchayats outside the 11 affected ones. The new list closely scrutinised the victims and further arrived at 4182 patients belonging to three categories (1) bed ridden-514 (2)not bed ridden but require help of care takers for daily activities-1939 and (3) Others-1729 (Asheel, 2012; Babu, 2012). Of the total victims enlisted around 1988 are females and the rest (2189) are males. This includes children. Interviews with officials confirmed that children form larger proportion of the victims pointing out the intergenerational effect of the pollutant. However, the final list of victims is not being made available by the EVRRC citing procedural difficulties. The further disaggregation of the patients on the basis of age, category and sex would have given a vivid picture of the spread and intensity of the disaster and vulnerability of population groups. This remains as a serious limitation of the present enquiry and can be explored in future. The discussions with individual

panchayat officials however, has provided a fair idea about the distribution of victims across the village.

The table (Table.5.1) shows the distribution of enlisted victims across the 11 of the affected panchayats in the district. Pullur periya panchayat reports the highest number of enlisted victims (407) followed by Ajanur (391), Kallar (383), Kayyur Cheemeni (381) and Enmakaje (377). The 11 affected panchayats have more than 89.3% of the total victims who are included in the list of beneficiaries.

Table.5.1. Distribution of victims across the panchayats

Panchayat	Number of Patients	% of total victims
Panathady	259	6.93
Karadka	272	7.28
Bellur	300	8.03
Kumbadaje	307	8.22
Muliyar	326	8.73
Badiadka	332	8.89
Enmakaje	377	10.09
Kayyur Cheemeni	381	10.20
Kallar	383	10.25
Ajanur	391	10.47
Pullur Periya	407	10.90
Total	3735	100.00

Source: Collected and compiled from individual panchayats and civil society activists, approximate

In addition to the 11 panchayats declared as affected the victims in the list also include patients from nearby panchayats as it is practically impossible to reduce the impacts to the spraying area mainly because wind carries the pesticide and deposits away from where it was sprayed. Hence the restriction of enlistment to these 11 panchayats will exclude many of the affected patients. The initial listing processes

had come under strong critique for confining the camps to these 11 panchayats as victims of the pesticide pollution are spread across the district. The fresh round of camps conducted has attended these critiques and they were extended to areas outside the 11 immediately-affected panchayats.

Table.5.2.Distribution of victims across disease criterion

Disease criterion	Number of victims
Neurobehavioural and Cognitive disorders	1624 (38)
Endocrine and reproductive disorders	641(15)
Multiple congenital disorders	748(17.5)
Allergic disease, skin and respiratory illness	1145(26.8)
Cancers	342(8)
Total	4273 ¹⁰⁷

Figures in parentheses show the percentage

Source: GoK, 2011

The list has been prepared on the basis of disease criteria formulated by empanelled doctors and the patients with neurobehavioural and cognitive disorders dominates the list as they form 38% of the total victims followed by allergic, skin and respiratory illness (26.8%), multiple congenital disorders (17.5%), endocrine and reproductive disorders (15%) and cancers (8%). There was agitation demanding the inclusion of cancer among the disease criteria for category determination as the NHRC recommendation made mention only about bed-ridden and disabled patients in their first document. It should be acknowledged that the constant vigil maintained by the activists and sympathetic bureaucrats have resulted in continuous upgradation of the criteria and the list from the initial stages. The proactive role played by these actors has contributed heavily towards improving the infrastructure and system of relief distribution in the district.

¹⁰⁷ The list initially had 4273 victims of whom, 91 died leaving the number of beneficiaries to 4182.

IV. Types of Benefits

The benefits distributed by various state agencies so far can be categorised into three—monetary, health, and other benefits.

Monetary benefits

Before the intervention by NHRC the government had been providing compensation to the next of kin of patients who are dead¹⁰⁸ and family pensions to the affected households. The government then had also offered one-time compensation to the families of patients who are suspected victims of Endosulphan; bed-ridden, seriously ill patients and next of kin of those patients who died got Rs.1, 00,000 and other patients Rs.50,000. There were provisions made for family pension based on the condition and disease of the suspected Endosulphan victim by categorizing them into three; category I, (bed-ridden patient), category II, (ambulant but requires assistance for routine activities) and category III, (ambulant with minor disabilities). The patients under category I and II were offered a monthly pension of Rs.2000 and category III patients were to receive a monthly pension of Rs.1000 (GoK, 2011). The distribution of pensions continue among the affected people in Kasargod .

The NHRC intervened in 2010 following fresh reports from ICMR¹⁰⁹ which reviewed the NIOH¹¹⁰ study which confirmed that the high incidence of the medical disorders recorded by NIOH continues even after ten years of the ban on the pesticide. The NHRC in its report put forward strong recommendations to establish Centrally Sponsored Palliative Care centers and health infrastructure in the district. The recommendations include the guidelines for providing relief for the disaffected. According to NHRC recommendation the Government of Kerala should pay at least Rs.5 lakhs to the next of kin of those who died and to those who are fully bed-

¹⁰⁸ The financial assistance of Rs.one lakh has been given away to the next of kin of patients who had a history of exposure to Endosulphan and had died. The assistance is released from the Chief Minister's Disaster Relief Fund and around 734 families have received the money till date.

¹⁰⁹ Indian Council for Medical Research

¹¹⁰ National institute of Occupational Health

ridden/unable to move without help including mentally retarded patients and Rs.3 lakh to those who have got.

Following the NHRC recommendations the state government has agreed to pay Rs 5 lakh to the bedridden victims, of which Rs 3 lakh will be given in the first phase. This amount will be distributed in two installments of Rs 1.5 lakh. The remaining Rs2 lakh will be kept as a deposit and the beneficiaries will be given a monthly assistance of Rs 2,000 for a period of five years, that is, a period equal to the return for long-term deposit. The distribution of the compensations are underway and around 100 patients across the district have received the first installment of the total compensation.

Health Benefits

A comprehensive and sustainable mechanism is put in place to ensure appropriate uninterrupted quality treatment and palliative care to the diagnosed patients. The issuance of treatment smart cards and the setting up of mobile medical units, physiotherapy units palliative care teams are underway in addition to strengthening of the existing health service delivery system.

The treatment smart cards aim at providing cashless treatment for the victims from the twelve hospitals empanelled for the project. The smart cards will enable identification of the listed victims in the empanelled hospitals thus ensuring them cashless treatment. The mechanism will be fully functional with the help of smart cards and online software which would ensure the encoding of relevant data and medical history of the patient for future treatment and verification. The smart cards have been issued to around 3714 patients till date (Asheel, 2012).

The mobile medical units are aimed at providing specialized home care for identified patients. A full-fledged mobile medical team consists of a doctor each from modern medicine, Ayurveda ad homeopathy, a physiotherapist, a psychiatric social worker, a speech therapist and a special trainer for mentally retarded person will function six days in a month at their allotted areas (Babu, 2012). Three mobile

medical units have been set up to provide services of which only one has the complete members.

The palliative care team is constituted to prevent and relieve suffering and to improve the quality of life for the patients facing chronic and serious illness (Asheel, 2012). The Home based palliative care team is intended to provide specialist nursing care and support to people with an advancing life limiting illness who prefer to be cared for in their home environment. Two additional staff nurses who received specialized training in palliative care and a physiotherapist for providing home based and institution based care have been posted in all the 11 panchayats as the palliative care team. The team has also been provided with vehicles in all the panchayats concerned.

In addition to these measures, the strengthening of existing health care service systems aimed at fine-tuning them to cater to specific demands of the present scenario are underway. This includes salary incentives to the medical staff, installation of physiotherapy units in PHCs and the modernization of GH (General Hospital) and District hospital in Kasargod by upgrading the facilities for improved physiotherapeutic and psychiatric treatment of the affected people.

The NPRPD (National Programme for the Rehabilitation of Persons with Disabilities) has also come up with projects like 'Sparsham', a community-based rehabilitation programme that promotes collaboration among community leaders, Endosulphan victims, their families and other concerned citizens for the development, equalization of opportunities and social inclusion of the people with disabilities with special reference to Endosulphan victims. 'Punarbhava' is another project which is aimed at providing self employment activities with disabled people in the district with special reference to Endosulphan victims.

Other benefits generally include scholarship schemes for students from affected families, free ration to the victims, inclusion of victims under BPL category and six months moratorium on the outstanding debts by victims.

V. Social base of the victims

The studies conducted in the affected areas point out that poor and lower income groups are the worst affected by the disaster (Jayakumar, 2011; Balakiran, 2012). The field visits and discussion point out that in general, poor are the worst hit by the disaster in the entire district.

The burden of pollution has squeezed their lower incomes and dragged many of them into taking loans for meeting their health related expenditures¹¹¹. Detailed parametric analyses are required to further understand the impact of the disaster on the health expenditure across socio-economic groups. There is complete absence of official information about the socio-economic base of the victims as the present process of enlistment records the names of victims under categories based on the severity of the illness following the guidelines issued by NHRC¹¹². In the present case the increased vulnerability of the poor to be affected is mainly contributed by lower levels of nutrition further lowering down their immunity (Jayasree, 2012) and resource dependence that makes them proximate to exposure pathways¹¹³ (Jayakumar, 2012). The absence of information on the socio-economic aspects of the affected household limits further understanding of the social and economic characteristics of the victims. The attempt here is to understand the social base of the victims in one of the affected panchayath. The results of this exercise cannot be generalized as multiple factors determine the exposure to the pesticide which can vary across the panchayaths.

¹¹¹ Jayakumar, KSCSTE 2011 points out that the expenditure at household increased drastically after the disaster in most of the affected households. The survey conducted among 75 households in Kallar panchayat points out that the average monthly expenditure of households with patients has gone up substantially. The study also points out the increased incidence of debt among the affected households. The total bank loan in Kallar as estimated by the ICDS works come to the tune of Rs.20 crores.

¹¹² Asheel, 20.11.2012

¹¹³ It has been pointed out that since the poor live in make shift houses they are more likely to get exposed to the pesticide during aerial spraying. The resource dependence further increases the vulnerability by bringing them closer to the pesticide exposure pathways; the water from the river or the poisonous fumes that are released during the burning of firewood contaminated with the pesticide will significantly contribute towards increasing the chances of being affected.

The section explores the social base of the victims taking Enmakaje Panchayat as a case. The distribution of victims across caste groups has been arrived at by closely analyzing the Endosulphan victims list for Enmakaje Grama Panchayat. Since no information about the socio-economic status is provided in the list we have roughly employed the methodology adopted by Santosh Goyal(Goyal, 1990) to decipher the social base of Endosulphan victims. The surnames of the victims were arranged alphabetically to identify religion and caste. Extensive help has been sought from the local elected representatives in arriving at religion and caste group from the surnames, also in cases where surnames do not reflect the caste details the discussions with the panchayat member¹¹⁴ helped in arriving at the correct details.

Table.5.3. Distribution of Victims across caste groups in Enmakaje Panchayat

Caste Groups	Number of Victims
GEN	76(20.16)
OBC	125(33.16)
OEC	11(2.92)
SC	35(9.28)
ST	130(34.48)
Total	377

Figures in parentheses show the percentage

Source: Endosulphan Victims List Enmakaje, Grama panchayat

The final list includes 377 patients from Enmakaje Panchayat (10.09%) of whom 48 patients belong to the first category, 229 to the second and 100 patients under the third category. The table (Table.3) shows the distribution of Endosulphan victims across caste groups in Enmakaje. Of the total victims in the village a greater proportion belongs to OBC (33%) and ST(34.5%) caste groups (Table.1.A). It must be noted that STs who form only 8.19% of the total population as per panchayat level

¹¹⁴ Sreenivasan , who has been an ex-member from Swarga village of Enmakaje Panchayat, helped in completing the exercise. A CPI(M) affiliate, he is one of the initial activists to step in to fight against the disaster in the Panchayat and has been playing a significant role since then in disseminating information about the pesticide and government schemes of relief to the villagers. He stays well connected with the field and has offered help in figuring out the details of the victims in the list as he knew all of them personally.

statistics, Kasargod, 2001, DES majority of the victims (34.48%). Of the 377 enlisted victims 76 belong to general category¹¹⁵, 125 belong to OBC¹¹⁶, 35 to SC and 130 to ST¹¹⁷. The table confirms that STs are the worst hit and almost 35% of the total listed patients belong to the caste group. Men(209) are more among the victims than women(168) and this can be due to the invisibility of women victims which is discussed towards the end of this chapter.

Proximity to water bodies, use of pesticide contaminated wood and other local resources, poor nutrition and lack of awareness are pointed out as the major reasons that made people more vulnerable to the disaster (Padre, 2011; Jayakumar, 2011; Balakiran, 2012). The disaster has affected people across caste groups in all the affected villages as the pesticide was sprayed aeri ally spreading the level of vulnerability. However, field observations and interviews point out that proximity to water bodies increase the likelihood of getting affected and accentuates the severity of diseases. In Enmakaje Dr.Y.S.Mohan Kumar's initial inquiry into the possible cause of the increasing health anomalies took him to the conclusion that people who live by the side of the Kodengiri river, which originates inside the plantation hills are the worst affected. Though proximity to plantation estates also increase the severity of diseases, wind carries pesticide further away from the site of spraying the vulnerability of succumbing to illness spreads much beyond the plantation areas to other panchayats as well.

The inclusion of larger share of population belonging to general category in the village Enmakaje should be examined by considering the spatial distribution of households near the banks of the river Kodengiri which takes origin inside the plantations. The oral histories collected from the elders in the region pointed out that

¹¹⁵ This includes Bhat, Nayak, Achary, Nair

¹¹⁶ Muslims form the majority, it also includes Shetty, Belichapada, Rai, Maniyani, Paattali, Rao, Alwa, Chettiar. OEC includes Moolya

¹¹⁷ There is a recent controversy regarding the inclusion of Niak's ? under the general category which is being contested in the Indian Parliament. As the tribal origins of the community is clear from oral histories for the purpose of the present study we consider them under the Scheduled Tribes category.(nlterview Sreenivasan, Mohanan)

the tribals who initially inhabited the river banks were displaced to the up-hill regions following the entry of Aryan immigrants to the region¹¹⁸. Thus the new settlement pattern had the Brahmins occupying the places near the river side and the tribals the up-hill.

“The houses on either sides of the Kodengiri stream belong to the Brahmin families...the in-migration of Brahmins to this region has altered the settlement pattern here...the Brahmins chose to settle by the side of the rivers and occupied the farm lands there...the new settlement pattern displaced the lower caste people to the up-hill regions...So if you look at the list you will find that the disaster has affected people across caste groups...”

(Sreenivasan, Ex-panchayat member, Swarga, 14 Dec. 2012)

The proximity to water bodies, which is a major exposure path-way made the Brahmins and upper caste people more vulnerable whereas the poor nutritional levels increased the vulnerability of lower caste people. The analyses of the social base of the victims show that the disaster has further accentuated the structural inequalities in the panchayat. The field observations also pointed out the increased instances of victims migrating out of the region to Karnataka selling their lands off. The migration of many such patients has kept them away from the victims' list and benefits. The lands sold by these 'ecological refugees' (Martinez-Alier 2002) are bought by planters and real estate agents from central and southern Kerala who have planted rubber extensively on them¹¹⁹.

VI. Discontent about the existing list and procedures of enlistment

It must be noted that from the very first, the lists have been a reason for discontent among the victims and activists. There are widespread complaints about the criteria chosen for inclusion under the list, the exclusion of deserving victims and the

¹¹⁸ Sreenivasan, personal interview, 24,1,2013

¹¹⁹ Interview with panchayath members pointed out that more than 400 acres of land in the Panchayat has been sold out to planters and real estate agents from Central and Southern Kerala, who have converted the hills into rubber plantations.

inaccessibility to medical camps¹²⁰ in the hilly villages. The activists have also come up against the recent move by the District Panchayat administration to distribute the monthly family pensions through ATM as it would force the victims to travel kilometers for collecting the pensions as the diffusion of new generation banking services is poor in these villages which are economically backward (Field Notes, 2012). The present section brings out the reasons for discontent among the victims and activists about the listing of victims and the procedures through which the benefits are distributed. The infrastructure put in place to offer compensation for the victims is commendable especially when considering the case of Bhopal in comparative perspective which has not yet secured such detailed and scientific mechanisms of relief distribution¹²¹. This however, does not imply that the relief and rehabilitation system is without limitations. The nature of the benefits disbursed is highly individualized, which address only the family rather than approaching the issue from the perspective of community. The nature of harm done is not confined to the society and people but has also affected the environment hence, piecemeal solutions like monetary compensation and pensions will not resolve the issues comprehensively. The relief and rehabilitation package must rather consider the restoration of the destroyed ecology and livelihoods along with the medical and financial benefits offered to the disaffected to secure them a future free from vulnerability to such disasters and offering them sustainable solutions. The call for transforming the panchayat into an organic district rests in paper and no serious initiatives have happened so far in this turn. The scheme of benefits has provision for community-based initiatives but very little have happened in this direction.

In this context, the subsequent section explores the nature of the benefits distributed and the problems associated with the implementation of the scheme of benefits in

¹²⁰ The location of medical camps in many of these hilly villages has kept these camps inaccessible to many of the victims who are disabled and cannot move without support. The terrain of the region is so difficult that it is difficult for the vehicles to reach to the village interiors and take the victims who are bed-ridden and disabled to the medical camps.

¹²¹ Interview with Jayakumar, 15.2.2013

the affected villages, and the effect this has had on the nature of the anti-Endosulphan movement itself.

VII. Politics of Inclusion and Exclusion in the list

The field visits conducted in Karadka, Enmakaje and Muliyar panchayat show that even after the re-categorization of the victim's list many deserving patients could not find their place in the list for compensation. Despite attending all of the medical camps these patients were not included in the list and hence receive no benefits from the schemes announced. Even those patients who got recommendations from medical practitioners from PHC did not get included in the list.

"I was regular in going inside the Koopu¹²² and collecting cashews and fuel wood when I was young. Our father passed away years back and we struggled to eke out a living after his death. The meager income that we would get from selling these cashew kernels would at least fetch us books for school. I never bothered about the spraying; I mean none of us had an idea that it is dangerous. It was only after my brother interacted with some of these activists that we learned how poisonous the pesticide was.

My son is eight years old now. He has been bed-ridden ever since his birth and also has epilepsya. He cannot talk, but he cries continuously. We had taken him to so many hospitals in Mangalore and Bangalore for treatment, and this has put my family in debt. Doctors point out that my exposure to the pesticide can be the reason behind his illness.

During the second medical camp in Muliyar, the doctor certified that he has 75% disability and included him in the list, under category one, but when the final list came out his name is missing from the list. He has not received any relief from the government so far. We have filed a complaint with the cell and they said they will consider the case. We do not have strong political connections, had it been so he would have made into the list much earlier."

(Hajira, Karadka panchayat, 20.2.2012, 12.30 pm)

The people who deserve and still did not make it into the list are generally those who stay less connected with the society and with minimal or no political power,

¹²² Plantation

participation or influence. Rather we could say that 'social' and 'political' capital play an important role in spreading the information about the benefits announced and procedures involved in availing them. Many of them have been in the dark about the disaster until recently, being illiterate. The barriers erected by linguistic and cultural backgrounds have also contributed to the lower dissemination of information regarding the disaster, the announcement of medical camps and relief packages showing that the state has failed to inform the people of their rights and entitlements towards the relief measures announced. The interiors of Enmakaje panchayat still holds firm to the belief that the health anomalies are due to the curse of "Jatadhari" god and deny treatment.

During discussions with local activists I enquired about the political inclusion of people in the list, some of them smiled away my question whereas a few seemed very strong in their opinion and pointed out that there are such inclusions. One of the respondents quite sarcastically observed, "there are serious politics involved with all these now, earlier nobody bothered to intervene, but now it seems all parties are 'concerned'", another respondent narrated an example to me "see...X¹²³ is a village where the extent of PCK land hardly spreads over 2 wards, but look at the number of enlisted victims...why?...the panchayat is ruled by Y party, and that explains it all..."

Access to political power has also been quite significant in determining the inclusion in the victims list in the recent period. Initially, the active participation of civil society groups worked towards ensuring the inclusion of all the deserving victims. In other words, civil social institutions and groups were more effective intermediaries, in terms of identifying the deserving victims and ensuring the flow of benefits to them. Of late the entry of political parties has co-opted many such efforts and has started playing the roles of intermediaries in reaching the benefits to

¹²³ Name of the village and respondents are protected to secure the identity of the victims. It should also be noted that the pesticide companies are troubling the functioning of the EVRRC from the beginning with RTIs requesting the final list of victims. The existence of undeserving victims on the list could be used by them to put the entire relief and rehabilitation measures in jeopardy.

the victims. Interviews pointed out that there is increasing confusion among the victims as many of them have been told that participation in the protest is mandatory for the inclusion of patient in the list¹²⁴. Victims reconfirm with many of the activists about the possibility of getting included in the list if they have not participated in the struggle.

M.A.Rahman, a noted writer and activists says;

“I often get calls from the victims asking me, “Mashe, we have not participated in the protest will we be included in the list?”

During the interview, Dr.Mohammed Asheel (Nodal Officer, EVRRC) pointed out that some of the protestors are spreading confusion among the victims and create panic. He said that he also often receives calls from the people to enquire if they will not find place in the list because they have not participated in the protests. “This is unfortunate because the list has got nothing to do with participation in protest”, he says.

This implies that inclusion in the list is linked with participation in “*Samaram*” (protest) or rather participation in protest is projected as a medium that ensures representation in the list. There is also alleged presence of intermediaries who takes money ensuring inclusion in the list¹²⁵

VIII. Nature of Benefits

The scheme of benefits is highly individualizing as it focused on particular families and individuals in them but not on collective interests. The monetary compensation which forms the most prominent category within the benefits has created cleavages

¹²⁴ Sreenivasan 14.12.2012 , Asheel 20.11.2012, Shafeeq 23.1.2013 ,Shanti 17.12.2012, Mohammed Kunji 16.12.2012, Kumaran 16.12.2012, M.A.Rahman 9.10.2012

¹²⁵ John Jan 2013, The observations from the field also shows that there are singular incidences where the victims were asked to contribute money towards the organisation of protests and were told that participation in the protests is mandatory for securing the benefits announced through inclusion of name in the list.

among the victims by separating the patients who could make their way into the list and who could not. The people who were active during the initial phases of the movement point out that the announcement of benefits has derailed the movement and reduced the political vigour as people are no longer concerned about anything more than the compensation. Of late, the struggle has been confined to fighting problems associated with list-preparation and the correct disbursement of benefits. The movement has tended to keep the demands for eco-restoration and penalization of the polluters by proving their culpability off its demands after the announcement of monetary benefits. The interviews in Muliya village indicate that victims who were in the forefront of the movement from the very beginning have started disassociating from the struggle as they did not find themselves adequately represented in the list. The case of Sujith and Manikandan, siblings with acute skin disease, appeared across the media since the early phase of the movement and they were one of the few victims who received some monetary relief during the period of A.K. Anthony in the early 2000s. Discussions with local activists made it clear that their mother no longer participates in the struggle as her kids were not included in the first category of the list. The possible reason for their exclusion would be given as they are non-bedridden and without physical disability. The absence of physical disability does not offer mobility to these persons as the nature of their disease will cause social isolation. Their repeated attempts to join school went in vain when the fellow students complained of the foul smell from their skin. They do not step out of their house as people are intimidated by their appearance. This makes clear that the categorization of victims should not be confined to the medical variables but also should understand the sociological and psychological conditions which would make Ravi or Kiran¹²⁶ as confined to their houses as a bed-ridden victim.

The inclusion of people in the list who have not really participated in any of the struggles also reduces the level of participation by those victims who have found place at lower categories in the list as they feel that the people who have managed to

¹²⁶ The names used here are pseudo ones to protect the identity of the victims.

get into initial categories get higher benefits from the efforts put forward not by them, and they accuse of them of free-riding on the efforts of people who have fought for the speedy implementation of the package and distribution of compensation.

The failure to address the problem from a community perspective and conversion of people affected into population categories is unsustainable in the long-run as it fails to create community assets which are productive and ensure future income generation.

There is no mechanism to monitor and guarantee that the amount distributed is used solely in the interest of the victims. Field visits tell us that many of the households spend the money to settle previous debts which were taken for meeting the health expenditure. Allegations are also there regarding the use of compensation money to meet the family expenditures which would imply that the share that the victim gets out of the amount is meager¹²⁷.

“It is true that the distribution of monetary compensation has increased the number of claims, but this should be understood in the backdrop of the history of economic backwardness of this region... The waiving of loans must be done first as it would enable the households to use the relief amount entirely for the benefit of the victims. A socio-economic survey of the affected households should be carried out so that we can target the poor and needy. I would rather say that, never give people fish but teach them how to catch fish and provide them with the implements to do so... this alone would be sustainable”

(K. Balakrishnan, KSSP, Kanhangad, 17. Dec. 2012)

¹²⁷ From Interviews with Jayakumar 10.10.2012, M.A. Rahman 9.10.2012, Shanti 17.12.2012, Asheel 20.11.2012

In short, the occurrence of a disaster in a region like Kasargod which is backward in socio-economic aspects would demand a deeper understanding and intervention by the state beyond the individual level to that of the community to effect meaningful solutions that would help in overcoming the structural inequities in which the society is embedded in. In addition to the monetary compensation, the NHRC had also recommended for the distribution of PCK land to the disaffected which was never really taken forward neither by the state government nor the activists.

The sustainability of the solutions are questioned by many. For instance M.A.Rahman points out that his organisation ENVISAG has envisioned a project to take people back to sustainable and organic agriculture by creating farming systems in villages. He said that the organisation has been successful in offering cows to selected households as the initial step and acquired land in Karadka panchayat to start group farming¹²⁸.

The list offers no information on the socio-economic status of the victims and this would imply that two patients with the very same illness belonging to diverse economic backgrounds would fetch the same benefits from the scheme. There is no consideration or positive reservations offered on the basis of the economic status of the victims.

Under the purview of governance

The above discussions point out that the reduction of Endosulphan victims into empirical categories that could be enumerated brings the issue under the purview of the 'governance programme' by the state (Chatterjee 2004; 2011). The approach and intervention from the state does not recognize the victims as citizens with rights but consider them population categories, just as it is done in the case of poverty alleviation programmes, making the programme compensatory and not rights-

¹²⁸ Personal Interview, 21.11.2012

based. The scheme of benefits are 'gratuitous' (Jayal, 1999; 2001) in nature and may not empower the victims.

The relief and rehabilitation package from the very beginning has been integrated and run through existing programmes like NRHM and the recent inclusion of NRLM programme in offering self-employment opportunities to the victims add on to the list of welfare programmes that are brought in to undo the harm done by the disaster. To argue in a different way the state has been successful in managing protest against the long-term harm inflicted on an entire region - to its very ecology - by a public sector corporation by treating the disaster as an issue of individualized welfare fusing it with the rolling schemes of the state which doles out such welfare, in effect taking the state off the hooks of culpability.

IX. Creation of rationalities: new participants

The announcement of monetary benefits has created new rationalities among the actors and incentivizes their participation in the movement demanding compensation. In the previous chapter we had argued that the anti-Endosulphan movement saw lower participation rates from the victims and the passivity of the people, especially towards the north of the Chandragiri river, was evident throughout the phases. The announcement of benefits has introduced greater incentives for the victims for participating in the struggles and many of them pointed out that some of the campaigners even stress the importance of participation for inclusion in the list of beneficiaries.

The scheme of relief has created a category of beneficiaries who look up to the state for monetary compensation and the package fails in terms of empowering people by adopting a rights-based approach and in providing them with means to secure sustainable means of livelihood. Instead of converting the disaster as an opportunity for reviewing the development paradigm adopted by the state which relies heavily on pesticide intensive-industrial-monoculture is bypassed by treating the disaster as any other social development issue.

Enquired about the changing nature of protests,

“I often say that they should change their protest vocabularies. It is wrong when they say that provide relief to all as directed by NHRC because NHRC has not directed the state to provide relief to all. Rather what they should demand is to broaden the categories of patients to provide them with the relief amount...Consider a hypothetical case where you have a room occupied by both men and women...See, we can demand that there should be programmes for men along with women who sit in this room, but cannot agitate and demand that the men should be declared as women and should be provided with the benefits. The situation here is somewhat similar to this.”

(Dr.Asheel, Nodal Officer, EVRRC, 20.Nov.2012)

He argues that the movement has taken a wrong step in spreading confusion and being anti-establishment. The movement should align with the state initiatives to ensure effective implementation of the schemes that are already put in place by the government. In general we can argue that the entry of monetary compensation has created wrong incentives, creating intermediaries between the state and the victims and massive inflow of political parties to the scene.

Those victims who had generally kept away from the movement due to lower level of awareness, and restricted mobility caused by the nature of ailments have reportedly shown increased participation after the announcement of monetary benefits. The compensation has created new incentives for newer actors to step in participate in the struggle. This of course is a positive development, which the activists could consider as an opportunity for politicizing the victims. But in the absence of such politicization, crowding for benefits can hardly be called ‘participation’ in the rightful sense.

The entry of political parties eyeing ballot and political mileage has led to loss of perspective for the movement and some activists argue that the movement has been co-opted by them sidelining the initial actors. The victims largely align with people

who promise them relief amount. The inflow of money without clear directions about how to spend it will not offer sustainable solutions in a region like Kasargod where structural inequalities are persistent. Many of the activists have started disassociating themselves from the struggles. They point out that politics has crept in to the movement, to the extent of unionsing the victims and creating divide among the affected. "I never brought politics into this issue. I had stood for the victims because I felt that there is injustice. But I cannot subscribe to the way political parties approach this problem. For me all the victims are the same..." opined an activist who had even left his job for almost half a decade in order to help the victims. "I cannot really be part of this run for compensation. I still visit all of them and inform them about new schemes and all...but that's all I do now...the movement has all changed course from where it started"...remarked an ex-member in one of the affected panchayats.

X. Changing identity of the victims

The entry of the scheme of benefits has also seen a change in the status of 'victim as an identity' in the affected villages. Initially 'victim' as an identity was something people hid from the society fearing social exclusion, the benefits have been successful in bringing people out to light who are severely affected by the disaster. The documentary on endosulphan victims by Prof.M.A.Rahaman has a scene where an agitated group of PCK workers try to interrupt the shooting of the documentary. While driving the group out of the plantations the workers shouted and repeated that there is nothing wrong with the people living there and he (M.A.Rahman) should not be taking the video footage of the patients anymore. ¹²⁹This has happened years back and things have changed quite a lot in these villages.

The shift in attitude is evident from the fact that the 'victim' once concealed within the house are now is seen as a category which could bring the population under that category to a stream of benefits. Sreenivasan¹³⁰ argues that even people with

¹²⁹ Arajeevithangalkku oru Swargam

¹³⁰ Personal Inreview, 7.1.2013

headache and blood pressure often claim their disease as a result of Endosulphan, without really knowing what it is, but understands it as a category that could bring money. The compensation has thus created new incentives for newer actors to step in participate in the struggle. However, both the projection of individualized monetary compensation as well as the entry of political parties eyeing ballot and political mileage have led to loss of perspective for the movement and some activists argue that the movement has been co-opted , sidelining the initial actors.

XI. Women Victims; unheard and invisible

“The women here have gynecology problems but they are not ready to come out and disclose the details in a camp. They are hesitant to talk about this. Many parents fear that disclosure of such information about their daughters would leave them unmarried...”

(Shanti, Anganwadi Worker, Muliyar, 17 Dec.2012)

Women victims' are largely missing from the list. Women share the double burden of being the victim and the care taker. Women play a major role in taking care of the disabled and diseased in the family and there are women with more than two disabled children. Care-givers undergo much distress both mentally and physically and we could identify a large number of families with women deserted or divorced by husbands, taking care of disabled children alone. The women in the affected areas generally remain silent and are invisible in the list. Women are reticent about revealing the gynecological illnesses affecting them especially in medical camps.. There are other sociological aspects to women's invisibility too.

“Women are scared to give birth to children...I am not sure if you are able to understand how unfortunate such a situation is...the state is responsible for all this”

(B.C.Kumaran, Bovikanam, 15.Dec.2012)

“The mother’s womb is regarded as the safest place that a child could ever be in, this has however, proved wrong in Kasargod...they have filled it with poison...and see the intergenerational flow of miseries continue...”

(M.A.Rahman, Calicut, 9.Oct.2012)

. Multiple abortions and menstrual problems are rampant but many of them do not find place in the list. During the field visits I had been to households where three out of four children born are mentally retarded.

Jayasree (2012) argues that -women’s health problems in Endosulphan affected areas have to be understood by keeping their lower social status and gendered division of labour under purview. In many of the affected households women are overburdened with domestic responsibilities as they have to offer continuous care to the affected along with other domestic responsibilities. The general well being of women is low due to poor nutrition and psychological stress and social isolation (Jayasree, 2012).

Study reports show that the reproductive health events including infertility, precocious puberty, abortion¹³¹, intra uterine death/still birth, neo-natal death, genitor-urinary disorders are found significantly higher in population when compared to other unaffected areas (Jayasree, 2012). Menstrual disorder is considered to be a serious problem as it is closely related to gender identity, perceived well-being, cleanliness, body image, motherhood and reproductive health. There are also instances of premature deliveries and low birth weight deliveries. Many of the interviews with women respondents pointed out that periods of menstruation is a concern for the mothers of disabled girls for reasons of hygiene. The diseases are aggravated by the poor nutritional level of the majority of women

¹³¹ The interviews with health workers and AWW pointed out that there are instances of repeated abortions for many women living in the affected panchayats. There are also cases where the same household has four mentally retarded children and many of the women during the interviews reported that they are scared to conceive a child fearing the possibility of giving birth to a disabled child (Shanti, Personal Interview, 17.12.2012, , Kumaran,14.12.2012, Rahman, 21.11.2012).

in the region as most of the affected are from low socio-economic class making them more vulnerable¹³².

Some of the respondents opined that there is social exclusion and stigma associated with the diseases as a result of which mothers with children with disabilities keep away from social gatherings. They have to be with the patient all the time, and many have reported that they are afraid to take children with mental retardation out as they may be hyperactive often and go out of control. There are also instances of self-imposed social isolation when women decide not to go out as they would like to stay with her disabled child all the time. The studies conducted have brought out instances where the victims have tried to commit suicide to alleviate the burden on their mothers and care-givers (Jayasree, 2012)

The disaster has put marriages under strain because of the increasing reports about high incidence of abortion and irregular menstrual cycles among the women in affected areas. Since many of the diseases are congenital there is also concern about the transfer of diseases to the next generation. Thus people are hesitant to marry girls from this area fearing that the anomalies will be passed on to the future generations. The indepth-interviews have shown that girls from families having patients often stay unmarried¹³³ (Kamala,24.Jan.2013, Enmakaje).

They are helpless, often confined to their families and avoid social functions. They are hesitant to talk about their health problems out in the public or to the doctors during the medical camps. The gendered impacts of the disaster can be better understood by exploring the sociological aspects in greater detail (Balakiran, 2012; Jayasree, 2012)

XII. PCK's non-culpability

¹³² This is mainly because protein deficiency is considered as a risk for Endosulphan related health problems by scientific studies (Jayakumar, 2012, Jayasree, 2012, Asheel, 2012).

¹³³]

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¹³³]

“Government perpetrates the harm and then they provide compensation from the tax payers money...Is there any logic? I don't find any “

(Mohammed, Pouvval)

“If endosulphan is not the cause for disease...but who are you giving the benefit of doubt”

(Shree Padre, Water-Journalist, Swarga, 21.Nov.2012)

“Companies can evade the responsibility by pointing out the negligent application of the pesticide by the PCK at doses high above the prescribed levels violating all the protocols. Hence, a case filed against the companies by the PCK will not stand”

The state had managed the protest against PCK by bringing the issue of relief and rehabilitation under the purview of governance thereby shielding it from culpability. The state has intervened here neither to secure environmental rights nor to punish the polluter and demand ecological restoration - it worked, rather, as just a crisis manager doling out welfare benefits. The only effort to penalize PCK has been through the contribution of Rs. 87.26 crores it should make towards financing the compensation package for the victims. The PCK has been directed to remit Rs.27.04 crores as first installment and has contributed the amount, but in the annual report it is mentioned that;

Regarding the balance amount (Rs.60.21 crores) we have requested the Government to reconsider the matter and exempt the Plantation Corporation from paying compensation...It may also be noted that Government vide order GO(MS) No.34/12/AGRI dt.21.02.12 has fully exempted the corporation from paying any compensation. As such there is no further

liability to the corporation and so there is no provision required for Rs.60.21 crores (Annual Report, PCK,2012: 28)

The above statement proves that the state will rescue the PCK from the culpability as the present schemes of benefits are linked excessively to the existing welfare programmes. Therefore, there is no sense of justice associated with the compensation offered if the PCK, the polluter and perpetrator of harm, is not made to pay for the negligence. Thus it is clear that the nature of benefits offered has made the issue much like poverty or malnutrition, obscuring the larger discourse of environmental justice and rights involved here.

We had started the enquiry by conceiving the Endosulphan disaster as an EDC, understanding how the conflicts in interest culminated in the disaster and further in creating the ecological movement, the anti-Endosulphan campaign. The present section evaluates the success of the movement in terms of internalizing the negative externalities against which it had started the fight and the issues involved when negative externalities are internalized

Internalizing Externalities and the issue of Incommensurability

We consider pollution as a negative externality and explains how the state's attempt to internalize the externality fails as it is impossible to attribute prices to natural resources by valuing them in monet terms. The loss of environment from the vocabulary of the protest also explains the valuation procedures which fail to price ecology because of its location outside the market.

According to Martinez-Alier;

Economic incommensurability also arises because most environmental resources and services are not and cannot be in the market or in surrogate markets (Martinez Alier, 1995:79).

The debate between environmental economics and ecological economics around the question of the 'internalization of externalities'¹³⁴ has led to a search for concepts to account adequately for the hidden ecological and social aspects of production have intensified in recent years. The neo-classical economics resolve the issue by internalizing previously unaccounted for ecological costs or 'externalities' into the economic system. This is done by assigning property rights and market prices to all environmental services and resources. The assumption here is that the valuation of natural resources is subject to only economic conditions and that all natural aspects can be entirely reduced to market prices(Escobar, 2006).

On the contrary, ecological economics considers that the value of nature cannot be assessed only in economic terms. The role of ecological and political processes that contribute to define the value of natural resources cannot be reflected in market prices and hence there is incommensurability between economic and ecological processes. The incommensurability between economic and ecological processes is prominent mainly due to the fact that communities value the environment for reasons other than economic say-they consider nature to be sacred or uncommodifiable. Escobar (2006) points out that conflicts over access and control of resources take on a complex ecological and political character following the suspension of the idea that everything can be evaluated in terms of money. Hence, the category of ecological distribution conflicts serves as a means to make visible the

¹³⁴, social benefits (costs) and private benefits (costs) differ from each other (Sankar,).The producers Externalities arise when certain actions of producers or consumers have unintended external effects on other producers and/or consumers (Sankar,).Externalities can be positive or negative. In this chapter we are dealing with negative externalities in relation to human health and environment. Negative externalities arise when an action by an individual or group produces harmful effects on others, for example ; pollution is a negative externality (Sankar,n.d)A factory discharging its untreated effluents into a river pollutes the river, and the consumption of this water bear costs in the form of health costs and/or water purification costs (Sankar,).In the presence of externalitiesof externalities have no incentive to take account of the effect of their actions on others.In the case of a negative externality the marginal social cost exceeds the marginal private costs this would in turn leave private optimal levels of output above the social optimal output. The situation demands intervention from the government in order to internalize the externalities in production and consumption to maintain equality between social and private levels of output (Sankar, n.d).

complexity, and political ecology emerges as the new field which studies about EDCs (Martinez-Alier, 2002).

In ecological economics market economy is considered to be embedded in a physical, chemical and biological system. The natural resources exist outside the market and this poses problem for pricing. The attribution of 'property rights' and inclusion in the market would change the distribution of income and patter of prices in the market economy. The pricing of resources depends on the distribution of income and on the problematic allocation of property rights to items of 'natural capital', which also has to bring in rate of discount needed to weigh the future costs and benefits falling upon the generations to come. Ecological economics, has eloquently raised the issue of incommensurability, pointing out the shortcomings of internalizing externalities in monetary terms. 'Incommensurability implies the absence of common unit of measurement, but does not however, mean that alternative decisions cannot be compared on a rational basis, on different scales of value as done in multi-criteria evaluation' (Martinez-Alier, 1995:). It has been pointed out that most of the times the money values given to externalities appear as a consequence of political decision. The discussion on incommensurability raises pertinent questions about the choice of something; say a development project strictly on the basis of a cost-benefit analysis (Martinez-Alier, 1995).

To quote Neurath (1919)

The question might arise, should one protect coal mines or put greater strain on people?

The above question can be rephrased in a context like ours 'should one protect cashew plantations or put greater starin on the people?.Theoretically the choice is determined by technical and non-technical matters including inter-generational utilities and has strong political-economic underpinnings.

Kapp points out that attributing monetary value or discount rate to future utilities or dis-utilities in order to arrive at their present capitalized value can offer monetary

calculations but will not resolve the dilemma in choice by not accounting for the risk with human health and survival. Hence, the attempts aimed at measuring social costs and benefits in terms of monetary or market values are doomed to failure. He argues that social costs and social benefits have to be considered as extra-market phenomena; which are borne and accrue to society as a whole and the heterogeneity makes quantitative comparisons impossible (Kapp).

In short, from an ecological point of view, the economy lacks a common standard of measurement, for it is difficult to give present values to future, uncertain and irreversible contingencies. It is important to understand that valuation would depend in the allocation of property rights and the distribution of income, hence the political economy would come into operation in determining the values. The poor living in squatters will not be able to report their demand for clean water in terms of a higher price; this does not however mean that their valuation for clean potable drinking water is low, but that they are constrained in their choices with a very limited set of available options. Martinez-Alier argues that such incommensurability opens a broad space for environmental movements.

The nature of benefits distributed for the victims have not even included the intergenerational loss suffered by the people. The amount distributed as benefits are arbitrary and are not based on any standard rates of discount which takes into account the future loss. The ecology however does not come into picture as it falls outside the market and hence cannot be appropriately priced. This brings out the serious limitation of neo-classical environmental economics which limits the idea of internalization by attempting to arrive at monetary equivalents of entities like resource or life which cannot be commodified in meaningful ways.

XIII. Conclusion

The chapter explores the response of the state to the ecological destruction wreaked by Endosulphan pollution in Kasaragod, which was to bring the victims of Endosulphan pollution under the purview of its 'governance programme', after the

transition of the movement from civil society to political society. The intervention by the state offering relief and rehabilitation to the victims is commendable but the nature of benefits on a closer examination proves to be individualizing and creating cleavage between the categories of victims.

The nature of benefits reduces the victims to population categories enlisted by the state. The chapter brings out widespread discontent against the procedures of enlistment and the distribution of the benefits, the inclusion of undeserving victims and the exclusion of the deserving and the invisibility of women victims from the list. It points to the changing status of the Endosulphan victim as an identity which once signified individual pain and misery but also the violence done to the local ecology, which has now changed to one in which people vie to be included. It argues that connection with political forces is important in managing to secure inclusion in the list, and that political parties now crucially mediate such processes. It is clear however, from the close examination of the victims' list in one of the most important affected villages that the social group that suffers the greatest social, political, and economic disadvantage in the region are also the worst-affected. While the compensation gained by the victims is quite considerable compared with other instances in the country, it is worth asking whether it is substantial enough - in quantity and quality - to make up for the additional burden that the already-disadvantaged have had to carry as a result of Endosulphan pollution.

Also, the monetary compensation scheme has derailed the popular movement from its goal of ecological justice and has created new rationalities for individuals' participation in the struggle. The chapter questions the sustainability of schemes which fail to create productive assets and offer long lasting livelihood solutions for the affected families. Moreover, the doling out of welfare by the state makes the polluter non-culpable except for the contribution made towards the relief fund.

Appendix.5A.1

Table.1.A.Distribution of Victims among Others, SC and ST

Caste group	Number of victims	Victims as a % of total victims in the panchayat	% of total population
Others	212	56.24	64.91
SC	35	9.28	26.90
ST	130	34.48	8.19
Total	377		

Source: Endosulphan Victims List, Enmakaje Panchayat

CHAPTER 6

CONCLUSION

The history of resource conflicts in the global South dates back to the colonial period when the changes in resource endowments entitlements introduced by the British came in conflict with local people's age-old rights and practices related to natural resource utilization (Bandyopadhyay and Shiva, 1988). If in this history, the colonial state donned the role of exploiter, in the present ecological distribution conflicts are between the globalized capital-friendly state and the dominant ideology of development, which destroys the ecology and livelihoods, and people who resist the march of this process of primitive accumulation. But there were significant continuities in the transition from colonial to post-colonial state. This was marked, for instance, by continuation of colonial resource management practices by the newly independent states which strove to achieve national development through modernization and industrialization (Baviskar 1995). In India, Nehruvian developmentalist ideology has destroyed the ecology through its resource intensive-massive, large and mega projects—and spread the ideology across the nation as the path to modernity.

It should be noted that the reverberations of Nehruvian developmentalism reached down south making the contents equally applicable to Kerala, despite its long history of 'communist rule' and left politics (Raman, 2012). It is of no surprise that Kerala has its own share of environmental and livelihood struggles against those projects, which were set up either by the state or with special invitations from the state¹³⁵, which exploited the local resources. Raman continues that though the developmentalist state flourished after state formation and claimed highly commendable achievements, the environment and livelihood risks inherent to some

¹³⁵ Note that the state invited the Birlas to set up Grasim factory in Mavoor and again the left democratic government offered a warm welcome to the U.S based Coca-Cola Company to set up its plant in Plachimada, Palakkad (Raman 2012).

of these projects were high and they were challenged by conscious people, which according to Raman is a reflection of the 'political-ecological modernity' of the society.

From the discussion in the chapters, it is evident that the anti-Endosulphan movement in Kasargod poses serious challenges to the ideas of democracy and decentralisation as they were shaped in the state. The absence of political left from environmental struggles but often aligning itself with the workers union has been the order rather than exception in the political scenario of the state (Devika, 2008). The limitations of the much acclaimed land reforms seem to also have had the effect of having elevated the state as a semi-feudal landlord exercising strong spatial control mechanisms over the territory. It is interesting that despite Kerala's strong traditions of 'public action'-based democracy located at the grassroots, the emergence of the PCK as a veritable 'landlord' in Kasargod remained largely unquestioned until recently. This is perhaps not surprising given the fact that such democracy was also strongly wedded to heavy-industry-centered visions of development.

The Endosulphan spraying in the district for more than two decades, despite strong opposition from the local people including the panchayats, also points a finger at the much-lauded homegrown democratic-decentralisation campaign of the State, the PPC. The anti-Endosulphan movement, with strong grassroots and civil society origins, talk about the potential these movements have in terms of changing the democratic discourse. Indeed, it is the panchayati raj institutions that have been at the forefront of providing relief and organizing welfare to the victims. However, the panchayats have been, in effect, reduced to welfare distributors and not acknowledged as the lawful protectors of the well-being of the people and of the natural resources of the local area. In other words, their role in furthering local *democracy has, on the ground, been strictly limited. The transition of the state in Kerala from a public-action-driven one to a fully-liberal welfarist one following the PPC can be observed in the state response mechanisms to the disaster, where the state manages the disaster by creating population categories and doling out welfare*

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by bringing it under the purview of governance programmes.¹³⁶ The state and the actors fail to factor in ecological losses due to incommensurability of the same in money terms thus confining the movement as one for compensation failing to account for the losses imparted in the ecology.

The increasing instances of ecological struggles in the state raise pertinent questions about the complexity interwoven into the relationship between state, development, resource and people. The questions stand very important in the context of Kerala, which has been a cognitive map of development scholars and practitioners for the past three decades because of its impressive accomplishments in social development achieved through public action, known as the—Kerala Model of Development (Veron, 2004). The “egalitarian developmentalism” attributed to the Kerala model has been critiqued for ignoring the unequal relations between social groups and being non-inclusive (Sivanandan 1976, Devika 2010). This forces one to ask the question—who are the prospective beneficiaries of such development models? The much lauded home-grown decentralized planning since 1996 has not been successful as regards enabling marginalized groups (Kjosavik and Shanmugaratnam, 2006) or in protecting the fragile ecology as promised in the campaign (Issac and Harilal, 1997). The ecological disasters like the one in Kasargod must be considered in a context where some authors opines that the “model” has won international attention for its achievement in social development and environmental sustainability (Veron, 2001).

The popular campaign of democratic-decentralisation has been transformed into ‘destatization’ where the liberal welfare state steps out of the traditional realms of action (Kjosavik and Shanmugaratnam, 2006).. The top-down nature of planning and implementation is still visible in this context where the people in the locality are left with no say over the land-use pattern, or use of a pesticide, of which they are direct

¹³⁶ For instance a closer examination of state’s response to the fishworkers movement we can see that the responded with welfare measures and individualized benefits, but was also forced to concede a ban on trawling during the monsoon, which was an acknowledgement, albeit hard-won and cursory, of the coastal peoples’ ecological rights.(Kurien, 1991; 2000) This is not how the state respond to the disaster in Kasargod.

bearers of negative burden if any.. The struggles are fought by the local people who initially face complete hostility from the mainstream political parties, and are hence strictly confined to civil society realms and actors. These struggles open up new avenues of democratic discourse in the socio-political landscape of the state which were not accessible to the "outliers" of the Kerala model.

It is to be noted that in most of the environmental struggles in Kerala, the state was responsible for bringing in a corporate regime of accumulation or starting a corporation under its ownership as part of its wider developmentalist agenda but the same was subjected to conscientization through the agency of transverse solidarity (Raman, 2010). The entry of development as modernity has restricted the society to a 'centralized-undemocratic-uniform' model which should be ideally replaced by one that is 'decentralized-democratic-diverse' (Shiva, 1991). The movements should also be able to suggest alternatives to the existing models which are bottom-up and participatory (Escobar, 1995).

The internalization of externalities in monetary terms has resulted in individualized benefits and this brings out the major weakness of the neo-classical way of internalizing externalities. The rate of discounts are arbitrary and do not reflect the future contingencies (Martinez-Alier 1995).The valuation in terms of money fails to capture the devastated ecology as the resources fall much outside the purview of regular or surrogate markets. The issue of incommensurability highlights the failure of market mechanism to strike the right price all the time for environmental resources. The disaster in Kasargod opens yet another chapter of state mediated ecological devastation, the political ecology of which is central to its making.

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Interview List

15.10.2012	C.Jayakumar, Thanal, Trivandrum
9.11.2012, 21.11.2012	M.A.Rahman, Retired Prof., Writer-Activist, Founding member of ENVISAG
17.11.2012	K.Balakrishnan, KSSP, Kanhangad
17.11.2012	Mohanan Pulikkodan, Kumbala
18.11.2012	K.S.Abdulla, Karadka, Kasargod
19.11.2012	Nazim, NPRPD, Kasargod
20.11.2012	Dr.Muhammed Asheel, Nodal Officer, EVRRC
21.11.2012	Sreenivasan, Ex-member, Enmakaje, Kasargod
22.11.2012	Narayanan Periya, EPJM, Vidyanagar, Kasargod
16.12.2012	B.C.Kumaran, Activist, Muliya, Bovikanam
17.12.2012	K.Balakrishnan, KSSP, Kanhangad
04.1.2013	Khadeeja, Housewife, Muliya, Kasargod Varghese George, Chairman, Plantation Corporation of Kerala, Kottayam
8.1.2013	
24.1.2013	Madhavi, Sarppamala, Enmakaje
24.1.2013	Devappa Shetty, PCK worker, Perla, Enmakaje
24.1.2013	Kamala, Swarga, Enmakaje
24.1.2013	Sreenivasan, Ex-member, Enmakaje, Kasargod
26.1.2013	Leelakumari Amma, Periya, Kasargod
27.1.2013	Madhanan, Freedom fighter, Enmakaje