Environmental Regulation and Pattern of Livelihood: A Case Study of the Western Ghats of Kerala, India

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Declaration

I, Saji M, hereby declare that the thesis entitled **'Environmental Regulation and Pattern of Livelihood: A Case Study of the Western Ghats of Kerala, India'** submitted by me to the School of Social Sciences, Jawaharlal Nehru University, New Delhi for the award of the degree of **DOCTOR OF PHILOSOPHY** is a bonafide work and that it has not been submitted so far in part or in full, for any degree or diploma of this university or any other university.

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Forwarded by

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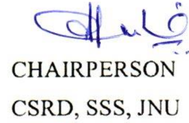

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Contents

Chapters	Title	Page Nos.
	Acknowledgements	i
	Contents	iii
	List of Tables, Figures and Maps	v
	Abbreviations	vii
1	**Introduction: Theoretical Framework: Regulation, Institutions and Forest Governance**	**01-49**
1.1	Introduction	01
1.2	Problematising the Research	03
1.3	Theoretical Framework	06
1.4	Forest Governance, Regulations and Institutions: Review of Literature	13
1.5	Research Questions and Objectives	37
1.6	Methodology	41
1.7	Formulation of the Study and Organisation of the Chapters	44
2	**Locating the Field Profile and Institutions at the Western Ghats in Kerala**	**45-78**
2.1	Introduction	45
2.2	The Field Sites, Communities and Institutions	45
2.3	Socio-Economic Differences and Development Indicators	59
2.4	Spherical and Interconnectedness of Values on Forest Resources	65
2.5	Conclusion	77
3	**Inhabitants and the State: Conservation and Livelihood in the Implementation of Regulation**	**79-138**
3.1	Introduction	79
3.2	Implementation of the Ecodevelopment Project at Periyar Tiger Reserve, the Western Ghats of Kerala	80
3.3	Locating the pattern of Forest Dependency of the Social Groups	85
3.4	Implementation of the Project: Livelihood, Access and Participation	91
3.5	Case Studies on Participation, Livelihood and Conservation	107

	3.6	Participation in Decision-making in Participatory Regimes of Forest Management	123
	3.7	Social Positioning and Responses Between and Among the Institutions	131
	3.8	Conclusion	136
4		**Formal Vs Social and Political Institutions: Responses, Regulations and Forest Governance**	**139-174**
	4.1	Introduction	139
	4.2	The Committee Reports : WGEEP and HLWG	140
	4.3	Responses of the Key Institutions	147
	4.4	Forest Governance, Conservation and Livelihood	169
	4.5	Conclusion	172
5		**Instituting Forest Governance: Process of Decision Making and Implementation of Regulation**	**175-216**
	5.1	Introduction	175
	5.2	Forest Encroachments, Property Rights and Non-Forest Activities	177
	5.3	Response of the Institutions in Enforcement of Regulations, Eviction and Forest Conservation	184
	5.4	Land Alienation and Claims over resources and influence of institutions	191
	5.5	Property rights: Forest land vs Revenue Land	195
	5.6	Establishing Support and Accreditation with Formal Institutions	196
	5.7	Forest Conservation and the State	199
	5.8	Conclusion	215
6		**Conclusion and Policy Implications**	**217-234**
	6.1	Introduction	217
	6.2	Livelihood, Regulation and Conservation Interface	218
	6.3	Land as an Asset for Negotiation and Participatory Governance	221
	6.4	Social Capital as an Asset for Negotiation and Enhancing Livelihood	223
	6.5	Participation of the Local community as a Core Strategy of the Regulations	226
	6.6	Participation of Tribal Women	228
	6.7	Building Coherence among Institutions in Forest Governance	229
	6.8	In Conclusion	232
		Bibliography	234
		Appendix-1	251

List of Tables

No	Title	Page No.
1.1	Classification and Characteristics of Property Rights	10
1.2	Forest Regimes and Nature of Forest Management in India	16
1.3	Overview of forest regulation and Governmentality in India	24
1.4	Basic information of the sample household	40
2.1	Key Institutions Covered in the Study	54
2. 2	Profile of the indigenous tribes in the study region	55
2.3	Details of the community under the study	57
2.4	Housing features of the sample households	60
2.5	Access to safe drinking water and better sanitation facilities	60
2.6	Distribution of land holding of the sample households	61
2.7	Major challenges in livelihood in the study region	63
2.8	Public Distribution System in the sample households	64
2.9	Basic Amenities of the Sample Households	65
2.10	Summary of values given by the social groups	68
2.11	Values of Forest resources	70
2.12	Friedman test showed significant ranking of various values	71
2.13	Rank is given to the non-economic use of the forest	73
2.14	Response on traditional rights and religious practices	74
2.15	Ranking of non-economic values	76
3.1	The summary of the project objectives and basic cost	82
3.2	Project sites of Ecodevelopment Project in India	83
3.3	Nature of forest dependency	90
3.4	Revenue from daily forest-related job	92
3.5	Distribution of Schedule Tribes and Castes in Project Areas	94
.3.6	Procurement of MFPs in Kerala	101
3.7	Indicative list of possible village investments	104
3.8	Community Participation	106
3.9	Summary of Profile—Tamil Sambhavar	116
4.1	Proposed Assignment of Various Western Ghats Districts to ESZs	143
5.1	Encroachment of forest land in Kerala	178
5.2	Diversion and other utilisation of forest land in Kerala and Munnar	182
5.3	Violation of rules and support from the institutions	210

List of Figures

No	Title	Page No.
1.1	Framework of Formulation of Institutions and Implementation Processes	12
1.2	Framework of the Study	45
2.1	Community-wise Distribution of Sample Households	56
2.2	Traditional occupation of the sample households	62
2.3	Current occupation of head of the households	63
2.4	Spherical nature of regulation and values of forest resources	67
2.5	Economic value on forest resources given by the users	69
2.6	Use of forest values—economic and generating income	72
2.7	Non-Use Value of Forest	76
3.1	Responses of the Community on their Participation	127
4.1	Framework of social trust and compliance and non-compliance	156
4.2	Trust within the community	157
4.3	Trust of the communities on various institutional networks	159
5.1	Utilisation of forest land in Kerala and Munnar 1973-2016	183
5.2	Proportion of landless households in Kerala	193
5.3	Factors leading to violation of regulations	213

List of Maps

No	Title	Page No.
2.1	The Western Ghats of India	51
2.2	The districts map and the high ranges of Kerala	52
3.1	Periyar Tiger Reserve	84
4.1	The cultural and natural landscape of the Western Ghats of Kerala	147

Abbreviations

MFPs	Minor Forest Products
AGMS	Adivasi Gothra Maha Sabha
CBNRM	Community- Based Natural Resources Management
CEC	Central Empowered Committee
CFM	Community Forest Management
CHR	Cardamom Hill Reserves
CPI(M)	Communist Part of India (Marxist)
CSO	Civil Society Organisation
CSS	Centrally Sponsored Scheme
EDC	Ecodevelopment Committee
EDP	Ecodevelopment Project
ESA	Ecologically Sensitive Area
ESZ	Ecologically Sensitive Zone
FCA	Forest Conservation Act
FD	Forest Department
FRA	Forest Rights Act
FSI	Forest Survey of India
GHNP	Great Himalayan National Park
GoI	Government of India
HLWG	High Level Working Group
HPC	High Range Protection Council
ICDP	Integrated Conservation and Development Project
IEDP	India Ecodevelopment Project
IUCN	International Union for the Conservation of Nature and Natural Resources
JFM	Joint Forest Management
JFMCs	Joint Forest Management Committees
KDHP	Kannan Devan Hills Plantations Company
KFD	Kerala Forest and Wildlife Department
KFDC	Kerala Forest Development Corporation
KFRI	Kerala Forest Research Institute
KILA	Kerala Institute of Local Administrations
KSBB	Kerala State Biodiversity Board
KSBC	Kerala State Bamboo Corporation
KSEB	Kerala State Electricity Board
KSSP	Kerala Shastra Sahithya Parishath
LSGs	Local Self Governments

MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MoEF	Ministry of Environment and Forests
MoTA	Ministry of Tribal Affairs
NAP	National Afforestation Programme
NDBR	Nanda Devi Bio-sphere Reserve
NGO	Non-Governmental Organization
NSSO	National Sample Survey Organisation
NTFPs	Non-Timber Forest Products
PA(s)	Protected Area’s
PESA	Panchayat Extension to the Scheduled Areas Act
PF	Periyar Foundation
PPP	Public Private Partnerships
PTR	Periyar Tiger Reserve
SC	Scheduled Castes
SEZ	Special Economic Zones
SHG	Self-Help Groups
ST	Scheduled Tribes
UNDP	United National Development Program
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UPA	United Progressive Alliance
UPASI	United Planters Association of Southern India
VPC	Village Forest Protection Committees
VSS	Vana Samrakshana Samiti
WGEEP	Western Ghats Ecology Expert Panel
WTI	Wildlife Trust of India

Chapter 1

Introduction
Theoretical Framework:
Regulation and Institutions and Forest Governance

1.1 Introduction

The study intends to understand the changes in forest governance and to engage with the responses of the major institutions to ensure their 'participation' while implementing forest regulations in the Western Ghats of Kerala. Understanding forest governance also includes discerning how far the regulations and its implementation represent conservation initiatives and the livelihood concerns of the forest dependent communities. The conservation of forests in the Western Ghats of Kerala is under threat and issues related to forest governance is an issue of persistent debate in Kerala. The responses of the institutions—operating at different layers—are determinants in implementing regulations, which could impact on the pattern of livelihood of forest communities and on forest governance. The study examines the economic behaviour and responses of the major institutions to the processes of implementation of key forest regulations, which widely impact on forest governance in Kerala. The analysis and arguments of the study are framed around the three phases of the implementation: before the implementation; post implementation; and evading the implementation. In the case of before (pre) implementation, the study uses the Gadgil and Kasturirangan Committee recommendations; for post implementation the study analyzes Ecodevelopment Project; and in the case of evading implementation the study explores the Forest Conservation Act, 1980 and the eviction process in the Western Ghats of Kerala.

By analyzing various phases of implementation of these cases, the study attempts to understand how far the environmental regulations and conservation initiatives embody a concern for the livelihood of the communities living in the forest fringes of the Western Ghats of Kerala. The forest economy/forest sector has been structured and

regulated in different ways since the pre-colonial, colonial and post-independence periods in India. An overview of forest regulations and policies shows that the priorities in forest governance have changed from State-centred management to a community-participatory regime of forest management (Lele, 2017; Agarwal, 2010; Behra and Engel, 2006; Baviskar, 2003; Karlsson, 1999; Saxena, 1996; Guha, 1983). Over a period of more than two decades, the Forest Department has emerged as a powerful institution within the new governance structure mainly in generating revenue to engage in development and conservation projects in India (Munshi, 2012; Vasan, 2002). However, forest governance has become more decisive in terms of various institutions and their multilevel operations, which lies beyond particular government institutions and geographical boundaries of the nation state.

Environmental regulation refers to one form of government intervention that is a part of the larger development process and often leads to institutional innovations in addressing lack of implementation of environmental policies. Forest governance, involves the participation of multiple institutions at various levels converts the locality (forest-human interface) into a discursive space, which influences on changes in forest management. Giessen and Buttoud (2014: 01) observed that forest governance encompasses three levels of operations and process. In the first level, it is all institutions—formal and informal, public and private regulatory structures consisting of rules, norms, and principles decision procedures—concerning forests, their utilisation and their conservation. In the second level, the interactions between public and private actors therein come in to deal and finally, the effects of these two levels on forests makes up the third level.

The communities and life at the forest fringes holds different stakes with uneven capabilities, constituting a hierarchy in the local community The study locates differences among the ‘inhabitants’, mostly the marginalised community and 'users’, migrants and local elites, and analyzes their role in the mitigation initiatives of the livelihood-conservation conflict and the negotiation process at the localities. Unsurprisingly, the stake of the marginalised, though the oldest and most fundamental, hold less priority. From a human geographical perspective, the powerful stakeholders corner the marginal communities through spatialisation. From a post-structuralist perspective, they are subjects of the ‘development discourse’, to borrow a term of Foucault. Despite the limited scope for generalisation, an in-depth analysis of one

particular case would suffice to illuminate the nature of sustainable development and processes of negotiation of the poor in the contested space of conservation and livelihood. To understand how the various structures, regulatory phases and its implementation are related to the economy, governance and community requires a broader framework, which goes beyond a general theory of economic development and economic environment.

1.2 Problematising the Research

The role and participation of key institutions at both direct and indirect levels play a vital role from policy level to operational implementation, which influences livelihood of local community, conservation agenda and forest governance in India. The governing structure between the Centre and the State, role of national and international private sectors in decision making, high incidence of conversion of forest land into various non-forest activities, legitimisation of forest encroachments and landlessness of traditional inhabitants and other poor in the State are matter of concern in the debate of forest governance in Kerala. The participatory phase of forest management included a wider discussion in the academic arena over justifying customary rights of traditional inhabitants, considering forest resource for income generation to the livelihood of the poor, strengthening of power of the forest department and other State institutions over tribes and limited role of traditional inhabitants in participatory discourse and so on (Kumar et. al 2015; Raghavan and Shrimali 2015; Gadgil 2001). At the policy level, participation of local community is one of the key agenda of major forest policies/regulations in the post 1990s India. As Karlsson noted, both the Joint Forest Management (JFM) and Ecodevelopment Project (EDP) are celebrated strategies in bringing people back into protected area making local people stakeholders and partners in wildlife conservation and forest protection (Karlsson 1999: 2087).

The reigning paradigm of natural resource management and sustainable development postulates different environmental regulations as part of the governmental intervention to minimise the cost of depletion and to enhance the livelihood of the forest dependent communities. The implementation of the regulation interfaces among the institutions and between the State institutions at various levels and serves as determinants of conservation, livelihood and forest governance. The interfaces among the institutions and locating and defining forest dependent communities itself are debatable (Newton et. al, 2016). Forest dependent communities have multiple stakes on forest: tribes for

their livelihood, illegal timber trading, State and industrialists for development projects and commercial infrastructure, some for non-forest activities, encroachers for agriculture and other land utilisation and so on. The relationship between forest and institutions varies with differences of interest and conflicts, which influence governance and forest depletion and where these relationships are in contested space.

The strategy to reduce pressure on forests while providing alternative employment for community who rely on forest for resources is widely hypothesised in the literature on livelihood-forest conservation discussions (Agarwal et. al, 2017; Sunderstrom, 2016; World Bank, 1996). Several scholars suggest livelihood options in off-farm activities and the backward and forward linkages of agriculture, and other non-forest economy. However, the question of landlessness and property rights of the forest dependent communities are still undermined in the debate on conservation and regulatory mechanism of the Indian forestry (Munshi, 2012). The regulatory mechanisms, through forest regulations and policies have discussed how these interventions restricted the traditional rights and access of the traditional inhabitants in India (Ghosal, 2011; Behra and Engel, 2006; Saxena, 1997; Jeffery, 1999; Guha, 1983 and Kulkarni, 1982). It is not axiomatic that the poor will have a worse rural or urban environment, although there are strong reasons to believe that the poor are less able to protect themselves against global concerns such as climate change, decline of forest resources and forest depletion.

Unequal distribution of land and lack of social mobility prevents their freeing themselves from the environmental boundedness even in the future. This dimension is particularly relevant when there is a consensus that forest regulations can achieve conservation without causing significant decreases in the sustainable livelihood of the poor. The absence of tribal participation in the processes of forest governance, beneficiary groups of the conservation agenda and other alternative initiatives shows their powerlessness to decisively influence the decision-making processes. In this context, the study intends to understand how far these regulations represent the development processes of the marginalised and posits alternative ways of enhancing their capabilities towards sustainability of their livelihood. It is also significant to examine different perceptions on forest regulations, forest governance and alternative livelihood, and so on, from the perspective of the marginalised to capture the multifaceted nature of conservation, livelihood and governance discourses.

The communities depending on the forest for livelihood face drastic losses in environmental entitlements due to various factors that have affected their livelihood over time. Factors such as social, cultural and institutional changes affect the dependency of forest dependent communities vis a vis their livelihood. Displacing traditional inhabitants for constructing dam and sanctuary or national park considerably changes their traditional entitlement. Have they had any role in the planning process? The current situation is that the losers will again be the people who live inside the reserved forest or those depending on the forest for their daily survival (Guha, 1994). The study tries to explore more viable alternatives to the current command-and-control based environmental management systems. The enormous uncertainty about micro/local and trans-national environmental impacts needs to be addressed and these impacts must be incorporated into decision-making, which may bring about a sense of balance to conservation and livelihood. The study also looks into how different levels of perception, the complexities of the power structure, and social relations between the tribal communities with other immediate institutions. The socio-economic differences in the existing society have a major impact on the composition of livelihood portfolios of the people. A number of these differences, including contrasts in asset ownership, income, gender, age, religious affiliations, caste, and social or political status are very relevant. The study proposes to investigate the different perceptions about environmental regulations, policies and sustainable livelihoods—conservation practices and livelihood from the perspective as seen from below—and encapsulate the multifaceted nature of the issue.

Introduced by the State, the forest regulation is a powerful instrument of intervention established in the colonial and post-colonial phases to achieve certain specific goals. The regulatory mechanism of the State was also supported both financially and technically by international institutions, which established rights over the forest property for generating revenue, regulatory measures in resource use of the inhabitants, changes in governance from centralised to decentralised governing structure for 'better management'. The regulatory intervention and decisions of the institutions impacts conservation, livelihood, forest governance and forest management among others.

An attempt, however, is made to understand the different perceptions that would help capture the dynamic nature of the issues. To ensure this, the study postulates few questions such as how different agents and actors can increase the representation of

their groups within communities or castes. How feasible is extending welfare projects to the tribal communities rather than addressing land alienation and their traditional rights over forest resources is a matter of concern in the study. Will enforcement of regulations attract compliance from the community and does enforcement of the regulations make poor people better off? What role do they play in the planning process in governance towards forest conservation/restriction of forest resources? What are the ways to strike a balance between conservation and livelihoods of forest-dependent communities and conversely which factors prevent the adoption of sustainable livelihoods? How do various institutions emerge as stakeholders of the regulation and what is their role in the processes of implementation? To engage in various questions centred on forest governance, conservation and livelihood, the study relied on institutions and its heterogeneous nature in the Western Ghats of Kerala. The historical context of the locality and institutional background of the communities are matters that help understand how response of the institutions influences on forest governance.

1.3 Theoretical Framework

The study relies on the theoretical framework of institutional economics (IE) which focuses on the process and evolution of regulations, and the role of institutions (formal, social, religious and political), which influences decision making, response, and economic behaviour of the institutions.. Further insights are drawn from the concept of social capital and environmental entitlement in order to understand how social positioning and relations, of and among the stakeholders, influence the pattern of social and economic behaviour of the institutions.

The core ideas of institutionalism concern institutions, habits, rules and their evolution. The theory and approach of institutional economics—that developed from Veblen through the Commons and Mitchell, to Myrdal and Galbraith—is based on the idea that economic analysis and the behaviour of individuals have evolved through interactions and the relationship between and among various institutions. There is nothing like a general theory about the behaviour of an individual and an individual should not always be taken as given (Hodgson, 1998). The approach of institutional economics is in theorising human agency, institutions and the evolutionary nature of the economic processes in order to understand the ideas and theories related to specific institutions and economies. Institutional economics stresses on the need to show how common habits are embedded in and reinforced by specific social institutions. The relations

between the individual and institutions are evolving in causal linkages through various processes. Institutionalists consider social and economic issues beyond general notions of neoclassical approach of rational choice theory but in the behaviour of an individual based on habits and rules of any situation, which is socially and provisionally specific.

Institutionalists do not attempt a single general model to create an idea in order to analyze social and economic behaviour of individuals. Rather, their approach gives importance to the processes that are developed through evolution and in the direction towards what is more historical and context specific (Hodgson, 2000; Gordon, 1984). The institutionalist's approach relies on habits and rules of the individual and institutions. The theory relies on how specific groups of common habits are embedded in and reinforced by various institutions. It relies more on different interdisciplinary approaches—anthropological, sociological and other research into how people behave. The general theory would be to indicate how to develop specific and varied analysis of specific phenomena. The approach stresses on historical and institutionally specific studies that bring more optional value rather than a general theory. As Hodgson states, individual habits both reinforce and are reinforced by institutions. Institutions play an essential role in providing a cognitive framework for interpreting data and in providing intellectual habits or routines for transforming information into useful knowledge (Hodgson, 1998). Over the period of theoretical development of institutional discourse, theories were developed within the framework of institutional economic theory.

Most of the analytical features and methodology of these theories are interrelated within the framework of institutional economics, except in the case of Neo or New Institutional Economics. The present study is based on the theoretical framework incorporating an evolutionary process and is open-ended, that which is considered evolutionism or new institutionalism. The approach of old institutional economics is a methodological holism and is evolutionary. The study gives importance to evolutionary processes of institutions and the process of institutional change, which is a core theme of institutional economics.

1.3.1 Conceptualising Institutional Economics

Within the institutional framework, the study focuses on the evolutionary process of formal and informal institutions to see the interface of regulations and its enforcement in the processes of implementation where livelihood and conservation are important.

Within the institutional economic framework, four major concepts were selected to formulate an analysis and offer arguments for the study. These concepts are: Institutions (organisation and social entity, formal and informal institutions and institutional analysis); Institutional Environment (with the addition of social capital as an informal rule/constraint) and Property Rights (with the addition of environmental entitlement).

1.3.1.1 Institutions and Processes of Institutional Development

In the institutional economics framework, the term 'institution' is defined and elaborated by key founders of institutional economics, such as Hodgson (1998 & 2000); Commons (1931); Hamilton (1919) and Veblen (1919). An institution is 'a way of thought or action of some prevalence and permanence, which is embedded in the habits of a group or the customs of a people' (Hamilton, 1932: 84). Hutchison (1984) has observed how Veblen considered institutions, which are habits of thought that prevail in a given period. Institutions are the rules of the game in a society or the humanity devised constraints that shape human interaction (North, 1990). Institutions encompass not just organisations (government department and organisation with any administrative structure), but also integrated systematic social entities such as money, law, practice etc. Institutionalism signifies a concern with economic institutions, or organisations, such as industrial, labour, or monetary institutions, or with the property framework and legal institutions, together in some cases with an emphasis on collectivism, and group institutions, or organisations, rather than individuals, as the main economic agents or actors (Hutchison, 1984). Both individuals and institutions are mutually constitutive of each other. Institutions mould and are moulded by human action (Hodgson, 1998).

Law enforcement, implementation and the interpretation of legislation and policies are integral institutions for the establishment of the rule of law in any sphere of state regulated actions (Torniainen and Olli, 2007). The institutional approach includes three levels of analysis to understand the institutional development (Kiser and Ostrom, 1992) which are the constitutional level, collective choice level and operational level. Constitutional (Policy) Level: The highest level is the world of constitutional decision making where political and legal arrangements are established (issue of ownership of natural resources); the formulation of policy is based on various interest groups.

Collective Choice Level (process of decentralisation, role of state, administrative structure in each state): At the second level, in the world of collective choice, decisions are made by officials to enforce, or change actions authorised by the constitutional rules. Collective decisions are plans for future action that are also enforceable against non-conforming individuals; officials not only have the power to enforce a collective plan, but also to impose sanctions against individuals who violate the official rules.

Operational Level (informal relations, low commitment, corruption and other issues): At the operational level, the actor is an individual or an organisational unit, whose behaviour is largely determined by the institutional framework, i.e. collective-choice and constitutional rules. By joining collective actions, actors at the operational level can influence the framework created at higher levels.

1.3.1.2 Institutional Environment and Social Capital

The institutional environment consists of formal rules (constitutions, laws and property rights) and informal rules (sanctions, taboos, customs, traditions, and norms or codes of conduct) that structure political, economic and social interactions (Patibandla, 2013 and Behra and Engel, 2006)[1]. The interplay of institutional environment determines the rule of the game and function of economic and social institutions. The informal rules or constraints are commonly referred to as social capital (van Kooten, 2013).

Social capital is the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalised relationships of mutual acquaintance and recognition -or in other words, to membership in a group- which provides each of its members with the backing of the collectively-owned capital, a ‘credential’ which entitles them to credit, in the various senses of the word (Bourdieu, 1986: 259). Access and claims are based on networks, institutions, or relationships that constitute their social capital (De Haan, 2000:345-6). Non-market institutions as a means to access resources or assets (Valdivia and Jetté, 1997) are therefore also a form of social capital. In another context, social capital is the social resources (networks, social claims, social relations, affiliations, associations) on which people draw when pursuing different livelihood strategies requiring coordinated action. The concept of social capital have been analyzed in the four chapters of the study (Chapters 3-6) to

[1] These studies are based on theoretical framework of new institutional economics. Here we only refer to concepts of institutional environment.

perceive how social capital influences responses of the local institutions which have direct impact on forest governance in the Western Ghats over a period of time.

1.3.1.3 Property Rights and Entitlement

Property rights are key institutions that determine the use of resources and influence the behaviour of resource users. Property rights can be defined as a relationship among actors pertaining to things such as natural resources and which are contestable (Agarwal, 2003). As Pryor states, property is considered to be a bundle of recognised relations (rights, obligations, claims, powers, privileges or immunities) between people in regard to any goods, services or 'thing' that has economic value (Pryor, 1972). Property rights define the relationship between individuals with respect to the right to a resource. Property rights are defined not as relations between people and things, rather, as the behavioural relations among people that arise from the existence of things and pertain to their use. Property rights are an important class of institutional arrangements (Wang and Van Kooten, 2001). There are four forms of property rights: private property, state ownership, communal ownership and open access, which are described in Table 1.1

Table 1.1. Classification and Characteristics of Property Rights

Type	Characteristics	Implications for economic incentives
Private property	Exclusive rights assigned to individuals	Strong incentives for conservation of resources and for investments as well
State ownership	Rights held in collectivity with the control exercised by authority or designate agency	Creating opportunities for attenuation of rights; managers have incentives for personal gains
Communal ownership	Exclusive rights assigned to all members of a community; approaching private property	Creating free-rider problem and low incentives for conservation
Open access	Rights unassigned; lack of exclusivity	Lack of incentives to conserve; often resulting in resource degradation

Source: Wang and van Kooten (2001)

Patibandla (2013) has observed that the natural resources of a country, such as forest, coalmines, oil and gas, and minerals are the common property of its people. Common properties are do not mean free access to the public; rather the State regulates and

monitors its resource for the public. Property is also related to the entitlement rights of the inhabitants in the area and there is a change in their entitlement over the period.

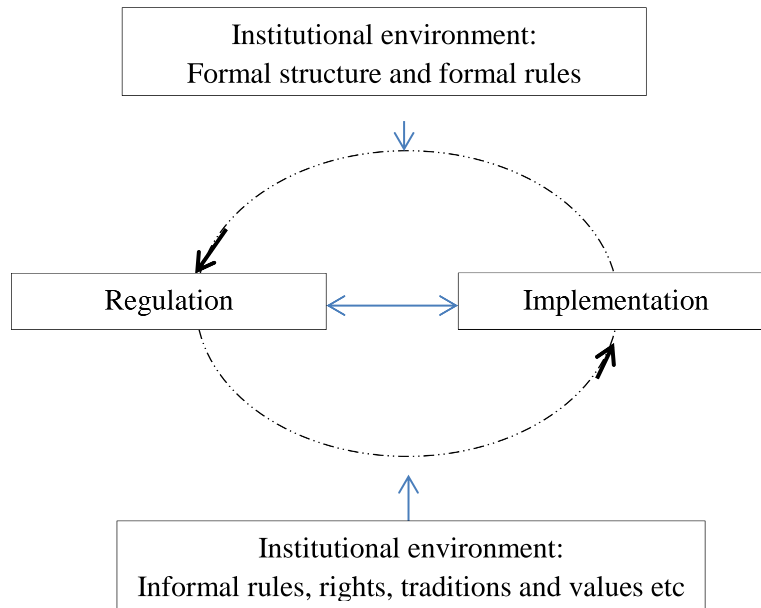
Situating environmental entitlements approach is an alternative approach that focuses on the importance of formal and informal institutions. Its starting point is the realisation that the environment and society are multidimensional, varied and dynamic, even within a local context. This approach seeks to determine the effects of resource management, access to and control over resources, and the impact of environmental change on certain segments of the population and their strategies. Formal and informal institutions, active at the local level (concerned with policy, land rights, rights of use, etc.), which are influenced by power structures, play a central role in interactions between humans and the environment. Processes of social arbitration involving different actors at the local level are therefore decisive in regulating access to resources and determining the impact that resources have on processes of impoverishment. Environmental entitlements have potential benefits for the environment over which people have legitimate effective command. They focus on the social structures and networks that allow poor people in developing countries access to resources in order to achieve sustainable livelihoods and minimise poverty (Leach M, R Mearns and I Scoones, 1999). Chapters 5 discusses the issues of rights over property and addresses how rights over property (private, revenue and forest land) was used by the communities to legitimise their participation in various phases of implementation of the regulation and how dominant social groups encroached public property and transformed them into private property for non-forest activities.

1.3.2 Contextualising Forest Regulations and Implementation Processes

Regulations are evolutionary in nature and there are different forms of government intervention to control or regulate the interaction of the user groups on ownership of the resources/state. As stated in the IE approach, regulation or law is a social entity and considered as an institution. Institutional economics explain regulation beyond an efficient and rational choice perspective. Contemporary studies often describe the cost and benefit effects of any regulation, but the IE approach explains the causal linkages of context specific multiple variables (Reynold, 1981). It describes the processes of development of regulations as an institution and implementation of the regulations, which eventually lead to further regulations. The regulations are dynamic in nature.

The institutional approach considers regulation and its implementation processes as a vicious cycle. As depicted in Figure 1.1 the study deals with two major concepts: regulation and its implementation.

Figure: 1.1 Framework of Formulation of Institutions and Implementation Processes



Institutional economics postulates that interaction of institutions is a process that eventually evolved into a new institution as a result of causal linkages and negotiations of institutions within and between each other. Both regulation and implementation are processes and outcomes of interactions between institutions (formal and informal) over a period. Here, the focus is on the implementation process, specifically the response of the various stakeholders and institutions to the implementation processes. The formation of regulations is also a process and is based on the response and negotiations of the institutions.

During the process of implementation of regulations, with reference to the present study, interactive processes of the various institutions are carried out and new regulations or modifications are formulated. Various regulations, for instances Joint Forest Management (JFM), Forest Rights Act (FRA) and the Gadgil Committee Report on the Western Ghats are the result of the interplay and negotiations within the institutions and gradually evolved to the present version. The Joint Forest Management (1988) with revised guidelines in 1990 and a new resolution in 2000 is an example of how the response to the implementation processes has an influence on existing policy/regulations. It was the response and resistance between tribal communities and

forest officials in various parts of India that forced the State to bring in new guidelines in 1990 to the Forest Policy of 1988 (Behra and Engel, 2006; Saxena, 1997). These guidelines provided the local communities the opportunity to engage in forest management by ensuring their basic access to forest resources. Another example is analyzed in Chapter 5 on how formulation two reports (report of Kasturirangan on the Western Ghats and report from the State expert panel of Oommen V Oommen) is the result of responses of the dominant institutions in Kerala. Both reports were an outcome of the protest of the political and religious groups against the Gadgil Committee Report and which forced the government to formulate a new study. The IE approach also depicts how important it is to analyze the nature of institutions and its formal and informal constraints before formulation of regulations and its implementation. An example is the variation in results and impact of implementation of JFM and FRA in each State in India. Though the nature of regulations is the same, its impact is limited in many regions due to inadequate knowledge of the function and interaction of institutions even within the formal institutions—cited from the discussion in Chapter 3 on Ecodevelopment Project. Kasper and Streit stated that policy advice in developing countries was often misplaced mainly because many economic observations and advisers made the habitual assumption that the way of working and role of local institutions do not matter (Kasper and Streit, 1998).

1.4 Forest Governance, Regulations and Institutions: Review of Literature

As discussed, the study tries to understand responses of institutions and decision-making process in relation to forest governance, which addresses agenda of livelihood and conservation in the Western Ghats of Kerala. The process of implementing regulation and role of institutions in the decision making also influences the nature of forest governance in the State. The Ecodevelopment Project in the post 90s, FRA in the post 2000, intemperate protest against the committee reports on the Western Ghats and rampant and continuous encroachment of the Western Ghats are the few regulatory measures and interventions leading the conservation debate in public and academic domain. The response of the key institutions on decision-making process and intervention of the State on various issues related to conservation and livelihood in the Western Ghats has gained wider attention in the public realm. The process and complexity of forest governance is also widely discussed in both the public and academic writings in the recent period.

The section of literature review brings out the dynamism and complexity of the area of study and the multi-disciplinary intervention of the engagements. Broadly the study interconnects issues related to forest governance—various regulatory and forest policies, livelihood challenges, complexity of forest dependency, economics of forest, regulatory projects, forest encroachments, dominance and power relations of various institutions, negotiation of tribal and other communities in the forest fringes and so on—which brings complexity of the issues and difficulties to separate one from another. The overview of literature on the broad spectrum of interconnections helps in situating the complexity of the research area. After a brief overview of forest regulation and forest policies in India, the section discusses studies on forest governance and its conceptualisation, studies on resource management and livelihood, situating forest economics and forest department, forest Ecodevelopment project and FRA, studies on the committee reports on the Western Ghats, question of landlessness of tribal communities in Kerala. The writings on economic history of Kerala covers early migration and encroachment history of high ranges of Kerala which postulates how dominant institutions regularise ownership of land, pattern of agriculture and how issues of rights over land of traditional inhabitants is still significant in the development experience of Kerala today.

An Overview of Forest Regulations: From Centralised to Participatory

The overview of forest regulations and policies briefly looks at how the approaches and priorities constructed through regulations control access and rights over forest by the State. An overview of the policies and regulations on forest resources in India shows there is a change in rights and management of forests in India. The rights of the community are regulated by the Government to ensure forest resources become their financial asset. A review of the regulations shows that the discourse on forest management has changed; to generating money (forest as natural capital) by ensuring conservation by community rights based management. Wildlife also became a focus of management in the colonial era, with the enactment of legislation such as the Act for the Preservation of Wild Birds and Game 1887, the Wild Birds and Animals Protection Act 1912, the Madras Wild Elephant Preservation Act 1873, and the Indian National Parks Act 1934 that focused on controlling hunting in game reserves (Kothari *et. al,* 1995). The Bombay Natural History Society, established in 1883, was a society interested in both natural history and controlled hunting and the adoption of British

game laws by native rulers in their hunting reserves (Tucker, 2012). The following section summarises the review of studies that analyze the approach and concern to rights and its access to the people and the State with regard to various forest regulations in India.

Over the period, the nature of forest management has changed from state management to partnership to community management. It briefs each regulation and focuses on management such as financial capital to conservation and livelihood. The section tries to analyze the approach and its concern to rights and access to the people and the State while reviewing various forest regulations in India. Key regulations are listed below:

I. Colonial Period
   a. Government Forest Act, 1865;
   b. Indian Forest Act, 1878
   c. Indian Forest Act, 1927

II. Post-Independence Period
   d. National Forest Policy, 1952;
   e. The National Commission on Agriculture (NCA), 1976;
   f. The Forest Policy, 1988;
   g. The Forest Right Act of 2006
   h. Forest regulation in Kerala: Ecodevelopment Projects, 1998 and,
   i. Reports/Proposals on Western Ghats by the Ecology Expert Panel (WGEEP), 2011 and the High Level Working Group (HLWP), 2013

During the colonial period, the forest was considered as revenue generating through timber and regulations were implemented (Government Forest Act, 1865, Indian Forest Act, 1878 and 1927) to control rights and access over forests by the government. The control over natural resource management by the state continued until the Joint Forest Management (JFM) was introduced at the policy level. Central policies reach the regional/state level as a regulatory framework or regulation, which is centred on access and management. The regulation in India on forest covers various categories such as Forest Conservation Acts, Rules, Guidelines and other miscellaneous notifications.[2] It forms various interventions and regulation in relation to forest.

There were a few more regulations that included the enactment of legislations such as the Act for the Preservation of Wild Birds and Game 1887, the Wild Birds and Animals Protection Act 1912, the Madras Wild Elephant Preservation Act 1873, and the Indian

[2] Various regulations related to forest are listed and updated in the website of the Ministry of Environment and Forest, http://www.moef.nic.in/division/forest-conservation.

National Parks Act 1934, which focused on controlling hunting in game reserves (Kothari et. al, 1995). Access to forests by forest dependent communities was unrestricted in the pre-colonial period in India (Guha, 1983). The tribal community used access to forests as their customary right. There were customary regulation practices within communities prevalent at that time. For instance, certain forests identified god's graves (Devraya) and regarded as being protected by the forests. Communities used to gather fallen leaves and fruits rather than cutting any tree in those areas (Kulkarni, 1982). The discourse on forest management in India has evolved from the concept of 'state manages' to 'co-management' over the period.

Currently, the co-management/joint management is being debated along with community management and the rights of the community over natural resources (public property) as depicted in Table 1.2. The brief of key regulations and policies are described below.

Table No. 1.2 Forest Regimes and Nature of Forest Management in India

Period	**Phase of management**	**Social and economic implications**
1952-1976	Forest policies on revenue generation	Forest for timber, neglect village commons
1976-1988	Commercial forestry to continue on forest lands, but more funds for social and farm forestry on non-forest and private lands	Forest management regime
1988-2000	JFM and various guidelines	A radical shift from the earlier revenue orientation
From 2000 onwards (especially after 2006)	FRA, proposals of the Gadgil and Kasturirangan Committees	Joint forest management to Community forest management

An overview of the policies and regulations on forest resources shows that rights and management of forests in India have been changing. Contemporary management shows changes from state management to joint forest management to community forest management (Behra and Engel, 2006; Saxena, 1997; Kulkarni, 1982). Forests have been an important resource for the livelihood of the traditional inhabitants in India and they have followed the customary rights and admired native forests for the role it used to play (Ghosal, 2011 and Kulkarni, 1982). The rights of the community are regulated by the government to ensure forest resources become their financial asset. The forest department (established in 1874) was given the responsibility for timber production;

securing future timber supplies through conservation and establishment of plantations, and, to a lesser extent, providing for villagers' subsistence. State ownership and control of forests fundamentally altered local access and rights to forest area (Indira, 1992). The land policies and various forest regulations during the colonial period alienated the access of tribal communities to the forest and outsiders flowed into the forest land (Sivanandan, 1979).

The participatory phase of forest management saw a wider discussion in the academic arena in justifying the customary rights of traditional inhabitants, considering forest resource as income generation for the livelihood of the poor, strengthening the power of the forest department and other State institutions over tribes and the limited role of traditional inhabitants in participatory discourse and so on (Baviskar, 2003; Bijoy and Raman, 2003; Guha, 1983, Gadgil, 2001; Kulkarni, 1982). Forest management was centrally regulated until the 1988 Forest Policy and Joint Forest Management (JFM) strategy in 1990. Later, the local communities were given due recognition in conservation, at least at the policy level, though their participation was largely only on paper. At the policy level, participation of the local community was one of the key agendas of major forest policies/regulations in the post 90s in India.

A resolution for enactment of the first post-independence National Forest Policy was issued in 1952. While this policy retained the basic thrust of the earlier policy, it emphasised on the economic, ecological and social benefits from the forests. It thus proposed to classify forests on a functional basis into (i) protected forests, (ii) national forests, (iii) village forests, and (iv) tree lands. While the functions of protected forests and village forests were the same as laid down in the earlier policy, national forests were meant for meeting the requirements of defence, communications and industry with a progressively increasing sustainable yield, while tree lands were proposed for improving the physical and climatic conditions and for promoting the general well-being of the people. The provision of a centralised management was continued in this policy (Saxena, 1997).

Joint Forest Management as a part of the national forest policy in India was introduced in the form of guidelines issued by the Ministry of Environment and Forests (MoEF), on 1 June 1 1990. The introduction of JFM in the 1990s enabled collaboration between forest departments and villagers, recognition of user rights, and devolution of some

management responsibilities to village forest committees (Hobbley, 1996). JFM needs a Village Level Organisation (VLO) of people and their participation in management. Such an organisation may be the existing village Panchayat itself or a newly formed organisation such as a Cooperative Society, a Development Society or a Forest Protection Committee. Saxena (1997) has observed of the important issues associated with the Joint Forest Management programme are as follows:

i. Delay in initial approval and signing of agreements by the Forest Department,
ii. Insecurity of tenure for the people,
iii. Lack of people's participation in planning, and
iv. Lack of cooperation between the NGOs associated and the Forest Department as well as between different Village Level Organisations.

The primary objective of the National Forest Policy, 1988 is to ensure environmental stability and ecological balance. The Policy also emphasises on the need to meet the domestic demands of rural people for forest produce, and involve them in protection and management of the forests. The National Forestry Action Programme, 1999 also addresses the Government's concern towards Sustainable Forest Management. Forest management became the joint responsibility of communities and forestry personnel and went through a paradigm shift. By 2005, all 28 States had appointed 84000 committees to look after 17 million ha of forest land. This figure has increased manifold due to central funding through the National Afforestation Programme (NAP). The forest sector is seen as a crucial component in eradicating rural poverty and providing livelihoods to the communities dwelling in and around the forests. JFM has transformed government-controlled policies and attitudes from centralised management to decentralised management, from revenue orientation to resource orientation, from a production motive to a sustainability motive, from target orientation to process orientation and from restricting people to working with people. On the contrary, it is seen as an effort by the Forest Department (FD) to garner increased financial outlays and expand its territories and spheres of jurisdiction to more and more areas, which are normally under the jurisdiction of the revenue department and other government development agencies.

The enforcement of forest regulations in the form of JFM is a part of the new paradigm of conservation of resources. As against denying accessibility to the local community, these programmes, in theory, offer participation for local people to manage and use the numerous national parks, which were in existence prior to 1972. The establishment of

the current protection area network increased substantially with the passing of the Wildlife Protection Act in 1972. The legislation, passed under the leadership of Indira Gandhi, enabled the establishment of national parks and sanctuaries predominantly for the purpose of wildlife and habitat protection, with stringent restrictions on resource use and habitation. This is clearly visible in the categories that were created and the strategies adopted in the last two decades, such as JFM, Community Forest Management (CFM), eco-development through micro plans, management plans, and working plans.

Sen and Pattanaik (2017) studied community based natural resource management paradigms and its interconnection to the protection of customary rights and forest management in the Sundarbans, West Bengal. The study looks into the necessity of local governance, which is indispensable for managing resources and conservation. However, the intangible nature of customary rights of the local community attributes power asymmetry to the implementation and lack of participation of the local poor in forest governance. JFM in the Sundarbans is a case in point. The study argued that the participatory regime is plagued by political rivalry at the local level as well as having an inequitable distribution of power relations, whereby the economically and politically powerful elites of the village align with the local functionaries of the State in pursuing the conservationist agenda. Forest workers who should necessarily be active participants in community forestry are not involved in the decision-making process. Despite the traditional knowledge of the forest and their reverence towards the forest, JFM, in the conservationist discourse, does not recognise them.

Bhattacharya et.al (2010) have analyzed two decades of JFM in India. JFM was initiated in India as specific forest governance for achieving conservation and livelihood through cooperation between State and civil society. By 2010, 106,482 JFM committees implemented JFM and it covered 22 million hectares of forests spread across 28 states and union territories of India. The study covers mainly five northern states, namely Madhya Pradesh, Jharkhand, Odisha, West Bengal and Chattisgarh. The programme improves quality of conservation and forest management in a substantial way, though the options for livelihood were very limited. The study stated that the autonomy of FD over allocation and demarcation of forest land and micro plans etc., left little room for people’s participation. Based on the case study of the selected states, the study argued that many hurdles like fragile institutional arrangements, inadequate

people's participation, inefficient accountability mechanisms, poor collaboration between FD and local communities etc., created bigger bottlenecks to the key objectives of the programme—to develop forest livelihoods and alleviate poverty along with forest conservation and rejuvenation.

Saxena (1997) stated that the formation of village level committees has been facilitated directly by the officials of the State Forest Departments with the help of local non-government development organisations. A few constraints at the implementation level of JFM restrict the actual vision of the policy in forest management and they are: (1) delay in initial approval and signing of agreements by the FD, (2) insecurity of tenure for people, (3) lack of people's participation in planning, and (4) lack of cooperation between the associated NGOs and the FD as well as between different Village Level Organisations. According to Baumann (1999), JFM does not have the scope for genuine participation of the people and is a means of ensuring protection of the forests at a very low cost. Hobley (1996) reported that the JFM programme has focused more attention on initiating community protection than on making the shift to active cooperation and to address the technical, social and economic issues, which accompany such a transition. It also noted the limitations of the legal authenticity of the village committees when they are involved in any registered case. Since their rights and power is not clearly defined, the villagers become victims in this kind of a situation (Majumdar and Raghavan, 1999).

The Government of India enacted the Forest Right Act (FRA) in 2006 with the objective of remedying the historical injustice to the forest dwelling tribes and other traditional dwellers in the country. The Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 came into force on 31 December 2007 followed by the notification of rules on 1 January 2008. Lele (2017) edited a four-commentary work on FRA of Kumar et. al (2017), Sahu et. al (2017), Ramanujam (2017) and Broome et. al (2017) on various aspects of the formation and implementation of FRA in India. Lele overviewed how FRA provides and reinstates the basic rights of the traditional forest dweller in various dimensions of forest governance. He argues that the existing multi-layer stakeholder ecosystem required multi-layered governance framework where the various roles in the formation and implementation may be separated and democratised. Multi-layer governance could address and accommodate various roles and ways to engage in sustainability of forest

and conservation. It may also engage or provide greater room for local knowledge of the community to protect forests. Kumar et. al (2017) have reviewed ten years of FRA and its implementation in various states in India. The state level analyzes show that major states have still not started implementing FRA or have barely made a beginning. The study observes that Maharashtra, Odisha, Kerala and Gujarat have a significant position in terms of implementation of the FRA. Overall, barely three per cent of the estimated potential for FRA cognition, which is 2.7 million acres out of 35. 6 million acres have been achieved. The review studies show that there is high potential for FRA to address the historical injustices against the forest dwellers. The democratic forest governance can have a wider reach to address both livelihood and forest conservation. The review observed that wider support, especially political and institutional, are required for its elaborate implementation across the states.

A few studies have also discussed how the FRA can be effective in ensuring the rights of the tribes by allowing them to take part in conservation. However, it fails due to significant control by FDs and different VSSs or committees, where most of the participants are from government bodies. By analyzing the implementation of FRA in India and specifically in Andhra Pradesh and Odisha, Barnes et.al (2016) stated that implementation of forest policy is a political endeavour involving both state and non-state actors. The study observed that civil society organisations often federate into civil society-led coalitions in order to shape forest policies in their favour. The study also argues that both as individual organisations and as part of loose coalitions, they are certainly important actors in the political process, and could potentially affect the direction of policy implementation. The study also suggests bringing out research that is more empirical to know how far CSOs and its coalitions influence implementation of forest policies in different states and region as it varies from state to state and region to region. The Act allows the government to explicitly and legally pursue its agenda, which of necessity, is dependent on extracting and selling its natural resources at competitive rates, measured in terms of economic growth and not peoples', especially marginalised people's well-being (Ramnath, 2008).

Forest Policies and Regulations in Kerala

The rise of forestry and forest regulations in Kerala was initiated between 1840 and 1940. India's Forest Acts of 1865 and 1878 greatly contributed to the development of forestry in Kerala. In addition, the Madras Forest Act 1882, Travancore Forest Act

1887 and the Cochin Forest Act 1885 helped in enacting the national forest policy. Reserve forests were created and a regular forest establishment, in keeping with British India, was organised in all regions. The major forest regulations and acts in Kerala are: The Kerala Forest Act, 1961 (Act 4 of 1962), to unify and amend the laws relating to the protection and management of forests in the State; the Kerala Private Forests (Vesting and Assignment) Act, 1971, to provide for vesting in the government private forests in the State and for the assignment thereof to agriculturists and agricultural labourers for cultivation, where the government considers such agricultural lands be so utilised as to increase agricultural production and promote the welfare of the agricultural population in the State; the Kerala Restriction on Cutting and Destruction of Valuable Trees Rules, 1974 that authorises only forest officials to give permission for cutting or destruction of valuable trees. It enforced strict restrictions on dependent communities to use and acquire trees for their use.

The limited development of the FRA in Kerala (Sathyapalan, 2010; Munster and Vishnudas, 2012) is due to the bad implementation process followed by the state. In Kerala, the process of land alienation of the tribes started at the early stage of migration and it is informally accepted by the State through various notifications. Many rules of the FRA have not been implemented so far in Kerala. But, unfortunately, the whole process of community building and community control has been subverted through the process of its implementation throughout the country. Its implementation has been reduced to a mere *patta* (title deed), under the ongoing colonial regime of hegemonic control of the FDs. The left-wing Government of Kerala (2006-11) aimed to interpret the FRA as a legal opportunity to obtain forest department land and to fulfil decade old promises to redistribute land to landless *adivasis*. However, the provisions of the Act were not the right means to bring them redistributive justice. The well-intentioned FRA failed to make an impact in the specific historical and legal environment of the region. The field-based study in Wayanadu stated that high-level forest officials at the Wayanadu forest range argued that there is no need for reform, as participatory forest management had already been established in the 1990s (Munster and Vishnudas, 2012).

The study of FRA implementation in Kerala brings out the major constraints in its implementation and it states that community rights and conservation provisions, which are core areas of the FRA, seem to be ignored. It is increasingly clear that the implementation was stalled by inter-departmental conflicts, mainly between forest

departments and revenue departments as noted in the case of West Bengal and Andhra Pradesh; bureaucratic and legal confusion (Sathyapalan, 2010) and a lack of provision for information and publicity (Cooke and Kothari, 2001). The Act is one form of government intervention on tribes/forest dwellers to protect their basic rights and to protect the forest. They are part of the process of conservation, which is completely under the hegemony of the FD of each State. However, in the process of implementation of the FRA, the tribes' participation is merely an excuse to claim their rights over land at both individual and community levels. The paradigm of 'sympathised development' needs to bring to attention the 'right based development' to resolve the web of the issues on rights and conservation, where the tribes become real actors in conservation and participation. As stated there are various regulations in the form of acts, guidelines, policies and other notification etc. that were framed after FRA, 2006. The following chapters will discuss how Ecodevelopment Project and the committee reports on the Western Ghats discuss two phases of regulatory mechanism and its implementation phase in Kerala. The key regulations in Kerala such as Ecodevelopment Project and the reports of Gadgil and Kasturirangan reports on the Western Ghats are discussed separately in the following chapters.

In the context of forest regulation in India, it has evolved through various phases of government interventions as policy formulations. The property rights regime on forest resources in India has been undergoing considerable change over a period of time. The first forest policy (1865) announced that forests were to be transformed into state property (Guha, 1983). It is widely argued that the four decades of forest policy preceding 1988 were mainly concerned with timber production for commercial purposes, and have neither been sustainable in terms of checking the process of deforestation nor have they improved people's access to forests for meeting their basic needs (Behera, and Engel, 2006). Debates over conservation and livelihood argues for conservation by conservationists, forest officials, wildlife ecologists and so on, and for livelihood by social activists, local community representatives, human rights advocates and so on (Kothari et. al, 1995). Over the phase of regulations, forest rights have changed from customary rights of dependent communities to rights with the State. The forest management regimes also have changed from state-centred management to the community participatory regime of forest management. Table 1.3 shows an overview of forest regulation as to how regulation affected traditional rights of inhabitants.

Table No. 1.3 Overview of forest regulation and governmentality in India

Period/Year	Scheduled Tribe	Forest
Pre-colonial India Discretion: Princely states	Adivasis or traditional inhabitants. There was no category of Scheduled Tribe	Princely states managed forests. Rights to forestland and forest resources varied among states.
British Colonial India Around 1850 to 1946 Discretion: British rule	1860s: Category of Depressed Classes was created for socio-economic benefits of marginalised groups. 1936: Scheduled Caste Order (included caste as well as tribal)-gave job opportunities for Depressed Classes. Forest dwellers resisted because village forest was not formalised.	1864: India Forest Department and scientific forestry established 1878: Indian Forest Act: ownership of forestland as right vs privileges became prime issues, and faced resistance from forest dependents. 1927: Indian Forest Act classified forests into three types: reserved, protected and village forest. 1930: Establishment of forest department at state level.
Post-colonial India From 1947-1989 Discretion: Central Rule	1950: Constitution of India adopted the definition of the scheduled tribes 1950: Scheduled Tribes Order: gave recognition to a separate statutory list of scheduled tribes	1952: Forest Policy Act: state took control of more forest land to achieve 33 % forest cover. 1976: Creation of separate Ministry of Environment and Forests. 1980: Forest Conservation Act-attempt to evict so-called encroachers.
Contemporary India 1990s Discretion: On paper, trend towards decentralisation	1992: National Commission for Scheduled Tribes created 1999: Creation of separate Ministry of Tribal Affairs 2007: India voted for United Nations Declaration on the Rights of Indigenous Peoples adopted by the General Assembly	1990s: People's participation. Joint Forest Management Programme involving Forest Department and local people to protect forests. 1996: Introduced Ecodevelopment Projects for 9 protected areas to promote conservation and livelihood in a participatory framework. New forest governance was established. 2000: Proposal to revisit the definition of forest by the Ministry of Environment and Forest. 2002: Ministry of Environment and Forests directive to evict illegal encroachers on forest land.
2006	Ministry of Tribal Affairs initiated a key piece of forest legislation: the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006.	

Source: Bose et.al, (2012)

Forest policy and its implementation mainly supported the interest of the dominant groups in both pre- and post-colonial India. As Guha stated, 'while, before 1947 forests were strategic raw materials crucial for imperial interests such as railway expansion and the world wars, in the post-independence period it has been the commercial and

industrial interest who have dictated forest policy. However in both cases, the successful implementation of the policy has been achieved only at the expense of the forest communities' (Guha, 1983: 1892-93). Over the phase of regulations, forest rights have changed—from customary rights of the traditional inhabitants to rights of the State. An overview of regulations and policies show that the conservation debate is centred on the 'participatory regime of forest governance' at the national and international levels. Similarly, the priorities in forest governance have changed from centralised form of governance to participatory regime of forest management.

Regulation, Implementation Process and Development Projects

The studies on JFM in India pointed out that the participation of the local people were a failure in terms of the agents for conservation and this was not because of their inability to adopt new resource use strategies, but from an unwillingness to do so (Husain and Bhattacharya, 2004). They have argued that there is a need to create demand for conservation among the local community by providing them alternative provisions. Wietze (2005) has studied the participation of the local community and explained the feasibility and gain for the community members as a part of forest management. The effectiveness of the local participation varies according to differences at the institutional and village level. For instance, the unequal distribution of land holdings and wide differences between the poor and the rich influenced the effectiveness of forest management for all people. For example, because of lack of alternative jobs, in Jharkhand, people are willing to work towards the forest management. The studies also pointed out that the increase in local community indebtedness leads to forest resource extractions; and providing them alternative source of income may reduce their dependency on forest resources. However, in an empirical study Neumayer (2005) observed that there is no direct relationship between high indebtedness and high extraction of resources. With the goal to alleviate increasingly emerging conflicts between multiple actors over the forest use rights (Rishi, 2003), India introduced the concept of participatory management in its National Forest Policy. The JFM guidelines define how local communities could be involved in forest management outside protected areas. These guidelines specify that responsibilities, benefits, control, and decision-making authority over forests be shared between local user groups and governmental agencies (Bhattacharya et. al, 2010). However, the power given to the communities involved in joint forest management is limited, participation inadequate,

the common property rights ill defined, and the Forest Department retains substantial control (Behera and Engel, 2006).

Jha (2000) reviewed how the Eco-development Project and Joint Forest Management addresses community participation while dealing with biodiversity protection in India. He analyzed that the role of the community and community participation may have different phases in both these initiatives. In JFM, intensity of community participation may increase as community performs more tasks, whereas the role of the community in EDP is large in the beginning but may decrease as the project moves ahead. In JFM, improved protection may increase more goods and services from the forest. However, in EDP the project is more focused on indirect value to the local community and suggests for alternative livelihood rather than relying on forest resources. The studies covered include Mahanty (2002a and 2002b) on the Nagarahole National Park, Karnataka; Baviskar, (2003 and 1999), Pandey and Wells (1997) on the Great Himalayan National Park, Himachal Pradesh; Karlsson,(1999) on Buxa Tiger Reserve, West Bengal. Apart from studies on EDP, Indira (1992) and Ogra (2009) have analyzed how protected areas create human-animal conflicts to the detriment of humans and wildlife.

Mahanty (2002a) argues that in the context of the participatory phase of a conservation programme initiated by international donor agencies the capacity of facilitators is critical in mediating intervention outcomes. The study examines the characteristics of key organisations and individuals and their relationships and the negotiations between them, based on a case study on the Nagarahole National Park, Karnataka, which is one of the protected areas selected for EDP. The study pointed out that conflict between immediate stakeholders caused delay in implementing the programme even after its commencement as there was a considerable lag in planning and implementation in the State as the project, though approved in 1996, commenced only in 1998. The study also reflects on factors such as caste, gender and status of the actors, which strongly affected and benefited conservation and participation interventions. For conservation practitioners, a significant issue arising from this study is the need to attend to the process of identifying, negotiating and establishing a network among key actors as a central part of the intervention.

Mahanty (2002b) observed how the internal dynamics of government agencies and the relationships between immediate stakeholders—NGOs, agencies and donors—

influences the conduct of a conservation programme in another case study of EDP in Nagarahole National Park, Karnataka. The study outlined three major perspectives on conservation, as conservationists and supporting organisations, that is, those who emphasise on strict restrictions and protection for forests. This included first, practitioners and activists for greater community involvement, second, power sharing for park management and for resolving conflicts and third, promoting Ecodevelopment Projects which aim to improve the compatibility of livelihoods and conservation in parks, but without questioning the underlying institutional arrangements for park management. The study also reviewed how institutional mechanisms at the locality in JFM became constraints and made it difficult to facilitate power sharing and meaningful local participation. The study emphasised that the role of local institutions—relationship between central, state and district levels of government—and the role of non-governmental organisations are important in the management of the park, forest related regulations and its implementation.

Karlsson (1999) brought out an extensive study on implementation of the EDP in Buxa Tiger Reserve, West Bengal. The study narrates how the concept of participation is still on paper for the tribal people in the Buxa Reserve and attempts to understand how the schemes relate to the question of rights (customary) to the forest and how they are different from other forms of village or rural development programmes. Lack of planning and lack of clarity about the project among the officials were the biggest challenge during the implementation phase. For the department it was another rural development programme, but they had more power over the community because of cash and other short-term benefits they could offer to the community. The study concludes that the project was carried out as a normal development programme where the entire process originated from above with hardly any participation from the tribal community. In the process, there was hardly any effort made to address the rights of forest dwellers sustainably, with the result the community received only a few basic infrastructure development benefits.

In a study of the practice of eco-development in the Great Himalayan National Park (GHNP) in Himachal Pradesh, Baviskar (2003) argues that the concept of 'Eco-development project' itself needs to be questioned. It is a larger framework wherein the Indian economy is being liberalised and the Indian state is being redesigned to facilitate the expansion of private capital. This is part of the World Bank's agenda of 'reshaping

civil society' by creating new institutions and procedures based on 'state community partnership', which provides 'good governance'. The study narrates the resistance of the local community to attempts made by the forest department to curtail their traditional rights. Though the project was widely promoted in the name of participation, it could hardly address the diversity of the local community in terms of their traditional sustainable practices and conservation mechanisms. Referring to the local NGO's study on sustainable use of forest resources, Baviskar observes how the FD brings out new strategies on regulation of forest rights for the community. The short-term offers, in the name of alternative livelihood, were not sustainable at the locality as stated by Karlsson (1999). By using Bourdieu's theory of misrecognition, Baviskar argues that despite the considerable experience of the rhetoric of 'participation', planners continue to misconceive rural communities as passive, homogeneous, and subsistence-oriented and shut their eyes to their complexity and dynamism.

The studies, based on evaluation of EDP, assessed the impact of the project on the hypothesis that tribal communities rely on forest resources for their livelihood and providing them alternative livelihood, mostly on a short-term plan, could induce sustainable conservation and livelihood (for instance, Gurukkal, 2003). These studies hardly discuss how the participatory regime of forest management, initiated by foreign donors, brings new policy changes in the Indian forest system. There is no discussion about the institutional mechanisms in the current system and about providing a new governance system, which could strengthen state-owned management even in the 'participatory programme'. The case of the Nanda Devi Bio-sphere Reserve (NDBR) is presented to illustrate the concrete effects of top-down conservation policies and ecodevelopment on local livelihoods. The study indicates that, even if the discourses on conservation have changed, ecodevelopment is marked by striking similarities with the previous conservationist approach, leaving the local population often further disempowered than before. The study argues that the exclusionary policy of the NDBR was rooted in a rhetoric that ignores the dependence of local people on natural resources, that this misunderstanding has led to a tragic pauperisation of the local population, that the Ecodevelopment Project initiated in the NDBR, is in theory more people-oriented than conventional conservation programmes. It appears to be a short-lived from of gaining people's participation, and that ecodevelopment follows a

lingering model of ‘exclusion’ resulting in a significant loss of decision-making spaces for villagers (Benabou, 2012).

Studies by Mishra et.al (2009) are based on best-case practices of three Protected Areas (Pas) (Periyar, Kerala; GHNP, Himachal Pradesh and Mundanthurai, Tamil Nadu). By praising the role of the forest department and the project’s implementation team, the study argues that the project is successful in achieving conservation by addressing social issues and livelihood of the community. The study says that the project benefited the ‘poorest of the poor’ in all three Parks. However, the study hardly addresses how development projects, plantation companies and other encroachments are creating more pressure on the forest and how the State or EDP addressed the issue and relied on the assumption that tribal communities live on the forest fringes creating habitat degradation and forest fires. For instance, about 70 per cent of the population in the peripheral area of PTR comprise of non-tribes/settlers. It also mentioned that there are 23 private estates around the PAs, but hardly discussed how these estates are creating threats and challenges to the sustainability of biodiversity. How sustainable is tourism (as quoted, 450500 tourists arrive annually at Thekkady) and how it creates further challenges to the forest are hardly addressed in the study. It is a similar argument seen in other studies available on the perspectives of conservation. The study by Pandey and Wells (1997) discusses how conservation education and awareness programmes enrich the EDP in GHNP, Himachal Pradesh. The study discusses the limitations and challenges faced by existing forest department staff considering the limited facilities available to them to provide additional support for the programme. In fact, the project has doubled their work in the park. The study also observed that the local community who are largely dependent on forest resources for their livelihood heavily influence the sustainability of PAs.

As against the conservationist discourse on threat to wildlife by forest dwellers, Guha (2003) in his study shows how the dominant discourse of conservationists, along with the forest department and international donors, overrule the basic rights of the tribes across India. For example, after the eviction of tribals from the Nagarahole National Park, the Taj Group is being welcomed in to build its hotel in the area. Apparently, the forest department has applied for American funds to build seven patrol stations and a network of roads connecting them on the pretext of patrolling for poachers. This ‘conservation imperialism’ concept is widespread in the discourse on conservation

where the basic rights of tribes are forcefully denied to them as they are considered agents of destruction and very conveniently, fails to address the extensive encroachment on infrastructure and development on account of mining and tourism. The study puts forward the idea of 'wild conservationism' and alienation of tribals from their basic rights in the name of conservation.

The ethnographic research study of Vasan (2002) focused on the social and professional lives of forest guards in Himachal Pradesh. It discusses the role of the forest guard in the implementation of forest policies in the paradox of livelihood and conservation in India. The study looks into how forest guards become a connecting point in maintaining relationships between the local community and the forest department. The discretionary manner in which a forest guard exerts his power in dealing with various offences, violation of regulations and its enforcement provides an insight into the amount of power and authority that is exercised in rural society. In the participatory forest governance regime, the forest guard has to gain the cooperation of the local community though good public relations for its success. The ethnographic research on forest guards reveals that the unrecognised realities of the multiple roles that the forest guard plays in rural society actually make the implementation of many current forest policies unrealistic. As the study states, the forest guard is the ultimate implementer of forest policy in India as a frontline staff of the forest bureaucracy.

In a study on conservation, Indira (1992) argued that merely creating Protected Areas would not achieve conservation while an inequitable approach makes resources inaccessible to the people and there is destructive and unsustainable development. The study analyzed how, in the name of conservation, inhabitants at the Rajaji National Park who were solely dependent on forest resources for their livelihood, were denied their rights. By referring to the strategy of the National Wildlife Action Plan, inspired by the World Conservation Strategy, the study observes that the conservation initiatives should develop equitable partnerships between the State and the community for sustainable forest management. The study also discusses how, while addressing conservation, the arguments hardly addresses the wide destruction of forest resources in construction of dams and other infrastructure development.

Encroachment of Forest, Landlessness and Livelihood

Kothari et. al (1995) have conducted a detailed review of the history of conservation and wildlife in India. The review discusses the arguments of conservationists on one side and rights for the community on the other. They have reviewed a few cases of PAs and established that generalisation of forest management and conflicts at PA is hazardous. In a few cases, the local community plays an important role in the protection of forests against mining and state supported multinational companies (Gujarat and Odisha). For instance, in the case of the Schoorpaneshwar Sanctuary, Gujarat, they have reviewed forest department support to mining companies and harassing of tribals for collecting traditional Minor Forest Products (MFPs). The conflicts (state-people, people-wildlife) may occur because of the conservatory programme and addressing the issues vary from region to region and is more context specific. The declaration of PAs and the imposition of regulations under WLP were usually done without consultation with the communities and resulted in their rights being terminated or abridged or access to basic resources being cut off without adequate provision of alternatives. By analyzing the fact on potential displacement and curtailing traditional rights of the local community, the study states that there is an urgency to unite all forces interested in conservation, including local communities and mass movements, NGOs, foresters, environmentalists, researchers, political parties and others. The rights of communities and wildlife may be protected in a harmonious manner, with a joint initiative of multi-stakeholder, which could address conservation and rights of the community.

Tucker (2012) notes how planters and foresters added to the depletion of resources and devastated forests in Kerala. The study observed that by 1947, India's forests were depleted not only by expanding crop production but also by commercial timber operations and plantation cropping for European markets. The study states that foresters and planters were introduced to India from Europe and these two groups became competitors with villagers for access to the land. Apart from timber production, the forest was used for creating plantation crops as early as the 1800s. By 1866, more than two hundred coffee plantations had been established in 14, 613 acres of forest land; two-thirds of the acreage was owned by Europeans, the rest by Indian investors from coastal towns. The study also points out that by the time of formation of Kerala state in 1956, its remaining forest cover was under pressure from both India's dense

rural population and from the export plantation system. Baak (1992) has mentioned the expansion of plantation crops in Kerala (Travancore) in his research on planters' lobby in the late 19th century. He argued that though plantations started a little late in Travancore, by the 1860s, the expansion of plantations by clearing forest land was rampant compared to other similar plantation regions in other parts of India and Sri Lanka. The Travancore government yielded to political pressure from colonial rulers to carve the 'jungle into cultivable land' with cheap rates and financially invested on building basic infrastructures such as roads and post offices for better communication.

Early migration and settlement in the hill districts of the Western Ghats region in Kerala is extensively documented. The migrants were encouraged to use the forest land for cultivation, which led to wider clearance of forest land into agricultural crops as the settlement was fully supported by the State. Internal migration started from 1920 onwards and it intensified in the post-World War period as part of the Grow More Food Campaign (Moench, 1991; Tharakan , 1977 & 1986; Joseph, 1988). Sivanandan et. al (1986) have reviewed the social, economic and political processes, which operated in the Western Ghats in Kerala before and after Independence. Their study examined the impact of encroachment and regularisation of forest land of the Cardamom Hills in the Western Ghats during the pre- and post-Independence period. The study noted that the forest region sharply declined from 87.08 per cent in 1905 to 31.64 per cent in 1973 in Idukki, a prominent high range district in Kerala. Forest encroachments in the Western Ghats have seriously affected the ecological balance, which has further deteriorated due to the expansion of private plantations in the area. Encroachments due to land greed of the local community, with the support of political parties for petty gains, encourage further land grabs and the further degradation of the eco-system in the region.

Moench (1991) has also discussed about the different phases of transformation of forest land into plantations and settlement of European planters and local settlers. He also discusses how the eviction process and regularisation of enriched land as legal rights of the settlers becomes a turf war between the State and people—those who are economically, socially and politically connected. In most of the cases, the State fails to complete the eviction and instead regularises the encroached land to fulfil the demands of the settler community. Though Kerala witnessed structural changes after the land reforms, it induced further alienation of land from the tribes. Sivanandan (1979) has stated that land reforms were in reality a continuation of land alienation for the tribes as

the act labelled the Adivasis as landowners and passed on their land to the non-Adivasi migrant settler-tenants.

Sreerekha (2010) analyzed the rehabilitation programme on distribution of land to the tribes in Kerala. Land distribution for the tribal community in Kerala is still in the implementation phase and has undergone many modifications from the initial bill passed in the early 80s. Even after the verdict of the Supreme Court to distribute alienated land to the tribes in Kerala in a time bound manner, the implementation is still in its initial stage. The study analyzes the case of Aralam, where, under the state's initiative, forest land was used for non-forestry purposes and later portions of the farm were distributed to the tribes. The study is concerned that the state fails to provide any institutional support to the community either in the form of financial aid or basic infrastructures etc or in overcoming their incapacity to manage plantation crops. As a result, many beneficiaries abandon their land and go back to their lives on the fringes of the forest and being landless. Though the agreement with the community and demand was for five acres, many got less than 5 cents (0.05 acres) of land and became another 'colony' of the State. Allotments were given to only a few, and these were the results of the continuous resistance of the community for their alienated land. Sreerekha (2012) and Rammohan (2008) have observed the resistance and struggles for land of Dalits in Chengara, Kerala that was initiated in early 2000. The case of landless Dalits in Chengara again brought up to the public domain the necessity for land reforms in Kerala. Landless Dalits and Adivasis have occupied parts of a corporate rubber plantation at Chengara for five years. The studies argued that there was a need for a land policy, which could address the landlessness of the Dalits and Adivasis in Kerala. Lack of institutional support, especially in terms of land distribution, shows the struggles of the Dalits will continue in Kerala.

How skewed the land distribution in Kerala is, was studied by Yadu (2015) and he analyzed the question of unequal distribution of land for the Adivasis. The study is placed in the context of well-reviewed revolutionary land reforms in Kerala where marginalised social groups are still at the bottom of the pyramid. The study relied on NSSO's employment and unemployment survey data, which shows that the top 10 percent of the population owned eight times more land than the bottom 40 per cent of the population. The study also observed that land alienation of the Adivasis is still high and ownership and social mobility is correlated. The study argued that a policy on land

distribution is required which could support social and economic change for the marginalised community in Kerala. A study by Scaria (2010) observed that land reforms have failed to provide land to the tillers of the soil; an analysis based on a micro-level village study. Though land reforms have induced a structural transformation of ownership pattern on overall social groups, Dalits are still at the bottom of land ownership in Kerala. The study also confirms the high correlation between caste and landlessness. The social groups that have really benefitted by the land reforms reinvested in cultivation, which could also be a support to investing in higher commercialisation.

One of the common arguments postulated by the conservationists is to re-locate forest dependent communities to protect forests and its sustainability. However, studies (Lasgorceix and Kothari, 2009) on the displacement of the communities to protect forests show that in many cases, especially relating to tribal communities that have been relatively isolated from the outside world, the displacement is traumatic from both economic and cultural points of view. In most of the cases, displacement literally places the communities in an entirely different location and they are alienated geographically, socially and culturally. For instance, the tribal community has to be transformed from a non-monetised economy to a money-dominated one. As a study stated, in many cases, free access to survival and livelihood resources such as water, fuel, fodder, medicinal plants and wild food has to be replaced by purchasing these goods in the market, which opens up such communities to serious exploitation. Relocation is always justified from the point of view of reducing pressure and securing wildlife habitats, but it hardly addresses relocation costs to the people, the cost of living, livelihood adaptability and formation of new institutions.

Governance, Participation and Institutions

The research and discussion on forest governance is gaining wide attention recently in public domain and academic arena globally. Broadly, the studies and discussion on forest governance were conceptualised as an attempt to understand the forest related decisions, intervention on both regulatory and non-regulatory interventions of the State and its impacts on various related issues on human-nature interface. Lele (2017) brought out various dimensions on the discussion and debate on forest governance in India. The study conceptualised the broader framework of forest governance and its multi-layered operations, the interconnection of decision-making processes and role of

institutions etc. while providing an introductory framework for the discussion of FRA and its implementation in India. The collection of studies edited by Lele and Menon (2015) has discussed various aspects of the forest governance debated in India with an in-depth discussion on definition and conceptualisation of forest governance. The study contextualises the interconnection with governance, conservation and livelihood, which covers various chapters of the book. The case studies and discussion based on major themes placed in different regional contexts brings out the complexity of decision-making process and regulatory intervention of the State that reflects on forest governance.

The works of Secco, Laura et al (2014); Arts Bas et, al (2013); Mcconnell and Sweeney (2005); Krishnadas M et.al (2011); Inoue and Shivakoti (2015) brought out the larger debate on forest governance from the perspective of different countries. The studies directed the debate and discussion on forest governance in various ways, starting from understanding forest governance to how forest governance could be implemented or achieved effectively in different socio-political and geographical contexts. Giessen and Buttoud (2014) edited a collection of articles on forest governance research in a special volume of Forest Policy and Economics that brought out detailed analysis of forest governance research. The studies in the volume contribute a wide range of discussions: it covers the defining, assessing and measuring indicators of theoretical and methodological advancement of forest governance research. For instance, Arts explains conceptual framework of forest governance, which explains shortcomings of existing research and opens up wider discussion on future research under the same area. Another study by Bohling and Arzberger from the volume discusses about the role of stakeholders in forming policy at higher level. The study observed that role and involvement of the local stakeholders in forest planning not reflecting for outcome of the effective policies.

The study by Bose et. al (2012) is based on the concept of governmentality—the history of categorisation, the politics of social identity, and the technologies of forest governance—to show how the efforts to politicise forest tenure rights have reinforced political control over the scheduled tribes through new forms of authority, inclusion and exclusion. The study was based on the Bhil tribe in bordering areas of Rajasthan, MP and Gujarat and examines the politics of identity, showing how various forest related and externally imposed Bhil identities (from encroachers to guardians) have

determined their inclusion in and exclusion from, forest rights and forest resources. The study analyzes how decentralised forest governance is a notion only on paper and how centralised it is in terms of giving rights and participation to the local community. The study further argues that the State is able to maintain domination over the tribes by new modes of regulations of forest administration that continues to function using a traditional authoritative approach by implementing rules that apply uniformly, ignoring differences in forest-people relations, and further perpetuating social identity through identity-based tenure reforms. The study suggests the necessity of further empirical research to understand and to assess the changing authority, relations and institutional arrangement for forest management in the scheduled areas.

By definition, protected areas refer to sites that remain relatively undisturbed by humans and close to their natural state (Dixon and Sherman, 1990). Protected areas are designated natural areas such as ecological reserves, national or provincial parks, wilderness areas, and wetlands; any designation aimed at keeping a natural area relatively intact and restricting commercial development (van Kooten and Bulte, 2000). It is possible to minimise the risks of irreversible damage to the ecosystems by human activity through the establishment of protected areas. These facilitate the carrying capacity and longevity of the subsystems and ecosystems. 'The interaction among species typically makes it necessary to protect varied species to ensure the protection of one. Thus, even if the species are not valued for their own sake, they are protected because of their role in supporting other species. By the same reasoning ecological services may be protected because they are by-products of the habitat. The emphasis is on a habitat rather than a species approach to conservation (Perrings and Lovett 2000). About 4,500 protected areas exist worldwide, of which one-half are located in the tropics covering around 5 per cent of tropical rain forests. During the major part of this century, the establishment of protected areas was the standard approach in biological conservation. A protected area is a clearly defined geographical space, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated eco-system services and cultural values (Dudley and Philips, 2008).

The forest dependency, poor development projects and forest depletion and others are still ongoing discussions in the arena of forest conservation, livelihood, and regulation and governance debate globally. The discussion of studies in the area of forest

governance, conservation, livelihood, forest regulations explains how these issues are interconnected and regulate forest governance in the context of Western Ghats of Kerala. By understanding various interlinked research domains one way leads to many research questions which is mostly based on contemporary debate in the area of forest governance and policy level questions.

1.5 Research Questions and Objectives

The study intends to locate the responses, negotiations and conflicts among the user groups (inhabitants and migrants) and between the state and the communities. The implementation of forest regulation is intrinsically linked with the questions of livelihood challenges and ecological sustainability and effectiveness of forest governance.

Lele's conceptualisation of forest governance centred thus, 'all governance questions are about who decides and who implements, through what process' (Lele, 2017:55). The proposed study problematises the central concerns of this definition and seeks to understand how responses and decisions of various institutions influence the central questions of who decides, who implements and through what process. As noted, the regulatory measures on forest over forest resources and rights of traditional inhabitants have intervened over the period. The State and various national and international organisations hold a major stake on the changes in the decision over forest rights, centralised to decentralised and participatory regime of forest governance. The discussion and analysis in the proposed study tries to describe the process of the dynamic relationship of and among the various institutions on forest governance by situating regulatory projects and debates in and around the Western Ghats in Kerala.

As stated, by situating the three cases implementation of regulations, the research questions are framed to understand who and how local institutions influence decision-making process of the State. The analysis attempts to see how responses of the institutions placed in multilayered levels determine conservation, livelihood and governance concerns in Kerala. Several questions arise in the context of conservation, livelihood and governance issues related to forest sector. These interlinked process influences forest governance in the State.

The questions cover who and how the decision will be taken on livelihood-forest-enforcement of regulation related issues? How the evading enforcement and delaying

implementation will impact existing forest conservation practices? What are the ways to strike a balance between conservation and livelihoods of forest-dependent communities and conversely which factors prevent the adoption of sustainable livelihoods? Do poor have any role in the planning process towards the conservation/restriction of forest resources? Whether regulatory projects are enough to address landlessness and challenges of livelihood of the tribes and other local communities? Will enforcement of regulations attract compliance from the community and does enforcement of the regulations make poor people better off? The questions are interlinked and analyzed through the subsequent chapters.

1.5.1 Objectives

The broad objective of the study is to understand the decision making and implementation process of the various institutions related to forest governance in the Western Ghats of Kerala, where the livelihood of the inhabitants and conservation of the resources is a matter of equal importance.

Key Objectives:

1. To understand heterogeneous nature of the local institutions in the forest sector and to examine why and how only a few could claim their rights, sustain livelihood and contribute to various process of forest governance in the State.

2. To understand how response of the institutions influence decisions on the implementation of forest regulation and its impacts on livelihood, conservation and forest governance in the Western Ghats.

3. To understand involvement of local institutions and relationship between and among them in implementation by addressing: forest dependency, participation, beneficiary groups, decision-making process, and in deciding regulatory mechanism, and any impact on formulating forest governance in the State.

4. To understand the socio-political and religious dynamics related to regulation, conservation and livelihood in the context of concerns of forest (or forest sector) as debated in the Ghats of Kerala.

5. To understand how far the environmental regulations and its implementation represent conservation initiatives and concern for the livelihood of the communities living in the forest fringes of the Western Ghats of Kerala.

1.5.2 Hypotheses

1. Differences in the social, physical and political space of the policy makers and community at the forest fringes often acts as constraints for protection of livelihood.

The place and position of a community in the hierarchy of power and social strata influence its access to and control of resources.

2. The concept of forest dependency is narrowly defined mostly to capture the livelihood issues of tribes and undermines those of other institutions who rely on forest for income-generating business and, industrial and development projects. Hence most of the regulatory process is only centred on the nature of forest dependency of the poor.
3. The projects and programmes related to forest regulation, in the long term, does not provide sustainable livelihood to the forest-dependent communities.
4. Over the period, agenda and concerns in the forest sector of the State have changed towards participatory in nature where heterogeneous communities get equal importance.
5. The core strategies of the policy document and forest governance at the higher level hardly reflect heterogeneous nature of the local institutions and their strategies on conservation, livelihood and governing systems.

1.5.3 Study Region: The Western Ghats of Kerala

The study villages fall within Kottayam, Pathanamthitta and Idukki districts in the high ranges of Central Kerala. Geographically, the study region is situated in the forest fringes of these three districts, and located between the border areas of Kerala and Tamil Nadu. The study villages cover tribal hamlets, villages dominated by the migrants, tourist spots, and pilgrimage centre in the high ranges. Several factors make the study region suitable to examine concerns regarding forest governance. For instance, the high ranges in Kottayam, Pathanamthitta and Idukki were sites of early migration. Further, over the last few years the study region witnessed several interventions to (de) regulate forest encroachment and formulating several development interventions for forest-dependent communities—facets of participatory forest governance. The region also covers Periyar Tiger Reserve—one of the project sites of the Ecodevelopment project supported by the World Bank—one of the largest protected areas in the Ghats. In recent history, the hill districts of Kerala have entered the governance debate in India due to the widespread resistance against Gadgil and Kasturirangan reports on the Western Ghats. The details of the institutions and geographical specifications are discussed in chapter 2.

The questionnaire survey covered the villages mainly in the forest fringes of Periyar Tiger Reserve. As discussed, the survey covers major tribal hamlets, villages dominated by the Scheduled Caste and the villages dominated by the migrant community. The villages and their inhabitants are described in the table 1. 4.

Table No. 1.4 Basic information of the sample households

Tribal Settlements	Tribal Groups	Area (ha) Occupied	Main occupation
Labbakandam, Kumily	Mannans	60	Fishing
	Paliyans	28.4	MFPS
Vanchivayal	Uralis	18	Agriculture
Moozhikkal	Malayarayans	112	Agriculture
Attathodu	Malapandaram & Ulladar	150	MFPs, Daily wages

The survey covered migrants and SC communities from the villages of Mukkempetti, Pamba valley, Thulappally and Thekkady. The details of hamlets of tribal communities and revenue villages are listed below.

- Labbakkandam: in Kumily village, situated on the northern edge of PTR.
- Vanchivayal: on the western edge within the buffer zone of PTR. Here the settlement of the Urali tribe occupies about 39.39 ha
- Muzhikkal :on the western edge within the buffer zone of PTR with Malayaraya settlement
- Attathodu : on the south side of PTR and in the Ranni division. There are Malapandaram and Ullada settlements that occupy 150 ha
- Azhutha,kadavu Kalaketty: On the south-western side of PTR in the Kottayam division. This is a settlement of Malayarayas.

The primary data collection, including formal questionnaire survey and major part of the qualitative survey were conducted during June-December 2013. I had visited many of the villages of tribals and migrants in the fringe area of Periyar Tiger Reserve and nearby forest division of the higher ranges of Central Kerala in 2001 and 2004 as part of the earlier research. My exposure to the society and ecology of that region enabled me to have a deeper understanding of the problems that the people there encountered, especially the tribal communities. In addition to the questionnaire survey, extensive fieldwork conducted in 2013 made use of qualitative research methods in the villages of Peerumade, Munnar, Thekkady, Mathikettan, Erumeli, Sabarimala, Thulappally and major tribal hamlets. During this phase of the fieldwork I closely interacted with Tribal and Dalits, plantation workers, migrant settles with differences in land ownership. In other words the migrant settler peasants could be internally differentiated on the basis of the ownership of land per household. Subsequently I continued with informal discussions, focused group discussion and key informant interviews with major

stakeholders and local community in 2015 and 2017. The systematic follow up visits in the field sites could gain in depth insights into the reigning debates on various aspects of forest governance. Such visits could provide opportunity to closely observe the responses of the various institutions on forest governance particularly the recommendations of committee reports on the Western Ghats that included among others forest encroachment and non-forest activities in the Ghats.

1.6 Methodology

The study is grounded in the primary survey, which is substantiated with secondary data sources. The primary survey relied on ethnographic research and a quantitative survey. The details of the data generated through the various methods used in the study are detailed in the following sections. The study used statistical techniques such as Cross Tabulation, Chi-Square Test, Fisher's Exact Test and Friedman Test. Various case studies were used in different chapters to highlight issues pertaining to the role of local communities in decision making, and to the conservatory and livelihood initiatives undertaken, in the context of forest governance in general.

1.6.1 Data Source: Primary Survey

A major part of the survey is based on cross-section data collected from the households in the major tribal settlements and revenue villages in fringe areas of Periyar Tiger Reserve and other revenue villages in Mathikettan and Munnar. The study surveyed 300 households, which covered the high ranges of Central Kerala. The survey covered tribal hamlets and villages of migrants near the forest fringes. Data collection using a structured questionnaire was conducted on 300 households from the forest fringes of Periyar Tiger Reserve and other protected forest areas of Kerala. The survey region was specifically selected by focusing on the high concentration of communities depending on the forest for their livelihood in each locality. The sample households from the village level were selected based on stratified and purposive sampling methods.[3] The few indicators were the base for the purposive sampling such as

[3] Stratified random samplings refer to the method of dividing the population into clusters purely for the sake of practicality which are communities of different caste groups, forest-dependent communities and farmers etc. in the context of the present study. A sample is taken from each group of the category separately. Targeted sampling involves intentionally selecting those cases that are most relevant to the study. Here, the communities which are directly linked with the forest either by their economic or non-economic dependency on forest are the targeted groups. In order to compare the views and experiences of other communities, which are directly not relying on the forest at present, a case control sampling is also used.

livelihood option (rely on forest for their livelihood), land ownership (covered various range of land ownership), involvement of forest-related works either as a guard or as a daily wage workers etc. The survey tried to cover the family of chieftain or Kanikkar of each tribal community.

The purposive sampling is also based on the availability of the tribal communities in the houses. Since most of the tribes were going to forest with their entire family, especially Malapandaram, it was difficult to trace the families within the stipulated time. Many interviews were conducted inside the forest or at the market site where family members were waiting to sell Minor Forest Products (MFPs) at the credit societies. This method was augmented by informal discussions with the different agents and actors involved, to understand their strategies, negotiations and relationships. The high vigilance from the forest officials in the tribal hamlets restricted the survey to a certain extent. Many informal discussions and focused groups discussion were arranged outside the tribal hamlets to avoid the intervention from the officials. However, few focused groups discussions held in the Aganwadi centres in and around the tribal hamlets where the meetings will be arranged by the forest department. Personal interviews and informal discussions covered different institutions—community and political leaders, various authorities of State institutions, household members, and NGOs, etc.—in order to understand their strategies, negotiation practices and the relationships between them. Qualitative research methods including ethnography were used to develop arguments of chapters 4 and 5.

1.6.2 Methodologies for Primary Survey Data Collection

The methodologies of various forms of collection of data rely on multiple factors including; the nature of the research, objectives of the research, the direction and the perspectives of the research, and the (subjective) position of the researcher vis-à-vis the research community and interviewees (Grix, 2010). Due to the nature and type of the research, primary data and information were collected using mainly qualitative methodologies. In the qualitative data collection, focused group discussions[4], structured

[4]Focused groups discussions are pre-arranged group interviews, usually of six to eight participants that normally have an interview guide similar to those used in individual semi-structured interviews. This is based on discussions among a group of participants rather than independent statements of each individual. The focused group discussions generate ideas and opinions and reveal the reasoning behind those opinions (Marshall and Rossman, 1999).

and semi structured interviews[5] informal discussions[6] and participatory observations[7] for generating more qualitative information were conducted whereas questionnaires were used to substantiate the qualitative survey.

It was noticed that when the survey was conducted with a formal questionnaire, many respondents were reluctant to share their experiences and answer questions, whereas they were relatively free in sharing the information in the semi-structured or informal discussions and focused group discussions. For example, almost all respondents were of the view that there were no conflicts between the forest officials and the community on any issue in the locality. However, in the informal discussion many respondents concurred that there were conflicts and provided details of the conflicts including the reasons, frequency and the impact of each conflict. The life histories of the selected individuals from the user groups of the forest dependent communities were collected with full awareness of the differences in the communities. The study also uses historical documentation, project documents, media stories, and documentation from key organisations, which are helpful in providing the background information on the actors, their strategies, negotiations and relationships.

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[5] In structured interviews, fixed wordings are presented in exactly the same way to all informants. Semi-structured interviews are used for a range of purposes, from elicitation of information from a specific person with specialist or privileged knowledge to exploring the views of a sample of people from a particular population. An unstructured interview is an in-depth conversation, usually arranged in advance in order to talk about a particular subject or issue. For instance, the unstructured interview with the educationist of Periyar Foundation during the fieldwork brought out many studies and their environmental education plan to the societies. It helps to focus on a few members to get their views on local conservation and awareness campaigns in the locality.

[6]Informal discussions are normal conversations with individuals or groups of people as they go about their daily lives, from which you make notes on points relevant to the research topic. It is valuable in providing information on sensitive subjects such as illegal activities or social conflicts where people may be unwilling to discuss them in a more formal situation. For instance, discussions with police personnel at different locations provided better information about cases against tribal community reporting in the area. When the first discussion was held in the police station, the main argument was that in most of the cases the tribals were the culprits. However, when I had a discussion with a policeman from the Paliya tribal community, he stated that with regard to issues of caste-based atrocities, the police and political parties have a lesser role. Community organisations are good at solving caste-based issues. At the police station or with the support of political parties, they will always try to compromise because the other parties are always highly connected locally or represent a powerful caste or are linked to political parties.

[7]Participatory observation would help to understand how things are actually done first hand and repeated observations of the same type of events begin to reveal common elements and patterns (Munck and Sobo, 1998). Conflicts occurred in the context of road repair works at Mannan tribe, one of the community settlement areas, witnessed during the participant observation method. Why and how it matters was understood later after an informal discussion with the two groups of stakeholders: forest officials and community members.

1.6.3 Data Analysis of the Variables

Household Level: The survey questionnaire to the head of the household included all the information related to the household such as details of socio-economic and demographic characteristics, employment, household amenities, major source of income etc. Other variables include: educational attainment, social and economic background, regional/urban status/neighbourhood type, marital status, household composition/children in the household, stability of residence/home ownership, income from various sources, net income (each source of income is the average household income from that source, i.e, sum of total household income from that source divided by the number of households) from different sources in the households, consumption level, gender participation, decision making, land holding, labour and work force, education level, migration details, the number of female headed household etc.

Forest Resources: These include factors such as distance from the forest, energy use pattern of the household, frequency of visit, details regarding other Non Timber Forest Products (NTFPs) and its collection and marketing, usefulness of the credit society for marketing forest products, per capita magnitude of forest resources collected by the households etc.

Individual Level/Particular Caste Groups: Data was collected from different individual and caste groups. It was useful to in different case studies such as the impact of environmental regulation on women, tribes etc. It opened a window to work out life histories of elderly people and to understand the trajectories of transformation.

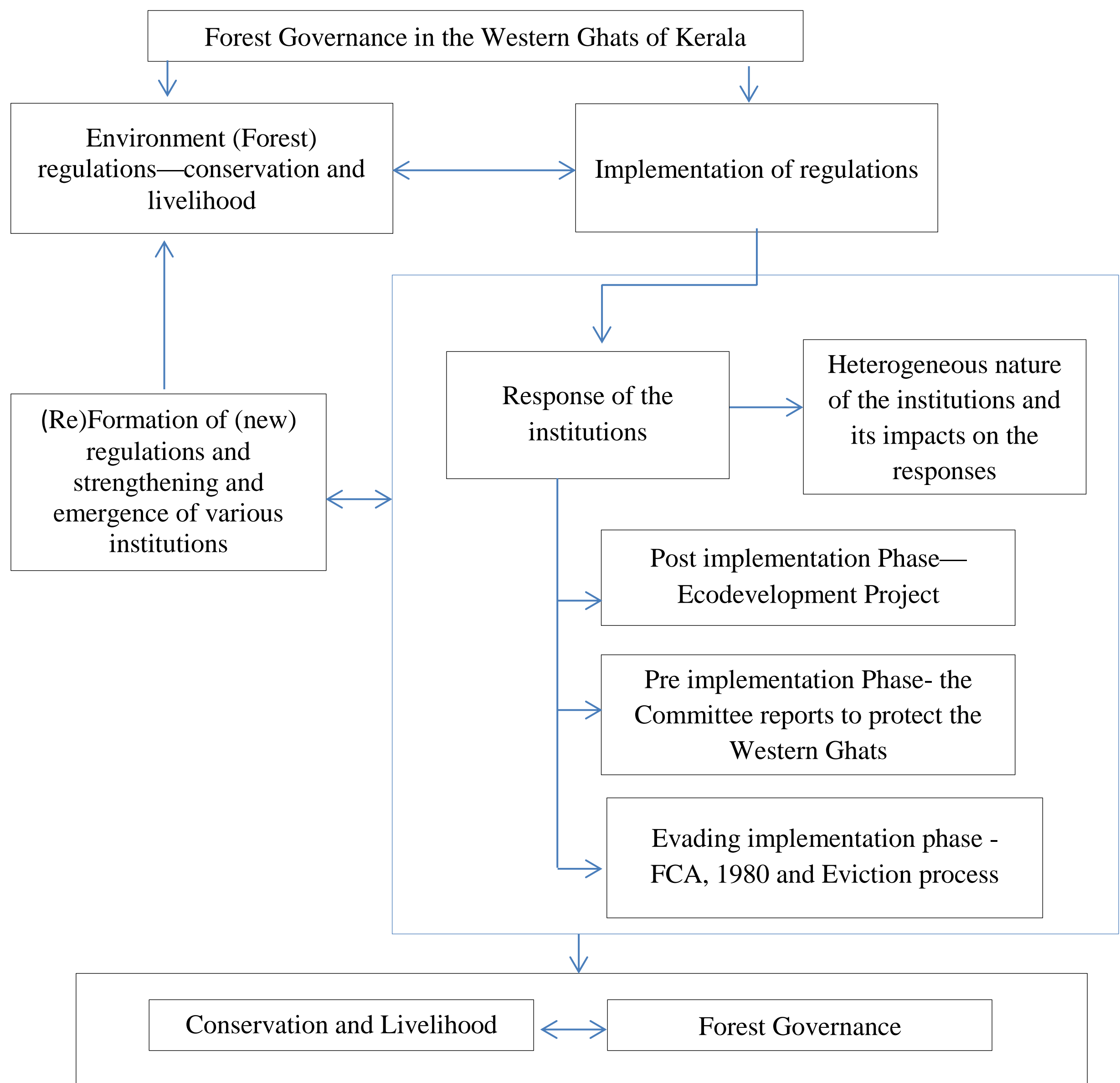
Resource Use Pattern and Conservation Practices: Specific questions were asked to women regarding who would take the decision to extract the forest resources, the mode of extraction and marketing. Questions were posed to know whether regulations affect their resource collection practices and reduce the income source.

1.7 Formulation of the Study and Organisation of the Chapters

The study is framed within the context of role of institutions to understand the core strategy of conservation and livelihood, which institutes structure and process of forest governance in the Western Ghats of Kerala. As stated, the argument of the study encompasses three cases of implementation of the regulations apart from situating the key institutions and development profile of the study region. In the case of before (pre) implementation the study uses the Gadgil and Kasturirangan Committee recommendations; for post implementation the study analyzes Ecodevelopment Project;

and in the case of evading implementation the study explores the Forest Conservation Act, 1980 and the eviction process in the Western Ghats of Kerala. The study also brings out the heterogeneous nature of the institutions, which influences decision making in the regulatory process and enforcement mechanisms in the implementation. That would influence the status of 'success and failure' of its implementation. Based on the theoretical framework and concepts, the study formulated the following:

Figure 1.2 Framework of the Study



The approach of the core three chapters is different from each other. The chapter on post-implementation looking at the implementation of the Ecodevelopment Project at the Periyar Tiger Reserve, largest PAs in the Western Ghats of Kerala. The chapter relied on primary survey, which covers both qualitative and quantitative survey

methods. The chapter on pre-implementation phase discusses how resistance against the committee reports on the Western Ghats decides changes in forest governance by stopping implementation of the reports and forming new reports based on the request of the State to the Centre. Following two chapters covers much debated issues in the conservation discourse of Kerala—the committee reports on the Western Ghats and rampant encroachments and non-forest activities in Munnar and other nearby areas of the Western Ghats of Kerala. Both chapters relied on ethnographic and qualitative survey to understand response of the institutions on the reports of the Gadgil and Kasturirangan reports and encroachment and attempts of the State against an eviction in the region. In addition, the chapters use media archives and discussions covered in the public domain. The key discussion and analysis and findings of the each of the chapters are given below.

Chapter 1: Introduction: Theoretical Framework: Regulation, Institutions and Forest Governance

The introductory chapter comprehends debates around the main research areas of forest governance, forest regulation, livelihood and conservation in India. The chapter covers problematising research, which focuses on the role of various institutions and its influence on decision making, implementation and process of forest governance, which is dynamically connected with livelihood and conservation. The study relies on theoretical framework of Institutional Economics that helps understand the responses and behaviour of the institutions beyond a rational choice theory of economics. The section on situating literature in the context of major debatable area of forest governance, regulation and its implementation outlines various forest policies in India, reviews implementation of the key regulatory projects, related debate of forest governance, forest sector and conservatory agenda. The chapter outlines key objectives of the study, study region and methodology of the study.

Chapter 2: Locating the Field Profile and Institutions at the Western Ghats in Kerala

The chapter brings out the heterogeneous nature of the study region and its influence on the response of institutions in the process of implementation of regulations. The chapter also locates a basic developmental profile, the evolutionary processes of the social groups and their conservation strategies, and the major challenges to conservation and livelihood in the study region. The chapter analyzes how various communities consider the forest in terms of its economic and non-economic values. The study observes that

different social groups form different perspectives and values about forest resources and these are defined in a wider social, cultural and ethical context. Factors such as demand for forest products and services; source of livelihood and subsistence; religion and rituals; and participation of the community in decision-making, connect with each other and become determinant features in the implementation process. The responses of the institutions are placed in the context of these factors and the following three chapters focus on arguments of how institutions influence forest governance while addressing the interface of conservation and livelihood.

Chapter 3: Inhabitants and the State: Conservation and Livelihood in the Implementation of Regulation

The chapter analyzes how the responses of various institutions influence forest governance by looking at the implementation process—a case of post implementation—of the India Ecodevelopment Project (EDP) at the Periyar Tiger Reserve, one of the key Protected Areas (PAs) in the Western Ghats of Kerala. The chapter overviews forest dependency of the local community historically and see how different communities relied on forest for various purposes. The chapter has covered three case studies—a women protection group, short-term investment for Dalits, and access and change in rights of tribes—to understand how they are represented in the participatory process of forest governance. The chapter observes that in the process of implementing EDP, migrant settlers emerged as protectors of forests along with the forest department, and the tribal community ended up as workers in the diverse short-term investment of the project. By introducing various short-term livelihood projects and regulatory mechanisms, the forest department only increased their control over the livelihood and development of the tribal community in the area.

Chapter 4: Formal Vs Social and Political Institutions: Responses, Regulations and Forest Governance

The chapter locates the responses of the institutions to the initiative of the Central Government to implement regulations (in the pre-regulation phase) based on the reports of the two committees on the ecology and economy of the Western Ghats—the report of the Western Ghats Ecology Expert Panel (WGEEP) chaired by Madhav Gadgil in 2011 and the report of the High Level Working Group (HLWG) chaired by Kasturirangan in 2013. The chapter describes how peer groups deviated from the conservation agenda of the State and how the State failed to negotiate the collective bargaining by dominant groups—the Left political parties and the churches dominated

by Syrian Christians in Kerala. Changes in the forest governance on the Western Ghats is an example of how the dominant community influences decision on regulation and its implementation processes with the State through various evading processes of the regulatory mechanisms. In the context of the wider resistance and unrest, the Centre extended the role of the State to bring in their own report thereby enhancing the role of the State in forest governance. This was despite contrary evidence indicating that if forest governance goes back in the hands of individual State governments it would be driven by their own short-term economic and electoral interests.

Chapter 5: Instituting Forest Governance: Process of Decision, Participation and Implementation of Regulation

The chapter attempts to see how various institutions—formal and informal—could evade enactment of regulations and influence favourable and unfavourable decisions on forest governance in the Western Ghats of Kerala. The rampant encroachment of forest land and claiming property rights for non-forest activities by prominent social groups are presented as an example to discuss the role of institutions in forest governance in Kerala. The study observes how the same community/institution 'uses officials' from the formal institutions to get a favourable decision on claiming encroached forests, while at the same time, 'blaming the officials' for their 'vested interests' in the case of any eviction drive by the State.

The dominant social institutions were mainly involved with the landed class in allowing encroachments at various biodiversity hotspots in the Western Ghats. It was observed in the field survey that few social groups, mainly Adivasis and other marginalised, lacked the capacity to negotiate their traditional rights, while others—mainly settlers—could claim their rights over public property from the early migration period itself. Unfortunately, the attempts of the State in creating and defending institutions for forest governance hardly saw participation by the tribal communities; rather included the dominant groups, churches and mainstream political groups and so on. This process only reinforced the earlier practice of legitimising encroachment of forest land and hardly addressed the dynamism of conservation and livelihood, resulting in rampant forest depletion.

Chapter 6: Conclusion and Policy Implications

By attempting to understand changing forest governance regime, where the livelihood of the inhabitants and conservation of forest resources deserves equal importance, the

research is situated in the high ranges of Central Kerala in the Western Ghats. The study is not about providing binary solutions to the many questions raised in the thesis; rather, it tries to describe the process of the dynamic relationship of and among the various institutions in the context of regulations, implementation and forest governance in the specific spatial-temporal context. The concluding chapter attempts to connect the central themes that are central to the forest governance in the study area and findings emerging from the research rather than providing a summary of each chapter. The thesis is centred on the following issues: livelihood, regulation, forest dependency and conservation interface, participation of the local community, relevance of social capital and land as major assets of the social groups, and building coherence among institutions in forest governance. These issues individually as well as in combination impact on each other and are relevant in unfolding the arguments put forward by the thesis.

Chapter 2

Locating the Field Profile and Institutions at the Western Ghats in Kerala

2.1 Introduction

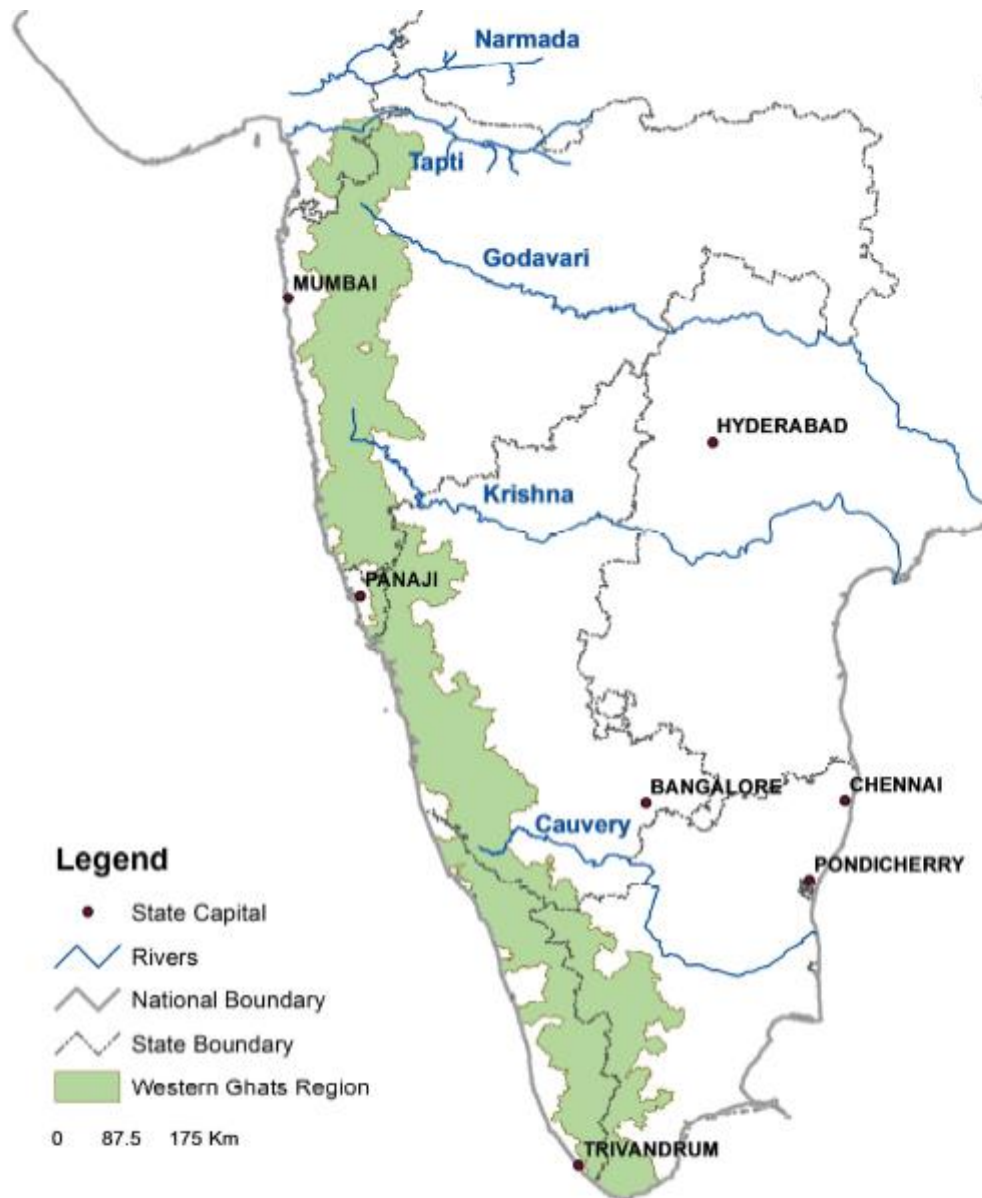
The chapter brings out the heterogeneous nature of the study region and its influences on the responses of institutions in the implementation of regulations. Many factors such as caste, geographical differences/location, local economy, participation of the community in the decision-making process, social groups and the variance of social capital among them, governing structure of the forest department etc., played a determinant role in the process of implementation of regulations. The study hypothesised that such differences differentially influenced on strategies and negotiations over conservation and livelihood of the institutions. Section 2.2 describes the study region and various communities as a subject of the study. Section 2.3 discusses socio-economic indicators of the key institutions in the study region. Section 2.4 brings out perspectives of the communities on values of forest resources and its use to understand how they influence the central themes—of conservation, livelihood, forest regulations and its implementation and forest governance. It is observed in the ethnographic research that these factors form different values on forest resources that transform and contribute to the success and failure of regulations. Section 2.5 concludes with observations on key institutions under the subject of the study. The chapter uses cross tabulation, chi-square and cross table analysis to understand the linkages of various factors related to the responses of the institutions to transform the regulation and its process.

2.2 The Field Sites, Communities and Institutions

The study empirically relies on key institutions—social, political, religious and government—in the Western Ghats of Kerala. The institutions are primarily from the high ranges, which are spread across the three districts—Kottayam, Pathanamthitta and Idukki—in the Western Ghats of Kerala as seen in the Map No. 2.1 and 2.2. The

Western Ghats is a hill range in the southwest of India well-known as a global biodiversity hotspot, and is biologically rich and biogeographically unique.[8]

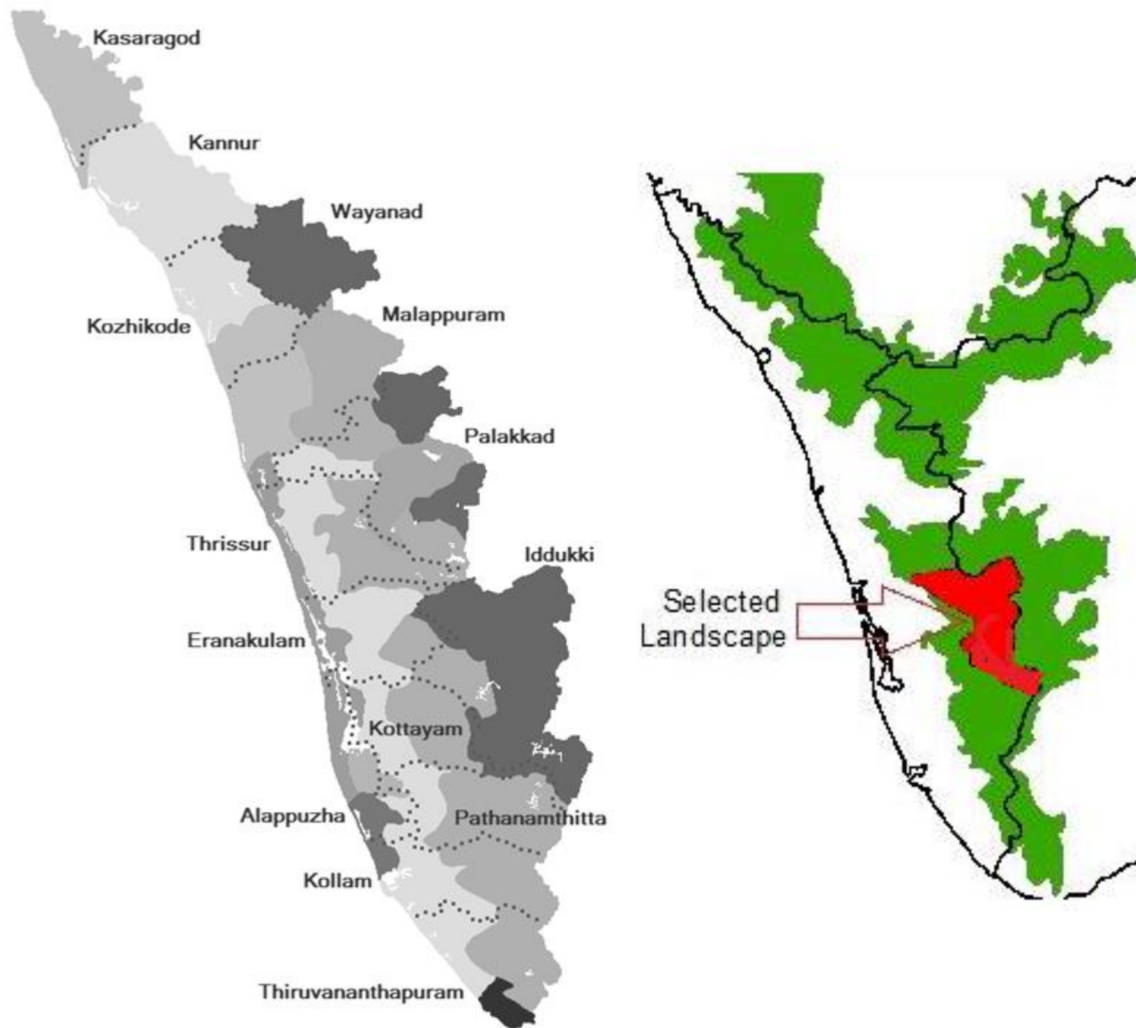
Map No.2.1 The Western Ghats of India



Source: HLWG, 2013

[8] The Western Ghats region is known for its rich diversity. For instance, the region is known for its 4000 flowering plants, which is about 27 per cent of the total species of the country. The known fish fauna of the Ghats is 288 species with 41 per cent of these being endemic to the region. The Western Ghats are particularly notable for its amphibian fauna with about 220 species, of which 78 per cent are endemic. (See details of its rich biodiversity in the Gadgil Committee Report, WGEEP, 2011: Vol I 36.) The Western Ghats provide hydrological and watershed services to the entire region that is, the 245 million people who live in that part of peninsular Indian states. They receive most of their water supply from rivers originating in the Western Ghats and the region is a major source of rich soil and perennial water supply, which directly and indirectly sustain the livelihood of millions of lives in the region.

Map No. 2.2. The districts map and the high ranges of Kerala



Source: UNDP, 2014

The Western Ghats region is 1600 km. long starting from the mouth of river Tapti near the border of Gujarat and extends through Maharashtra to Kanyakumari, the southernmost tip of India, in Tamil Nadu. It covers six states, namely: Tamil Nadu, Karnataka, Kerala, Goa, Maharashtra and Gujarat (portions of Dang Forests). The sustainability of the Western Ghats is challenged by many factors—increasing pressure of population and industry, emerging nature-based tourism, submergence of forest areas under river valley projects, encroachment on forest lands, mining operations, clear felling of natural forests for raising tea, coffee, rubber, eucalyptus, wattle and other monoculture plantations, infrastructure projects such as railway lines and roads,

soil erosion, landslides, habitat fragmentation and rapidly declining biodiversity (WGEEP, 2011). The Western Ghats region in Kerala consists of 22 protected areas. Idukki district, one of the major hill districts in the State includes 10 protected areas, which is about 43 per cent of the total protected area of Kerala.

The economy of the study region relied on forest, tourism and pilgrimage. The differences of the economy have its own social and environmental specifics and it can be assumed that these differences in the localities differentially influence in shaping its responses to the institutions in relation to regulations and its implementations. As stated, the study covers tribal hamlets, tourist destinations, pilgrimage centre, and fringes of tiger reserve in the high ranges. Main tribal hamlets are Maanankudi and Paliyakudi in Periyar; Urali in Vanchivayal; and includes Malapandaram and Ulladar in Attathoddu; Malayaraya in Azhutha and other tribals groups in Thualappally villages. Munnar and Thekkady are the key tourist destinations in the Western Ghats region of Central Kerala. Sabarimala is one of the key pilgrimage centres in the study region that has a major role in the economy of the region. Sabarimala (Ayyappa Temple) is the pilgrim centre that attracts about 500,000 pilgrims annually (Joseph et. al 2016; KFD, 1999). While, in one way, the pilgrimage and tourism contributes to the village economy it creates wider environmental issues like forest encroachments, pollution of water bodies, forest degradation, unplanned construction of various levels of buildings in large scale and other health related problems like communicable diseases due to unsustainable transformation of tourism and handling of pilgrims. As stated, the hill districts of Kerala have also been affected by urbanisation backed by large-scale migrations and the spread of commercial agriculture since the early 1940s. The details of the early migration will be discussed in the following section and Chapter 3 has analyzed how alternative employment is provided in the pilgrimage season to the local communities. Chapter 5 observes that the potentialities of the tourist economy to the livelihood of the local community are used as justification of forest encroachment by the dominant communities and the State.

2.2.1 Communities and Institutions

There are multiple actors and agencies at the level of implementation of all development and regulation programmes at the forest fringes. The key institutions include formal/government institutions namely the Kerala State, village and revenue departments, Kerala Forest Department (FD) and the social institution, that is, the

community, which includes different social groups, political and religious institutions and regulation. FD is the major institution to implement forest regulations and its enforcement. FD also plays a key role in the decision-making process and this includes identifying the beneficiaries, initiating development projects and the level of compliance and non-compliance at the local level. Table 2.1 provides a simplified list of the main institutions considered in the study. The institutions, structured formally and informally, covered organisations and social, political and cultural entities based on the definition of IE.

Table 2.1: Key Institutions Covered in the Study

Categories	Organisations/Entity	Role and characteristics
Government authorities and departments/ agencies	Ministries and departments, forest departments, other development and civil departments (Centre-state-regional levels)	Policy makers and implementation/regulators, responsible for enforcement, ensuring resource of the public etc
Forestry users/protection groups	Committees of heterogeneous groups with formal and informal constraints/rules	Enforcement of regulations, innovation and diversification of conservation and development projects
Social groups/institutions	Village communities, various social groups, migrants etc.	Forest dependent communities for livelihood, commercial purpose, non-forest activities Direct and indirect access to property rights, traditional holders of environmental entitlements
Leaders, representative and followers/cadres of local level institutions	Social entity, organisations based on political, religious and social beliefs	Consolidating response towards property rights, enforcement of regulations, entitlements etc.
Regulation and law	Social entity	Formative and evolutionary nature. Creating a platform for interface of conservation, livelihood and implementation

Source: Formulated based on the Primary Survey

The communities and social institutions are officially homogeneous, although they are heterogeneous at the local level in terms of caste, gender, religion and political affiliations. A community at the local level is a multiple spatial unit, which consists of diverse social groups and peer groups with different stakes on conservation and its implementation. The communities living in the fringes, who are subjects of the study, fall into three broad categories. The first is the tribes who are the traditional inhabitants, those who rely on forest for livelihood. Second, the communities who have lived long in a given forest area, but are not considered traditional or indigenous. The third category includes people who have migrated to the forest area, mostly the Scheduled

Castes. The migrants include Hindus, Muslims and Syrian Christians. However, Syrian Christians are the majority among the migrants. Few households are settled in the fringe area by their inter caste marriages. Outsiders marry tribal women and settle in the land of the tribes. This was common practice across the tribal settlement in Kerala.

Table No 2.2 shows the basic profile of the seven indigenous tribes[9] in the Western Ghats region of Central Kerala. Mannans were primarily fishermen community and dependent on the Periyar Lake for their sustenance. To supplement this seasonal activity, they collect MFP, work in nearby estates and cultivate pepper in small patches. The Paliyans depend mostly on the MFP for their livelihood. The Urali community mostly constituted of farmers growing cash crops like coffee and pepper.

Table 2.2 Profile of the indigenous tribes in the study region

	Major tribal groups	Total population	Literacy rate	% of major cultivators	% of agricultural labourers	% of other workers
1	Mannan	7467	52.3	3.72	20	9.4
2	Paliya	962	50.8	1.66	23.2	17.3
3	Urali	11103	63.3	13.62	11.1	10
4	Malapandaram	2694	48.4	0.37	4.2	20.9
5	Malai Arayan	32332	85.4	9.2	2.9	20.3
6	Mala Vedan	6186	67.2	0.5	11	12.7
7	Ulladar	16741	72.5	3	6.8	19.3

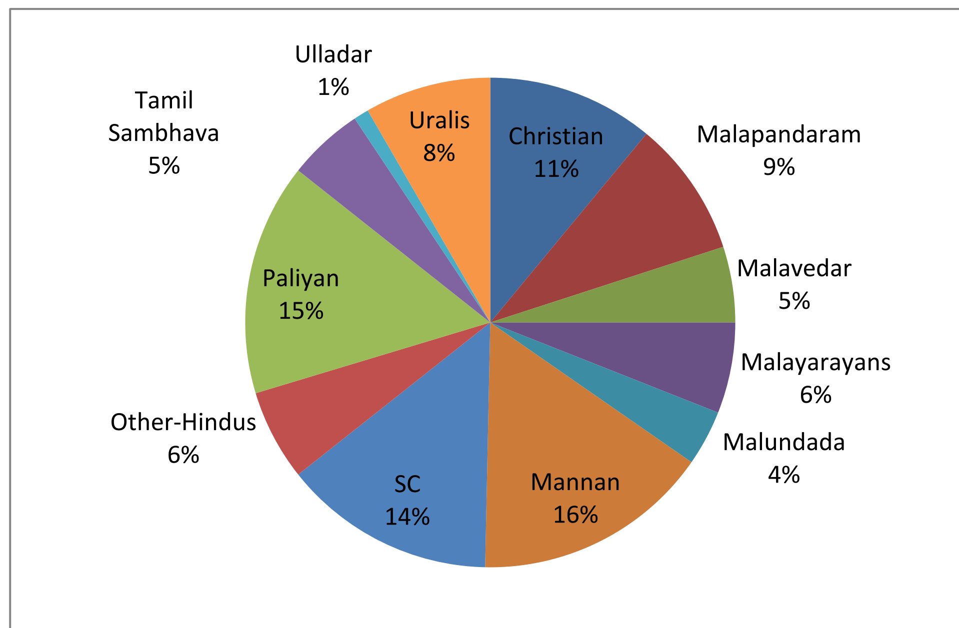
Source: Census, 2011

The Malai Arayan are relatively rich with their cultivable land and are a community of mostly farmers and workers outside the fringe area. Malapandarams completely rely on forest resources for their livelihood and the community mostly follows a sedentary life within the forests. The Mala Vedan and Ulladar work outside the forest as day labourers and rely on forest resources of MFP to supplement their livelihood. Apart from the tribes living on the fringes of the Kerala border, there are other tribal communities who live in the border areas of Tamil Nadu, who partly rely on the resources of PTR. In Tamil Nadu, Kani, Yadavar, Muthuvar and Paliyar are major indigenous tribes.

[9] The terms 'tribal', 'traditional habitants',' adivasi', are used interchangeably throughout the thesis.

The demographic distribution of the sample households classified by the community is given in figure 2.1. Out of 300 sample households, around 64 per cent belong to seven different tribal communities, and 19 per cent belong to the Scheduled Caste population that are part of five communities, and the rest 17 per cent are migrants that include both Christians (11 per cent) and Hindus (6 per cent). From the sample size, 17 per cent constitutes settler farmers and they are known as migrants. Scheduled Tribes constitute 64 per cent of the sample households and 19 per cent Scheduled Castes were part of the survey. Most of the households among the tribal community are forced to re-locate to different places due to one or the other development projects.

Figure No. 2.1 Community-wise Distribution of Sample Households



Source: Primary Survey

Among the tribes, Uralis and Malayarayas are relatively wealthy with high income, land ownership and social mobility. As development profiles vary, the negotiation over forest rights and power relations between communities and forest officials are different for these two communities compared to other tribal communities in the region. Few cases are explained in the chapter 3 and chapter 6. Since socio-economic indicators of STs are different from other groups and this difference influences the analysis, the study uses them differently as ST and as 'Others'. Thus, community is categorised into four groups which are ST, SC (includes all Scheduled Castes groups), migrants (include all migrant settlers) and ST-Others (includes Uralis and Malayarayas). The

table 2.3 provides number and proportion of the total respondents based on their community category.

Table No.2.3 Details of the community under the study

	Communities	Number	(%)
1	ST	149	49.7
2	SC	57	19
3	ST- Others	43	14.3
4	Migrants	51	17
		300	100

Source: Primary Survey

All non-tribal communities had migrated to the region during the early phase of migration in the early 40s and 50s from the plain lands of Kerala. The detailed analysis of these communities and their link with the various livelihood assets are discussed in the following section.

2.2.2 Migrants Emerge as a Powerful Institution

Over the period of migration, the migrants, majorly dominant Syrian Christians and higher Hindus occupied a major role within the social-political space in Kerala. Over the years, they have also occupied major land asset as a physical asset over the inhabitants in the region. In the process of settling in the migrated region, the dominant caste groups maintained the social relations within the caste that existed in the plain lands of Kerala. The dominant groups marginalised Dalits, who were part of the migrants.[10] Most of the Dalits who accompanied the dominant Syrian Christians during their migration were labourers of the dominant groups in pre-migratory phase and continued in the same status in the migratory region as well. The land occupied by them is marginal mainly because lack of other capital and lack of support from the elite in the society. Thus, the Dalits could not own significant land ownership even though they belong to the group of early migrants. As discussed in many studies, in the process of acquiring land and natural resources they were relegated to an insignificant position in the society.

However, in non-material benefits, most of the Dalits experienced better status from their previous status in the plain lands. Through the process of migration, many of

[10] Discussion with Dalit Organisation at Pampa Valley during the Focused Group Discussion held during the fieldwork in October 2013.

them perceived that they could free themselves from the cultural indebtedness, social inequalities and extra economic coercion etc., which were prevalent in the society.

The migrants clamoured for property rights over occupied land once the plantation crops became settled agriculture, as the slogan '*land to the tiller'* was the reigning norm during the early phase of migration. Early 40s settlers from plain lands of Kerala have encroached the forest land through various forms of cultivation and infrastructure development. An encroachment and demanding for the regularisation of the encroached forest land by the dominant 'peasant community' and the regularisation of land by the State is an intermittent phenomenon in Kerala.[11] The political and social institutions usually support the demand by putting forward various 'legitimised reasons'.

Early migration with its different phases created a new community in Kerala as migrants. The overview of the changing scenario of cultivation and forest resource use also pointed out that the migrant community, built their social and physical capital with the use of political, religious and government support and networks**.** The forest resources as a natural capital for direct livelihood and commercialisation of agriculture started in the early 40s with internal migration in Kerala. The driving factor for the migration to high ranges of Kerala was in search of an economic wellbeing, that is, on the material development of the households (Tharakan, 1998). While economic factors were the obvious inducement factor for migration, the socio-cultural elements of the households helped in the settlement.

The migrants and corporate-owned plantations capitalised on the natural capital and transformed them into permanent assets by ensuring that the rights are not shared with the traditional inhabitants of the region. Similarly, they consolidated their position in both religious and political networks and became a strong community as migrants. Through the various phases of migration the settlers, mostly dominated by Syrian

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[11]Struggle for the title deeds of the local migrants is one of the major issues today in the high ranges of Kerala. Following this sequence, the encroachments has been regularised four times since the formation of Kerala State—encroachments before 4 January, 1957, 1 January, 1960, 1 January, 1968 and 1 January, 1977. This would imply that nearly the entire encroached area, apart from some stray instances of evictions from reserve forests, had been regularised (Kjosavik and Shanmugaratnam (2015).Land grabbing by `the rich, the powerful and the influential' is continuing unabated in the Cardamom Hill Reserves (CHR) of Idukki district in Kerala, according to a recent report of the Central Empowered Committee (CEC) of the Supreme Court. The protest to regularise encroachment land, right over encroached land still continues in Kerala and recently flared in the Western Ghats. It is reported that the State had earlier regularised pre-1977 encroachments in 20,363 hectares of CHR area after getting the mandatory approval from the Ministry of Environment and Forests. The State had received the approval on the condition that all post-1977 encroachments would be removed and no further encroachments would be allowed (Venugopal, 2005).

Christians emerged as powerful institutions in the region as migrants.[12] Due to the strong support from political and religious institutions, the migrants have become powerful social institutions in the high ranges of the Western Ghats of Kerala. Their responses and position influences governance and conservation agenda of forest, which will be discussed in the following chapters.

2.3 Socio-Economic Differences and Development Indicators

The average size of the household is 4.5 that is lower than the State average based on Census 2011, which is 5.3 persons. The literacy rate and level of education is relevant in the community where many sensitive issues related to conservation directly affect the user community. The overall literacy among sample households is 84.72 per cent, which is less than the State average. This is mainly due to the low literacy rate among the tribal population who make up the major proportion of the surveyed households. Within the communities, more than 70 per cent Malapandarams under the sample survey were found to be illiterate, which is an alarming rate. The State average of the literacy rate of Malapandarams is 48.9 per cent (Census, 2011). Facilities for basic literacy and elementary education are not available to the community. A case of regulation that impacted on the traditional rights of Malapandaram has been analyzed in Chapter 3.

2.3.1 Basic Infrastructure Assets

Among the 300 households, 28.3 per cent occupy concrete houses and 10 per cent stay in temporary houses with plastic sheet covered roofs. Among migrants, 70 per cent stay in concrete houses, whereas 50 per cent ST-Others category uses concrete houses. The status of housing conditions is almost the same for SC category as in the ST category in this category. The details are described in table 2.4.

[12] The terms ‘migrants, ‘settlers’ community’ is used interchangeably throughout in the thesis. The term ‘migrants’ is used to describe the early settlers. Migrants include multiple castes and religious groups but was dominated by Syrian Christians.

Table No. 2.4 Housing features of the sample households

	ST	SC	ST-Others	Migrants	Total	(%)
Tiled (add in sheet)	7	0	0	0	7	2.3
Sheet	42	16	1	4	63	21.0
Traditional	10	4	0	0	14	4.7
Concrete	20	17	19	29	85	28.3
Hut/ Thatched	27	12	0	0	39	13.0
Semi pucca	22	5	23	18	68	22.7
Temporary plastic sheet	21	3	0	0	24	8.0
Total	149	57	43	51	300	100.0

Source: Primary Survey

About 98 per cent of the migrant households have better sanitation facilities and have toilets with septic tank facilities. It is almost the same for the ST-Others. In SC and ST social groups, they have limited facilities, about 60 per cent. It is almost the same as the State average and far better than the national average for sanitation facilities to the ST and SC communities respectively. In terms of access to water, the accessibility to clean water is limited to SC and ST communities. Above 80 per cent of migrants get access to safe water at their house itself with a combined source of water from both the well and water tap in the house. 20 per cent of the total sample households rely on public tap for their source of water and 37 per cent rely on their own well for safe water.

Table No. 2.5 Access to safe drinking water and better sanitation facilities

	Sanitation facilities			Source of drinking water					
	Private in own home	Tempor ary	Public	Tap in the house	Public tap	Bore well	Well	Pond	Oth ers
ST	77	72	0	6	35	16	66	1	25
SC	34	21	2	4	19	1	15	0	18
ST-Others	33	10	0	7	5	1	20	5	5
Migrants	49	2	0	37	1	0	11	0	2
Total	193	105	2	54	60	18	112	6	50
(%)	64.3	35	0.7	18	20	6	37.3	2	16.7

Source: Primary Survey

2.3.2 Pattern of Land Ownership

As noted, Uralis and Malayarayans, own cultivable land. Urali tribes traditionally rely on various cultivation in and around forest areas before they settle. Once they have settled in the fringe areas, they start agriculture, mainly pepper and coffee cultivation. The landscape is unique compared to other cultivable land owned by migrants in the

region. They do not clear their land for cultivation; rather they cultivate crops within the natural vegetation within the landscape. There is no construction of proper footpath or road within their habitat. The average land size of STs is 10-20 cents. Both Mannans and Paliyans are settled in their hamlets and most of them have 10-20 cents, which was given by the government during the settlement period. There is fragmentation in the process and this is mainly because land is divided within the family. Since their land is within the settlement area (hamlet), they are not allowed to sell their land to outside caste groups.

Table No.2.6 Distribution of land holding of the sample households

	No land owned	Less than 1 acre	1 - 3	3 -6	5 and above	Less than 10 cents	10 - 50 Cents	50 cents - 2 acres	2 - 5 acres
ST	42	1	0	0	0	51	55	0	0
SC	17	0	0	0	0	24	15	1	0
ST-Others	0	0	13	9	1	0	3	6	11
Migrants	0	3	7	7	0	0	7	19	8
Total	59	4	20	16	1	75	80	26	19
(%)	19.7	1.3	6.7	5.3	0.3	25.0	26.7	8.7	6.3

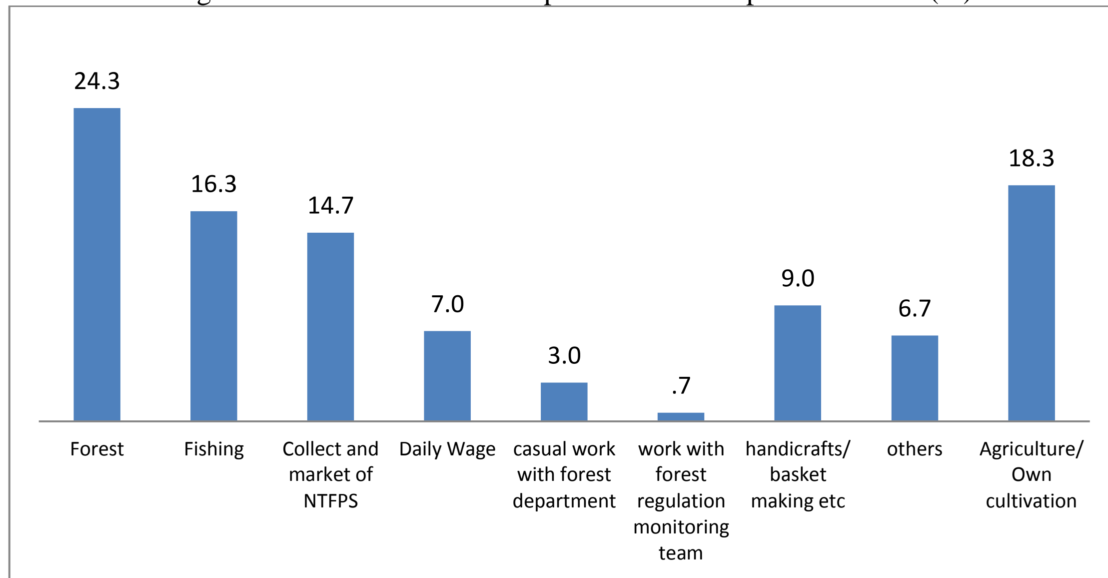
Source: Primary Survey

Among migrants, the land distribution is relatively high. The average size of land is 2-3 acres. Rubber cultivation is predominant in the region. Few households also follow a multi-crops system in the region. Details of land utilisation patterns of migrants are described in the following chapter. Land ownership pattern shows the mean land holding and standard deviation of land size of the household under the study region. It includes both tribal and non-tribal communities and among the tribals there are two caste groups, which hold relatively high land size. The land distribution shows high inequality among the households of non-tribal groups. The low SD of the tribes showed relatively low inequality in the distribution of land among the tribes and high distribution among non-tribes. The mean land holding of the tribes is low (0.12 ha) and non-tribes is 0.41 ha. Even if the average land size is relatively high between the other two tribal groups (0.30), the SD is low and inequality of distribution is less within the community. The importance of land as an asset to claim basic rights of the tribal communities and instituting social capital will be discussed in Chapter 5.

2.3.3 Occupational status of the respondents

Tracing the occupational pattern helps understand two main aspects; first, the traditional occupation of the community and second, the present occupation of the household head. All respondents answered that traditionally they relied on the forest and that forest resources were their only livelihood option and occupation.

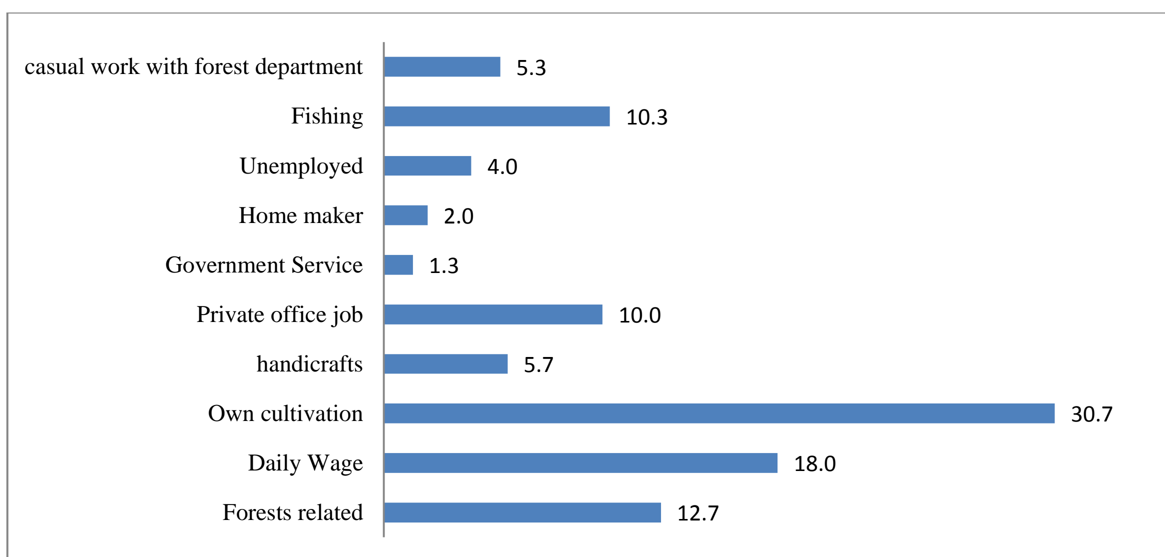
Figure No. 2.2 Traditional occupation of the sample households (%)



Source: Primary Survey

However, over the period, the livelihood dependency from the forest has reduced and there has been a change to other sources of occupation especially for migrant communities. Among the tribal communities 80 per cent are engaged in forest based activities such as collection of forest products/NTFPs and fishing. Both activities are traditional livelihood options for the Paliyans and Mannans. Marginal portion (less than 10 per cent) of the community members are casual workers with the Forest Department. Among the respondents, 52.3 per cent stated that traditionally their community relied on forest related activities for their livelihood and responded that this was the major occupation of their community. Agriculture and own cultivation was the main occupation of the community for the migrants population in the study region. Similarly, among ST-Others, 76 per cent stated that the main occupation of their community was agriculture. Fishing is considered as another traditional occupation for 39.6 per cent of the respondents.

Figure No. 2.3 Current occupation of head of the households



Source: Primary Survey

The SC community in the study region stated that their traditional occupation was handicrafts/basket making based on bamboo, which is 47.4 per cent. Within the SC community, 21 per cent are daily wage labourers. Among the challenges of livelihood most of the respondents stated that unskilled situation and low education to avail any skill development for further employability are major challenges faced by the present generation. Water shortage was reported as one of the livelihood challenges in the study region. Low agricultural yields are considered one of the problems, which are mostly reported by migrants since most of them are farmers. A lack of ability/availability to find alternative employment forces the tribal communities to rely on forest resources for their livelihood.

Table No. 2.7 Major challenges in livelihood in the study region

Livelihood issues	Mean Rank
Major concerns about drinking water availability	2.71
Unskilled situation	4.37
Low education to avail any skill development programme	4.51
Lack of ability find other options	4.60
Many rules that restrict the use of forest products (access to the forest)	4.43
Limited access/availability of other options	4.87
No stable market to sell the products/fish etc	6.30
Low agricultural yields	4.21

Source: Primary Survey

The unequal distribution of basic assets and lack of access to resources still exists in rural and urban areas. With regard to land ownership, 75 per cent of the SC households and 75 per cent of ST households are landless and are marginal landholders. Among the same category of agricultural labour in rural areas and casual labour in urban areas the most deprived in terms of all variables are the SCs/STs. The agricultural labourers are the most deprived among the rural poor including 50 per cent of SC population and 40 per cent of the STs. Among them around 46 per cent of SCs and 61 per cent of STs live in poverty. Similarly, more than 25 per cent of the SCs and STs are casual labourers and around 60 per cent of them live below poverty.

Kerala is among the better states in terms of functioning of the Public Distribution System (PDS) both in numbers and in access to basic food. In the sample households, 95 per cent households say that they have a PDS shop near their homes, at a distance of 2 km. Among sample households, 57 per cent are holding BPL (Below Poverty Line) cards. About 35 per cent of the households avail BPL cards among the ST category. It is reported that 8.3 per cent of the ST community are not having any PDS card and 6 per cent of the SC community reported the same.

Table No. 2.8 Public Distribution System in the sample households

	Nearby PDS Shop		BPL Card		APL		No Ration Card	
	No. of hhs	(%)	No. of hhs	(%)	No. of hhs	(%)	No. of hhs	(%)
ST	147	49	105	35.0	19	6.3	25	8.3
SC	46	15	30	10.0	9	3.0	18	6.0
ST-Others	43	14	23	7.7	20	6.7	0	0.0
Migrants	50	17	14	4.7	37	12.3	0	0.0
	286	95	172	57	85	28.3	43	14.3

Source: Primary Survey

The brief on basic amenities and assets shows that there is unequal access among social groups in the study region. The forest fringe is a spatial unit, and there are relative disadvantages of development when we compare the urban-rural transformation in the development scenario of Kerala. However, among the social groups, STs and SCs have less initial endowments and capabilities compared to the migrants in the region. Table 2.9 shows a summary of the key basic amenity indicators of the sample households in the study region.

Table No.2.9 Basic Amenities of the sample households

Indicators	Category	All	Tribes	SC	Tribes—Malayaryans and Uralis	Migrants
		300	149	57	43	51
Land	% of land owners <50 cents	51.7	71.1	68.4	7.0	13.7
	>2 acres	14.3	0	0	48.8	54.9
Nature of housing	% of concrete	28.3	13.4	29.8	44.2	56.9
	% of semi pucca	45.6	14.8	3.4	15.4	12.1
Access to forest	Nearby forest less than 1km	62	73.8	52.6	67.4	33.3
Access to water	Own well/water tap	55.3	48.3	33.3	62.8	94.1
Sanitation facilities	Pvt, in own house	64.3	51.7	59.6	76.7	96.1

Source: Primary Survey

The following section attempts to set various forms of values on natural/forest resources based on the perspectives of the social groups as these perspectives are influenced by the wider social, cultural and ethical context in general.

2.4 Spherical and Interconnectedness of Values on Forest Resources

The analysis attempts to link the values given/carried by the users and the influence of these values on users' response in connection with the compliance to regulations. The values and preference given to the forest by the community at the fringes are linked to their response and approach towards the resources. The communities living in the fringe areas of the forest reserve in the hill districts are strongly linked to its resources as a natural capital. Apart from a generic use, forests as a natural capital provide livelihood assets to traditional inhabitants. Moreover, it provided better business opportunities to local elites, those who engage with various commercial units, mining and timber trade.[13]

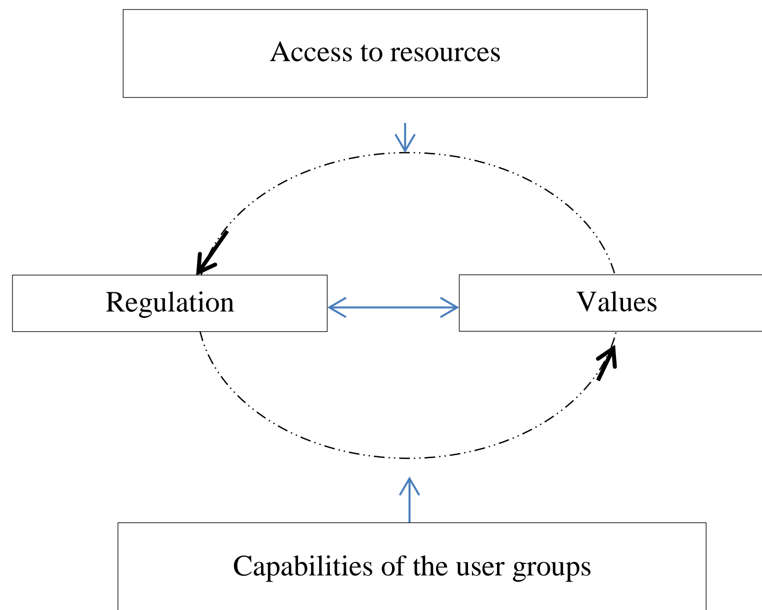
Literature on values in forestry is largely built on Rokeach's universal value theory. Rokeach (1973) defines value as an enduring feeling that a specific mode of conduct is personally and socially preferable to an opposite mode of conduct or an end-state of existence, wherein value is an ideal or held value. Following Rokeach's definition, the

[13] As discussed in GOI (GoI, 2013: p 21). It is also reported that widespread cutting of trees occurred in the forest areas of Idukki district during the agitation and deadlock on the eve of protests in response to recommendations of the Gadgil and Kasturirangan reports (Hindu, 2014).

ideal values have been defined as relatively enduring and fundamental concepts of the goods related to forest and forest ecosystems; whereas assigned value is defined as the relative importance of objects related to forest and forest ecosystems. Theoretically, value of forest eco-system and resources are discussed based on different parameters, for instance, transportation costs and opportunity costs. The concept of value use in the study is more on assigned value, which refers to the intrinsic value or worth of a specific object (Bengston, 1994). Values are regarded as social phenomena, connected to factors explaining human action (Karppinen, 2000). However, the assigned value is a relative concept, which is based on the subjective valuation of the forests by the stakeholders directly or indirectly. The assigned value here is part of the inter-connectedness between use value, use of the forest products and its links to compliance and non-compliance with the regulations. This valuation process can be driven by individual preferences, social obligations and norms, functions and usefulness of the object (Andrews and Waits, 1978).

There are various theoretical and empirical assumptions concerning the way in which values influence responses and vice versa. Empirical studies have emphasised that peoples' values can be used as predictors of their behaviour (Brown and Reed 2000; Karppinen, 1998). The values and preferences on forest resources changes across gender and caste of the users even within the same localities. It is observed in the field that the value of the natural capital and its use work in a spherical way; and many times simply denying access to resources worsen the lives and livelihood of the tribal community. This goes beyond viable economic returns of the resources. The process of providing natural capital to the wider livelihood options of the community relies on the access of each community to the available resources. Figure 2.4 schematic representation of the spherical linkage of regulation, livelihood and values given to the forest resources by the social groups.

Figure No.2.4 Spherical nature of regulation and values of forest resources



The dependency rate, livelihood options, enforcement of act/law, access over the natural resources and failure and success of implementation of any regulation etc., also influences the value, which is given in comparison to a nearby forest by the user groups. These factors are also interlinked and connected to access to resources and capabilities of user groups in the locality. A value that is given to the resources by the community would also vary over the period as stated by the user groups. It is mainly based on the requirements and needs of the local community as and when required.

How strict are regulations on particular products and region are important in determining value on forest resources by the users. How each factor form values and influence the use of forest resources by the social groups are discussed in the following sections. How do forest dependents transform their assets into better livelihood options for themselves and whether this reflects their priorities in terms of the resource related to their lives? Moreover, a priority on resources also determines their nature of dependency and the changes that ensued in a short span of the time.

The changes over traditional rights due to various forest regulations also contributed to change the values on forest resources within the social groups. Here, the analysis considered various differences in values and preferences as given by the user groups. Within the values, there are use and non-use values, economic and non-economic values and direct and indirect values. The identified categories of forest values are grouped into subsistence, environmental, economic, learning future, cultural and

spiritual forest values. Table 2.10 summarises values given by the community. Details of each value and its significance across communities will be discussed in the following section.

Table No. 2.10 Summary of values given by the social groups

Economic and income generating	Non-economical and subjective
Economic activities and trade	Cultural belief and related
Subsistence	Moral and duty
Environmental	Religion and ritual
Aesthetic, Medicinal plants	Spirituality

Source: Primary Survey

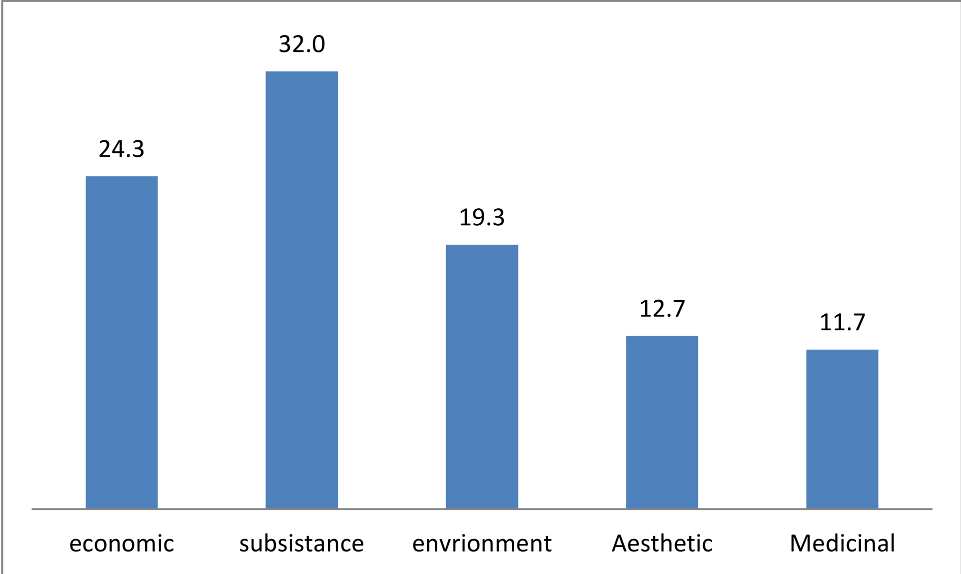
Only few values are scientifically linked with the resources when they directly transform natural capital into economic assets. Due to this multiplicity of values and inter-linkages with many factors and communities, the respondents were asked to rank their preference on values of forest resources. The ranking of the resources given by the users was different across communities, showing that communities assess differently and it is positively correlated to their livelihood. The ranking is also connected to their capabilities to use the resources as assets in the short and long term. The rights and access over forest resources of the community individuated the value of the forest resources irrespective of the regulation and its implementation. Based on values given by the tribal community one can infer why the community prefers to be inhabitants of the forest despite being ‘offered’ various development and welfare schemes and short-term financial assistance as part of the development projects and forest regulation. The following section discusses details of values (economic and non-economic) given by the social groups under the broader category of economic and non-economic values of forest resources.

2.4.1 Economic Use Value

The economic aspects of forest resources are related to income generating activities of the user groups. The economic values of forest resources broadly include economic activities and trade, subsistence, environmental, aesthetics and medicinal values that directly or indirectly generate income to the local community. As there are differences in communities, there are differences in values of forest resources to all communities. Many of the users see values broadly on forest resources which provides an opportunity for subsistence (crops, vegetables, meat, fruits,) shelter and household items, firewood,

livestock feeders, fishing etc. There is a correlation between subsistence value and livelihood of the community. The communities rely on forest resources for their livelihood and ranked subsistence value of resources as the highest. The graph 2.5 provides the economic value of the forest.

Figure No.2.5 Economic value on forest resources given by the users



Source: Primary Survey

The respondents provided their value based on their use pattern of forest resources. Subsistence value of forest resources was ranked the highest at 32 per cent, and economic value was ranked second at 24.3 per cent, besides other aspects of forest use values. The community who depend on forests for their livelihood therefore ranked subsistence aspects of the use value to be the highest. As stated in the previous chapter, many of them still rely on minor forest products for their livelihood and they have ranked forest resources higher on economic and subsistence value parameters. The right to and the need for livelihood, support and subsistence is one of the primary reasons why most of the respondents perceive certain forest values—subsistence and economic values—as the most important. Many of the tribes responded that the welfare and development schemes of the State are very limited and relying on the schemes is not sustainable for their livelihood and development.[14] The respondents believe that resources of the forest may be more sustainable for their livelihood, though their access

[14] During the focused group discussion, the community felt that no development project was matching the livelihood options for the community. Mostly, it would end up with short project-based contributions, like, for instance, providing few goats to the tribe. It will not provide adequate income to the households. Once a household gains benefits from any of these projects, they are not qualified for the next. The focused group discussion was conducted among a group of the Mannan tribe, Thekkady, Kerala, October, 2013.

to the community has been reduced over a period. The ranking differed in terms of community. The rankings based on the importance of various categories of use of forest values were statistically significant and the Friedman test statistics is 317.3 with p-value 0.000 (<0.05).[15]

Table No.2.11. Values of Forest resources

Use of forest values	Mean rank
Economic /more revenue	2.35
Subsistence	2.45
Environmental	2.46
Aesthetic	3.64
Medicinal plants	4.11

Source: Primary Survey

The table 2.11 shows that the sample tended to rank 'Economic /more revenue' higher than other values. The table shows the ranks given by the different communities according to the use value of forest resources.

Table No. 2.12 Friedman test showed significant ranking of various values

N	300
Chi-Square	317.3
Df	4
Asymp. Sig.	.000

The migrants, especially Christians, rank the subsistence value as the least important because they hardly rely on the forest for their subsistence.[16] As explained, the forest was the only source of livelihood and a large tract of forest land was converted to cultivable land in the early phase of the migration (Chundamannil, 1993). The value given to forest resources by the migrants have changed over the period and is evident in the survey results. As discussed, over the period, many of them possessed larger areas of agricultural land. Many of them own title deeds. Even if migrants are on move

[15]To determine ranking of importance assigned by the respondents within the group of use and non-use forest values, Friedman test was applied. Pair-wise comparison of values was done using Wilcoxon's test with Bonferroni adjusted p-value as the Friedman test indicated statistically significant differences in the importance of forest values. This was done to find out the order of preference for each forest value as the ranking of importance for use and non-use forest values was done separately.

[16] As noted by Cavendish (1999), the share of aggregate environmental income decreases as income rises. When migrants were in poor economic conditions, they relied on forest resources more than in the current rich conditions. As discussed in the previous chapter, however, better-off households are, in quantitative terms, the most significant users of environmental resources. The better-off households demand more and not to implement the reports on Western Ghats is vital, as it would affect their usage of forest resource in a bigger way.

against the committee reports on Western Ghats, they give high value to the forest resources in terms of subsistence. To the contrary, the response shows that the tribal community gave a high rank to subsistence value and low rank to the aesthetic value of forest resources.

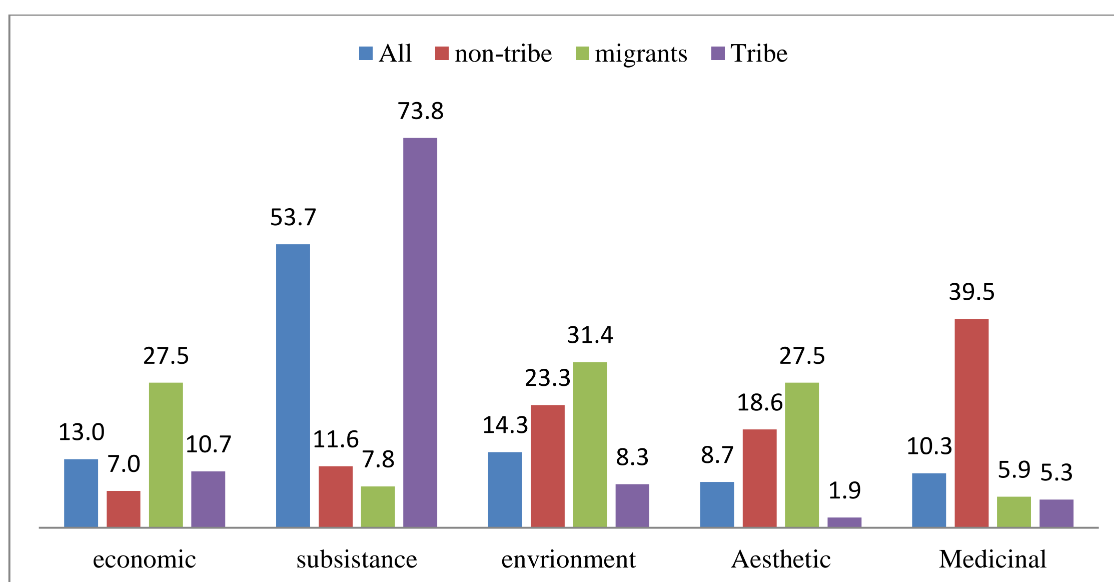
Preferences and values on forest resources also vary depending on locations. As discussed, the economy of the region around Sabarimala relies on positive externalities of pilgrimage. Most of the respondents in the region considered the environmental value of the forest as important. It is more or less related to environmental services to the community, both on the fringe and outside the area. Similarly, tourist spots like Munnar and Thekkady brings multiple benefits to the local community in the region. The migrants reported that they accord great importance to aesthetic value because tourism is based on the aesthetic beauty of the Ghats.[17] In both the region, the settlers have given a high rank to the environment and to aesthetic values to forest. However, they responded that they have given higher ranks because of better eco-system and pollution free environment[18]. Aesthetic in a broad sense reflects that the community uses and enjoys the forest and natural surroundings, the scenery and wilderness etc. Similarly, many of the pilgrims to the Sabarimala region reported in the survey that the landscape and forest also encourages them to visit the temple regularly. It is observed in the discussion with the pilgrims that landscape and 'dense forest' also attracts them to visit the temple. The value of the aesthetics of the region transforms into economic value through 'nature based tourism and pilgrimage based tourism'.

There are significant differences in the ranking of the forest values among the tribal population and migrants. A value given to forest is also different within the tribal community. The majority of the respondents (73.8 per cent as given in Figure No. 2.6 have given a higher rank to the economic and subsistence value of the forest. The tribes, especially, Malapandaram, Mannan and Paliyans, give higher rank for subsistence as their main source of income is from forest-based activities. However, unlike other tribal groups, 37.4 per cent of the Urali tribe responded that they do not consider forest as the primary source of their livelihood. They have given higher ranking (39.5 per cent) to the medicinal aspects of use value.

[17]Information collected from the focused group discussion where most of the group members (8 out of 11) were migrant Hindus and Christians. The focused group discussions were conducted in October, 2013.

[18]As stated in the focused group discussion conducted among settler communities in Thekkady. in November, 2013.

Figure No. 2.6 Use of forest values—economic and generating income



Source: Primary Survey

However, forest provides an additional source of income to a majority of them. Their preference is based on their dependency on the forest for medicinal purpose, which is not directly contributing to their livelihood. Communities are mostly utilising medicinal plants for their own use and a few of them recognise their economic value. Since traditional medicinal practice is prevalent among Uralis they have given higher rank to the medicinal values of the forest. A detailed ethno-botanical study was carried out among the Urali tribal group on their medical practices with the use of herbal plants (Simon et al, 2011). The study pointed out that the community practices with different medicines and uses members from within and outside the community. It is also noted that many plant species used by the community is not even reported in general Ayurveda texts. The community follows many traditional medical practices based on the plants, which are available in the forests. However, a few of them responded that the availability of the plants has declined recently and this has reduced their practice to a large extent. As discussed in the Chapter 3, as per the forest statistics among the MFPs the procurement of Ayurvedic herbs has reduced drastically from 1116125 in 2008-09 to 732560 in 2015-16.

2.4.2 Non-Economic Use Value

The tribal community has considered the forest as part of their life and the forest integrates into their lives. More than 80 per cent of the tribes (about 49.7 per cent of the total respondents) in the survey reported that the forest is an integral part of their life.

Though forest resources are beyond their economic activities, some of them consider the forest as a source of subsistence, whereas most of them consider forest as a part of their lives.

Table No.2.13 Rank is given to the non-economic use of the forest

Values	All	Tribe	Tribe-Others	Migrants
Religion and Rituals	1	1	3	5
Spirituality	2	2	1	4
Future Values	3	3	2	1
Cultural	4	4	4	2
Moral and Duty	5	5	5	3

Source: Primary Survey

During the survey, it is observed that tribal communities consider forest shape their day-to-day life in addition to its resource use (economical). It continues even today. High rank is given for its value in religion and rituals (which is 50.3 per cent) from all the respondents. The communities consider forest as a place for worship. Spirituality is also discussed on a priority basis because of the opportunity to obtain one's inner peace through contact with nature.[19] The change on access to forest either for resources or in way of their life is explained the way they value the forest. One of the women respondents from Malapandaram community shared why and how they integrate into the forest: 'our life can never be completed without forest. Even if we get everything from the State and the Forest Department, we cannot live without forest. We should be close to the forest. Once in a day, we need to enter the forest. The role of forests in our life is not quantifiable and very often the officials fail to understand this'.[20]

It is observed that almost every tribal group share the same opinion on how forest is integrated into and important in their social and religious life in addition to the economic viability of the community. Within non-economic value, the tribes opted for high ranking for categories on spiritual and religious value. To add to the same argument, a respondent from Mannan community, who also works as a temporary forest guard stated.[21] 'Over a period of time, I have come into contact with outsiders non-tribe villagers. I would like to interact with the outsiders. I would take any job,

[19] Discussion with the Chief of Paliyan Community.

[20]In discussion with Malapandaram women who stay in temporary shelters at the forest fringe area of Pamba, Sabarimala, Kerala. The information was collected through informal discussions with the family members in November, 2013.

[21] He works as a forest guard and belongs to the Malapandaram community. The information was collected through informal discussion with the family members in November 2013.

which provides sufficient income to meet the expenses of education to my children. But, I would like to stay in and around the forest. I cannot quantify the value of forests in terms of its contribution to our overall life. I need both *kaadu* and *naadu* (forest and village)'.[22]

Many respondents from tribal community shared their concern that restriction to perform their religious rituals may lead to violation of regulations. As stated, many of them continue their rituals inside forest. The table (No.2.14) shows their responses if regulation area against their traditional rights and if regulation deny religious rituals inside the forest. About 77 per cent and 88 per cent are reported that they will violate the regulation if it against their traditional rights and deny their rituals respectively.

Table No.2.14 Response on traditional rights and religious practices

Region	Communities	If (regulation) denied traditional rights	If (regulation) denied religious practices
		Ready to violate(in percentage)	
Tourism	Tribe	77.8	88.7
	Migrants	67.6	47.7
Pilgrimage	Tribe	71.5	62.8
	Migrants	56.8	91.5

Source: Primary Survey

In effect, the tribal community ranked high the religious value of the forest and felt that if the law denied them their right to perform religious rituals they may violate the rule.

Majority of the tribes shared details about their rituals and it is integrated with the forest. They prefer to follow the same traditional way of practice and conduct the rituals inside the forest. The community is allowed to perform the rituals inside the forest annually. The religious cult of Mannan community is located approximately 20 km away in the buffer zone. The community get permission—restricted entry—from the officials to perform their rituals inside the forest annually.

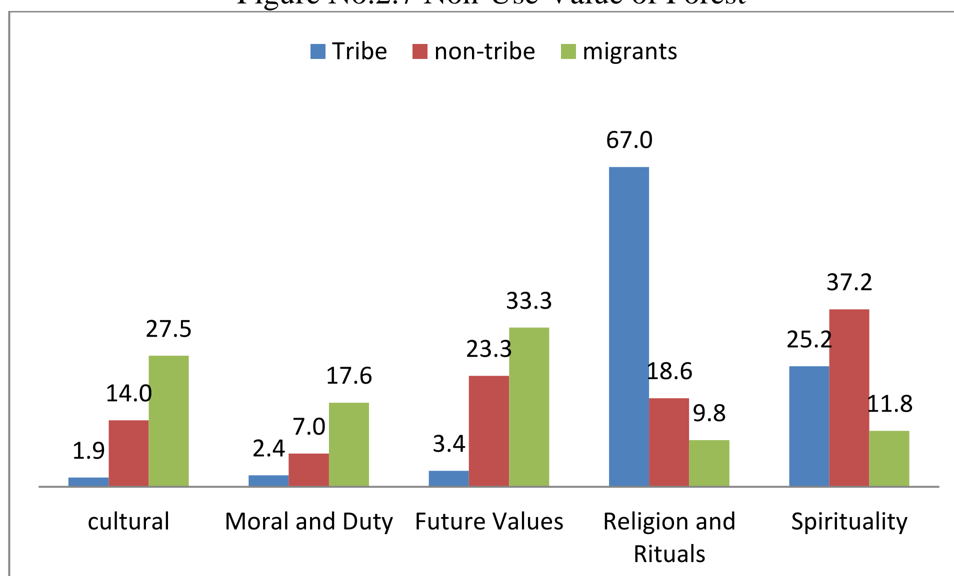
Even if there are differences on material well-being across tribal communities in the region, their preference for non-use value of forest resources are the same. All tribal communities except Uralis still perform their religious rituals inside the forest or forest is an integral part of their religious customs. Uralis believe and practice both—traditional god like other tribes and follow mainstream Hindu religion. They accord a

[22]*Kaadum Naadum* (inside the forest and the village) is locally described for forest and village. The outsiders also point out the tribe as *kadintemakkal*, children of forests.

high rank to spirituality and third position to religious practices when it relates to forest. They share their concerns and consider forest as an integral part of their life irrespective of the high economic positioning. They have religious beliefs related to forests, however; it is not like an integral part of their lives as in the case of Mannans and Paliyans: 'Forests are used in religious practice; we believe in our own god and Hindu god. But, some groups claim that their god is still inside the forest and do some kind of annual customary religious practices'.[23] On the contrary, the tribal groups except Uralis have given high ranking to religion and spirituality because their religious practices are integrated with the forest. It shows that they are not following homogeneous approach and practices on forest and its use and non-use values.

The FD also provides permission to perform religious rituals for both Mannan and Paliyan community annually. The community gets special permission and the performance of rituals last for seven days. Permission is also granted for members from the community to attend the ritual. Figure No.2.7 shows the overall response towards the non-use value of the forest by all the communities.

Figure No.2.7 Non-Use Value of Forest



Source: Primary Survey

Table 2.15 shows the rank of non-economic values of the forest given by the major categories among the respondents. Comparisons showed that all non-use forest values have a statistically significant ranking order ($p = 0.000 < 005$).

[23] Information collected in the focused group discussion with the Urali community, Thekkady, Kerala during fieldwork in September, 2013.

Table No. 2.15 Ranking of non-economic values

Non-use of forest values	Mean Rank
Believe in culture as a national resource	3.5
Giving importance to future values	2.9
Give value because of moral and duty	3.8
Religion and rituals	2.1
Spirituality	2.7

Source: Primary Survey

Almost all groups have ranked religious and spiritual factors as the most significant in the category of non-use forest values. It is more predominant (more than 60 per cent) among five tribal groups, namely, Mannan, Paliyan and Malavedar, Ulladar and Malapandaram. In the case of non-economic forest values, 'Religion and rituals' were highly ranked and the Friedman test showed significance in ranking of various values with p-value = 0.000 (<0.05). The pair wise comparison revealed that there were statistically significant rankings of economic, subsistence and environmental values when compared with aesthetics (p-value= 0.000<0.005) and medicinal values (p-value= 0.000<0.005).

The respondents also had given priority on sustainability and future values. Among the respondents, the settlers considered future values as the most important value when they relate to non-economic use of the forest. Forest as a cultural heritage of the region was also considered of high value by the migrants (27.5 per cent) and non-tribe (14.0 per cent) community. These findings imply that the forest values depend on a specific socio-economic and cultural context. The political, social and economic conditions are interconnected to the values and its use. The value assigned to the nearby forest resources and their uses by the community are closely interlinked. There are a few factors that are greatly influenced by the response of the community towards regulations in the study region. The factors are interconnected and linked with their socio-economic character and the values, which they have given to the forest resources. Very often, the collective decision of the community, mostly based on values and priorities they give, determines the nature of compliance and non-compliance to any regulation.

2.5 Conclusion

The chapter outlines the profile of the region and the communities, in the fringe areas of the Western Ghats in Kerala, and forms the subject of the thesis. The focus of the analysis is to examine how far the development process in Kerala, a state with better human and social indicators of development, was inclusive and facilitated the upward mobility of marginalised communities in the State. The development profile of the communities, which is the focus of the study, is explained based on data gathered from a survey covering 300 households using a structured questionnaire. Out of 300 households covered in the survey, around 64 per cent belong to tribal communities, 19 per cent belongs to Scheduled Caste population and rest, 17 per cent are migrants (includes both Christians (11 per cent) and Hindus (6 per cent). All non-tribal communities had migrated to the region during the early phase of internal migration in Kerala, during 1940s and 1950s from the plains of Kerala. The analysis indicates poor development indices among tribal communities in the study region. The basic household assets, access to water and sanitation and level of education requires further improvement. The migrants in the region are better off in terms of basic infrastructure and social development. Tribal communities are largely dependent on forest products and forest related occupations. Analysis also brings out new livelihood challenges confronted by the communities in the region—negative impacts of climate change, limited access to safe drinking water and poor agricultural yields. The issue is pressing for migrant households who are mainly engaged as farmers in the region. Majority of the respondents stated that lack of appropriate skills and low level of education restricts their access to skill development programmes. Without viable economic options, tribal communities in the study region are forced to rely mainly on forest resources for their livelihood, and thus limit their scope to enhance their livelihood and development. The community and institutions have differences have on their perspectives and values on forest resources based on various factors—heterogeneous nature of the community and institutions, region, caste, native/migrants, market demand for the MFPs, participation of community in forest management and so on—which are observed in both quantitative and ethnographic fieldwork. It is observed that based on the value has given by the social groups some of them (tribals) consider forest is their integral part of their life and it integrates into the socioeconomic life of them. Others, for instant migrants, mostly beneficiaries of tourism and seasonal employment in pilgrimage

consider forest resources on high value on economic aspects and overall beauty of landscape is important for future. The perspectives of forest use values (economical and material) and non-use values are also examined in the specific social-economic and cultural context such as when the theories of different values are grounded in 'wider social, cultural and ethical' contexts. The value that is given to the forest and its resources by the community is directly linked to how they support the regulations or violate the regulations. Following the description of key institutions and development profile of the institutions, the following three chapters analyze the questions on how regulations and its implementation process addresses conservation and livelihood and how responses of the institutions influences 'objectives' of the regulations. As stated three phases of implementation—post, pre- and evading implementation—will be discussed in each of the chapters.

Chapter 3

Inhabitants and the State: Conservation and Livelihood in the Implementation of Regulation

3.1 Introduction

The chapter analyses how the responses of various institutions influence forest governance by looking at the implementation process of the India Ecodevelopment Project (EDP)—a case of post implementation—at the Periyar Tiger Reserve, one of the key Protected Areas (PAs) in the Western Ghats of Kerala. The United Nations Environment Programme (UNEP) has developed the concept of ecodevelopment and the World Bank financially supports its implementation. The strategy of EDP was to conserve biodiversity by addressing the impacts of local people on the protected areas and of the protected areas on local people. The chapter examines how the institutional changes and the new governance connect the conservation and livelihood practices of the user groups.

Apart from the quantitative survey, the chapter also relies on information and ethnographic research methods to understand the local history and resource use pattern of the community. Fishers Exact Test was also used to see how caste and forest dependency is significant based on the data collected from questionnaire survey. The second section of the chapter discusses objectives, scope and core strategy of EDP and operational implementation at Periyar Tiger Reserve. The section describes how the regulation by implementing various strategies of Ecodevelopment Project addresses conservation management of PA and livelihood of the local community. The third section tries to situate the core objectives and outcome of EDP—reducing pressure of the local community from the forest, participation and sharing responsibility with the local community in forest conservation, the social impact on women, alternative livelihood to the local community by three case studies based on ethnography research. The chapter concludes that in the process of implementing EDP, migrant settlers

emerged as beneficiaries of the project and were recognised as protectors of forests along with the forest department, and the tribal community ended up as workers in the diverse short-term investment of the project.

3.2 Implementation of the Ecodevelopment Project at Periyar Tiger Reserve, the Western Ghats of Kerala

In response to pressure on protected areas, the Government began to establish a new strategy of ecodevelopment through participatory management. Ecodevelopment addresses the welfare and behaviour of local people and integrates these concerns into management of protected areas. It also builds private-sector stakeholder support for conservation by bringing in NGOs, nature tour operators and the public. The strategy aims to conserve biodiversity by addressing both the impact of local people on the protected areas and the impact of the protected areas on local people. The strategy has two main thrusts: improvement of PA management and involvement of local people. It seeks to improve the capacity of PA management to conserve biodiversity effectively, to involve local people in PA planning and protection, to develop incentives for conservation, and to support sustainable alternatives to harmful use of resources (World Bank, 1996: 03).[24] It supports collaboration between the forest department and local communities in and around the project site. Ecodevelopment Project, financially and technically supported by the United Nations Environment Programme and World Bank, brought out the new discourse of forest management in India.

The concept of ecodevelopment serves as a means of gaining local support for conservation and for reducing impacts on biodiversity. The concept was developed based on the various forest management projects and its implementation in India including projects funded by the World Bank itself such as National Social Forestry Project (NSFP), Joint Forest Management (JFM)and few other rural developments projects. Background work also included numerous studies on the benefits and failures of the Panchayat system, including lessons on the management of village based on development assistance. The World Bank also stated that the concept of Ecodevelopment Projects was also developed based on a series of workshops held prior to the formulation of the project (World Bank, 1996: 72).

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[24] The details about Ecodevelopment Project, target groups and project implementation procedures etc. are drawn mainly from project and assessment document on ecodevelopment of the World Bank (1996 and 2007).

The key beneficiaries targeted by the Ecodevelopment Project were from the important protected area ecosystem and people in and around these areas. By protecting the ecosystem the project aimed to support the livelihood for the tribal people by ensuring sustainability of medicinal plants and MFPs. The Indian economy is primarily based on a natural ecosystem—agriculture, livestock, forestry and fishery—which contributes to about 30-35 per cent of GDP. The Ecodevelopment Project report states that the importance of ecodevelopment is its multiple impacts cutting across the various sectors in the economy. The sustainability of the ecosystem also affects water resource management, which contributes to development of both agriculture and industrial development (World Bank, 1996: 01). The objectives of the Ecodevelopment Project are (World Bank, 1996: 08):

- To improve the capacity of the PA management to conserve bio-diversity and increase opportunity for local participation in PA management activities and decisions
- To reduce the negative impact of local people on biodiversity, reduce the negative impact of PA on local people and increase collaboration of local people in conservation efforts
- To develop more effective and extensive support for ecodevelopment
- To ensure effective management of the project
- To prepare future biodiversity projects

The table 3.1 summarises the key objectives of the project and the percentage of the base cost for each objectives. As explained in the table, about 55 per cent cost is allocated for village ecodevelopment activities. As reported in the project summary, the Village Eco Development Component has been the core strategy envisaged under the project, which is also the major cost component (55 per cent).

Table No.3.1 The summary of the project objectives and proportionate base cost

Key Project objectives and activities	% of the base cost
1. Improved PA Management 1.1 Improving PA planning processes and building capacity 1.2 protecting and managing ecosystems and habitats within PA 1.3 upgrading PA amenities for field staff	22
2. Village ecodevelopment 2.1 conducting participatory microplanning and providing implementation support 2.2 implementing reciprocal commitments that foster alternative livelihood and resource uses to be financed by a village ecodevelopment project and to specify measurable actions by local people to improve conservation 2.3 Special programmes for additional joint forest management, voluntary relocation and supplementation investments for special needs.	55
3. Education, Awareness and impact monitoring and research 3.1 promoting public support for conservation through environmental education and awareness campaigns 3.2 impact monitoring and research to improve understanding of issues and solutions relevant to PA management and interactions between PAs and people	8
4. Overall project management	9
5. Preparation of future biodiversity projects 5.1 second ecodevelopment project 5.2 biodiversity information project 5.3 Ex-situ conservation project	4
6. Reimbursement of the project preparation facility	3

Source: World Bank (1996)

Ministry of Environment and Forest (MoEF) has finalised lists of PAs as project sites after consultation with various state governments and NGOs. The status of high threat from local people to biodiversity was the prime criteria for the selection of project site. Other factors considered in finalising the project sites were: the extent of human pressures, PA management capacity, existing infrastructure, accessibility, support from the state and national government and responsiveness of the state government to community and involvement of NGOs on forest management. Based on the criteria, nine protected areas were selected for the ecodevelopment project. Out of nine, two project sites were selected for pilot projects in the first phase. Ecodevelopment Projects are initiated in two phases in India. The Great Himalaya National Park (GHNP), Himachal Pradesh and Kalakkad Mundanthurai, Tamil Nadu are included in the first phase. In the second phase, seven project sites were selected and the Periyar Tiger

Reserve (PTR) was one among them. The other project sites included seven protected areas in India. The project sites are given in table number 3.2.

Table No. 3.2 Project sites of Ecodevelopment Project in India

	Name of the PAs of EDP implemented	State
	Pilot Projects and First Phase	
1	The Great Himalaya National Park (GHNP)	Himachal Pradesh
2	Kalakkad Mundanthurai Tiger Reserve	Tamil Nadu
	Second Phase	
1	Buxa Tiger Reserve	West Bengal
2	Gir National Park	Gujarat
3	Nagarhole (Rajiv Gandhi) National Park	Karnataka
4	Palamau Tiger Reserve	Bihar
5	Pench Tiger Reserve,	Madhya Pradesh
6	Periyar Tiger Reserve	Kerala
7	Ranthambhore Tiger Reserve	Rajasthan

Source: World Bank, 1996

The project areas include protected areas and villages in peripheral areas to the PA within 2 km radius. The project aimed to achieve its core objective of conserving biodiversity in and around PAs over five years of time (1996/97- 2000/01). Though the period was initially fixed to 1996-2001, its implementation was postponed for a few years. The implementation process for each project sites depend on various issues such as delay of the responses from immediate stakeholders, lack of proper communications among various departments of state and the Central governments and the resistance of the local community and so on (Mahanty, 2002a; Baviskar, 2003; Karlsson, 1999). The project started in PTR in 1996 with a duration until 2004. Several of the regulatory mechanism and institutional initiatives continues until today. Many regulatory measures of the project are still going on at the project site and the women forest protection groups is one among them.

PTR (Map No. 3.1) is located in the Idukki and Pathanamthitta districts of Kerala and forms part of the Western Ghats, which is recognised as a biodiversity hotspot. PTR is one of the largest PAs in the Western Ghats of Kerala and was notified in 1984. The PTR encompasses biodiversity hotspots with a general elevation of about 1000m and the highest peak is 2119m.

Map No.3.1 Periyar Tiger Reserve

Source: UNESCO, 2012

As in many other biodiversity hotspots in the Western Ghats region in Kerala, the PTR is also the source of numerous perennial and seasonal streams and rivers and provides water for power generation in the Periyar reservoir. The vegetation consists mostly of closed forest that is dominated by tropical wet evergreen and moist deciduous forests. The wet evergreen forests and the open moist deciduous forests host a large predator and prey system. Periyar Tiger Reserve has the largest forest cover among other protected areas (777 sq km) in Kerala[25] and has a human population of 225,000 living within 2 km radius of the reserve who either partially or completely depend on its natural resources (World Bank, 1996). PTR has a total boundary length of 220 km, and shares an interstate boundary of 90 km bordering the State of Tamilnadu. The reserve is divided into core (350 sq km), buffer (427 sq km) and tourism zones (50 sq km) and is headed by a Field Director and two Deputy Directors. PTR has two

[25] Historically the area now encompassed within PTR was under the administrative control of the erstwhile State of Travancore. An area of 600 sq km was declared as the Periyar Lake Reserved Forest in 1899. More areas were added in subsequent years and the present wildlife sanctuary of 777 sq km was established in 1950. The core area of 350 sq km within the wildlife sanctuary was declared as a national park in 1982. PTR was designated as one of India's Tiger Reserves in 1978 and was declared as an Elephant Reserve in 1991.

divisions (Periyar east division and Periyar west division), each managed by a Deputy Director and has five administrative ranges each managed by a Range Officer.

The reserve has a 90Km interstate boundary with the three districts of neighbouring Tamil Nadu. The Ranni reserve forest of Pathanamthitta district borders the southern part of the reserve. The eastern boundary of the reserve forms the eastern side of Kottayam forest division. Thus, the fringes of the reserve and the settlements around the area belongs to different districts within Kerala and Tamilnadu. There are altogether 55 settlements and 23 estates along the boundary of the reserve. The main forest types in PTR are tropical evergreen and semi-evergreen (74.6 per cent) and moist deciduous forests (12.7 per cent). Eucalyptus *Eucalyptus grandis* plantations occupy about 7.1 per cent and the Periyar Lake, a man- made reservoir built in 1895, forms 3.5 per cent of PTR area. PTR acts as a catchment for the Mullayar, Periyar, Pamba and Azutha rivers. The Mullayar and Periyar rivers join to become the Mullaperiyar River that has been dammed to form the Periyar Lake.[26] The safety of the dam and sharing of water between Kerala and Tamil Nadu are still debated issues in both states.

3.3 Locating the Pattern of Forest Dependency of the Social Groups

The section describes forest dependency of the community that lives in the forest fringes of the PTR. As discussed, the nature of forest dependency is based on multipurpose use of forest resources—some rely on forest for livelihood, some others for commercial and industrial activities, plantation companies engage in conversion of forest into various commercial crops and the State use it for development and infrastructure project. The survey data shows that tribals continue to rely on forest for their livelihood. The historical account of migration shows that the migrants have relied on forest for livelihood, cultivation and commercial activities from the early phase of migration itself. The following sections provide a brief account on nature of forest dependency of the migrants from the migration phase and pattern of forest dependency in the contemporary scenario.

3.3.1 Forest in early phase of migration

As stated earlier, migrants are prominent among the social institutions in the area with their material well-being and social capital. The early phase of internal migration from

[26] Water from the Periyar Lake is also used for hydropower generation in Tamil Nadu. The lease for the Mullaperiyar dam, which was built prior to the declaration of the wildlife sanctuary, runs for a period of 999 years.

plain lands of Kerala directly links with the forest in different ways: shifting cultivation and conversion of forest land to plantation crops and forest resources for day-to-day livelihood and so on. Over the years, the right over forest resources in the Western Ghats of Kerala were 'owned' and 'shared' by the colonial administration, private plantation companies and migrants. The colonial administration and private planters use the forest as a natural capital to meet high demand for wood and commercial plantation products from the Western market in the post-world war period. Since 1800, the Western Ghats region has witnessed large scale conversion of forest land into plantations by the colonial companies as free grants by the State (Tucker, 2012).The plantation companies hold a major share of landholding in Kerala both legally and illegally (Scaria, 2010). Internal migration started from 1920s onwards and it intensified in the post-world war period as part of the Grow More Food Campaign (Tharakan, 1977 & 1978, Joseph, 1988).

The migrants were encouraged to use the forest land for cultivation, which led to wider clearance of forest for agricultural crops as the settlement was fully supported by the State. Families of the early migrants recollected many related events during informal discussion. One of the respondents observed: 'during the period, there was an influx of cultivators who cleared forest tracts and cultivated seasonal crops in the forest land. The Government had directed private companies to tree felling from the forest, which facilitated expansion of cultivable land to the settler farmers. Eventually the migrant farmers made incursions into the forest and brought new patches of land under cultivation. It was free access to the forest and its resources. Land was a central point in terms of intensive and extensive cultivation and for livelihood.[27]

The shifting cultivation was the main form of cultivation practice during the initial phase of the cultivation. Forest land was the major cultivable area for the shifting cultivation. As quoted from the migrants, 'we used to clear all the forest land before starting cultivation. Initially, the productivity was high in this new cultivable land'. Since the State promoted the 'Grow More Food campaign', the clearing of forest land into agricultural land was not an obstacle for the migrants (Tharakan, 1984). As the 'Grow More Food' campaign made headway, there were concerted efforts to cultivate few seasonal crops like rice, pulses and cassava etc. in the region. The cultivation was

[27] Focused group discussion with migrant community during the fieldwork conducted between June-December, 2013 at Sabarimala region, Kottayam.

mainly based on the demand of the government to resist famine and produce more food.

The rationality and desire of the farmers were to optimise their benefit by producing more with the use of less labour power and time. From the seasonal cultivation, mainly food crops, it slowly shifted to perennial crops and later into commercial crops. By engaging with different crops and cultivation, most of the migrants found their livelihood and the food while forest resources became determinant for both. The phase of intensification of agriculture with the commercial crops brings out the second phase of the migration. The spread of the cash crops directly induced conversion of forest land and its natural bio-diversity. Once the government legitimised settled agriculture, the migrants started growing different commercial crops. The intensive cultivation started the use of more labour and capital to a relatively small unit of land holdings in order to obtain higher yields and to produce several crops from the same field in a year such as sugar cane, coffee, cocoa, areca nut, rubber etc. The commercial viability of these crops demanded further lands, which led farmers to occupy furthermore forest land to expand the crops. Within the commercial crops coconut ranked first in terms of area under cultivation initially. Similarly, during the period of 1965-75 the cultivation of sugarcane also started. Sugarcane was continuously cultivated for 8-10 years and mostly on the deforested land. Sugarcane cultivation demanded a high level of forest resources in the form of both cultivable land and firewood for the processing. Over a period, the restriction on collection of firewood from the forest and the constraints of limited transportation facilities to reach the market impeded the expansion of the sugarcane cultivation. The settlers noticed that the gradual depletion of the natural nutrients of land led to the progressive deterioration of returns from the land, especially seasonal crops and paddy and even in commercial crops.[28]

The gradual loss of productivity of paddy, areca nut and coconut led to large-scale cultivation of rubber. While rubber plantation was already started by the Europeans in early 1900 (Tucker, 2012), it became monocrop due to the migrant farmers in early 1970s in Kerala. Once commercial crops become profitable and stable, the demand for land increased among the settlers. It is clearly evident that faster cycle of shifting cultivation due to the pressure of the high number of migrants and reduction in acreage has resulted in the degradation and desertification of the forest dominant villages.

[28]Discussion with settler's family. Fieldwork conducted in November, 2013 at Thekkady.

Apart from the better returns, there were institutional supports to the farmers especially from the Rubber Board. The Rubber Board facilitated subsidies and fertilisers. Extended support also covered training to farmers, which ensure substantial income even for small and marginal landholders. Rubber gradually edged out other crops and established itself as the most important commercial crop. The rubber plantation came up mostly on the fertile deforested land. Since the lifespan of the rubber tree is around 30-35 years, the plantations will be cleared again and re-planted once every 30-32 years. Rubber cultivation requires a peculiar way of digging up and levelling of the hill slopes to plant seedlings. This process leads to the total destruction of the natural landscape that adversely affects the structure of the soil. It is observed that since re-plantation is a regular process, it furthermore deteriorates the natural fertility and the soil condition. Since rubber is promoted as a mono crop, hardly any other trees are grown, which have more value in terms of firewood and fodders. Thus, the households heavily relied on forest for fodder and firewood.

Analysis of forest dependency shows that migrants used forest for livelihood, various forms of cultivation—shifting cultivation to plantation, commercial and development projects. The households with high financial assets, tried to occupy more land to extend their commercial and plantation crops. The relatively rich migrants from the plains tried to capture more land in the new region and based on their capacity they cleared and occupied the forest land. Presently, many households reported that they continue to hold large tracts of land because they are direct descendants to early migrant population. The demand and nature of the use of forest resources of the migrants vary with the nature of the cultivation which changes in the different phases of the migration, starting from shifting cultivation to the settled commercial agriculture. The forest and its resources were collectively used in the various phases of the cultivation. Most of the early migrants received their title deeds over the period, but a right over the land is a major concern in the region.

3.3.2 Current Pattern of Forest Dependency

The factors that determine use of the resources and the nature of dependency has changed over a period, especially from the early phase of the migration. The data shows that forest dependency is linked with the economic position and livelihood options of the households. Out of 300 households, the survey reveals that about 90. 7 per cent reported that they currently use forest resources. Table 3.3 shows that forest

dependency is high (about 98.7 per cent) among tribal communities whereas 59 per cent of migrants, out of 51 migrant households confirm that they use forest resources.

Table No. 3.3 Nature of forest dependency

	Total respondents	Forest dependency of the respondents	
		Nos.	%
ST	149	147	98.7
SC	57	54	94.7
ST-Others	43	41	95.3
Migrants	51	30	58.8
Total	300	272	90.7

Source: Primary Survey

The dependency is directly linked with their traditional livelihood options and the present economic status of the community. Even though 59 percent of migrants rely on forest, their dependency has reduced to firewood. Few reported they do collect fodder from the forest. The collection of firewood during the Sabarimala pilgrimage season is high due to the high number of eateries that spring up in the region during the season. Usage is mostly under the pretext of permitted quantity, however, demand is very high and officials are unable to prevent excessive collection. Livestock rearing is widespread among migrant households. The tribal households and lower income groups use bamboo leaves for buildings, roofs, which stay intact for 2 to 3 years.[29] Tribes also use bamboo and other small trees for constructing houses. Sticks and stumps of small plants are also used for fencing their land. The results of the Fisher's exact test show that there exist a statistically significant relationship between caste and dependency on forest for use (p-value = 0.000 < 0.05). The data reveals that more than half (54.0%) of the dependents are STs and three-fourth of the non-forest users are migrants. Though both the tribes and the migrants rely on forest for different resources, the pattern of extraction of resources has changed over time.

The households from Scheduled Castes mostly earn their livelihood from casual work or temporary jobs in forest. Many households among migrants use LPG for fuel, but use firewood as additional fuel for cooking. In addition, those who rely partially on casual and daily work depend on the forest to substantiate their livelihood. Paliya

[29]The bamboo locally known as *Eetta orEera* and its scientific name is *ChlandraTravancorica*. Each clump is up to 8 m tall. Bamboo thrives in moist deciduous and semi-evergreen forests, mainly confined to the southern Western Ghats and North-Eastern States.

community members stated that other alternative jobs are very limited for them in the area and that forces them to rely on the forest. 'We do not know any other occupation. We do find casual work which is offered by the forest officials'. Ulladar community from Attathodu village stated that 'inadequacies of public transport is one of the hindrances for us to find daily wages outside'—shared by one of the family members who go into the forest to collect MFPs. Forest dependency also depends on availability of the resources. The users reported recently that they have noticed a drastic reduction in wild flowers, locally known as *patharipoove,* a significant Non Timber Minor Forest Product (NTMFP) in the area. Major commercial MFPs from PTR includes cinnamon bark (*CinnanonumZeylancium*),Kulamavu oil (*Kingiodendronpinnatum*), Thelli powder (*carnariumstrictum*, *Vatteriaindica*), Reeds, Cane, Honey and firewood. However, availability of MFPs depend on seasons and other factors.

Climate change and mono cultivation of Eucalyptus have also influenced reduction of numerous MFPs inside the forest. Most of the time the collection of forest products is a collective work and the income is shared by the members of the team. A few members from Paliya community informed during the focused group discussion that availability of the products depends on the season and weather conditions. For instance, they have collected honey only in the last rainy season, as they have quoted: 'Due to changes in weather, especially lightning and thunder in rainy season, there will be a shortage of honey. In our last attempt we got very little quantity of honey and we are around 5-6 people and spent almost a week's time in the forest. We knew that it is difficult to collect honey during this (rainy) season, but it was a better option than looking for some work outside our settlement for daily wages'[30]. The table no. 3.4 shows the income and expenditure in collecting honey from the forest.

The income from forest resources or forest related works seems to be low. The daily earning of a person is Rs. 131.95 only after engaging in a week's time in the forest for collecting honey. The minimum wage rate of forest related workers is 402.50 and 382.50 is the average minimum wage rate in Kerala during the same year, 2013-14.

[30]Discussion with the community members those who are collecting honey for livelihood, conducted during the field work of June-December, 2013.

Table No. 3.4 . Revenue from daily forest-related job

Details	Activities and price
Total amount received (Rs)	6250
Total expenditure (Rs)	1500
Balance (Rs)	4750
Number of persons	6
Number of days	6
Income per person for a week (Rs)	791.6667
Income per day for a person (Rs)	131.95

Source: Primary Survey

The present dependency on forest resources of the community at the forest fringes shows that tribal community integrates with the forest at social, economic and cultural level of their day-to-day life. In the debate of the human-nature interface, the migrants are not in the picture and they are mostly in the discourse of the protectors. The current trend of forest use shows households that rely on forest only for firewood and fodder have cultivable land, employed in government services and have other alternative source of livelihood. These users are mainly from higher social groups—migrants and few tribals such as Malayaraya and Urali. Analysis of forest dependency shows that tribes rely on forest for their livelihood and migrants and industrialists rely on forest for expanding their plantation business and other commercial endeavours. Over the period, scarcity of MFPs is one of the major problems faced by the tribals communities today. The field observations infer that climate change and expansion of monoculture contributes significantly to this scarcity of the MFPs in the forest fringes of the Western Ghats of Kerala. The challenges to the community on forest resources may be classified into multi levels, which are overall reduction in the forest resources, regulatory mechanisms including regulation on duration of time and unavailability of stable markets for the collected MFPs,

3.4 Implementation of the Project: Livelihood, Access and Participation

The various regulatory mechanisms and its enforcement are established during the phases of implementation of the project. The section covers various regulatory mechanisms in support of the implementation and sees how it adheres to the compatibility of livelihood, conservation and participation of local community at PTR. The implementation of the projects initiated village development committees (Ecodevelopment Committee-EDC), financial assistance, and membership for EDC,

entry fee, providing marketing facilities and other short-term investments for alternative livelihood.

3.4.1 Implementation Phase of the Project

The officials stated that they tried to implement the project as outlined in the project document based on their training and exposure received as part of the project implementation programme. 'The implementation processes were to objectify the core strategies of the EDP', as shared by the officials of the Periyar Wildlife Foundation, Thekkady. The regulation mechanisms were concentrated to materialise the outcome of the core strategy of EDP such as to improve the capacity of PA management to conserve biodiversity effectively, to involve local people in PA planning and protection, to develop incentives for conservation, and to support sustainable alternatives to harmful use of resources. The forest departments of each state were selected for the implementation of the project to obtain the key objectives. The initial awareness of the project to the local community did notelicit positive responses to the forest department. The project was started at different project sites at different times. Though the project document stated that the project period is for four years from 1996, the project started in 1998 in PTR, 1999 in Nagarhole National Park, Karnataka, 1997 in GHNP, Himachal Pradesh, 1999 in Buxer Tiger Reserve, West Bengal and so on. The project was funded by the central government to each state government. However, the communication on project and its implementation varies from state to state. The design of the project and selection of project sites was the outcome of a series of consultations with various officials and stakeholders from the governments, both Centre and State, NGOs and other departments (World Bank, 1996: 10). However, the communication at different levels of institutions created a lag to the project in many sites. 'In PTR, the study reported that project began to be implemented from December, 1996 onwards with the preliminaries carried out by diverting the funds from other heads and programmes. The financial flow from the project fund started only in 1998' (Gurukkal, 2003: 19). Mahanty (2002a) stated that the project delayed in Karnataka due to communication gaps among the institutions, which operates at different levels. The inadequacies in the coordination and convergence among various departments were key reasons for delaying the project at various project sites.

The initial project document identified a population of about 225, 000 within 2 km of the reserve as a target population of the project. Due to limited project period and to manage the size of the population, the target groups were reduced to a population of 58, 144,who were elected from the villages within 2 km radius. The revised target included 25 per cent of population from Scheduled Castes and 4 per cent from Scheduled Tribes. Earlier, it was 25 per cent each from both STs and STs. Overall beneficiaries among SCs and STs in all the project sites are given in table 3. 5.

Table No. 3.5 Distribution of Schedule Tribes and Castes in Project Areas

% of project participants	BUX	GIR	NAG	PAL	PEN	PTR	RAN	Total
% ST in project	44	4	25	74	48	25	57	39
% ST in State Popn.	7	19	3	9	28	1	15	
% SC in project	36	10	10	15	8	25	13	13
% SC in State Popn.	26	7	27	15	15	11	18	
%Total SC and ST of project participants	79	14	35	89	54	50	70	55

Source: World Bank(1996)

However, the project document and the project outlines (as per the details available from the forest officials) that the key beneficiaries are from the marginalised communities project—STs and SCs. The project document hardly discusses about social hierarchy and social positioning of the various communities at the project site.

3.4.2 Village Ecodevelopment Committees (EDC)

In the first phase of the project implementation, FD formed Ecodevelopment Committees (EDC) to facilitate the project implementation, creating short-term investments for alternative livelihood and so on. The committee was formed with the members of the local communities including tribals. However, most of the secretaries of the EDC are either from the migrant communities or from the forest guards who are temporary staff with the department. One way forest guard who embodies the power of the State vis-a vis the forest dwellers. The guard who is on daily basis decides whether some act as an offence against the forest rules. The guard is also hold primary responsibility to implement the regulation or to ensure compliance (As observed in Vasan, 2002 and Karlsson, 1999). The question is how effective and participatory if the same guard is the member or secretary in the EDC?. While forming EDC, the FD hardly considered existing local institutions to share or take the responsibilities of the project. There are other existing institutions in many forest villages. However, the

EDC as a new institution replaced the other existing institutions, which works on various livelihood and welfare projects supported by the State, and other community development programmes. Various welfare and development projects through the village administration are available in the villages where the Ecodevelopment project was implemented. The usual scenario is repeated even in this project. Once the new project is introduced in the villages, implementation is based on the project document. The implementing groups or institutions are developed and trained. However, once the project is over the 'new institutions' are closed along with their services. It would be more sustainable if the project implementation could integrate with village systems or with existing organisations.

Few studies also observed that the validity of the institution that formed new projects is valid only during the project period. Benabou (2012: 45) has observed that other village institutions are already working on conservation and livelihood related activities, for example Van Sanrakshan Samiti (Forest protection committee) or Mahila Mangal Dal (Women's welfare associations, WWA) are involved in the ecodevelopment project in Uttarakhand. Some other EDP project sites, they have changed Forest Protection Committees of JFM into EDC for the EDP (for instance, Buxer Tiger Reserve).

In the process of awareness programme, forest department offers a membership in EDC to the local community to ensure their participation in the implementation of EDC. However, the membership became mandatory for all tribals,who are users of forest resources. As part of the regulatory scheme, the officials made the membership as mandatory for forest entry. They are not allowed to enter the forest if they are unwilling to take membership. Though, there were confusion and protest in in the initial period at PTR, once membership with EDC became compulsory the resistance from the tribal community has come down. In Buxa Tiger Reserve Karlsson observed that that officials often threatened the community that they would throw them out if they did not cooperating in protecting the forest (Karlsson, 1999: 2091).. Another case was reported in GHNP, Himachal Pradesh that with support of NGO (Society for the Advancement of Village Economy) villages initially had a militant protest against the implementation of EDP as it conceived that EDP is against the customary rights of the local people on the forest. They have also argued that villagers use forest resources in a sustainable way and regulatory measures only curtail their livelihood than conservation. The main argument of the protest is that implementation of EDP would affect their

local economy, which is heavily dependent on the National Park (Baviskar, 2003).

3.4.3 Financial Assistance

As stated by Wells and Brandon (1992), the project conceives integrated conservation and development approach in which concept of promotion of conservation is propagated through the provision of incentives and alternative options to dependent people. At PTR, forest officials 'offered a financial assistance' to the local people. All local people who are staying in the forest fringe irrespective of users, non-users etc are eligible for financial assistance from EDP. First year, Rs. 10000 was distributed to all the members of the EDP. There is also a provision for members to avail loans. The underlying assumption is that the user groups could use this money as an investment to find out feasible alternative livelihood to forest dependence.

Beneficiaries have to return the amount within a stipulated time. It is observed that the poor among tribal communities have been excluded even from this financial support system in a short period. Many of them were unable to repay the amount provided by the EDC and the forest officials. Gradually poor user groups were excluded from the beneficiary groups. One of the beneficiaries, a Sambavar woman reported that, 'our income comes from forest products. We have only 5 cents of land. We will make *Muram* (husk-separator) from the *Eatta* (Bamboo), which is collected from the forest. Through EDP an amount of 1000-5000 is given, preventing us to enter the forest, even from firewood collection. What can we do with this money, how people can find an alternative source of income with this limited amount and even within a short time period?'.[31]

World Bank proposed that the customary right of the traditional inhabitants could be diverted to self-employment rather than dependence on forest resources for their livelihood. The short-term financial options were to find alternative livelihood based on market economy against their traditional livelihood pattern. Nevertheless, the World Bank and other international agencies clarify that short-term financial support will not lead to the permanent solution for livelihood of local communities and conservation of nearby forest, but the operational implementation of the policy supported by World Bank rely on 'short term financial assistance to find alternatives to the forest'. Whether financial help provides feasible alternatives for local people in a short period is a

[31] Focused group discussion with Sambavar community during the field work conducted in June-December, 2013 (Koruthodu village, Kottayam).

development question. Benabou (2012) has portrayed how this loan leads them into indebtedness trap in the market economy once they lose their traditional livelihood, which is based on forest resources.

The functioning of EDC in providing financial assistance can be explained further by citing an example in Urali community. The EDC offered additional help to the community for constructing houses to support the housing scheme provided by the local Panchayat. The Panchayat allocates funds on instalments. The first allocation would be given after completion of the basic structure with some portion of the amount needed coming from the householders themselves. Generally, the EDP provides financial help to other communities to construct the basic structure to enable the householder to take the first financial instalment from the Panchayat. Members of the Urali community refused the financial support from EDP and took a collective decision to support each other to complete construction of individual houses. The community would support the member who was constructing the house by collecting money within the community itself. Once the payment is sanctioned and delivered from the Panchayat, the member would repay the amount to the members of the community. Apart from financial support, the members of the community also extend their support in terms of free labour for the construction of the houses of their members.

3.4.4 Entry Fee and Forest Access

Forest dwellers have to collect an entry pass for collection of MFPs. Several issues arise from the introduction of entry pass, such as collecting, renewing the pass etc. The validity of the entry pass is 15 days. However, the nature of the collection and procedures are different for different products. The difficulty with the use of the entry pass can be perceived from the illustration of the collection procedures of flowers. The user groups' experience seems different. 'Obtaining forest products is very risky and some days we would not get anything. Before the expiry of the entry pass (15 days) we have to come back. If we don't have a valid entry pass, the forest officials may charge us for illegal operations'[32], few collectors of MFPs from Ulladar community reported in the personal discussion. In another case, the EDC has provided pass to the members of the community for fishing in Periyar Lake, which is located inside the Periyar Wild Life sanctuary and is the main source of fishing for this community. EDC introduces a

[32] Focused group discussion with Ulladar community during the fieldwork conducted in October-November, 2013 at Attathodu, Sabarimala region.

system to regulate the fishing and marketing which is monitored by selected members of the EDC.

Generally, dwellers stay inside the forest for a minimum two weeks and it varies depending on the MFPs. It may vary according to the season. The tribes go with their entire family to collect flowers. One week is required to dry it up once it is collected. They stay a month inside the forest and it may go further if flowers are not easily available. The new regulation in terms of restriction on number of days inside the forest has not taken into account any uncertainty about availability of these MFPs. Flowers may not be available in the same place. Some other groups might have collected it or there is hardly any time to re-generate 'It's just like fishing in the sea', women from Paliya shared their concern during the discussion. The entry pass also emphasises accessibility to a particular forest division whose legal boundaries may not coincide with the boundaries of the resource-spread in the forests. Most of the users reported that after the restriction through the entry passes the nature of extraction and collection of items changed. 'Earlier we do extract any MFPs in very sustainable manner because we know that we need to come back again. That is our livelihood. Since officials pressurise on restricted days many opted short cut way of collection of MFPs which are not sustainable in nature', narrated the change in regulation on nature of collection of MFPs by Kanikkar from Paliya during the discussion.

3.4.5 Markets for MFPs and Impacts on Resource Use Pattern

As discussed, livelihood of tribes not only linked availability of MFPs but also availability of stable markets. The main market options are cooperative credit society and open markets. It also varies region to region. The following section describes marketing options available for the local community for the forest products. EDC has facilitated market options for few commodities in some villages under EDP. Credit societies are available in some of the forest villages to sell MFPs. This is the feasible option for marking MFPs for tribal communities. However, the availability, performance and function of the societies are debatable among the communities in the area. The credit society is undertaken by the State co-operative society, and its functioning with the management of the local community. The society is a Federation, an apex body of SC/ST Co-operative societies in the State. There are 35 Tribal Service Co-operative societies in Kerala, which are engaged in the collection of NTFPs. .One of the objectives of the societies is to provide better marketing options for the MFPs to

get a fair price without any middlemen in the process. Based on a contract signed by the branch managers of the federation and the divisional forest officers, different ranges in a division are allotted to different societies working within the forestry division. Generally, each society has its own jurisdiction of collection to which the members of other societies may not enter for collection. The society provides identity card to the members and license or entry pass will be given each time for collecting MFPs. All MFPs collected from the forest are to be given to the society. The number of societies is still inadequate to meet requirement for all the tribal communities in the entire region of the Western Ghats.

The local elites run the credit society and they always try to exploit the tribes. Mostly, the credit societies run a grocery shop as well which is attached to the main shop.[33] Though the societies are for promotion and provide better markets, for the user groups, those who collect MFPs can register with the society. To get a licence to run the credit societies in the tribal region the tender is submitted by outsiders with the support of the political parties. In the tender, the outsiders include name of the tribes as part of the formalities even without informing them. The price of MFPs is not displayed to the public in most of the credit societies. It has been noticed that price list varies from the state level to regional level. The price list is available with each society and by law,it should be on display board. 'We always get a lower price than the official price list. The society outlets never display the price list. Whenever we ask about price list/board, the salesperson at the outlets says that the list is not available. They will always buy our products at lower rate. There is no uniform standardisation on quality of the products. This quality parameter is applicable for *kunthirikkam* and flowers. The price differences should be there based on quality/variety of these products as similar to any other agricultural crops like tea and pepper. Since we take the entry pass from the society we have to sell the products to the same society'.[34]

Marketing of forest products and its price fixation varies in different locations even in the fringes of PTR. The study observed changes in Thekkady tourist zone and Sabarimala pilgrimage zone. In Sabarimala, South West of PTR, marketing of MFPs and its price fixation is entirely different compared to few other regions under the study. The market for MFPs can sell both open market and through the society. The

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[33] Information gathered from the focused group discussion in Kusumam Colony, Kanamala in Sabarimala region during the fieldwork in September-October, 2013.

[34] Fieldwork conducted with the Malapandaram community in September-October, 2013 at Attathodu, Kottayam.

open market is highly influenced in the area due to seasonal demand of pilgrimage season. The respondents shared that there are price differences in both the markets. Generally, they get proportionately higher price in the open market. 'The price for MFPs in the credit society will be less than 50 per cent than the open market. Price may go up few times. But the forest products may not be available all the time. Sometimes we have to come back with empty hand', a women from Malapandaram shared in the discussion. The price at society for honey is only Rs. 100 per litre, but price will go up at the range of Rs. 400-500 in open market. The community demanded that if they get the opportunity to sell products in the open market, they get a better price and a reasonable profit. In contrast, the community from Thekkady shared their concern that if there are credit societies nearby, they will get a better price from the society. They pronounced that if there are two market options, open market always gives higher price. If there is no other option, there will be a monopoly and the price will be lower than the floor price.

In Thekkady, Northern side of PTR, there are only open markets for MFPs. The community receives very low prices for their products in the local market. Many consider that unavailability of a stable market is influencing non-compliance. The local market will not buy MFPs all the time and they would regulate the trade without any reason or on any specific season. If there were a high market price, even if it were off-season, the community would explore for MFPs in the forest. The duration of the stay may be beyond a permitted limit, which is regulated by the EDP or the forest officials. The chance of non-compliance from the users may go up in this situation just to meet market demand/price. The respondents believe that they may get a better price, if there is a credit society in their location. The price in the open market is low and users are forced to sell their products in the open market since no other options are available. In situations where only open markets are available, strict regulations are required to ensure better price for the communities. When there is high demand in the open market the users venture into the forest collecting resources according to the market demand. Similarly, in the Sabarimala region, the low price status in the credit society forces the users to sell the products in the open market. When they sell the products in the open market, there is no method or system to monitor the products and to monitor the nature of the extraction process for particular products.

Fluctuations in prices of forest resources are one of the factors that indirectly contribute to reduction in MFPs collection. The price of the forest products differs from time to

time. Fluctuation of the price affects their profit from the forest products. This affects their constant extraction of resources practices. As part of the Ecodevelopment Project, the forest officials along with the EDC have formed few marketing societies to provide better market options and to regulate the trading of the MFPs. Marketing options are provided for a few products—honey, fish and pepper. The users can sell their products directly to the EDC. One of the constraints to the community was to find stable market for fish. Before EDC, fishing was not officially allowed even though it was their traditional livelihood. Granting permission for fishing by the FD is based on particular 'officials', that is, the money they can give to the officials from the community—shared by members from the community.

In another case, EDC runs a processing unit for honey that facilitates whole processing including bottling at the collection centre itself. The honey is available in the market under the brand label of 'vanasree', which is the official brand of FD for the forest products. The product is available at the tourist zones of Thekkady. The users will sell the other forest products in the open market at Thekkady town. They get a very low price in the open market and it was suggested that if a co-operative credit society is available in the area they will have a better market. Similarly, if EDP will expand their market options for other products, they can have stable market. Over the years, the availability of MFPs has reduced substantially. The table 3.6 shows the differences on availability of MFPs during the years from 2008-09 to 2015-16.

The table no.3.6 Procurement of MFPs in Kerala

	2008-09	2015-16	Difference
Ayurvedic herbs	1116125	732560.1	-383564
Spices	900.5	4745	3844.5
Fibre	46760	8361	-38399
Grass other than fodder	83438	127693	44255
Invasive plants	60517	10437.7	-50079.3
Honey	2001.5	56176.9	54175.4
Bee Wax	79081	272.4	-78808.6
Vegetable oil seeds	778	4415	3637

Source: Forest Statistics, various years, KFD

The scope of credit society is beyond marketing of MFPs in the area. The unstable market options and variations in demand for the MFPs have both economic and environmental impacts. It has wide implication for resource use pattern, illegal poaching, setting up conservation agenda and forest governance. The mechanism of

credit society in a way regulate period for extraction of produce from inside the forest. The mechanism ensures better governance in relation with access and extraction and nature of dependency and use of forest products. The function of the society is to regulate on nature of forest resource use. It is also important to see whether given time is enough to collect the production in different seasons and to foresee the changes in availability of the product from the forest. If credit societies work properly, there is a mechanism to understand whether given time is enough or not, whether products are available or not. This information can reschedule operations and instructions. However, if they directly link to the open market, there is no mechanism to record accountability, quality and nature of dependency. The structure and function of credit society directly affect the resource use pattern and their livelihood. The restriction directs forest dwellers to extract different products. It affects the nature of the collection too.

3.4.6 Market Demand and Source of Income

Does demand in the peak season (tourism and pilgrimage) place more pressure on the forests? The state and other social institutions facilitate support for tourism and pilgrimage which is often legitimised by the State. It is observed that non-compliance is very high during the peak season of pilgrimage and tourism in related region. There is a crucial inter-connectedness between the seasons, compliance and non-compliance on forest use, and enforcement of regulations. The demand operates differently at different levels. There is a high probability to violate the existing regulations as and when the demand increases. How local elites legitimise their forest encroachment for facilitating livelihood based on tourism is matter of concern (chapter 6). There are many regulatory measures on forest, water, waste management and vehicle parking etc. during the season at Sabarimala.

It is shared by the forest officials that rate of incidents of violation of rules is high during the peak of pilgrimage season. Sabarimala season generate several alternative sources of income to the community irrespective of their economic position but it puts considerable pressure on the forest resource. The settlers and few tribes also shared that they have benefitted from the pilgrimage season as it provided them an additional source of income through various ways. The Malavedar community violates the regulation and try to collect more MFPs to sell in Sabarimala season. The settlers also violate regulation on firewood and collect more to run their eatery shops during the season.

The non-compliance practice to meet high demand in forest products would also have multiple impacts on environment in terms of pollution and poor waste management in the locality. While addressing alternative employment to reduce dependency of resources, forest department could hardly address sustainability challenges of the region. It is observed that many environmental hazards occur during the season and more post-season. For example, in spite of regulatory measures, pilgrims visiting in season leave behind huge amount of plastic waste. 'An average about 200-250 grams of plastic either water bottles or food covers are left behind by each pilgrim'—as observed by one of the officials in duty at the Sabarimala region. It is a grave matter because of the large number of pilgrims visiting the area during the season. The high rate of inflow of people in and around the *poonkavanam* (around the temple) and its impact on the ecosystem is highly apparent with its linkages to the worst environmental hazards.[35] River pollution is also more intense during the Sabarimala season. The holy Pamba River flows into the entire Pamba valley region and thousands of people directly use water from the river. Informal discussion with the tribal and migrants in and around the Sabarimala route pointed out that during the season, the water is highly polluted and unusable; but majority of the people continue to use it. Nevertheless, people of Pamba valley reported many cases of rashes that appear on their skin after bathing in the polluted river. The villages around the region are also exposed to communicable diseases that cause heavy casualties every year that is mainly due to the high pollution from the river and water logging in and around the villages.[36]

The respondents shared their concern that these environmental impacts occur mainly due to corruption of the State institutions, eatery shops and pilgrims.[37] The demand is not only for forest products and the season attracts many officials as part of the season

[35]Studies pointed out various impacts such as highly polluted river and riverbed, in and around roadside of the regions (KSCSTE, 2009). It is reported that these pollutants and poor waste management results in a wide range of diseases and seasonal fever in these areas. The Kerala High Court also made a remark by stating that those who pollute Pamba River shall have to face penal consequences on the serious issue of water pollution during the season at Sabarimala (Mathrubhumi, 2015).

[36] Local community takes special care about the negative externalities of the season and its impacts on river and water in the nearby areas. It is observed that local hospital will be full of patients after the season mainly due to water borne diseases and fever. There are many cases reported in the local hospital during the seasons and many casualties reported due to unknown fever. Studies have identified there is a high risk of human stampede and communicable diseases in the mass gathering of about 30 million people in a short period of time in Sabarimala (for instance, Joseph et. al, 2016).

[37] Beyond pollution of local environment excessive plastic wastes have seriously affected wild animals. Carcasses of wild animals after consumption of plastics are quiet common in the area. The villagers shared one case about death of a 40 year-old elephant. It was found dead with about two kilogramme of plastic waste in its bowels in a forest nearby Sabarimala. Similar cases were reported every year.

for monetary benefits. For example, it is shared by the local community that there is a high demand among forest officials and the police personnel to get postings at nearby stations of Sabarimala during the season. The season facilitates many lucrative income-generating possibilities though many regulatory measures are already in existence.[38]

3.4.7 Short-term Investment and Alternative Livelihood

Conservation of forest by local people is possible if they use resources in a sustainable manner. The objective of providing alternative livelihood was to reduce the pressure on forest by the local communities. The official's versions on degradation of PTR confirm the same. The alternative livelihood by providing short-term financial schemes to the tribal community is to reduce their dependency on forest. One of the key objectives of the EDP is to reduce pressure on the forest from the local community (World Bank, 1996: 26). Many of the traditional livelihood options have limited scope of sustainability in tribal villages. However, the project documents also provide list of traditional livelihood options for creating alternative income generation for the forest dependent communities to reduce 'pressure from forest'. The table 3.7 shows the list of possible village investments which is listed in the project document of the World Bank.

Table No. 3.7 Indicative list of possible village investments

Type	Variety
Participatory forestry	JFM Private timber and fuelwood plantations Establishment and operation of nurseries
PA Protection	Community patrolling, trenches and electric fences
Energy Conservation	Improved stoves and biogas plants
Livestock improvement and fodder production	Cattle breed improvement, pasture regeneration Fodder plantations, facilities for stall feeding
Ecotourism	Nature guides, tourist accommodation Operation of visitor attractions, e.g., museums Other ecotourism service concessions
Non-timber forest product cultivation	NTFP cultivation, NTFP collection and marketing
Alternative income generation	Sericulture, Bee keeping, Pig rearing, Poultry, Mushroom cultivation, Inland fisheries, Rabbit rearing, Lac production, Food processing, Rope production, Weaving, Paper production, Tailoring and other traditional projects.
Soil and water conservation	Vegetative treatments, Small stabilisation structures
Reducing wildlife damage	Electric fences, trenches, alternative crops, community patrolling

Source: World Bank, 1996

[38]Informal discussion with the forest officials at the duty station of Sabarimala region, September-October, 2013.

Most of the tribes and villages are aware of their rights, and are unwilling to let the forest department take decisions on their behalf. They have few expectations from the project itself. Livelihood suggestions made by the people of Mannankudy in the micro plan (a set of separate plans, one for each settlement), include a request for more land, employment in the forest department, fishing rights, and training as tourist guides. Most of these were dismissed on ground of either being illegal or because of a shortage of funds. However, fishing right is given back to the community on a regulatory basis. The alternative livelihood projects mostly centred on 'honey keeping, animal husbandry, planting of wild plants/medicinal plants outside forest region etc.' and were not very diverse. Many studies have documented on how these traditional options always fail and recommend finding alternatives for the local community.

Fishing rights were granted to 30 out of 61 families in the village. The regulation and its overall nature restricted the day-to day use of resources from the forest, though the inhabitants fully rely on forests for their livelihood. The few members of the Paliya community stated about their use, rights and nature of their dependency on the forests: 'The people who live on the seashore have the right to catch fish, we are at the fringes of the forest, but we are not allowed to enter the forest. The officers are coming from cities and many of them hardly know the practical knowledge about the forest and its products. However, they regulate us on what to take and how to use. We know how to extract resources, without destroying the core. We can simply store some honey and meat to use it later. But the argument is that we will destroy the common property, how is it possible'.[39]

As reported in other project sites few traditional livelihood projects that were initiated could not succeed. One of the successful alternative employments was creating temporary jobs for the local community in the Sabarimala season. The inflows of the increasing proportion of the pilgrims to the Sabarimala directly lead to certain employment opportunities to the local community. The forest officials regulated the seasonal employment opportunities as part of the EDP. Through the various EDC, the forest department made various regulatory measures and its enforcement to generate additional income to the local community and to maintain conservatory practices in the nearby forest.

[39] Informal discussion conducted during the field work in September-October, 2103 at Paliyakudi, Thekkady, Kerala

The table (Table 3.8) shows the community participation of the alternative livelihood options for the local community during the Sabarimala season. 150 respondents were covered in the pilgrimage region in the quantitative survey. Out of total 32 migrant respondents, it shows that 78.1 per cent under the study avail direct benefits and make additional income during the season. Out of 18 respondents in ST-others (72.2 per cent) gained high benefit in the season. In contrary, only 18.9 per cent of the tribes availed the direct benefit during the season though 53 respondents were from the community. All the respondents (150 numbers are responded on seasonal employment are from Sabarimala region) shared that they are aware/know about Eco Development Committee (EDC) in the region and their role in facilitating seasonal employment for the local community.

Table No.3.8 Community Participation

Social groups	No. of respondents	Aware about EDC		Availed benefits directly		Availed Benefits indirectly	
		No.	%	No.	%	No.	%
Migrants	32	32	100	25	78.1	32	100
SC	47	47	100	18	38.3	32	68.1
ST	53	53	100	10	18.9	16	30.2
ST-Others	18	18	100	13	72.2	15	83.3

Source: Primary Survey

It is reported that during the season, the dependency on the forest will be high from local people and tourists, and as a result, various impacts on environment affecting the health of the local population is observed. In tribal community, many responded that they have lost their traditional rights over resources. However, they find forest resources are the only option for their livelihood and source to generate sustainable income. The right to few resources is not based on traditional rights that they owned, but the forest department with proper guidelines as part of the EDP allows this. However, all users agreed that there are changes on their rights over forests and there are many restrictions, which directly affects their accessibility over a period. All traditional inhabitants reported that their socio-economic and religious life is integrated to the forest. However, the alternative livelihood supported market-based economy rather than forest-based indigenous economy.

The forest officials directed the options for alternative livelihood though there were many suggestions from the local community. The EDC facilitates initial investment for starting a business like the opening of tea shops, stationary stores and cool bar etc. It is

provided for people who come in the guise of natives to start businesses. However, third party evaluation reports, mostly funded by the World Bank and facilitated by FD itself, mentioned that the participation of the local community in seasonal employment is more efficient under the EDP. Efficiency is evaluated in terms of price, quality and management of seasonal employment and business. Nevertheless, efficiency in seasonal employment can be generalised to imply overall efficiency of the EDP remains unaddressed. The participation of the lower social groups in seasonal employment was relatively low. It was reported by respondents that business options were offered to the tribes, but choice for business and places suggested was not convenient for the tribes. The perception and strategy of responsible officials of the EDP and the forest officials towards the poorest social groups were more or less the same. As Benabou (2012) pointed out, the alternative livelihood options are provided to reduce human intervention or reduce pressure on PA. However, human activities are perceived as detrimental to wildlife conservation, as in conventional conservation thinking. By alternative livelihood, EDP accelerates the entry of local people into the market economy, initiated by the former preservationist policy. The only difference is that ecodevelopment offers local people some tools (loans, employment opportunities), which are more governmental handouts than sustainable job opportunities. Formation of wildlife foundation of the forest department is one of institutional innovation, which has changed the governance structure of the department in terms of implementation of the EDP.

The forest officials underscore the positive impacts of the projects by stating how tribes also gain jobs in a few projects of the EDP, increase their share of income from a market economy and further alternative livelihood and so on. However, income shares from the market economy—livelihood based on outside forest—of the tribes increases but for a short period. It would reduce forest dependency; but sustainability is a matter of concern. As observed in the short-term investments for alternative livelihood, the projects ended in the short term itself. The beneficiaries shared their concern that the 'offers' from the project would be beneficial during the project period. However, regulatory measures such as restriction on forest entry would continue even after the speculated period of the project. The alternative livelihood option provided by the project is as similar as any welfare projects of the State. The problems of the 'welfare projects' have been documented even in the EDP project document as 'these State

projects are short term in nature and top-down approach' (World Bank, 1996). However, the impacts of EDP have also endured the same.

Many respondents reported that the recent regulations and restrictions were implemented without taking into consideration their livelihood practices and traditional forest rights. There is a high probability of violating the rules to enter the forest by those who rely on forest resources for their livelihood. Respondents stated that they would tend to violate the rules, if the policy is unable to support their livelihood in a sustainable way: 'we were part of the Ecodevelopment Project from its initial period itself. The forest officials were implementing many regulations on forest entry, resource use and many that were related to our livelihood as part of EDP. Only after the introduction of EDP many regulations are implemented on our day-to-day activities'.[40]

In the survey, around 61.7 per cent of the respondents stated they might violate the regulations and rules if the rules are against their livelihood practices. With regard to the tree-felling rule, the majority of respondents from the Mannan and Paliya communities said that they would obey the rule because the officials may link the compliance with other issues, which may adversely affect their livelihood. On the other hand, respondents from the settlers expressed that if the rule directly affects their livelihood or unfair to them they may break the rule.

3.5 Case Studies on Participation, Livelihood and Conservation agenda in the implementation

The following three sections cover three case studies—a women protection group, short-term investment for Dalits, and access and change in rights of tribes—to understand how they are represented in the participatory process of forest governance. The case study on the women protection group observed that an 'access to forest' was enabled by forming the group comprising of women from the settlers' community. Going beyond their patrolling 'duty', the group was increasingly directed to regulate 'Adivasi women poachers'. Through diversified schemes, the various 'micro-plans' emerge as powerful institutions which de-constructed and undermined the contribution of tribal women and other traditional inhabitants. The project hardly offers any sustainable livelihood options to the community and rather forms various regulatory measures, which curtails their livelihood option in relation to the forest economy. The

[40] Focused group discussion held in Paliyakudi, Thekkady during the fieldwork in October, 2013.

whole process of regulatory mechanism and providing alternative livelihood created a discourse of conservation without participation of traditional inhabitants.

3.5.1 Community Participation in Conservation—Women's Forest Protection Group

The section attempts to understand how participatory forestry regimes engage with inhabitants to ensure their 'participation' in the contested space of livelihood and conservation of the traditional inhabitants living in the Western Ghats of Kerala. Conflicts and resistance over encroachment and conservation are on the surface of the ecological arena in contemporary Kerala. Forms of the implementation process of forest regulation vary from region to region, mostly based on social relations of key institutions in the locality. The concept of women's participation in forest conservation is one of the key agendas in the participatory regime of forest management through the Joint Forest Management (JFM) and Ecodevelopment Project (EDP) in the post 90s in India (Agarwal, 2010; Saxena, 1997). The discussion on forest depletion and challenges of conservation mostly theorised and associated with the tribal community and their traditional rights though many dominant communities rule the State and the forest department.

The study raises few questions such as how concerns of tribal women about forest and livelihood are different from that of the women from migrant communities. How the interests of dominant institutions are shared with tribal women? How do dominant institutions engage with traditional inhabitants on their rights and access over forest resources? How various institutions transpire as stakeholders of the regulation and their role in the processes of the implementation? The section narrates the process of formation of women's protection group and exclusion of tribal women during the functioning of the group. The Ecodevelopment Project has been adopted as 'a strategy for protecting the ecologically valuable areas from unsustainable or otherwise unacceptable pressure resulting from the needs and activities of the people living in and around such areas' by involving the people living in and around the Protected Areas

into conservation planning and implementation in the management of the area.[41] As part of EDP, the forest official formed *Vasanthasena*, (*literally translated as Green Army;* hereafter *Sena*) consisting only women members for forest protection. The forest department officially announced that *Sena*will be part of the existing forest protection force and the main duty of *Sena* would be patrolling to control poaching and cutting of sandalwood trees in the area. The Sena works 'voluntarily'. The information on the formation of this group and its activities was disseminated to the public as that of a 'group of women who have joined into a forest protection force voluntarily'. There was no separate financial allocation allotted for compensation of the Sena. The media and the forest officials projected and reported that Sena was a platform of tribal women folk to protect their 'own' forest. Moreover, it is advertised as 'poachers turned protectors' at the inception report of the project. The members of Sena were ready to offer their 'service' to the conservation of forest free of cost. Initially public raised their concern about this unpaid job. However, officials of forest department have clarified the role of the protection group and the benefits to the members.

> A group of women including outsiders (migrants and non-tribes) came forward once we conducted awareness on conservation and forest protection. Many women shared their concern that forests should be protected and they are ready to support. A few women came forward to be part of Sena without demanding regular payment. We have given an offer to Sena that their candidature will be given preference if any project will come up in future. It was an opportunity for the public to be part of the conservation programme. Forming a protective group of women provided an opportunity to women folk to be part of the forest protection, which is generally handled by men.[42]

Reciprocal commitment was a strategy for the officials to form this Sena.[43] Joining with Sena was an opportunity for women from migrants' community to get access and

[41] The project aims to achieve this by adopting a three-pronged approach; (a) identifying, establishing, and developing sustainable alternatives to the biomass resources and incomes that are at present being obtained from the Protected Areas, (b) increasingly involving the people living in and around the Protected Areas into conservation planning and implementation in the management of the area, (c) raising the level of awareness among the local community for the value and conservation needs of the protected area and patterns of economic growth and development, which are locally appropriate and environmentally sustainable (KFD, 1995).

[42] Informal discussion with the members of Forest Department, Periyar Tiger Reserve, Thekkady, held in June-September, 2013

[43] As defined in the EDP document the strategy to engage with local community based on reciprocal commitment is widely criticised and documented. The approach would only create maladaptive practices and unnerving position to indigenous people. Any 'offer' may be given or declined based on this reciprocal commitment though forest department play a dominant role in both instances. See illustrations in Baviskar (2003) and Karlsson (1999).

rights over forest management. The Sena members are confident about their involvement in the forest protection and hardly given any apprehension on their unpaid status. ‘Entry to the forest was restricted to us for being an outside community, migrants and only tribes could get free access as they rely forest for their livelihood. When officials offered us a ‘job’ for conservation, it was a creation of access to forest for us. Though monetary payment was not in the offer, officials offered uniform free of cost. We were also told that there will be a study cum pleasure trip to nearby forest reserves annually’.[44]

The area is notorious for illegal trade of sandalwood and the infamous hand-in-glove relationship of the forest officials and the sandalwood mafia. Sena was primarily formed, as shared in the public domain, to patrol the forest area. Sena members are provided with uniforms, caps and daggers for self-defence. The principal objective of patrolling is to safeguard the ‘rich wildlife and the precious sandalwood trees’, as widespread logging was rampant in the area. Later, the role of Sena is to patrol and regulate the tribes in general and women in particular, especially on collection of firewood and other MFPs. Initially Sena was formed with 100 members of which20 were Adivasi women who live on the fringes of the Thekkady region of Periyar Tiger Reserve. Few months after its formation, tribal women were ‘side-lined and confiscated’ from the group. Sena became a protection group of women consisting of outsiders/migrants. Higher caste women's group was told by an officer that they should be vigilant of tribal women as they may engage in ‘some illegal trade’. Soon they found out that about some illegal trade by tribal women from their group itself. Few members ‘found’ that a tribal woman, who is also leader of 20 tribal women in Sena, poaching a ‘root’ of sandalwood tree uprooted in the recent past. The members reported to the officials and gained assurance that the allegation is strong enough to take action against the ‘accused’ as the root of sandalwood is as costly as wood. The officials decided to remove the leader from Sena even though she entreated that it is an allegation made out of a personal disagreement based on their caste. As noted by Agarwal (2010) being low caste and poor reduce a person’s bargaining power within a predominantly upper caste society.

[44]FD develops a benevolent and hierarchical relationship in the ecological space where they forcefully excluded the inhabitants. Informal discussion with the members of *Vasanthasena*, held in September-October, 2013.

The social position of migrant women helped them maintain their dominancy over tribal women and treated them as 'exploiters'. Members of Adivasi women's group shared their concern over the incident that 'this false story is constructed over a personal grudge. Women folk from outside Adivasi group try to overrule our indigenous knowledge on forest resources and our way of management which we practice traditionally'. Eventually the rest of the members—19 tribal women—walked out from the group once their leader was removed from Sena, It was very clear to everybody that once the leader is removed from the group others will not be part of Sena. Finally, Sena ended up with 80 members and all of them are outsiders, non-tribals. The outsiders and the members of the Sena maintain animus towards the tribal women. The members of Sena portray themselves as outsider and confirm their 'otherness':

> 'The tribal women used to cut grass/thickets to clear the walking lanes inside the forest to collect firewood and other MFPs. We have noticed that these folk will identify sandalwood on the pretext of collecting of MFPs and inform the sandalwood mafia outside. As a tribal group, they have access to enter the forest freely and officials are unable to take any action against them. However, as a protection group and forest vigilant we could stop their illegal activities. We made up a system that we have allotted them a specific time and forest areas where they can collect firewood and other MFPs but within the stipulated time.[45]

How rural women contribute to conservation and protect forest resources and how vulnerable they are in the degradation of forest is widely discussed (for instance, Shiva, 1988; Fernandes and Menon, 1987; Jain, 1984). However, within the local system and the dominant notion of 'biodiversity conservation' (Damodaran, 2006) the services of Sena were recognised and well appreciated as they could regulate Adivasi women 'poachers' from the region. Members of Sena act as if they acquired power from the forest officials to handle adivasi poachers and smugglers and they are proud to be a member of the Sena. By keeping guard on Adivasi women and their day-to-day life Sena belittled the contribution of tribal women in forest protection and labelled them as mere 'poachers'. The position over tribal women enabled the rest of the Sena members

[45]An informal discussion with the members of *Vasanthasena* during the field visit of September-October, 2013. The smuggling of a tree in the forest area by the wood mafia is noted in the colonial period itself (Bourdillon, 1893).

to be more united. The 'slogan' like poachers turned protectors problematises the consensus about the community and the role played by the officials. Being and carrying the 'otherness' against the tribes, the dominant groups' notion and the way of portraying the poacher's life of the tribe are same. But it varies with different roles of the dominant group like an outsider, migrant and state and forest officials. The existing discernment on Tribe as a poacher remained with the forest officials even under the participatory forestry regime funded by the World Bank to ensure 'local participation'. Both the forest department and the neighbourhood claim that after the establishment of the Sena they could save the forest and its resources from the hand of 'poachers'.

The process of empowering the women as a protection force reproduce the 'poachers' within the ecological and gender sphere and made tribal women ecological refugees in their own habitats. The institutionalised contribution and the processes of various activities of Sena constituted a space over traditional forest dwellers in the discourse of conservation. While engaging in cleaning of the buffer zone and protecting the forest from the mafia, the Sena became an integral part of forest protection and tourism of the Periyar Tiger Reserve. While accepting the role of the Sena, officials feel that PTR is still a hotspot for poachers even after the state spent large amounts of money for its conservation:

> 'Cutting trees illegally has reduced substantially after the constant patrolling by the Sena. Earlier 10-12 illegal cutting of trees were reported. Apart from keeping an eye on poaching and tree felling, patrolling has also helped to reduce forest fires where the frequencies of fires were high during summer. It also helped to maintain green cover and fodders'-shared by the officials during the discussion.

Many members of the local community show their incredulity on the contention of forest official that the impact of the wood mafia has reduced due to the mere presence of the Sena. Adding to the claim, the Forest Range Officer, Thekkady, stated that, 'steady patrolling of Sena effectively impacted on exploitation of forest resources, especially on reduction of illegal trading of sandalwood tree in the area'. The forest department has come up with few projects that related to tourism in the area for income generation for Sena; for those who were working voluntarily. By providing short-term employment opportunities to members of the Sena, the officials showed the reciprocal commitment which they have offered in the initial stages of the project. In the process of strengthening the Sena's role in the participatory discourse of forest regulations,

members of the Sena gained increasing access to the social and cultural space over the Adivasis, particularly over Adivasi women. Members of the Sena believe that there are some changes in their role as a homemaker at their home itself.

The role they have played in forest protection made them more confident in both the spaces and they could move up, beyond the socially constructed role of a homemaker. A few of them narrated the changes over their social structure as, 'in the initial period, we had many social barriers while working in the Sena. Many of us found coming out from the existing social stigma was more challenging than working as forest vigilantes'. Being part of the protection group transformed us to negotiate inside and outside home for our 'real contribution'. Being a Sena member and a high-caste woman they have shared their opinion that they will decide who can join the Sena in the future.

> 'We were working for last six years without any violation against the forest law. We have been instrumental in controlling poachers and illegal activities while supporting the implementation of forest regulations in the Western Ghats. We will decide who would become part of the Sena in the future. If there is a public notification, there will be many applicants. Many might be more qualified than us. Our contribution will be forgotten as well. To maintain our culture we have decided to recruit candidates from our family and relatives. We have proposed our concern to officials and they have agreed'.[46]

In the 'process of empowerment' Sena members occupied a dominant position and 'job' in the Sena became one of the most in-demand jobs in the locality. The process and interconnection of the implementation of regulation as in the case of EDP postulates that its impact on the community varies. It is observed that social positioning, existing power relations among and between the institutions, differences in the capitals and livelihood assets of the community within the heterogeneous social groups still determine 'the beneficiary group and agents for conservation'. The existing context of social dynamism and power relations in the society helps understand the intricacy of any regulation and its intervention like the Eco- Development Programme in PTR. Any regulation, even EDP, does not commence with a clean slate, but

[46] Discussion with the senior members of *Vasanthasena*, fieldwork conducted in October, 2013. Recently the officials created a few jobs for the Sena. The work is related to tourism at Thekkady such as cleaning including removal of plastics inside the buffer zone up to the boat landing. In another job, *the cloud walk*' is to take tourists around and inside the forest to the nearby hill areas. The major portion of the fee goes to the common fund, which is regulated by EDP.

encounters the struggle between actors for control over resources and to promote their perspective on the relationship between people and landscape (Mahanty, 2002b).

The evaluation of the implementation of EDP brought out that there is a reduction of forest dependency among the tribal community. In addition, as discussed, the officials claim that steady patrolling over forest dwellers reduced their illegal activity drastically. Though many studies discuss how the State constitute traditional inhabitants as being the other side of the resources (Guha, 1983; Gadgil, and Guha 1992; Tucker, 2012), still dominant institutions in the study area believe that forest dwellers are traditionally exploiters of resources 'owned' by the state. The case of Vasanthasena—a protection group where all members are from dominant migrant communities—narrates how the community groups emerge as a powerful institution and how they institutionally excluded the tribal women in the process of conservation and livelihood. The forest department uses 'participation' to re-construct a binary division of tribes and migrants as the agents for poachers and protectors based on their social positioning shaped up over time. Beyond the patrolling 'duty', the group was increasingly directed to regulate 'Adivasi women poachers' by availing 'free access' to the forest. Through diversified conservation schemes, the Sena emerges as a powerful institution for conservation in the Western Ghats, de-constructed the contribution of tribal women and labelled them as mere poachers.

One can see that how the Vasanthasena uses a social hierarchy of caste extended into the ecological space of the tribal community, especially the women folk, and made them ecological refugees in their traditional habitats in the Eco Development Project—a participatory forest management project. Studies suggest that assessment and recurrent revisions are required to contextualise interest, values and hopes based on gender inequitable resource management and conservation plans (for instance, Colfer, 2013), though it is lacking in the field. It is also observed that it is important to see differences of interest and hopes of women in different social hierarchies and local social systems. As development, conservationists and the forest officials mainly handled the entire implementation without addressing the social dynamics in the society even in the new governance as seen in the community participation of the local community. The next section brings out how another tribal community; Malapandaram could negotiate with the EDP and the institutional apparatus in conservation and participation of forest management.

3.5.2 Short-Term Investment and Livelihood Enhancement

The case study on Tamil Sambavar, Schedule Caste community, explains how the regulation impacted on access to forest resources and traditional livelihood of the marginalised social groups those who were forest dependent for their livelihood. The study also explores how short-term investment/short-term plans as part of the regulatory measures for alternative livelihood benefited the social groups. Tamil Sambavar community is one of the landless social groups in the forest fringe of Kuttikkayam, Kottayam district in the Western Ghats of Kerala.[47] Total number of households is not more than 60. The number of households was 180 before the EDP came into the picture. The households are migrants from the nearby districts of Tamil Nadu and most of them are settled nearby in the North East side of the Periyar Tiger Reserve. They have migrated to the forest fringes in late 70s. All households are landless except one who holds ownership on piece of land of 10 cents. Majority of the members live in rented houses, which is temporary/poor house under the ownership either of Syrian Christians or in the public property-Government land. They are landless except one household and the household owns a house, which was built by the Panchayat.

Table No. 3.9 Summary of Profile—Tamil Sambavar

Number of households	25
Community	SC
Origin	Migrated from Tamil Nadu
Traditional occupation for livelihood	Bamboo basket making
Current occupation for livelihood	Bamboo basket making
Alternative livelihood option	Daily Wages
Average households size(No.)	4
Literacy status (%)	20
Type of house	Temporary
Distance from forest	1-2 km
Land ownership	land less
PDS-BPL cardholders (%)	60

Source: Primary Survey

Traditionally the communities were dependent on forest resource for their livelihood. The community engages in basket making with bamboo. They rely on nearby forest for collecting bamboo. The Sambavar community considers making baskets as their ancestral and inherited craftsmanship. Above 80 percent of the respondents reported

[47] Originally, they belong to Tamil Nadu and few households stay in the border areas of Kerala and Tamil Nadu and known as Tamil Sambavar. In Kerala, Sambavar community belongs to Scheduled Castes and it is same in Tamil Nadu.

that they are interested in continuing this work. This approach persists even among the younger generation of the community. 'It is our family or community's work which we have to maintain and continue. If we get some work in agricultural field, we may not prefer to go for that. We will get contentment only by doing the same work which we're doing traditionally' as shared by basket maker from the community. Entire family members are engaged in the work of making various types of baskets. It starts from the collection/cutting of bamboo, drying and making small pieces, and the final work is weaving the basket. They even go to the market to sell the product along with the family. However, outside jobs—daily labourers in agricultural field—are generally not offered for both the genders. Jobs either will be for men or for women and wages are also different. This is the one reason they do not prefer to work outside for daily wages. The limited access or availability to find other options in the locality is another livelihood threat they find problematic. The area offers hardly any other work to the community except as agricultural labourer in the agricultural lands of migrants. The community prefers to engage in their traditional works that satisfy them. Since they were engaged only in this traditional occupation, they were not trained for other works, which are locally available. The agricultural labour demands experienced labourer or skilled labourer. One of the migrants stated that: 'These groups are not skilled to employ in day-to-day maintenance works, pruning and chemical spraying any other works related in rubber, cocoa and coffee cultivation. They are more comfortable in their basket making which they were doing all their life'.

The community finds the rules that restrict the use of raw materials from the forest as their major livelihood threat. It is also observed that the distance they cover to collect the bamboo has increased over the years. Earlier, we could collect raw materials near the forest border, now we need to travel 4-5 km or even more. The growth pattern of bamboo has also changed. Price they get from the local market is relatively low. But, the demand for the bamboo mats and baskets increase during the pilgrimage season. The demand for the baskets and mat increases during the season, but the supply of raw materials are restricted due to entry restriction. As part of the regulatory measures of EDP, the FD introduced short-term investment for alternative livelihood for the community. They have introduced an entry card and entry fee to restrict their usage to reduce pressure to the forest. Only EDC members are allowed to use entry card to gain access to the forest.

The impacts of regulation have multiple effects on livelihood of the community. They have to pay the local migrants for buying raw materials for basket making. The community was excluded from the membership of EDC when it formed a beneficiaries list in the area in 1996-97. The major criteria for EDC membership were that the members should own a house in the locality. The local EDC members decided to exclude the Tamil Sambavar community on a pretext that they are from Tamil Nadu and will return to their home state soon. Once they formed the EDC in the area, the entire community was excluded and which denied them forest entry to collect bamboo for their traditional occupation. The EDC decided that only the members have the right to access the forest resources including the bamboo. One way both Tamil Sambavar and Syrian Christians are migrants but, the membership of EDC is provided only to the Syrian Christians. Since migrant Christians are members of EDC they hold rights to enter the forest based on the regulatory measures initiated by the EDP project. By using the entry pass, the community members can enter into the forest. The community will pay the fee or price for the entry pass to the pass owner among the Syrian Christians.

However, the EDC provided an option that the local migrants will be provided an entry pass to collect the bamboos and Sambavar community can avail the facilities of using those entry passes. Irrespective of their traditional livelihood, those who are members of the EDC have access to enter the forest and collect bamboo. The migrant Christian, the majority community in the locality, holds the rights over the forest to collect the bamboo. None in the Christian community is engaged in any traditional work related to bamboo. In the process, the migrant Christians appoint a labourer to collect the bamboo and sell to the Tamil Sambavar community.

The forest officials state that membership of EDC will be provided to those who are natives and not to any migrants. But the question is who the native people are? People who are members of the EDC are also migrants. Due to their political network and better off situation in the society, they could easily get these benefits that are denied to us. Further, EDC provided loans for migrants to start their own business/self-employment. We are also told that forest officials directed migrants to evacuate us who are living as tenants in their buildings'. This was shared by the community members regarding whether they could negotiate with the officials to regain their traditional rights or access to the resources. The rules of EDP restricted their access to raw materials. Once they have lost rights to collect the raw materials, they were paying high

price to get the materials from the EDC members—Syrian Christians. The net profit to the community has reduced since the introduction of this new regulatory mechanism. The other alternative livelihood options demand skilled labour and many of them are scattered to different locations and few returned to their homeland. There is no active community organisation for Tamil Sambavar in their locality. The participation of the community in any political parties is very limited. As a community, population is very low to gain any interest from local political parties.

On the pretext of reducing dependency on the forest, the EDC provides short-term loans to the users to encourage them to engage in other livelihood options. It was also an encouraging factor in the local community to be part of the EDP. However, within the local community, the EDP selected the migrants by addressing the short-term benefits to the community; they completely failed to address the larger issues of forest depletion, environmental negative externalities in the longer period. The following section indicate how Malapandaram—a prominent traditional community and nomadic tribal group—negotiate with the new regulatory measures of the project.

3.5.3 Negotiations for Forest Access and Role in Conservation of Malapandaram

Earlier studies noted that the Malapandaram community is a nomadic tribe living in the Montana forests of Kerala (Morris, 1976 & 1999; Raju, 2002, Saji, 2001). Morris located that the main region inhabited by the Malapandarams are at the Western Ghats of Central Kerala and it is the same even today.[48] The majority of the community are forest dwellers and rely on forest resources for their livelihood. The pattern of life of the Malapandarams can be considered as 'dual existence'—nomadic and sedentary.[49]

Though 20-30 per cent of households own houses or small huts in the settlements on the forest fringes, they rarely inhabit the houses. They stay inside the forest continuously for three-four months and gather food and other Minor Forest Products (MFPs). The social stratification within the community is limited, compared to other

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[48] They are spread over five districts of Central Kerala namely Kottayam, Idukki, Pathanamthitta, Kollam and Thiruvananthpauram. The Malapandarams are found along the higher reaches of the Pamba River of the Ranni and Manimala Ranges, the Achencoil River of the Konni Range, the Mukkadavu stream of the Pathanapuram Range, and the Thalapara, Palaruvi and Kannupalli of the Shencotta Range where they are known as Paliyans (Iyer, 1937). Earlier studies stated *Hill Pandaram*as groups traditionally living in the deep forest and hence isolated to a large degree from the mainstream culture (Iyer, 1937; Morris,1977).

[49] Estimates suggest that there are about 400 nomadic and semi-nomadic tribes in the country, numbering some 150 million most of whom do not possess land rights or house titles, and are therefore denied even voting rights. Many of these groups have lost their traditional livelihoods over time, and are now confined to the urban fringes, living in abysmal conditions and are dependent on informal means of livelihood (Editorial, EPW 2007: 4020).

tribes in the region. It has been reported that the Malapandarams have lost out through interactions with outsiders. No specific reasons have been given, but they agree that encroachments by outsiders initially started with cultivation of seasonal crops and finally outsiders established their own rights upon their land.[50]The level of economic and social indicators of this tribal group has not moved up from the description of the earlier studies (see Iyer, 1937 and Morris, 1976). It is observed that they go back to forest and stay back. The thatched huts in the 'settlements' remained deserted.

Basic development indicators such as education, land ownership and access to local labour market are inaccessible to the community. For instance, the educational status of Kerala (94.0 per cent, which is the highest in India, Census of India, 2011) did not have any trickle-down effect on the community. The only educational facilities that are available in the area is Alternative Schooling, which is part of the Sarva Siksha Abhiyan (SSA)[51]. No formal teaching is imparted in this provision. One of the parents, whose two children have been attending alternative schooling under the SSA for the past three years, quoted: 'Teachers are not regular they are coming from a far distance. Even after attending for a few years my daughters are still not able to write their parents' names'.[52] There is no formal structure or building provided for alternative schooling; it is a temporary shelter without even a roof cover. Parents stated that training from this school does not equip the students to seek admission in any other schools because the school does not issue any valid certificate for completion of the course. The formal school run by the Government is about 25 km away from this locality. However, non-tribal people have a different perception about the tribals, which is implicit in the opinion of a non-tribal informant: 'they do not have any problem and… after schooling they will get a government job of

[50]Ttribal lands occupied by migrants in exchange of debt, liquor etc have been discussed in the discussion conducted with the community during the fieldwork.

[51] Elementary education is provided free of cost by the Government of India as part of Right to Education and Sarva Siksha Abhiyan (RTE-SSA) which are flagship programmes of achievement of Universalization of Elementary Education (UEE) in India. Yet, the elementary schools in the premises are have inadequate infrastructure and basic facilities. Schooling provisions under SSA includes the Education Guarantee Scheme (EGS) for primary and upper primary schools. The EGS and the Alternative and Innovative Education (AIE) Scheme is a part of the SSA framework. EGS is one mode of operations of AIE under the scheme (MoHRD, 2011). Introduction of EGS is one of the strategies to address the education facilities for out-of-school children in the States. The EGS is meant for unserved habitations (habitats where there are no formal schools) and alternative and innovative schemes for out-of-school children living in difficult circumstances such as in isolated geographical locations or mountains. Alternative schooling facility under SSA norms should be within 1 km of every habitation and provision for opening of new schools as per State norms or for setting up EGS like schools in unserved habitations.

[52] Informal discussion conducted in households during the fieldwork in Attathodu, Sabarimala region, Kerala, October-November, 2013.

their choice'.[53] Such an overriding understanding of the tribal community camouflages reality, but is still prevalent among the non-tribal people in a big way.[54]

The FRA is overlooked with the extensive cover of EDP across the stakeholders. The FRA is also conceptualised and implemented as part of EDP in the study region and among the tribal groups. However, none of the respondents were aware of the Forest Right Act in the study region, except two households among the 300 households covered during the survey. The field based study in Wayanadu stated that higher forest officials at the Wayanadu forest range argue that there is no need for reform, as participatory forest management had already been established in the 1990s (Munster and Vishnudas, 2012). The two households mentioned above who were aware of the FRA, belonged to the tribal community Malapandaram and they are illiterate. One of the respondents is a forest watcher with a temporary job with the forest department. He recollects a meeting held by the Forest Department a year back close to their village where a few of the locals were participants along with some high officials of the department. In the meeting they were talking about the new rule and found it to be another regulation, to be followed for the conservation of the forest. One or two copies of FRA were also distributed at the meeting. None of the households are literate enough to read and understand the implications of the document. The other tribal communities like Mannan, Paliyas and Uralis, are not aware about FRA and they were not aware about any meeting that was held on FRA. All the respondents stated that every discussion on conservation was centred on the EDP.

In the process, the EDP regulated the Malapandaram community to follow the 'entry pass' system which is connected to the local co-operative credit society. They were forced to take the entry pass to enter the forest for resource collection, the same way they have to give the products/resources to the credit society. This new regulation placed restrictions on their traditional entitlement of free access to the forest resources. Now, their options are limited; they are not entitled to enter the forest as per their choice, but regulated by the guidelines of the EDP and the credit society. Functioning of the credit

[53] This is the kind of opinion that other natives especially migrants have about the tribal social groups. The reservation policy of the Government in the public sector is the reason for these kinds of response from the migrants. Casual discussion with the migrant workers at their work place, which was conducted during the fieldwork at Thulapalli, Sabarimala region, October-November, 2013.

[54] Despite this, there was hardly any government/public sector employees in the tribal community. Most important is that such an understanding of the 'outside world' on tribal community trivialises the complex issues of identity and marginalisation of tribals to a single point of job reservation in the public sector.

society in the region set a pattern of constant exploitation. The functioning of the credit society, the nature of resource collection and marketing create indebtedness for the tribal community and produces a web of interdependency and related problems as stated by a respondent:

> 'The functions of the credit system and market forced us to depend on forest resources. It re-directed our nature of forest resource use. We used to stay in the forest for many days which continued even for more than a month. Now we are forced to return back even if we were not able to collect anything'.[55]

The structure and compositions of the EDP are different in terms of its mode of implementation. One of the respondents stated that inside the forest they would not find any difference in terms of its boundary, once they were in the forest to collect MFPs. Another case cites the participation rate in the seasonal work during the Sabarimala pilgrimage season. Generally, EDP allocates short-term credit facilities to run a teashop or street trade to local people during the season. However, the experience of the tribal people is that being illiterate they do not have any role in decision-making. They have pointed out that most of the credit facilities benefit only local elites from the migrants and not the landless Adivasis. Consequently, the functions of the EDC seem to neglect the problem of the Malapandaram community. However, the notion of sharing is different among the migrants. They state that the issues arise due to their inadaptability to cope up with the new developments of the project. The institutional structures introduced to protect the environment often affect them adversely. However, even in this 'participatory regime' the roles of Adivasi are only on paper as in the case of the Malapandaram. Rather, the participatory regime of forest management facilitated the forest department to become a powerful institution in the contested space of livelihood-conservation.

The forest department has more control over tribal communities in the participatory regime of forest management. As pointed out by many, the real beneficiaries of this participatory regime—where local community gets a prominent role in activities, which aim at conservation and livelihood participation—are local elites or other caste groups rather than Adivasi social groups. For instance, a case study narrates how Vasanthasena—a protection group where all members are from dominant settler communities—emerges as a powerful institution and how they institutionally excluded the tribal women in the process of strengthening their institution by building a vital role

[55] Informal discussion conducted in households during the fieldwork in Attathodu, Sabarimala region, Kerala, October-November, 2013.

for themselves in conservation. The complexity of the process of these kinds of regulations and cultural practices of the local communities leads to further marginalisation. In many cases, the other caste groups, those who rely on forest resources for additional income, make use of the credit society in an efficient way. They have also succeeded in getting licenses to enter the forest and collect the resources. In this process, the local elites control the access over forest resources and traditional inhabitants like the Malapandaram have to seek permission to get access to the forest and its resources.

Since many of the households still live a nomadic life in the forest, they hardly avail any welfare projects initiated by the Government. Often, local Panchayats provide opportunities for some of the tribal communities. For example, they supply goats as an alternative means of subsistence to the tribal communities. However, being a nomadic group, they are least equipped with animal rearing and therefore, the 'project' fails at the very beginning itself. [56]As we have seen, in the case of the Malapandaram community, an entire family goes for resource collection. The welfare scheme such as providing domestic animals is an example of how the different dominant agencies subject them to the dominant development processes.

3.6 Participation in the Participatory Regimes of Forest Management

The section observes how the communities find their role in the decision-making process in the overall arena of the participatory forest management regime and how far it influences the compliance and non-compliance of regulations. The role of the local community especially tribals as they are major stakeholders of the regulation in taking decision on various phases of enforcement - various micro plan projects, regulatory measures, restriction and regulating forest dependency, selection of alternative livelihood options and so on- along with the forest officials and other formal and informal institutions. The matter of concern for the analysis is how participation

[56]One of the respondents pointed out that if the tribes are given a goat it would surely reach the nearest cattle market the next day. The welfare schemes such as providing domestic animals and so on can be cited as the example of how the different dominant agencies subject them to notions of the dominant development process. This has been cited in many region-based case studies. It is not different even in a socially developed State like Kerala. When it comes to tribal social groups, the implementing agencies and institutions proceed with the same attitudes towards these social groups. The kind of image that those agents hold is that they are responsible for developing the so-called 'under developed' societies. As we have noted, generally they stay in the forest for resource collection. In the case of the Malapandaram community, the entire family goes for resource collection. Their current social and mode of economic activity is not appropriate for keeping livestock. No scheme is actually concerned about what they want and what they are.

engages in developing responses of the social groups in different phases— responses on the regulations and responses of the regulations. Almost all tribal communities responded that they had never been part of any decision-making process regarding forest regulation and its implementation.[57] As pointed out by one respondent from Malapandaram: 'Few of us are still staying in the forest. We are not aware about forest rights. We come to know about new regulations when forest officials instruct us what to do and what not to do. Sometimes, they also call a meeting and inform us about the new restrictions which we should follow.'[58]

The 'difficulty' of the officials in the participatory process and the kind of relationship and behaviour with the community are discussed in many studies related to enforcement of forest law in India (Baviskar, 2003; Mahanty, 2002a). Since engagements of the officials are justified as 'official duty', it is acceptable even if they do engage in poaching/violating any rules in the name of protection.[59] On their participation in the decision-making process and changes in relations between officials and the tribes during the implementation of EDP, members of Paliya community stated that:

> 'It is very common that if we inform and prevent illegal entry or tree-felling of outsiders, entire credit will go to the officials. Few days back, three of us were suspended from our temporary jobs of Forest Watchers by accusing us of violating forest laws. We had a religious ritual in the forest. In the process, a few friends of my cousin joined us. Since they reached at night, we forced them to stay with us in the forest, as travelling back through the forest during the night could be dangerous. Soon after, the forest officials came to know about their visit and they charged us for illegal trespassing and accused us of alcohol consumption inside forest premises. In fact, very often, many of us were assigned the duty of guarding the guests of high-ranking forest officials during their ride inside the forest. During such occasions, it was common for those people to indulge in drinking and cooking inside the forest. After being suspended for a few days, the issue was settled based on our written apology. During the negotiation meeting, one of the high officials used a caste-based remark. Though the issues are well understood within the community, none of us came up with a direct conflict or an open confrontation with the officials.[60]

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[57]A few householders, during the informal discussion with Malapandaram, stated that they would resist or violate the rule, if it affects their day-to-day livelihood options.
[58]Malapandaram community shared their views on participation in the decision-making process. Focused group discussion, September 2013.
[59] The road construction of FD inside the forest is highly justified as it supports forest protection.
[60] Focused group discussion held with Paliyan community members during the fieldwork, October, 2013.

The Ecodevelopment Project and its various forms of implementation are the only regulations that the users reminisce as the regulation in the region. As noted by the forest officials, the heterogeneous nature of social groups in the locality becomes challenging for implementing any regulations. Those who do not belong to the tribe are mostly members of EDP, which regulate the sustainable use of forest resources. The evaluation of the implementation of EDP brought that there is a reduction of forest dependency among the tribal community.

The forest communities have been perceived as thieves and it is believed that forests have to be protected from them. While the department continues to blame the forest communities for the destruction of forests, it is well established by now that it is the unholy nexus between timber traders, forest officials and politicians that have caused the depletion of the forest resources in India. If at all, the local people are the lowest link in this chain (Munshi, 2012: 296). When the discussion directed to their rights and dependency on forests, Paliya tribe responded, 'One way, the EDP has multiple impacts on us. Before, EDP there was no right for us though we were considered as traditional inhabitants and at the same time blamed as poachers by outsiders. However, we did not have the right to get free access to the forest. We were always under the threat of fear when we are inside the forest. Any time any officials can catch us. Since there is no other alternative for livelihood, we are forced to rely on forest resources as part of our traditional occupation. We were all illegally entering the forest. The forest department never allowed our traditional rights'.[61] Recent Forest Right Act emphasises that the local people are supposed to develop a sense of ownership about the rules regarding resource use and then they will be more inclined to obey them. Moreover, the development experience in Kerala, offers a more decentralised nature of power and social structure.

In most cases, participation and representation of the inhabitants in the implementation process are reduced to a mere temporary or contract job in the conservation and monitoring team. The contractual jobs are offered to the tribal community at low wages. The forest officials also convey to the community that this is a service to the community provided by the forest department and, in response to this offer, the community should provide support and service to the forest department. The officials demand several free services from the community members who are on such contract

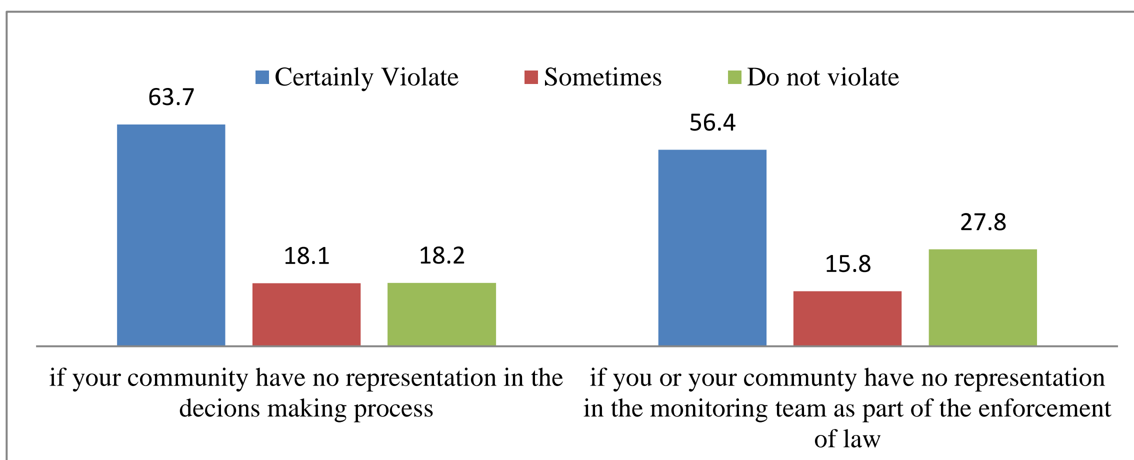
[61] Ibid.

jobs. For instance, the trekking team was asked to be part of night patrolling in the area free of cost. Members of the trekking team from Mannan community stated: 'We were engaged with our traditional occupation, fishing and collection of MFP. When EDP came into the picture we were offered jobs in the trekking team. As per the contract document, the salary was Rs. 9000 per month, but we were offered only Rs. 6000. Since it is a monthly salary, a few of us joined the team. Later, the officials asked us to serve in night patrolling as a free service. They claimed that the forest department is providing jobs for us so we should also help them back as a reciprocal commitment'.[62]

Another job was that of 'forest watcher' which was widely offered to the tribal communities. It was also a temporary job. The job demanded 30 days of work, but payment was offered for only 22 days or even less. The payment was also not made on a regular basis in both the regions. It varied from community to community. For instance,Malapandaram in the Sabarimala region got their payment twice a year. However, the payment is delivered every three months in the Thekkady region. However, in both regions the workers were paid only for 20 days (sometimes 22 days) though the number of days they worked was 26-30 days.[63] However, the most of the respondents shared that there is a high chance of violating regulations, if they were not part of the decision-making process. As shown in Figure .3.1, about 63.7 per cent responded that they will violate regulations if the community does not have any role in the decision-making process of any regulation and its implementation. In addition, 56.4 per cent reported that they would violate the regulations if their community were not part of the monitoring team.

[62] Focused group discussion held with Trekking team of Mannan community, MannankudiThekkady, October 2013.
[63]Informal discussions with the forest watchers from the tribal community, September-October, 2013.

Figure No. 3.1 Responses of the Community on their Participation



Source: Primary Survey

Respondents from Malapandaram community stated that a few meetings were held at the premises in the Sabarimala region organised by both FD and local administration on the eve of the pilgrimage season. These meetings were focused on various regulatory activities as part of the EDP and as part of the regulation to control various externalities of the crowd during the season. The regulated activities described by the community members had to do with how to minimise the waste during the season, how to regulate eatery shops, how to regulate vehicular traffic during the peak season and so on. Most of these meetings were meant to provide instructions to the officials that should be followed by the inhabitants in the region. The officials take feedback from the local community in a few areas, but hardly take any inputs in most of the cases.[64] In some cases, FD as an institution became more authoritarian and regulated the economic and social life of the community. 'The officials at the initial time were very good and they have explained to us what the project is and what kind of support FD is required to ensure for conservation and livelihood. However, when new officers take charge, the attitude towards the programme becomes just like many other forest protection programmes with the role of the local community as a follower of the rule. The officials generally consider us as poachers though we are natural habitants of the

[64] Community members informed that most of the meetings are held in a hurry in the first phase of the season. There is not enough time for any discussion or consider opinions from the locals. Most meetings will end up with instructions on recent regulations, restrictions and punishment, if any violation occurred. Informal discussion with the local community at Kalaketty, Sabarimala during the field work, October 2013.

forest'.[65] Senior officials from FD also accepted that the relationships and attitudes are changing, agreed that it is not yet in participatory mode in the field and added:

> 'Yes, there are problems within the officials to practice 'give and take' policy. It is easy to bring policy at the state and centre level on participatory and sharing power with the community. However, in the field, we are successful mainly because, we do use our power and decisions to implement the programme. It is a power relationship among the official and the users groups. Still, some of them dominate and use the opportunity for exercising their power. Nevertheless, there are changes towards real participation in the field. It is not easy to walk hand in hand, one sudden morning. In that case, even people will not obey or accept our decision.'[66]

As discussed, community organisations of tribals are very weak in the area and people hardly own membership in the organisation. The officials are well informed about the status of community organisation of both the migrants and the tribals in the area. The *Kanikkar*(head of the community) of Paliya community reported that, 'unless forest officers come from our caste, we will never be treated equally or be given any responsibility for conservation. We will be treated as helper,sometimes to provide support to the forest guard to carry their firearm or as unpaid guide for the new officials to the dense forest'.[67] It is well known that any officials can easily target and trap us into any case. There are many loopholes in the law related to the extraction/conservation of forest resources. The level of participation of local communities is also dependent on the subjective interaction of the officials of FD. This is locally determined even if participatory discourse is in practice in the implementation of forest regulations in general. The officials hardly notice the difference whether in day-to-day forest management or implementation of the EDP or any other regulation while they engage with local communities. While the eco-development designers articulate a desire to move away from a blue print approach to intervention (World Bank, 1996), the strong and hierarchical structure of the FD enables a very limited degree of innovation and flexibility for field staff (Mahanty, 2002b).

[65] Focused group discussion conducted during the fieldwork at Paliyankudi, December 2013. Main topic of discussion was the role of the tribal community in the process of implementation of EDP and other regulations, which have direct impact on their use pattern, Paliyakudy, Thekkady.

[66] Informal discussion held with the Deputy Director, at PTR, Kerala during the fieldwork in October 2013.

[67]Informal discussion with the *Kanikkar* (priest) of the Paliyan community, October, 2013, Thekkady, Kerala.

A number of household members reported that members from high-income groups might not follow the restrictions and avail more benefits from FD. For instance, settlers get opportunities for employment and business during the peak season of Sabarimala pilgrimage. Similarly, they often become member of forest protection team, which is constituted locally by the forest officials. The response of the dominant social groups reveals their role in conservation activities, which regulate daily life of the tribal groups. As quoted by a member of the forest protection team: 'due to our strict monitoring, we kept these (tribes) people out from the forest. The tribes may not cut sandalwoods directly but they are instrumental in aiding outsiders who have linkswith illegal timber trade. It is observed that these men would become guide to timber mafia for easy money and comfortable life than what we provide'.[68] A few settlers reported that they were part of the decision-making process of the plan for recycling of waste during the peak season.[69] They observed that even if there is participation of migrants in many areas of regulation, they are reluctant to obey the regulations when it comes to their basic rights. Members of the Urali tribe declared that they would cut trees from their land for household purpose, though it is restricted under the regulation. The community shared their concern about the regulation and its enforcement without taking their views and they are firm on their non-compliance:

> It is our property and we have rights over it. Yes, officials say that we need to take prior permission for each and everything we do on our land. Why should we follow the rule and regulation, which are formed without taking into consideration our concerns? There may be communities who will follow the law as instructed by officials, but we are not like that. We are ready to challenge openly. We will not extend our support completely unless we are part of the process. Knowledge on forest is only from books for officials. Still they instruct us what and what not to do.[70]

In the phase of plantation of Eucalyptus in the forest as part of the national forest re-generation campaign, the tribal community protested because of its 'foreign origin' to their local forest. While converting rich biodiversity into monoculture, the FD or the state hardly take any feedbacks from the tribal community. Ecological imbalances due

[68] Informal discussion with the forest officials, range officers and forest guards, those who are in charge of the Thekkady region of Periyar Tiger Reserve, Kerala.

[69] Informal discussion held with the households belonging to the migrant Christian community at Thulapalli Panchayat, Sabarimala during the fieldwork of September, 2013. All respondents are directly or indirectly part of the seasonal works, which provides substantial income during the Sabarimala pilgrimage season.

[70] Focused group discussion held with Urali community members during the fieldwork, October, 2013.

to Eucalyptus cultivation are widely discussed in the Indian forest context and there was a mass movement against it (for instance, Devi, 1983). Officials and local government institutions insist on planting of trees though they have no scientific understanding of what kind of plants are suitable in each region. They are hardly concerned about how the local community and the environment derive benefits from these trees.[71]

In the context of monoculture, Guha (1983) pointed out how monoculture destroys basic biodiversity and disruptions of life support system of local tribal communities through exogenous changes in the forest habitat while observing teak cultivation by replacing Sal trees forest in Jharkhand. The tree is important, as a source of fuel, food, medicine and even for religious rites of the local people and monoculture to replace the trees has led to widespread movements later. Teak cultivation was promoted to meet the high value of commercial demand in the timber market. The case of Bastar pine project that envisaged the clear felling of 40, 000 hectares of deciduous forest to raise tropical pine as raw materials for paper industry by the establishment of mill in the public sector. The project is funded by the World Bank to support displaced Adivasis but finally ended up as an industry with the private sector. However, the project is temporarily shelved due to wide protest from the tribal communities and other commission reports. Several regions of Karnataka, Tamil Nadu and Kerala of the Western Ghats have already moved to ban or stop the non-native eucalyptus tree. Many officials from the FD have observed that eucalyptus induces lowering water levels in the region.

The users give priority to their role in the decision-making process rather than being part of the monitoring team.[72] The community members are aware about the role of monitoring team. Though their participation is only on paper, the role of the tribal community is restricted to some contractual job with the forest department and thereby considered as part of the monitoring team. The *Kanikar* from the Paliya community stated as follows: ‘None of the officials take my opinion as a community head or give

[71] Numerous protests on Eucalyptus are reported from many parts of India. Inhabitants were concerned about the eucalyptus as it causes deforestation of traditional plants, which provides MFP, fodders and others for household purposes. It is observed that water consumption of one eucalyptus tree is equal to that of ten Sal trees (Devi, 1983).

[72] Monitoring Team is merely a part of the forest protection group, a free service. Their role is to support or assist forest officials to guide the route inside the forest or to carry their gun while they are inside the forest.

space to discuss our view on any policy and regulatory activities. In another way, they will call me and instruct me what new regulations we have to follow. And it is my responsibility to communicate to the rest of the members of the community about the new regulations and rules. In this situation, there is a high chance to violate the rule; and there is a high chance to obey the regulation if we are part of the process. In addition, there is an incident when an official from the World Bank came for an evaluation of the ongoing EDP. The official called a meeting of our community and I was supposed to pass the information. We all gathered for a meeting, expecting to get an opportunity to share our views and experiences. However, a few minutes before the meeting, a high official of the forest department entered the room and instructed us to keep issues within ourselves. He stated that, 'whatever happened in the process of the EDP and its implementation is now past, it's already happened. I know there are many shortcomings. But this meeting is to discuss future activities and we will address those issues in future'. To ensure our 'silent participation' he was present and sat among us throughout the meeting. It was to make sure that we would not show any dissent against the department on the implementation procedures of the programme. To ensure the "silent participation" a few of our community members stated our problems and experiences as pre-designed by the officials'.

The user groups from the traditional inhabitants become subjects of the central arena of discussion on conservation and bio-diversity in general. Local people say that 'these days there is no sound from the gun, or reports of poaching.[73] Similarly, local environmental protesters and activists are also reporting that they could collect a number of unlicensed pistols from the locals. They consider this as one of the practices necessary for conservation. Forest officials are proud of this as they consider it as their policy success. It is important to ask how legal restrictions have a negative impact on the rural poor. Regulatory restrictions reduce their accessibility to forest resources.

The restriction of resources directly affects the subsistence level of the poor, as there is a considerable reduction in their income. Outsiders mainly control timber cutting and hunting that lead to depletion of such resources, and poor people do not have any power to control it. Restriction on extraction of forest resources by the enforcement of law will not affect the rich people, as they do not depend on it for their livelihood.

[73]Informal discussion during the household survey in Kusumam village, Sabarimala region, October-December, 2013.

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Privatisation (specifically refers to ownership of a natural resources by private groups) with new legal/illegal rights, further affect the forest use practices of the marginalised community especially with the already existing limited alternatives. Sentiments of the community members are aptly captured by the response of one of the respondents in a focused group discussion[74] when he asked, 'how many tribes became rich by engaging in the trade of sandalwood and the tiger?'

3.7 Social Positioning and Responses Between and Among the Institutions

Over the period, in a conservatory discourse, the majority of conservationist and government institutions have cited and argued how and why traditional inhabitants induce forest depletion and fail to integrate into the regulatory and development mechanism of the State. The discussion on forest depletion, environmental regulation and challenges of conservation always theorised and associated with the tribal community and their dependence over forest resources. However, the issues of conservation and livelihood are determined by many factors, which are generally undermined. Furthermore, conservationists mainly handled the entire implementation without addressing the social dynamics in the society even in the new governance as seen in the community participation of the local community.

The concern of officials is more about tribes and that they are not sensitive about depletion of forest resources. Most of the forest officials were of the opinion that local people exploit the forests in order to make profits, not because of lack of alternatives to meet their basic needs. The officials are accepting that migrant's community is more concerned about conservation and they are ready to join regulatory mechanism. Few respondents from migrants reported: 'during the early phase of migration, we were allowed to enter the forest, which was an important source of livelihood for all of us. Later we were sensitised about the depleting forest resource and they (forest officials) started imposing restrictions on our access to the forest. Until a few years earlier, we were completely dependent on forest to meet our demand for firewood in the season of Sabarimala to use in the temporary restaurants. But now, it is completely controlled and we buy firewood from outside to meet the demand for firewood during the season'.[75]

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[74] Focused group discussion held in Vanchivayal with community members of Urali tribe, September, 2013.

[75]Focused group discussion with the migrants household held in June-October, 2013, 2013 during the fieldwork at Thualappalli, Sabarimala.

Though the project document discusses how human intervention impacts on ecological destruction, the discussion hardly mentioned about how tribal dependency on forest causes destruction near their forest. In the case of PTR, the report says tourism, pilgrimage and other forest intervention by the public are major threats to the forest degradation. These factors create more pressure on the forest. However, the focus was on forest dependency and livelihood of the tribal communities as if that would create more pressure on forest. The implementation hardly discusses the various other non-forest activities and other challenges created by the migrants, timber mafia and the State.However, the focus was mainly to reduce pressure from forest by regulating access of the tribal communities. How the concern about conservation, reduced the life of tribal communities has required much attention. However, the large-scale forest encroachment of non-forest activities, impacts of nature-based tourism (Thekkady and Munnar for instances) and Sabarimala are hardly discussed in the debate on conservation of the Western Ghats of Kerala. However, the outcome of the project hardly discusses about the intervention, the complexity of the conservation pattern in the PTR, but focuses on how they could implement the project as per the outline of the project document. The forest department also claims similar outcome of the project as well documented in the evaluation report of the World Bank. The major outcomes, as stated by the evaluation report of the EDP (World Bank, 2007) in PTR are:

- Increased rate of regeneration in many areas previously disturbed due to extractive and non-extractive pressures (such as pilgrimage as in the case of the Sabarimala)
- Attitudinal changes among the people and the forest department staff
- Institutional innovations that ensured sustained financing of the Eco Development activities beyond the Ecodevelopment Project.

Other additional achievement stated includes improvement in conservation activities, namely, reduction in poaching, illicit felling, and fuel wood collection, and reduction in many other illegal extractive dependencies. The project in PTR has been documented in the evaluation report as most successful project (World Bank, 2007: 01).

In project (EDP) document, the pressure on the forest would be reduced and the regulation would provide alternative livelihood to those who are dependent on forest resources for a livelihood. In practice, this is not the case, though the evaluation of the

project says the project achieved the outcome as expected (World Bank, 1999; Gurukkal, 2003). However, the representation of the tribes in participation, decision making and beneficiary groups of the EDP are not problematised by the officials. The representatives of the traditional inhabitants confine to rhetoric because the chain of preparation of documents to the evaluation phase (top-down process of any project: strategy and policy document for operational implementation), are done by the experts and hardly represent them. The project document has documented various stakeholder meetings but hardly reported any feedbacks or meeting with 'real target groups'—traditional inhabitants.

As noted, the argument of Vasanthasena is that they have reduced an illegal activity of women tribals once they started the regular patrolling inside the forest. The intervention of multi stakeholders in the region is not based on forest regulation itself, but its multiple linkages to the wider social and economic representation, which is heterogeneous in nature. As stated by the forest officials during the discussion that ensuring participation of local communities is not possible in a short time. As noted by Vassan (2010), the project implementation will be the responsibility of the forest guard—end of the chain of the formal institutions. Suddenly, they cannot change their behaviour to the local community in the name of 'participation' as written in the project document. The training and exposure visit to different project sites mostly benefit the higher officials and they have hardly visited the project sites.

The officials at the lower level get one more responsibility whenever the region acquire new project either for conservation or for supporting livelihood. In the Ecodevelopment Project, about 8 percent cost is allocated for the awareness and training. However, it is observed that only high officials benefit from the training. As noted by Baviskar (2003), many higher officials undertaken international visit and they hardly have any idea about the project implementation on particular projects. Many responded to EDP as a short-term welfare project to the public and local communities. It is also observed by Karlsson (1999) that even if officials are involved in participatory mechanism for the EDP in Buxer, the official could not avoid shooting a tribal when they saw him

‘patrolling in the night’. The patrolling duty was non-paid work offered to the tribal communities as part of the project. [76]

The approach of regulations is mostly centred on conservation perspective and there is hardly any role for social scientists to problematise man-nature interactions. Partnership among the developmentalists, conservationists and social scientists would develop wider understanding of livelihood-conservation nexus, though it is lacking in the field. Better understanding of how they interact, influence and shape one another allows us to improve our ability to conserve the area's biodiversity while maximising benefits, or at least minimising costs, to the populations living in and around protected areas, which are often amongst the most marginalised groups in society (Holmes, 2013). As Ashish Kothari and Vasant (2001) demonstrate, ecodevelopment does not attempt to reverse the historical process of state takeover of community lands, and the common (though not universal) denial of rights and traditional security over resources for local people. The idea of participation in the ‘new conservation and participatory programme’ has become a further form of disempowerment (Sari, 2001).

The power relations in society influence the interface of conservation and livelihood in the villages. It is further explained in the following chapters as how settlers get support from mainstream political parties for their encroached forest land in the Western Ghats region in Kerala. Power is an extremely complex issue which at its most basic is a measure of the ability of someone to do something, or to make someone else do something (Lukes, 1974), such as the ability of conservationists to make local people behave in a particular way, or vice versa. The issues are more complex when there is a power relation existing between communities and between the forest officials and the community. The conservation and livelihood of the region are linked with the multiple social issues, existing power relations, differences in the capitals and livelihood assets of the user community. Furthermore, there are differences in livelihood and capital assets in the local community and their responses towards the regulation are also influenced by these factors. It is not the market in itself that leads to environmental problems, but the dynamics that entails the economic process. Though biodiversity includes variety in all forms of life, from genes to species, through to the broad scale of

[76] Karlsson observed that a man belonging to the Rabha tribal community was shot dead by patrolling forest guards in the Buxa Tiger Reserve. The man had gone out to fetch a log which had earlier been felled by other people, as villagers stated. After the incident the villagers stopped collaborating with the officials for the EDP and JFM. It is observed that once they have stopped patrolling the forest at night illegal fellings reportedly started increasing again in the reserved (1999: 2087).

ecosystems, the contribution of inhabitants are underrepresented in conservation discourse. Mostly, studies on conservation are highly focused on ecological elements in the PAs. It is hardly documented how local community contributes to the conservation and how biodiversity loss negatively affects their livelihood. Along with participation, livelihood is also undermined in the baseline studies and in the project documents. While conducting a baseline survey in the GHNP, experts were seeking feedbacks on social and development aspects from the temporary guide of the experts (Baviskar, 2003).

An important element of forestry in India, observed by Munshi (2012:295), as elsewhere in 19thcentury, involved the almost complete exclusion of local people, who depended on the forest for their livelihood, from all aspects of management, which then became the responsibility of the forest department. Apart from serving the revenue interests of the colonial state, the department was to protect and propagate the forests, primarily the commercially valuable species in it, in the best scientific tradition by foresters who alone could be trusted with the business of forest management. With military personnel at its command, the forest department carried out the protection of forest effectively, excluding the forest communities who had drawn sustenance from the forest for centuries. After independence this trend continued as the FD assumed more and more powers to manage forests for economic and ecological reasons.

Even in the new phase of participatory management discourse, the relationship of forest officials and the tribes were the same as in the past. Now, the forest officials have more control of the day-to-day life of the tribal community at their habitats. The participation of local community was given importance in the project because the past development experiences shows that lack of participation from local community was the major hindrance in the implementation of the many welfare and development projects initiated by the State (Jha, 2000: 528). However, the EDP created a space where the officials maintained their dominance and regulated the work and activities of the participatory management of the tribe as workers as either forest watcher or any work related to the EDP. The people of the community reported that they are not allowed to discuss the issues with any outsiders and only the community head, *kanikkar,* is allowed to speak. When the question reaches the *kanikkar*, he says, ‘I don’t have any power; without prior permission of the forest department we are not entitled to use any forest products, initiate any construction in and around our houses and our premises,

and we are not allowed to even talk or seek help from outsiders on any issue'.[77] The implementation process gave the forest officials power to regulate and control their life more directly than previous administration. Similar case has been noted by Benabou (2012: 51) based on the analysis of Ecodevelopment in the Nanda Devi Biosphere Reserve, Uttarakhand, 'the villagers complain that they can no longer do anything on their own initiative concerning natural resource use without prior approval of the forestry staff. From being responsible for forest management (through their customary land use system, but also through their local institutions such as the Van Panchayat and the Mahila Mangal Dal), the villagers' role has been reduced to providing information for the preparation of micro-plans and working as wage labourers for short-term activities. Their opinions are never sought when it comes to delicate questions. Karlsson also noted that the implementation of EDP in Buxa Reserve has originated entirely from above and the tribal communities (Rabhas) have had more or less no part in the planning process. However, the project regulated and restricted their access to the forest (Karlsson, 1999: 2094).

3.8 Conclusion

The chapter has analyzed how the responses of various institutions influenced forest governance by looking at the implementation process of the India Ecodevelopment Project (EDP)—a case of post implementation—at the Periyar Tiger Reserve, one of the key Protected Areas (PAs) in the Western Ghats of Kerala. The implementation of the EDP is based on a hypothesis that short-term financial support would reduce pressure on the forest and support the community to find out an alternative livelihood within a short period of time. The EDP considers local community in a more static manner where they expect short-term financial support will reduce the overall dependency on the forest by the community. By implementing EDP, formal institutions projected that they can develop a sustainable and participatory forest management in and around PTR. The chapter has analyzed how small financial assistance and various short-term investments/micro plans aimed to provide an alternative livelihood to the local community while reducing their forest dependency. The financial assistance was the prime benefit offered by EDP to attract the community. Many of the 'short-term investments' for alternative livelihood actually ended in a 'short term' period. It could

[77]Informal discussion with the community head of Paliyan community, Paliyakudi, Thekkady, September-October, 2013.

not reduce forest dependency substantially. Rather the approach made the tribal community end up as workers in the diverse regulatory and livelihood mechanism of the forest department. The diversification of their livelihood is very limiting for tribal groups as they believe the forest integrates their socioeconomic and cultural life. It limits their integration into the market economy or other temporary livelihood options in the service economy, which otherwise contributes to Kerala's economy. The predicaments in the dichotomy of the forest and the market economy were undermined, while implementing the much discussed Ecodevelopment Project in the PTR.

Apart from the quantitative survey, the chapter also relies on ethnographic research, which substantiates the case studies. A statistically significant relationship between caste and its dependency on forest use is indicated in Fisher's exact test (p-value = 0.000 < 0.05). The income from forest resources or forest-related work seems relatively low. For instance, the daily earnings of a person were only Rs. 131.95 after engaging in a week's work in the forest for collecting honey. The minimum wage rate of forest-related workers in Kerala during 2013-14 was Rs. 402.50 while the average minimum wage rate was Rs. 382.50.

The chapter has covered three case studies—a women protection group, short-term investment for Dalits, and access and change in rights of tribes—to understand their representation in the participatory process of forest governance. The process of empowering 'women's participation in conservation' in a way reproduced the prevalence of 'caste and poachers' within the sphere of gender-conservation. As such, forest officials made sure that the existing social positioning of caste groups continued. Through diversified schemes, the various 'micro-plans' emerge as powerful institutions which de-constructed and undermined the contribution of tribal women and other traditional inhabitants and labelled them as 'poachers'.One can see that how *Vasanthasena*useda social hierarchy of caste and extended it into the ecological space of the tribal community, especially the women folk and made them ecological refugees in their traditional habitats in EDP—a participatory forest management.

The chapter observes that in the process of implementing EDP, migrant settlers emerged as protectors of forests along with the forest department, and the tribal community ended up as workers in the diverse short-term investment of the project. By introducing various livelihood projects—ensuring access to forest resources to the tribal community legally, participating with local communities in conservation

programmes, short-term direct financial assistance, a wide range of deployment of forest officials, and the establishment of many formal and informal institutions—the forest department only increased their control over the livelihood and development of the tribal community in the area. The project—over the years of its implementation—transformed the discourse of forest management from a centralised system of governance to participating at the policy level, though participation is still rhetoric at the grass root level; ironically the project was against centralised governance of a majority of the government funded projects on conservation (World Bank, 1996: 18). The formal institutions could exercise their power in the community where inhabitants/traditional tribal communities are a major cause of depletion of forest resources and migrant settlers emerge as protectors of forests along with the forest department. However, the response and their role as dominant social institutions turned to violators against forest regulations in the context of implementation of the reports of Gadgil and Kasturirangan on protection of Western Ghats, which is an ongoing debate in Kerala today. The following chapter situates the case of pre-implementation, the responses of the institutions and formation of regulations to protect the Western Ghats in the context of the reports of Gadgil and Kasturirangan reports.

Chapter 4

Formal Vs Social and political Institutions: Responses, Regulations and Forest Governance

4.1 Introduction

The chapter is an attempt to situate implementation of regulations by the government institutions—Centre and State to protect the Western Ghats—and the responses of the institutions, which impacted change in policy and forest governance in the Ghats of Kerala. The case of pre-implementation phase has analyzed the regulatory initiatives based on the reports of the two committees on the ecology and economy of the Western Ghats—the reports of Western Ghats Ecology Expert Panel (henceforth WGEEP) in 2011 and High Level Working Group (henceforth HLWG) in 2013. The reports submitted to the Ministry of Environment and Forests (MoEF) have created rigorous debate, resistance and violence from a wide spectrum of stakeholders and institutions in Kerala. The economic activities and its wider implication on ecologically sensitive areas of the Western Ghats remained a concern over the years. In the context of conserving ecologically sensitive area, the MoEF set up the WGEEP in 2010 with clear terms of reference to assess the state of the Ghats and recommend ways for conservation and protection through a process of consultations with the state governments, industry and local people (Gadgil , 2014; Chopra, 2014). The mandate of the HLWG was to examine the implementation of WGEEP report with a view of holistic development.

The chapter addresses a number of important issues. How the peer groups deviate the conservation agenda of the State and how the State fails to negotiate the collective bargaining of dominant groups—Syrian Christians, the Left political parties and the churches in Kerala. What are the factors behind the resistance and how the dominant social, religious and political groups negotiate and impose their peer group pressure on

the State over public property/forest rights? The chapter is based on both qualitative and quantitative data, generated during fieldwork from the high ranges of Kottayam, Pathanamthitta and Idukki in the Western Ghats of Kerala. Media reports have also been used to substantiate and to analyze responses and protests across the Kerala since 2001. The informal discussions covered household members across communities, religious and political leaders, and stakeholders of forest and other local government institutions.

The chapter proceeds as follows. The following section discusses the reports of the two-panel committee and discusses conservation, livelihood and issues of governance in the context of Kerala. The third section overviewed the responses of the institutions—nature of rigorous debate, resistance and violence from a wide spectrum of institutions and formation of new institutions in Kerala. The next section discuss as to how the committee reports and the responses of the institutions made an impacts on forest governance, conservation and livelihood in the context of conservatory discourse of Kerala. The concluding section discusses how these protests of the dominant groups in the name of 'livelihood' reflected on forming regulation and its implementation, conservation discourse and forest governance in the State of Kerala.

4.2 The Committee Reports : WGEEP and HLWG

Given the environmental sensitivity and ecological significance of the Western Ghats and the complex interstate nature of its geography, as well as the possible impacts of climate change in this region, the Ministry of Environment and Forests, Government of India, constituted (by an order dated 4 March, 2010) a Western Ghats Ecology Expert Panel (WGEEP) under the Chairmanship of Madhav Gadgil.[78] The Committee includes nine members from different spheres of knowledge and representatives from various government departments of the Centre and the States. The report is popularly referred

[78] Members of the panel include Chairman (Prof. Madhav Gadgil) and members (Mr. B J Krishnan, Dr. K N Ganeshaiah, DR. V S Vijayan, Prof. Renee Borges, Prof. R Sukumar, Dr. Ligia Nononha, Ms. Vidya S Nayak, Dr. D K Subramaniam. Many representative from major departments were also part of the panel: Dr. R V Varma, Member (Ex-officio), Chairman, Kerala State Biodiversity Board, Chairman, National Biodiversity Authority; Prof. S P Gautam, Member (ex-officio) Chairman, Central Pollution Control Board (CPCB); Dr. R Navalgund , Member (ex-officio) Director, Space Application Centre (SAC); Dr. G V Subrahmanyam, Member-Secretary (ex-officio)Advisor (RE), Ministry of Environment and Forests, Government of India, New Delhi. The panel was appointed on 4 March 2010 and the repot was submitted by 30 August 2011.

to as the Gadgil committee report. The panel was asked to perform the following functions (WGEEP, 2011:23).

i. To assess the current status of ecology of the Western Ghats region
ii. To demarcate areas within the Western Ghats Region, which need to be notified as ecologically sensitive and to recommend for notification of such areas as ecologically sensitive zones under the Environment (Protection) Act, 1986.
iii. To make recommendations for the conservation, protection and rejuvenation of the Western Ghats Region following a comprehensive consultation process involving people and Governments of all the concerned States.
iv. To suggest measures for effective implementation of notifications issues by the Government of India in the Ministry of Environment and Forests declaring specific areas in the Western Ghats Region as eco-sensitive zones under the Environment (Protection) Act, 1986.
v. To recommend the modalities for the establishment of Western Ghats Ecology Authority under the Environment (Protection) Act, 1986,this will be a professional body to manage the ecology of the region and to ensure its sustainable development with the support of all concerned states.
vi. To deal with any other relevant environment and ecological issues pertaining to Western Ghats Region, including those, this may be referred to it by the Central Government in the Ministry of Environment and Forests.
vii. The Ministry has subsequently asked the Panel to include in its mandate (a) the entire stretch of Ratnagiri and Sindhudurg districts, including the coastal region, and to examine specifically the (b) Gundia and (c) Athirappilly Hydroelectric projects (d) recommendations with regard to the moratorium on new mining licenses in Goa.

The report of the WGEEP was submitted to the MoEF on 31 August, 2011 after seventeen months since its inception. The report states that sustainability of the Western Ghats is challenged by many factors—of increasing pressure of population and industry, emerging nature-based tourism, submergence of forest areas under river valley projects, encroachment on forest lands, mining operations, clear felling of natural forests for raising tea, coffee, rubber, eucalyptus, wattle and other monoculture plantations, infrastructure projects such as railway lines and roads, soil erosion, landslides, habitat fragmentation and rapidly declining biodiversity (WGEEP 2011).

The report has designated the entire Western Ghats as an Ecologically Sensitive Area (ESA) and, assigned three levels of Ecological Sensitivity to different regions. These are termed as Ecologically Sensitive Zone 1 (ESZ1), Ecologically Sensitive Zone 2 (ESZ2) and Ecologically Sensitive Zone 3 (ESZ3). The report brought out the validation of each recommendation and provided various options for environmental protection with a participatory approach to the Western Ghats. The panel proposes that there should not be any environmental clearance to large-scale storage dams in ESZ1 and ESZ2. Out of 14 districts, 12 districts and 15 Taluks (20 per cent of 75 taluks) of Kerala are covered under the ESZ.

Table No.4.1 Proposed Assignment of Various Western Ghats Districts to ESZs

State	No. districts	Number of taluks assigned		
		ESZ1	ESZ2	ESZ3
Gujarat	3	1	11	1
Maharashtra	10	32	4	14
Goa	2	NA	NA	NA
Karnataka	11	26	5	12
Kerala	12	15	2	8
Tamil Nadu	6	9	2	2
Total	44	83	24	37

Source: WGEEP, 2011

The panel observed several development projects across the Western Ghats and urged to the Centre to re-consider the clearance allowed to projects, which have direct impact on the forest. In the case of Kerala, the panel stated that the Athirapally dam site is in ESZ1 and it should not be given clearance.[79] Athirapally dam was in discussion for a long time. The panel undertook a series of consultations with the immediate stakeholders and analyzed the documents, which were already available in the public domain on various aspects of the dam. The location of the dam is also in the habitat of the Kadar tribal community. The panel report also stated that FRA is not used by the tribal community while assessing and proposing the dam from the villages (WGEEP, pp.59-60, 2011). Apart from it being the traditional habitat of the Kadar community and considering its biodiversity richness and the high conservation value, the WGEEP recommends to the MoEF that the Athirapilly-Vazhachal area be protected as such and permission for the proposed hydroelectric project at Athirappilly is to be denied. The

[79]The KSEB (Kerala State Electricity Board) proposed a hydroelectric dam across the Chalakudy River in Trichur district, Kerala, to generate 163 MW of power to meet the deficit during the peak hours from 6 pm to 10 pm.

WGEEP further recommends that the Chalakudy River be declared as a fish diversity rich area, to be managed on the pattern of 'Conservation of biodiversity rich areas of Udumbanchola Taluka' in Kerala.

In addition to the focused description of each cases already in the debating arena, the WGEEP situates many best-case practices to ensure the participation of the local community in conservation of natural resources and livelihood. Plachimada is one of the cases the panel noted in this regard. Plachimada, a struggle and movement of the local community for clean water and against the Coco-Cola company is one of the best examples as to how the community can regain their rights.[80] WGEEP points out that local community participation is one of the best avenues for protection of local natural eco-system when the Centre and State government may fail to offer support. The panel also recommends a new model of using environmental services from the local community and private landowners in the region by paying financial incentives and direct payment facilities (WGEEP, 2011: 116). The report has mentioned that enhancing minor forest products could support the livelihood of the forest-dependent communities. The silvicultural practices would maximise the production of MFPs and gatherable biomass. Ensuring rights to the community through the Provision of Panchayats (Extension to the Scheduled Areas Act, 1996(PESA)and FRA would support to maintain both the quality and the quantity of the forest products, which would eventually support their livelihood (WGEEP, 2011: 59). The implementation of FRA and PESA would support the communities to overcome the scenario of various interventions such as deforestation, expansion of plantation crops, regulatory framework, nationalisation of NTFPs and exploitation of middlemen in the NTFPs collection and marketing etc. Implementation of FRA would also support better access to NTFPs to the poor and better income through marketing (Ibid: 59-62).

In the process of implementation, as stated in the report, local communities would get an opportunity to be part of environmental protection and can gain financial incentives from the State as well as other institutions, which engage in conservation initiatives.

[80]Plachimada is located in a rain shadow region in Chittur taluk of the Palakkad district in the south Indian state of Kerala. The region is part of the Western Ghats, ESZ1. The continuous resistance of the local community for water, garnered wider attention globally. The response of the Centre and the State government was against the resistance of the local community initially. The victory over MNC and other dominant institutions of the local community was a model to many other villages across India to fight against the agents those who drain the local resources and deprive the local community (Sudheesh, 2009 and Bijoy,2006).

Economists have recently favoured the direct payment of incentives to landowners and communities for their demonstrable achievements in conservation (Ferraro and Kiss 2002). This approach, also known as 'payments for ecosystem services', has never been tried in India, but is being implemented both in the developed (e.g. U.S.A., Australia) and developing (e.g. Mexico, Costa Rica, Colombia) countries. The draft eco-tourism policy for Protected Areas posted on the website of the Ministry of Environment and Forests, Government of India, on 2 June, 2011, also makes a mention of financial incentives to private landowners near Protected Areas for maintaining forest cover (WGEEP, 2011). After 12 months of submission of WGEEP and receiving numerous response from various institutions, the MoEF constituted a High Level Working Group (HLWG) to provide recommendations on the feasibility to implement WGEEP and the report became another form of regulation on the Ghats.

4.2.1 HLWG

The Kasturirangan Committee is a high-level committee appointed by the Government of India to review the Gadgil Committee Report and suggest ways to speed up the implementation process. The Kasturirangan Committee was not a separate expert committee on the Western Ghats but was constituted to suggest feasible ways to implement the Gadgil committee report. The mandate of WGEEP was to demarcate ecologically sensitive zones and suggest measures to conserve, protect and rejuvenate the ecology of the Western Ghats region. Taking into account the comments and suggestions made by different stakeholders including State Governments and Central Ministries on the WGEEP Report, the MoEF constituted a High Level Working Group (HLWG) to suggest an all-round and holistic approach for sustainable and equitable development while keeping in focus the preservation and conservation of ecological systems in the Western Ghats (HLWG, 2013: 6).[81] The Committee included eight members and one member convener from MoEF.

The main terms of reference for HLWG are to examine the WGEEP report in a holistic and multidisciplinary fashion in the light of responses received from the concerned governments of States, Central Ministries and Stakeholders, keeping in view a few important factors:

[81] Members of the panel include Chairman (Dr. K Kasturirangan)), members (Prof. C R Babu, Shri J M Mauskar, Prof. Kanchan Chopra, Dr. Jagdish Kishwan, Shri Darshan Shankar, Ms. Sunita Narain and Dr. P S Roy) and Member Convener (Shri Ajay Tyagi, Joint Secretary, Ministry of Environment and Forests, Government of India, New Delhi).

i. sustainability of equitable economic and social growth in the region while preserving the precious biodiversity, wildlife, flora and fauna and preventing their further losses;
ii. ensuring the rights, needs and developmental aspirations of local and indigenous people, tribals, forest dwellers and most disadvantaged sections of the local communities while balancing equitable economic and social growth with sustainable development and environmental integrity;
iii. the effects and impacts of climate change on the ecology of Western Ghats region
iv. the implication of recognising some sites in Western Ghats as world heritage sites in the conservation and sustainable development in Western Ghats
v. the constitutional implication of Centre-State relations with respect to conservation and sustainable development in Western Ghats
vi. to interact with the representatives of the six States of Western Ghats region and other stakeholders, particularly environmentalists and conservation specialists
vii. to suggest to the Government on further course of action of WGEEP report;
viii. any other relevant matter that may be referred to it by the Central Government, and finally
ix. submission of Action Plan to implement WGEEP report in the most effective and holistic manner(HLWG, 2013: 02).

In the process of reviewing the report, the Kasturirangan Committee facilitated a dialogue with all concerned States, respective ministries and the departments to provide their feedback on major obstacles of the Report and challenges to its implementation. Apart from this, the Committee held a series of meetings with major stakeholders in the States including all-party representatives, civil societies, NGOs and beneficiaries/benefactors to get their suggestions. The report stated that the set of recommendations and Action Plan for the conservation of 'the unique ecology and sustainable and equitable development in Western Ghats' are based on:

i. careful examination of the WGEEP report
ii. the submissions received from State Governments, Central Ministries and Stakeholders on the Report

iii. direct interactions of HLWG with the four State Governments at different levels (CM and Chief Secretary), elected representatives of State Legislative Assemblies and Parliament and other stakeholders

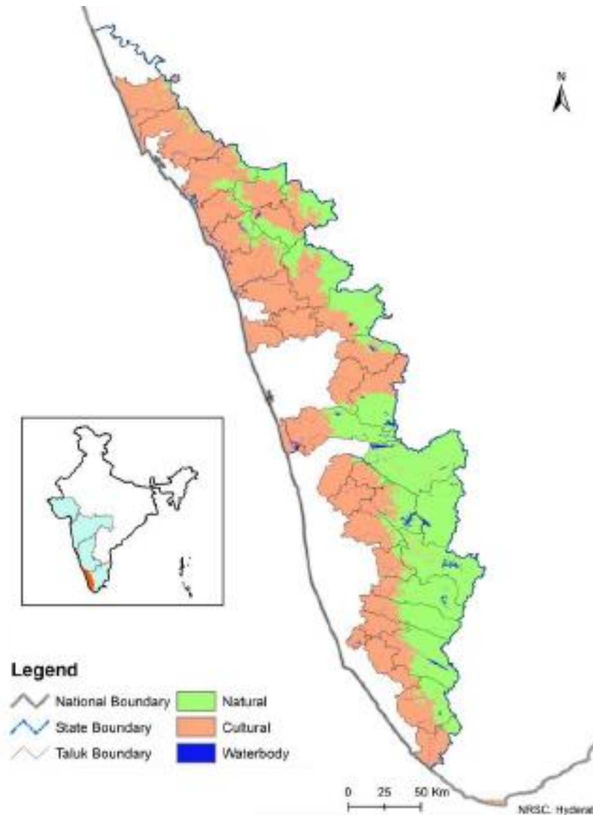
iv. written responses submitted by all the six States and Twelve Central Minsters to the questionnaire sent by HLWG (HLWG, 2013: 06).

An overview of the HLWG brings out that the report is a simplified version of the WGEEP and has avoided many issues, which were prominent in the WGEEP. However, the HLWG also addresses the major challenges, like mining and other threats, in the Western Ghats and urges for the intervention of both Central and State Governments. Because of unprecedented threat to the natural landscape of the Western Ghats region by development projects and urban growth, the Working Group has recommended a zero tolerance policy regarding highly interventionist and environmentally damaging activities like mining or polluting industries. It made specific recommendations about prohibited activities and those that require a high level of scrutiny and assessment before clearance within ESA.

Apart from the key recommendations, the HLWG states that widespread sensitisation and awareness are required across stakeholders to protect the Western Ghats. Among the stakeholders, the Committee stated that FDs required more training and awareness programmes. ‘The State Forest Departments of the Western Ghats need to be sensitised towards the importance of biodiversity, ecosystem services and local bio-resources. The State frontline staffs of Forest Departments needs to be equipped with modern systems of communication and surveillance. Regular in-service training of Forest officials needs to be undertaken in the area of wildlife management’ (HLWG, 2011: 53). There are various forms of forest regulations formulated and practiced in India. Various forms of regulation are put into practice through various forest policies as well. Many guidelines on conservation and livelihood have been examined in many forest policy discussions in India and the States. While WGEEP looked into the whole region of the Western Ghats as an ESA area, the HLWG demarcated the region into cultural and natural landscape. About 41 per cent of the area declared as ecologically sensitive areas (natural landscape). The report state that about 60 per cent of the area defined as Western Ghats is under cultural landscape (HLWG, 2013: 98). Cultural landscape covers land use of settlements, agriculture and plantations (other than forest

plantations). Map 4.1 shows the natural and cultural landscape as depicted in the HLWG.

Map No.4.1 Cultural and Natural Landscape of the Western Ghats of Kerala



Source: HLWG, 2013

The WGEEP report wanted illegal mining and quarrying to be stopped immediately in the Western Ghats, however, the HLWG permitted mining and quarrying in 63 per cent of the area. It was estimated that around 17,000 mines, including the reported illegal ones, were operating in the Ghat region of the State. However, the report states that the natural landscape face unprecedented threats due to development projects and urbanisation. The report emphasises a no-tolerance policy pertaining to highly interventionist and environmentally damaging activities like mining and polluting industries (HLWG, 2011: 106-107).

4.3 Responses of the Key Institutions

The section discusses responses of the key institutions on the reports. The responses of the dominant institutions were violent protests against the reports. However, few responses also came up to support the WGEEP and HLWG and in favour of protection

of the Western Ghats from the hands of industrialists and interests of the coalition politics.

4.3.1 Resistance and Protest of the Dominant Religious-Political Institutions

The issue has become a hot topic of debate with people living in high range areas protesting the Centre's decision to implement key recommendations of the WGEEP and HLWG reports holding that it would adversely affect their livelihood and lead to mass displacement. The reports were projected in a way that implied the implementation of the reports would directly affect millions of farmers including eviction of farmers, who spent their life in the hill ranges developing the land for their livelihood. Neither media nor the Government brought out the brief of the reports as to how people would benefit; rather rumours spread about eviction of people with the implementation of the recommendations. The news on eviction of the farmers based on the reports spread among the public through the print and social media across the region, instigating a strong feeling against the ruling government in the Centre and in Kerala.

The CPI(M)-led Left Democratic Front (LDF)-leaning politicians immediately took up the issue and invited their cadres and public to join and fight against the initiative of the State and the imperialist forces. Meanwhile, the churches also publicly announced their dissent against the recommendations of the reports as it directly affects their farmers. Both the groups participated in the agitation though they are politically and culturally on different sides of the social milieu. The two dominant peer groups joined and eventually led to a series of hartals and agitations across Kerala.[82] Most of the hartals during the period were called for by the Left coalition and supported by the Christian groups or vice versa in Kerala. As a result, Kerala witnessed more than 20 hartals within a few months and most of the hartals were reported as successful. While discussing the impact and sanctity of the hartal, one of the supporters of the political party stated that, 'we are not against conservation of forests, but we can't accept the report. The report should have given priority to the local people but not the forest. The panellists (both Gadgil and Kasturirangan) made the report to evict the poor farmers here without consulting the local people directly'. Another groups of the supporters of

[82]Hartal in Kerala is well known for its stray incidents of violence, closing of shops and business establishments and educational institutions. 'Confederation of Indian Industries (CII) estimates that there is a GDP loss of Rs 900 crore per day when a hartal is 100% successful. This does not include the agricultural sector, but includes trading, manufacturing and services sectors' (Karun, 2013).

hartal shared that 'the reports are supported by the anti-people approach of the ruling government. But, we will fight against the report until we could win'.

In addition to the normal violence and agitation, there were a few serious incidents on hartal days. On one of the days, the supporters of both the political and religious groups, including the priest of the local church, razed a Forest Range Office in the northern region of Kerala by setting it on fire. The entire case files on mining reported in the area were also lost in the fire.[83] The media reported on the violence thus, 'Seven police vehicles including five jeeps and two vans were set ablaze and two vehicles were overturned during the local protest against the implementation of the Kasturirangan panel reports. The hartal burst into violent incidents provoked by the routine forest survey by a four-member team of MoEF officials from neighbouring Karnataka'.

A Christian family shares how the church instigated the fear of eviction during the informal discussion with the migrants—Syrian Christians in Idukki during the fieldwork 'The priest in the church discussed that there is a high chance of eviction from their land and home. Hence, the protest against the implementation is mandatory from all'. Apart from the protests in public and joining hands with the Left, the churches mobilised the congregants by briefing them as to how the reports will affect the migrants in Kerala through various bulletins published by the Archdiocese (Circular No. 15/2013, Archdiocesan Bulletin 2013). The bulletins designate how the farmers (their congregants) contribute to nation building and clearly deny the role of their members in illegal forest activities like mining, which leads to negative environmental consequences in the Western Ghats. However, the bulletins describe how there will be a negative impact on the farmers in various ways, if the government implements the recommendations of the reports in Kerala. On hearing the news and panic at the eviction of cultivable land, one respondent stated, 'we do not allow the government to take our land. We have only two acres (0.5 hectares) of land and do cultivate multi-crops. We don't apply pesticides except for few on seasonal vegetables. Why should we give our land to the Government and leave empty handed? Our Church offered support and directed us to unite to fight against the HLWG reports'.

The bulletins hardly provide information on how it affects their farmers or their social and livelihood positioning. The bulletins are circulated to each parish and are read

[83]The office at Thamarassery lost all the files. 3 department jeeps and a few more vehicles, seized in connection with various cases, were also set on fire on the day of Hartal (Hindu, 2013).

during Sunday Mass. After hearing the bulletins, the congregants felt threatened by the reports. During a discussion on the reports, another Christian family shared their concern that 'we were awed on hearing that we would face displacement as told in the Sunday mass at church. Whatever we have today is the result of hard work of our ancestors. This report says that we have to leave all the land and settle somewhere. We will fight the government for our rights till our death with the support of our church. No one can displace us from our land'.

The Archbishop of the southern region stated that the government should provide priority to the people living in the area. The Bishop was supporting the demand of the farmers while addressing the convention in the Farona Church at Amboori—a suburban area in Thiruvananthapuram, Kerala. The archbishop also mentioned that farmers, who grew various agricultural crops, should get protection from the State and not eviction. Paradoxically, Amboori witnessed a grave natural calamity in 2001 in which 40 people were crushed to death due to a landslide.[84] There were many discussions on illegal settlements, unplanned agriculture and construction against the natural landscape of the region at the time of the calamity in 2001, but after 12 years, the same group was asking for protection from the State; not to protect nature, but the farming and the people. The Archbishop commented that the implementation of the reports would negatively affect the people rather than saving the environment. It also shows that the responses of the State on any calamities end up with a few comments, which stir up the news and hardly any follow-up action.

As Gadgil pointed out, the responses of the institutions towards the report was mainly based on lack of information or misinformation by the dominant institutions—political and religious—with their vested interest. He observed the overall responses under four themes (Gadgil, 2014): (i) the report represented a set of rigid conservationist prescriptions to be imposed on the people, which could land them in severe hardship; (ii) the report was anti-science and anti-technology; (iii) the report was indifferent to what the people wanted, which was development to create jobs; (iv) the report was funded and driven by a US imperialist agenda wishing to keep India underdeveloped. The discussion with the major stakeholders during the field research also confirmed the same arguments developed by the dominant institutions on the reports. For instance, a

[84]The landslide occurred when a portion of a 700 metre-high hillside strewn with boulders came tumbling down in heavy rain, sweeping away many houses and agricultural crops, which resulted in a huge loss to the farmers and the region (Hindu, 2001).

press release of the church referred to illegal links to international imperialist agencies and called for an enquiry into the source of foreign funds of the panellists on the committee of WGEEP and HLWG.[85] The labelling as 'imperialist interest' is a much-discussed argument in the development discourse of Kerala especially since post 90s. The churches demanded that the State should protect the Western Ghats by giving protection and priority to the farmers, as they are the real saviours of nature. By providing misleading information, the church decrees the believers to gather under the name of belief and protest with full strength against the position of the Government on the implementation of the Reports (Archdiocesan Bulletin, 2013).

The media and political parties, especially the Left, created a panic when they said that the reports recommend the eviction of lakhs of farmers and thus challenge and destroy the livelihood of people living on the fringes and nearby areas of the Western Ghats.[86] For the Left, the issues were more against the then ruling government in the Centre and the State. The terms 'development' and 'livelihood' were much discussed in Kerala during the resistance to support the argument of the protestors. For example, the peer groups have argued that ending the proposed Hydro Power Project will create further crisis in the power sector in the State.[87]It would add to the power crisis in the State.

Stopping the mining[88], the protesters argued, would bring challenges to the farmers and villagers and it would destroy the normal life of the community in Kerala. One

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[85] This is the typical selling point in Kerala. The public in Kerala is more sensitive to foreign funds and the links to the international agencies were watched with suspicion on many occasions. Criticism about the Centre for Development Studies on their link to foreign funds based on the projects and studies the institutes carried out, attacking the ADB project office for its alleged links to the imperialists forces etc are some examples of the same.

[86] The reports recommend organic farming by phasing out all chemical pesticide/weedicide etc. and suggesting the State to provide incentives to the farmers to promote organic farming (WGEEP, 2011: 43). Currently, the villages are already in the process of organic farming because the use of chemical and its side effects are alarming (Discussion with the Agriculture Officer, Idukki, October 2013). Wayanad district reports the highest rate of cancer patients, higher than the State average. The farmers themselves agreed their unsustainable use and way of handling pesticides and chemicals for crops like banana and other seasonal crops may be the reason for the increased incidence.

[87]In fact, the case on the matter is already under the perusal of the High Court of Kerala due to its negative impact on wildlife in the area and the settlement of the tribal communities as petitioned by Kerala Forest Research Institute (KFRI) and the local NGOs. Based on the cost–benefit analysis the reports suggested not to proceed with the project and asked the State to review it (WGEEP, 2011: 224 and HLWG, 2013: Vol.1 120).

[88] The report stated that a ban in 5 years of time or until the end of the current license, whichever is the earliest. The report suggests the formation/activation of the Gram Sabha in each village, which may have more say on mining and other threats to the local environment. For instance, the unanimous vote by 12 grama sabhas in Odisha's Rayagada and Kalahandi districts, rejecting Vedanta Aluminium Ltd and the Odisha Mining Corporation's plan to extract bauxite from the Niyamgir hills, is a historic and significant precedent that could determine the course of similar development in other tribal areas in India (WGEEP, 2011).

argument is that the ban on mining will affect the livelihood of the workers, especially those who labour in mines. Another argument is regarding the infrastructure of the region; that there would be high scarcity of metal and other by-products, used mainly for construction, which may impede infrastructure development. The entire high ranges of the Western Ghats are infamous for illegal mining and activities of the quarry mafia, which is mostly led by the local elites.

The Left political party took the lead to resist, along with the local people, against the WGEEP and HLWG reports and used it as a great opportunity to build a favourable environment to gain political mileage during the then Lok Sabha elections. The party was facing failures due to unfavourable support from the public and mass protests for the party's role in the political murder of one of their opponents. The church proposed to protect the farmers who claim that they have spent their entire life to build their livelihood in the hill ranges of Kerala. For the church, it is the best time to gather their followers as a dominant political and social group and build a larger peer group to negotiate with the State. The church has already challenged the political parties on their candidate in the forthcoming elections and stated that they would decide the winning candidate in their locality.

The villagers participate in hartal and protests under coercion from the peer groups. Both the peer groups, mostly heterogeneous in nature, joined to 'protect' the farmers in the area. Highly diverse actors (Wangel and Blomkvist, 2013) are likely to cooperate over the broad framework of livelihood of farmers, but have separate political agendas. The church and the political parties hardly discuss what exactly is described in the reports and how it negatively affects the people living in proximity to the Western Ghats. Even the High Court of Kerala slams protestors observing hartal asking whether they had read the report even once. When the Court's remarks were discussed with the natives at the upland areas during the fieldwork, they stated that 'if you say that there is no harm in the reports to the farmers, in that case why the government or news lines are not bringing the truth to the people. Some say there are no problems and others say there would be an eviction. Which is the truth? Why should the Church and political leaders tell lies?' It is observed during the fieldwork among the communities that many of them are not aware about the details of the report. Among migrants, the majority of the respondents say that the regulation/law does not represent their rights, which they

have enjoyed since the early phase of migration. One of the respondents mentioned that:

> 'Every year, we support forest official to prevent forest fires. But, this time we denied our support when they came to call us to prevent fires. The recent circular based on the Kasturirangan Report on 'eco-sensitive zone' is implemented in our area. It cost us as we can't sell the land, can't replant, can't cut the trees etc'. The new regulation created many puzzles to our day-to-day life. Our livelihood is based on land and cultivation. Since the forest department implements new rules and regulations, we will not support them anymore for better implementation of other laws and malpractices'.[89]

Another respondent reacted, 'Somehow we have managed to get *Kaivasaavakasam* (right to land possession) after many years of demand and agitations. Now, this new rule will trouble us again; we can't even sell our land for another 25 years. We consider land a good asset to make money for any family requirement. For instance, most of us collect money by selling our land at the time of the marriage of our daughters'.

The reports were uploaded on the website of the MoEF for receiving responses from the major institutions, communities and individuals. Gadgil (2014) observed that overwhelming majority of the people of the Western Ghats had no access to the report and the report in local language was not available. The unavailability of the information created panic and helped the political parties and the churches to intensify their campaign of disinformation. After submission of the report in August 2011 the MoEF uploaded the report on 23 May 2012 and the access is mainly used by the local elites and industrialists—those who are engaging in mining and operating other polluting industries. The MoEF received many feedbacks within the stipulated time of 45 days as response from the public. However, Gadgil has argued that there was no mechanism to check the authenticity of the feedback from the public and the feedback was not shared with the team of WGEEP by the government.

However, HLWG have analyzed the responses and stated that majority of the reports were against the WGEEP, with no possibility of verifying its truth. The HLWG analyzed the comments on WGEEP, whether it is verified or not is not communicated (Gadgil, 2014: 45). In the analysis out of 1750 responses, 81 per cent responses were 'not in favour' of WGEEP. The major concerns were regarding the recommendations

[89] As shared by the local communities from Syrian Christians during the personal discussion held in Pambavalley village, October, 2013.

and the methodology of the WGEEP. Further analysis of the responses 'not in favour' shows that 33.89 per cent were concerned about the mining in Goa and 18.64 per cent on mining in Sindhudurg (HLWG, 2013: 10). It shows that majority of the responses received were from stakeholders who engage in mining and industries in the Western Ghats.

On the one hand, the State failed to communicate with the people about the report, and on the other; the protestors brought their own agenda. A local resident opined that 'the issues are sensitive and anybody can interpret it in their own way. There are many grey areas in the report, which need to be clarified'. 'How do the poor find materials for their house construction, if there is a ban on stone mining?' as stated by the one of the respondent in the Idukki district of the Western Ghats of Kerala. These are a few simple queries from the public with no clarification from the State, the political party and from the church. Both the groups are not clear or very clear as to what (or not) to inform to the public. Any enforcement of regulation, which directly affects economic activities, always creates fierce responses from the dominant social groups. It can be inferred from their response against the traffic restrictions inside the sanctuary, which was received with widespread resistance. One of respondents narrated why they have opposed the recent enforcement of law to regulate vehicular traffic inside the tourist spot of Thekkady by the Department. The FD is enforcing traffic regulations because the high vehicular traffic inside the Periyar Wildlife Sanctuary would have a negative impact on the eco-system of the region.[90]

The local community argue that tourists are attracted to the region because it promotes 'nature based tourism'. They stated that tourists always prefer to be 'free' inside the sanctuary. The business community from Thekkady shares their concern over the regulation: 'enforcement of the regulation on traffic inside the sanctuary may be conservatory steps for forest; however, it would have a negative effect on tourism and livelihood which is based on tourism. Since tourism is a major source of income and

[90]Department related Parliamentary Standing Committee on Transport, Tourism and Culture recommended that vehicular traffic may be restricted inside Periyar Wildlife Sanctuary and the present parking area, which is inside the forest area. 20th Report, Parliamentary Standing Committee Development of Tourism, National Highways and Water Transport in Kerala and Cochin Shipyard Limited.

livelihood of the natives, this move will directly impact on our livelihood. The government has to intervene on this issue.[91]

Most settlers opined that promotion of tourism would benefit local communities, mostly dominated by the settlers, and would promote conservation in general. However, they were hardly clear about how these incoming tourists contribute to conservation of wildlife. Nature-based tourism is only to open up facilities for trekking in the forest, as argued by the respondents from the Mannan community. Even though nature-based tourism is promoted aggressively in Kerala, the awareness creation among the stakeholders and tourists on conservation and waste management etc. are very low. How promotion of tourism negatively affects conservation and how institutions support tourism at the cost of forest will be discussed in chapter 5.

4.3.2 Formation of the Responses and Social Capital of the Communities

The survey attempted to understand how social capital especially interpersonal trust and institutional networks of the communities could mediate their vested interest to influence the State to step back from the position of 'save the Western Ghats'. Social capital is also considered a good resource for successful implementation of forest regulations in participatory regimes. Studies attempt to discuss how within the community social capital can create an increased success rate in terms of forest conservation (for instance, D'silva and Pai, 2003).

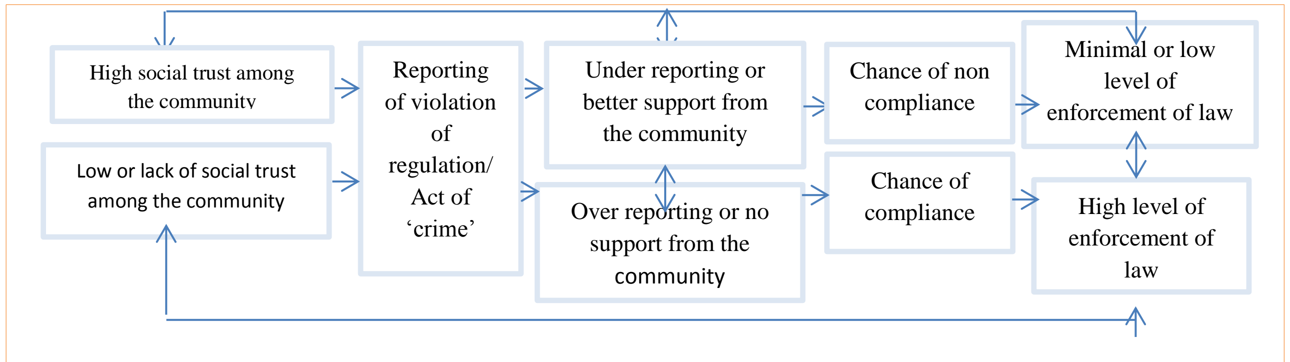
Social norms and trust play an important role in the compliance and non-compliance behaviour of the community; however, it works at different levels. The level of social trust of the community has directly led to three levels of enforcement of regulations.

First, the high social trust within the community leads to non-compliance with certain issues of regulation and its implementation, which is explained in the figure number 4.2. A few respondents, as described would support any community member who violates any regulation if they have high social trust within the community. In the second case, it leads to failure of the regulation in the context of the discourse on

[91]Information gathered from the discussion with business people who are selected randomly in and around the tourist spots at the Periyar Wildlife Sanctuary, Thekkady, Kerala in October-December, 2013. As stated in the previous chapter, conservation of forests and its resources are highly influenced by the interests of the local people who are highly influenced by the economic and political groups in the locality. Killing of tiger is important since it affects their livelihood. Similarly, short-term benefits from business overrule the long-term conservation practices in Thekkady, controlling traffic in the Buffer Zone. The local community demands interventions from the Government not to enact regulation; rather support the demand of the local community, relatively elites of the society, to support their interests.

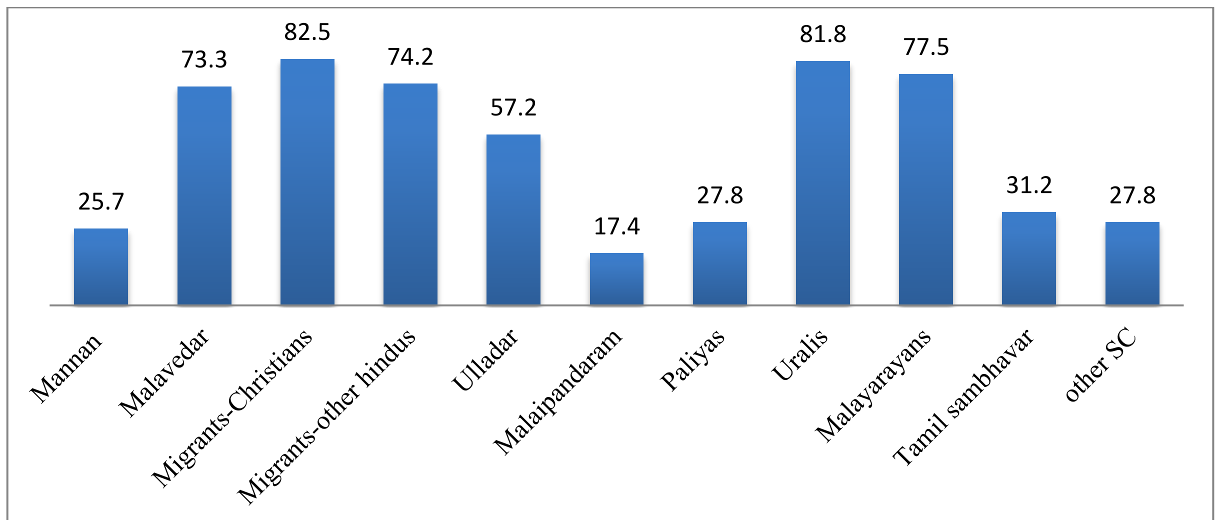
conservation and its enforcement. In the third case, if there were a lack of social trust, it would lead to many rivalries within the group, regulations would be obeyed only for short periods, and if someone violated the rules for their own sake there are chances of their being reported. The trust among other institutions and network is another level of mediating social capital which is explained in figure 4.1

Figure No.4.1 Framework of social trust and compliance and non-compliance



The figure number 4.2 shows trust within the community. Among the Mannan tribe, 25 per cent stated that they have trust in their community organisations while it was above 80 per cent for both migrant communities—Christians and Uralis.

Figure No. 4.2 Trust within the community



Source: Primary Survey

It was also noted that the communities that do not share adequate trust/network with each other and within the community fail to negotiate with the officials to sustain their traditional rights. The officials very often take advantage of this lack of trust among the

communities to augment their control over the community. The usual practice of 'divide and rule' works easily for a few of these communities in the case of better implementation of any regulation. This is very evident in the case of the Malapandaram. For instance, the rivalry among the Malapandaram community is widely known in the locality. As quoted by a member of the local Panchayat:

> 'Most of the members from the Malapandaram are nomadic and stay inside the forest. They will change their location every few days within nearby premises of the forest. If there are any fights among the groups, they simply move from one place to another and will not keep any contact with others. Whenever we enquire about other families, they simply say they don't keep any relationship and contact with other households within the community. We have noticed that due to petty issues they will keep themselves separate from other community members. It is difficult for us to find out about other groups, if we want to provide any food or support when it comes from the local government'[92].

Since rivalries among the community occur easily due to petty issues and since they do not share any social trust within the community, there is a high chance of reporting instances of violation of the law by any community member. Similarly, any false cases would be promptly reported to take revenge against opposing households.It was reported during the survey that only 17.4 per cent respondents agreed that they have trust within the community whereas it was 82.5 per cent among migrants. One of the incidents reported during the informal discussion with the community members reveals how some of them paid a huge cost because of a complaint by fellow members[93]. A few members informed the officials about the links of one of the householders with outsiders to facilitate hunting. With this information, the officials arrested three members of the community and they have been imprisoned since then. Forest officials claimed that they have confiscated the guns and other illegal materials from the tribes; however, the community members denied the claims.

The topic was discussed and cross-checked with different members during the survey and it was concluded that the case was just an allegation. It was not a matter of reporting illegal hunting, but reporting false cases against the community members

[92]Semi-structured interview with a panchayat member, Attathodu, October, 2013. The issues of cooperation and relationship within community were also discussed in the focused group discussion, which was held within the community in the same region in October-December, 2013.

[93] Informal discussion with the households held in Attathodu region. The households stay in temporary shelters on the roadside of Sabarimala highway. The households were also included in the formal questionnaire survey.

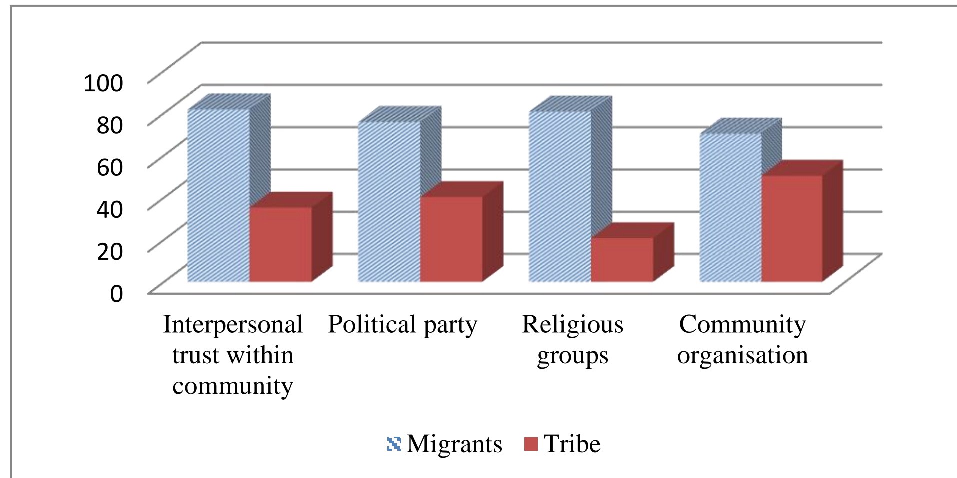
based on their personal petty rivalries. However, in such situations, the enforcement of the law is very easy and the officials can claim success based on their monitoring of any implementation and make a suitable case for their records.[94] This kind of 'reporting' does not transpire among the migrants and the Uralis with precedents to non-compliance at the same time. Among 300 households, in instances of high bonding within the community and households believe that there is trust in the community, 20 per cent of them stated that they certainly violate the regulations and get access if required. 47 per cent of the respondents stated that they sometimes violate the rules. It shows how institutional trust as part of social capital works within the community, in terms of the response of the community towards the regulations and its implementation.

The survey reveals that the migrants are highly connected with the dominant institutions, political and religious, whereas the tribal communities are unable to maintain high trust at the interpersonal and institutional level. As stated, the migrant Christians are highly connected socially and politically. Both institutional and personal trust is high among the migrant community compared to the tribes who live in the fringe areas of the forests. The social capital, especially the interpersonal and the institutional trust of the community, could aid in collective bargaining and exert pressure to negotiate their interest over any political or development questions. Here, the section explores social capital based on a few key indicators such as trust in the community: whether community members are ready to work together, data regarding community-based membership to a political organisation, whether the community members have trust in the forest department, political parties and religious networks/organisations. As Graph 4.3 shows, 81.65 per cent of the migrants reported that they have a high trust level within the community members, whereas it is only 35.23 per cent among tribal communities. There is a relatively high level of trust among tribal communities in their community organisations, whereas the migrants show relatively low trust compared to their trust with other institutions. However, there are very few community organisations for the tribal communities in Kerala and it hardly covers all caste groups among the tribes. Among migrants, Syrian Christians are highly connected with their churches and other religious organisations. The high social

[94]Informal discussion with the forest official who is in charge of the area. Informal discussion held at their duty stations, Sabarimala in December 2013.

capital and political network of the community brings the political group together to address their issues compared to other marginalised communities in Kerala.

Figure No. 4.3 Trust of the communities on various institutional networks



Source: Primary Survey

A recent incident of a tiger being killed in Kerala is another example of how the dominant communities put pressure on the State and use their social capital for better negotiation across political parties over conservation and wildlife protection debate in Kerala. The increasing man-animal conflicts became a major concern across India in the recent past. Many conflicts and casualties are reported in the relationship between wildlife and humans in India and across the world. The Union Ministry of Environment and Forests declared that 653 persons were killed and 17062 were injured due to animal–human conflicts in the last 10 years in different places in India. In Kerala, the media reported a series of attacks by a tiger on domestic animals, which resulted in a few casualties in the area. Media covered the issues extensively and gave it high priority. As per the report, ‘a cow and its calf were allegedly killed in a tiger attack in Wayanad district and many more animals were attacked’ (Hindu, 2012). Many contended that the attack of the tiger on a human habitat was alarming and demanded an immediate intervention from the State and the forest department. In response to the attack, the farmers in the locality, mostly Syrian Christians, gathered and staged a massive protest and blocked the roads and destroyed public infrastructure including public transport systems and disrupted functioning of the government. Divisional Forest Officer visited the site and assured the villagers that the department would compensate the farmer for his loss as per the recommendation of a veterinary surgeon, but the people were not satisfied and it necessitated higher level intervention.

The protest vociferously turned to direct negotiation with the State over the safety of the farmers versus protection of the wild animals, and farmers versus the State. The State intervened in the matter soon after and appointed a task force of forest officials to catch the tiger. The task force could not make any significant headway in their 'task', while the media, on its part, highlighted a few more cases of attacks by the 'same tiger'. The peer groups amplified their protests with the direct participation of leaders from religious and political groups. The dominant political parties along with a group of migrants dominated by the Syrian Christians had taken up the protest that attracted wide media coverage. The protestors came out publicly and they even displayed the body parts of the animals killed by the tiger. They went further by walking around in front of the media wearing the body parts of the dead animals as an ornament. In the panic and chaotic setting created by the media and protesters, the State acted swiftly by ordering the task force to kill the tiger (Bhattacharya (2012). This time the task force was more effective as they found the tiger in a coffee plantation near the protected forest. The task force successfully completed their task within a few days. A special task force of the Forest Department shot dead the tiger inside a coffee plantation near Moolamkavu on Sunday after it ventured out of the forest and lifted over a dozen cattle from the neighbouring villages. The villagers and the media confirmed the news and were satisfied with the action since they were part of the task force. The task force allowed the public and the media to enter the forest along with the officials, though the forest area is otherwise restricted to the public. Since the 'task' was contextually important, nobody paid any attention on how and why the peer group was allowed into the forest along with the task force. As discussed, the State acted as a dual protagonist in the exercise of the power nexus of the peer groups where the State decides and gives priority to the habitats of the humans, thus undermining the conservation of the tiger—the excuse being, the tiger was a 'serial killer'. This act of the State contradicts its position as the protector of the tiger as it ordered the killing of the tiger.

This was one of the 'black spots' in the history of protection of wildlife in that the entire country is spending a large amount of money on protection of the tiger with the active contribution of a number of national and international organisations juxtaposed to the government killing a tiger to pacify a powerful social group.[95] When the question was raised about how the forest department can implement both protection and killing,

[95] Informal discussion with the officials at various levels of the FD held at Thekkady, November, 2013.

one of the high officials from department deployed at Periyar Tiger Reserve quoted during the discussion: 'Yes, it was the failure of the KFD and am ashamed to be an officer of the same. This killing is a kind of honour killing, to polarise the vote of the community and not directly a swift act of attack of the tiger. Moreover, it was evident from the protest scenes that they all represented mainstream and dominant religious groups. The State could not be stable on the policy on conservation over the pressure created by the protestors and media. How the media extended their support to the protestors were also matters of discussion. In the process, the media and the State forgot what the real issue was. Many reports accused the government by stating that it is a failure of the government, as it fails to ensure the protection of the people'.

Though the responses of conservationists and civil society were minimal, a few responses targeted the action of the State—'the killing of a tiger, which had given sleepless nights to people in several villages of Wayanad district of Kerala over the past fortnight, has triggered uproar within and outside the State'.[96] They questioned how the State and the forest department would react to similar issues if the incidents were linked to the tribal communities. It is often considered as a trade-off between the tribes and the tiger and it is but natural that the destruction of their habitat often leads to conflicts. The response of the State towards the case shows that the dominant community set the agenda on conservation.

The livelihood asset of the community, for instance natural capital and its use, totally depends on the permission given by officials from the forest department. A few communities, especially Urali in the study region, continue to hold rights over their resources. This is because of their social capital and, furthermore, their capabilities to use the capital for better negotiation with the forest department. For instance, small-scale stone mining, housing construction is evident at the settlement of the Urali community in Vanchivayal, Thekkady. However, any kind of stone-mining requires special permission, but these practices work because of the nexus between forest officials and the community. Similarly, the community uses timber from their land for domestic use. As mentioned in the previous chapter, land use pattern has not changed in the settlement since it was allocated to the community. The vegetation cover and the

[96]Green Cross World Environment Protection action group filed a petition in the Kerala High Court seeking a CBI probe into the killing of a tiger in Wayanad. The petitioner said the incident could have been avoided and the tiger could have been easily captured and relocated. Besides, the officials had not obtained permission from the chairman, National Tiger Conservation Authority, before shooting the tiger down(Bhattacharya, 2012)

forest cover are the same and there is not even a *Pucca* road in the settlement. As reported by a community member:

> 'These kinds of conciliations have been reached very recently. There were many conflicts between the community and the forest officials on resource use and intervention of the officials in our day-to-day life. With the support of the community organisation and the political parties, we have made an informal agreement on certain issues. The issues are mostly on our freedom within the settlement region. There will not be any unnecessary intervention from the forest department and so on. Now, we feel better and we live just like outsiders. Many of us are active in local political parties and our community organisation is far better than the other tribal groups in the nearby region.[97]

The majority of community members responded that if they have taken any decision collectively there is a high chance of compliance with the act or regulation. Non-compliance is more likely to occur and more likely to be approved by peers if the resources are needed for domestic use, or no alternatives are available. However, if any violation occurred, to gain commercially or at a larger level, there is strict disapproval from the community. Both the communities believe and practice social norms and trust within the community, making it easier for them to negotiate with the officials for their livelihood assets and options. Because of high social positioning, they could easily influence decision making of the State by influencing their priorities and concern over conservation. Few others including tribal communities and supporters for the reports also shared their concern but it hardly reaches the State on their decision towards the reports. The following section describes the responses in favour of the reports.

4.3.3 The Responses in Favour of the Reports

Though Kerala has a long history of environmental and conservation movements, whether any movement to protect the Western Ghats is possible is a question asked by a few during the fieldwork. The possibility of a movement towards thoughtful conservation and development was raised by Chopra (2014) and remained unaddressed in the context of the wide protests and the dominant groups' hold on the State. The KSSP[98]—a civil society organisation known as people's science movement—in Kerala supported the WGEEP and urged for its implementation. KSSP has a history of

[97] Focused group discussion held with Urali community members during the fieldwork, November-December, 2013. Few members in the group were part of stone-mining within the settlement.

[98] Historical explanation of the relationship between the Left and Parishad proves that both have benefited from this union. It is widely acknowledged that the KSSP has been recognised by the CPI (M) as a stake holder in the implementation of public policies since the Total Literacy Campaign in the late 80s (Nirmala, 2010).

promoting and popularising science among common people and rely on scientific principles for social revolution. Since its inception in the early 60s, the organisation influences development process in Kerala. It is widely accepted that the KSSP has been recognised by the Left-CPI (M) as a major stakeholder for supporting and implementing public policies especially for the literacy campaign in the late 80s in Kerala (Nirmala, 2010). The KSSP has observed that Kasturirangan report primarily supports mining and tourism mafia (Hindu, 2014b). The KSSP has brought out a translation of Gadgil report, which is available to the public domain. The Malayalam translation of the report was widely sold in the International Book Festival at Kochi held in January 2014. Their campaign for implementation of Gadgil Committee report was weakened within the wider political protest of CPI(M) along with the church groups in Kerala. In the environmental movement in the late 70s against the dam site in the Silent Valley, at the southern end of the Western Ghats in Kerala, the KSSP played a major role,which was a historical moment in the conservation debate of Kerala. The movement was to save the local ecology— undisturbed rain forest areas in the state— over the marginal benefit to 'development'. With years of activism, the movement persuaded the Central government to appoint a committee to review the project and finally the scheme itself was abandoned (Karan, 1994: 33). It is also observed in the field discussion with various civil societies that even with the history of successful movements to protect the local environment over marginal economic benefit it was unable to succeed against the dominant lobby in the contest of WGEEP and HLWG.

Few environmentalists also shared their concern about the position of the Government and the resistance of the dominant groups in Kerala. They have also stated that the mainstream political institutions and the churches mislead with their reports to the public to safe guard their vested interest. The Member of Parliament then, P C Thomas alleged that even if Catholic Churches know the reality of the report they are spreading rumours to gain support from the people. Though he arranged a gathering of local people to discuss facts of the report—to point out that there is nothing against the livelihood of the people—the mob led by the priest who is heading High Range Protection Council, disrupted the meeting and it ended up in commotion (Suchitra, 2014).

The locals from one of the villages of Pathanamthitta district complained about water shortage in their region and alleged that the local mining caused the water crisis. As

stated, water shortage was one of the major livelihood challenges observed during the fieldwork and reflected on the survey. The villagers came up against mining, as they are direct witness to the changes brought about by mining and its effect on the water source in the villages. A few among the respondents opined in a different way as they experienced many calamities and setbacks recently. 'How long will the hill's udder provide milk for us, once we also experience what happened to land of gods (Utharakhand)? Why are people not bothered about the tragedy we face every year?', as shared by one of the respondent during the discussion. Landslides claim many lives every year in the uplands of Kerala during the monsoons. It was felt that most of the landslides and loss of lives were due to unplanned developmental and infrastructure construction in these areas' —response from one the respondents during the survey.

The Church of South India (CSI) also came out to support WGEEP report. The Bishop Thomas Oommen, head of the Madhya Kerala Diocese stated that the WGEEP report should be implemented to avoid any natural calamities which occurs many hill station in India. The calamities should be an eye opener to those who oppose the recommendations of WGEEP. The Bishop also alleged that vested interest of the lobby including mining, quarrying, resorts and sandal were sponsoring agitations against conservation of the Ghats (Hindu, 2014a). However, the response supporting the reports and its implementation was silent regarding the dominant political and religious protest against the reports. As Chopra (2014: 13) observed, in the context of wide protest to protect interest of the elites, a set of economic incentives were to be set in place for movement towards green growth and sustainable agriculture. Meanwhile, the right wing political groups expressed their concern on the protest and urged the need for the conservation and protection of the Western Ghats. However, their positive response towards the reports was only in Kerala. Though the BJP unit in Kerala propagated the report, the position of other States and even the Centre under the ruling government (of BJP) after 2014 were not supportive of the reports.

4.3.4 Response of the tribal communities

Many Adivasi groups, including Adivasi Gothra Maha Sabha (AGMS), those who initiated an agitation of landless tribals at Muthanga Wildlife Sanctuary Wayanadu, supported the WGEEP and HLWG reports and urged its implementation in Kerala. They have observed and shared that the implementation of the reports would also guarantee the Forest Rights Act (FRA) 2006 since both the WGEEP and HLWG

strongly recommend the swift implementation of the FRA in the entire forest region (WGEEP, 2011: 43; HWLG, 2013: 56). The reports also blamed the forest department for incapacitating the community by delaying its implementation. In the context of FRA 2006, there were hardly any major initiatives and discussions held in Kerala on the implementation of the Act. Though, high status is accorded to social development, there is hardly any progress on implementation of FRA in Kerala and hardly any progress was seen in the development agenda of the State. 'Why the forest department is not in favour of implementing Gadgil committee report. They were very much interested to implement other regulations if that directly impact on our livelihood'— one of the Mannan tribes shared concern about the reports and the role of the forest department.

4.3.5 Responses of Scientific Community and the Forest Department

Conservationists and Kerala Forest Research Institute (KFRI) were totally silent on the panic situation created by these peer groups. Many of them from these institutions participated in various consultation meetings conducted by the two panels in preparation of their reports (WGEEP, 2011: Vol. II 162; HLWG, 2013: Vol. 1 132). The scenario was different a few years back while it related to Muthanga struggle in Kerala in 2001. The public and policy makers were very active when Kerala experienced the struggle of the adivasis for their alienated land under the leadership of Adivasi Gothra Maha Sabha (AGMS) in Wayanad district of Kerala during 2001-03. It was a response of the Adivasis to the State and institutions and for those who lost their traditional and customary rights on forest resources over the period, with the expansion of commercially viable plantation crops and internal migrations in the colonial and post-colonial period. Many promises were made between the State and tribal community to distribute land to ensure the basic livelihood of the tribal community in Kerala. As a response to the delay and lapse in assurance, landless tribals temporarily settled in Muthanga Wildlife Sanctuary to retain their basic rights. The movement over alienated land brought out a wider discussion on the responses of the State and the public (Bijoy and Raman, 2003; Raman, 2002). Within a few days of the protest, a group of academicians and environmental activists, under the label *Prakruthi Samrakshana Samiti* (Environmental Protection Organisation), brought out a statement against this struggle describing it as unjustifiable since the protestors lived inside the forest. Though the movement gathered wider support among the tribal communities

across Kerala, their strike met with a violent end, as the leaders were brutally attacked by the State. The State forcefully evicted all the protestors, which culminated in the tragic end to the 44-day struggle of the Adivasis in Muthanga.

While forest officials were supportive and recognised migrants as agents for conservation in the phase of Ecodevelopment Project, they approached the court to get protection from 'agents for conservation'. Under pressure from peer groups of the political parties and Churches in the hill ranges, the officials approached the government and court for protection. Violent protests and agitations of the peer groups incapacitated the forest officials in discharging their day-to-day responsibilities in and around the forest region of the hill districts of Kerala. The forest officials submitted a memorandum to the government complaining that that their jobs are under threat and they are unable to maintain vigil in many areas of the forest where the mafia dominate. The absence of patrolling by the officials in many regions resulted in rampant tree felling by the local elites and the timber mafia. In many region, it is observed from the discussion with local farmers that trees inside the nearby forest and even from the private properties are being cut and traded openly due to rumours that once the HLWG report is implemented no one will be allowed to cut tree even from their own land.

4.3.6 Formation and Emergence of the New Regulations and Institutions

By observing responses of the various institutions during the fieldwork, it was found to be based on anecdotes mostly disseminated by the political and the Churches. There was no clarification or any attempt from the formal institutions either from forest department or from the State authorities to disseminate the reports to the public. Initially, the ruling government at both the Centre (ruled by the UPA) and the State (led by Indian National Congress) supported the reports unconditionally. Then the Union Minister stated that WGEEP is a roadmap for conservation of the ecologically sensitive hills of the Western Ghats. The unrest issues became a conundrum to the State government and there was a slowdown in their stand on the implementation of the recommendations of the reports. The Kerala State government urged the Centre to consider the demands of the people of Kerala. The political pressure by the Left and the Church forced the State government to support the protest to assure their followers in electoral politics. The coercion made the then Chief Minister of Kerala to state that,

there is no question of compromise on this issue and we will protect the people and give priority to the farmers over environment.

The region also witnessed the emergence of many civil society groups such as the High Range Protection Council (HPC) headed by a priest to support farmers and to resist the implementation of the Reports. The emergence of the HPC and its negotiation with the Churches and mainstream political groups shows that electoral politics dominate concern on conservation and forest in Kerala. The ruling congress did not even offer a seat to an existing MP in the Parliament election of 2014 due to his support for the implementation of the reports. The intensive agitation against the reports continued until the Parliamentary elections and the Left and the churches supported the independent candidate elected from the constituency. The HPC candidate became the first Member of Parliament from Idukki constituency supported by the Left, otherwise the seat was always with the congress party. The electoral victory of the independent candidate of HPC with support of CPI (M) shows that the whole protest was for short-term electoral interest of the political parties. However, the elected MP was accused of holding large tracts of encroached forest land in the district.

In the context of intemperate protest and the appeal from the State, the Central government approved the formation of another committee based on State's demand. The State government appointed an expert panel including three members (Oommen V Oommen, Chairman of the Kerala State Biodiversity Board, V N Rajasekharan Pillai, Executive Vice-Chairman of the Kerala State Council for Science, Technology and Environment; and P C Cyriac, former Chairman of the Rubber Board) to find suitable recommendations based on HLWG. The Oommen Committee was set up by the State government in response to pacify the dominant Churches and political parties who were against the Kasturirangan report. The panel has recommended that the inhabited areas, plantations and agricultural lands in the Western Ghats region be excluded from the scope of ecological sensitive areas (KSBB, 2014: 16).

The Kasturirangan committee report was in response to the protest against the Gadgil Committee report. The Oommen committee was asked to review Kasturirangan report and suggested plantations and farm areas be excluded from the scope of ecologically sensitive areas. The committee also recommended that the Kerala (Vesting Management of Ecological Fragile) Land Act of 2003 (EFL Act, 2003) be scrapped. The have stated that the Act already served its purpose and hence there is no scope and

relevance for the Act. No more land should be acquired under the Act. The committee also recommended for a physical verification to be carried out to determine ecologically sensitive areas.

The protestors were concerned mainly with two issues in the Gadgil and Kasturirangan reports. One is notification of ecological sensitive region. The Gadgil committee report (WGEEP) observed relative levels of ecological sensitivity in different areas of the Western Ghats and the 'entire Western Ghats tract should be considered as an Ecological Sensitive Area. Within the ESA different areas were assigned as ESZ1 (region of highest sensitivity), ESZ2(region of high sensitivity) and ESZ3 (region of modest sensitivity)' (WGEEP, 2011: 22). The Churches and the political parties misled by equating the term ecological sensitive areas to extend their wide level protest to ecological fragile area. Since 'Ecological Fragile Act' will evacuate the encroached farmers without prior notice, the people were relating Gadgil report with the EFL Act, 2003. The In this scenario, the State expert committee specifically mentioned about the ecological sensitive area and ecological fragile Act and recommended to delete the Act.

Secondly, the concern was about a rumour of immediate eviction from plantations. The WGEEP also recommended that 'no monoculture plantations of exotics like eucalyptus in all three zones' (ibid: 44) in their report. The term plantations was seized by the protestors and created a panic among the farmers that 'all plantations including tea, coffee, rubber, pepper etc should be removed or no cultivation allowed' in the Western Ghats if the report implements in the region. The State committee specifically stated that 'plantations (tea, coffee, rubber etc) need to be kept out of the ESA labelling'. By addressing major concerns of the settlers' community, the State committee report garnered wide appreciation from all social, political and religious groups in the hill districts of Kerala.

4.4 Forest Governance, Conservation and Livelihood

The process of formulation of three regulations started from WGEEP (with 14 Members committee) and ended up with the expert panel of the State (with 3 member committee) to decide protection of the Western Ghats in Kerala. As stated, finally the protection of the Western Ghats was governed by the reports of three scientists, Oommen V Oommen, led the panel and also the Chairman of the Kerala State Biodiversity Board, V N Rajasekharan Pillai, Executive Chairman of the Kerala State

Council for Science, Technology Pillai; and P C Cyriac, former Chairman of the Rubber Board.

The Chairman of the State panel says that the issues on the Western Ghats report are only scientific issues. This approach may be justify the fact that the State panel consists of only science experts and hardly bring out their expert knowledge on social development, livelihood and governance where heterogeneous community have also a say on forest governance. The Chairman stated that the issues were taken up based on socio-political rather than on scientific premise. The 'scientific community' remained silent where the political-religious groups have interfered on 'scientific issue-conservation', which have multiple impacts on forest governance in the Ghats.

The MoEF 'principally agreed' on the WGEEP and HLWG reports, but rejected by the State and major institutions in the State. The State panel report was accepted by the institutions in Kerala and the State and the report was submitted to the Centre. The expert panel was appointed to review the HLWG report in the context of the protest against the report. The official 'duty' of the HLWG was also similar—review and recommend the WGEEP for better implementation. However, both the committee (HLWG and the expert panel of the State) have brought their own reports, which emphasise their own scientific explanation and explain why their report is more suitable to protect the Ghats. In addition, the expert panel defined their report as more suitable for the people in the Ghats. The reports (WGEEP and HLWG) discuss details about the ecological concerns of the State but hardly discussed how the implementation of the reports would impact on livelihood of the people in the Western Ghats of Kerala. Similarly, the HLWG repots hardly provide any details on their meeting with 'the local and indigenous people, tribals, forest dwellers and most disadvantaged sections of the local communities' though it is one of the key ToR of the HLWG. The reports of the two committees clearly discussed the various aspects of the major environmental challenges and threats for each of the states in the Western Ghats.

However, the reports failed to foresee the resistance of the dominant community, those who hold major share of land and business in the Ghats. The land use pattern of the region and history of migration of the hill districts are undermined as they propose various ecological regulations to the region. The reports hardly discuss how participatory development initiatives could make conservation more effective. Similarly, the reports hardly address the major challenges and inherent risk in the

implementation of their proposals. If the reports could have foreseen the possible protests from the farmers in the Ghats, the panellists could have discussed various options with the governments to create awareness and thereby address the local challenges.

The lack of understanding or sceptical position of the State opens up wider political resistance jointly led by the Churches and mainstream political parties. In the course of protest, the central themes of the reports narrowed down to the various levels of ecological zones/region in the Ghats, which undermined ongoing and future threat of the dominant development interventions. The third report has given an important role to the plantation companies, industrialists and the rich in the forest conservation and governance in the State. The report listed the contributions of the early migrant communities in the conservation of forest and other services to the environment. By accepting the demand of the protestors—dominant groups—the report reinstated the role of the groups in forest governance and decision making of conservation discourse of the State. How their role is inevitable and ensured in the decision- making process would be discussed in the following chapter.

The resistance of the dominant groups over the reports influences the strategy of the government on conservation. Their role—either in conservation or in anti-protection of the Western Ghats—in forest governance is validated by the State. The role of dissents, supporting the reports, by the tribals and other minority CSOs are hardly addressed by the State. While conservation and sustainability is a matter of concern globally, the challenges in the local arena rely on responses of the dominant institutions. By giving responsibility to the State to bring their own report to address the protests and to protect the Ghats, the agenda of conservation became the subject of the State. The governance at the State level has impacts on village level—where operational implementation of the policy is formulated at the higher level. However, as observed in the responses of the local institutions, the dominant groups—social, religious and political—have an upper hand in the villages. As cited, the shared interest of these dominant groups may deviate from the core strategy of policy during implementation at the villages.It is driven by a short-term economic and electoral interest of the State. For example, the coalition politics representing the interests of the religious and political groups could use their democratic power in the election (Parliament election in 2014) to choose their MP from the High Range Protection Council.

The major challenges in forest governance in the context of the debate on the Western Ghats were ruled by asymmetric information, misinformation campaign, misleading farmers by the church and the left parties and other political leaders. The analysis of previous chapter observed that migrants are regarded as protectors and agents for conservation, and are overwhelmingly supported by the forest officials. The same dominant social groups were against the Committee reports, which were constituted for the conservation of the Western Ghats though the reports hardly recommend a massive eviction. The forest officials themselves approach the judiciary for protection from the protestors constituted by the migrants. By the protests and support of coalition politics, they make an impact on changes in policy level and governance of forest where forest department hardly play a decisive role. As observed by Nair and Moolakkattu (2017); Nagarajan et. al (2015) and Chopra (2014) when implement the policy at villages the concerns on livelihood and ecological sustainability will only get less priority, if there is no change in the existing forest governance system in the State. It would end up the process of gaining maximum benefits of the few privileged at the cost of conservation and livelihood.

Once forest governance became state subject, forest became a political product, and was used to polarise the vote bank— it was done earlier by the Congress and now by the Left in the case of the Western Ghats of Kerala. The response of the dominant social, religious and political institutions are constituted by the electoral politics where there is no role for traditional inhabitants and landless poor living in the fringes of the forests. However as stated in a discourse on forest management, from the colonial to the post-colonial phase, traditional inhabitants were considered as exploiters. During the implementation of any regulation, it was to be considered and treated as State vs the indigenous community. However, the face off was between the State and the dominant social groups in the context of implementation of the reports on the Western Ghats. The social positioning of the social-political-religious institutions and their wider network in the social and political arena may be a reason why the so-called intellectuals and academia were mere onlookers during various protests and unrest against the implementation of the reports in Kerala.

4.5 Conclusion

The chapter locates the responses of the institutions to the initiative of the Central Government to implement regulations (in the pre-regulation phase) based on the reports

of the two committees on the ecology and economy of the Western Ghats—the report of the Western Ghats Ecology Expert Panel (WGEEP) chaired by Madhav Gadgil in 2011 and the report of the High Level Working Group (HLWG) chaired by Kasturirangan in 2013. Recommendations of the reports stirred unrest and discontent in the Western Ghats of Kerala. The chapter describes how peer groups deviated from the conservation agenda of the State and how the State failed to negotiate the collective bargaining by dominant groups—the Left political parties and the churches dominated by Syrian Christians in Kerala. Social capital and institutional trust of the community helped to bring together two powerful forces—the Left and the Christians—that had followed contradictory interests on many issues earlier.

The networks and institutional trust of the 'farmers' extends to the wider protest under the leadership of the Left political party and church in Kerala. Earlier, the Church and Kerala Congress Party that changed over a period dominated high ranges and the Left got a stake after the protest on the reports. The field observation emphasises that the social capital and institutional trust of the community help in the collectivisation of both the political and religious institutions, which follows two diverse interests. Though both the reports hardly indicate any threats to the livelihood of the poor in the hill districts of the Western Ghats, the peer groups created a panic situation and brought about uncertainty in the lives of people in the hill districts of Kerala. The tribal communities supported the WGEEP and HLWG reports and urged its implementation in Kerala. They opined that the implementation of the reports would also ensure the execution of the Forest Right Act (FRA) 2006 since both the reports strongly recommended the swift implementation of the FRA in the entire forest region. The field observations clearly noted that most of the stakeholders were hardly aware about the causes and consequences of the report; rather they rallied behind the protest of the Church and political parties assuming that large-scale displacement and eviction would result if the State were to implement either of these reports.

The migrant community resisted intervention from the various authorities to implement the report by arguing that the committee proposals would adversely affect their 'livelihood' and their 'traditional' rights over land. Peer group pressure developed as a strong institutional network that pressurised the State and the forest department to reformulate a simplified version of the regulations, and finally, put a temporary halt to the regulations itself. The migrant communities were able to overpower the

conservation mechanism of the State where the forest department and the State became mere onlookers to the process. The forest department was a mute spectator during the protests and unrest, which caused a wide range of forest depletion, destruction of buildings under the department and forceful trading of timber and so on. The analysis confirms the theoretical argument that the social positioning of the migrant community and their wider network in the social and political arena gave them command over natural resources that was instrumental in enhancing their capital. Formulation of various regulations in the Western Ghats is an example of how the response to the implementation processes influenced existing policy/regulations and formed new regulations/guidelines on the existing regulations.

In the context of the wider resistance and unrest, while the MoEF agreed with the reports in principle, they were rejected by the State, major political parties and churches in Kerala. The reports primarily focused on ecological concerns, but lacked in development theory and practice and relatively less attention were paid to livelihood challenges and impacts. During negotiations on the recommendations of the reports, the Centre extended the role of the State to bring in their own report thereby enhancing the role of the State in forest governance. This was despite contrary evidence indicating that if forest governance goes back into the hands of individual State governments their own short-term economic and electoral interests (Chopra, 2014:14) would drive it. The response of various institutions shows that 'forest' is a political product in Kerala. Conservation became a political agenda of the political parties. The vested interest of the coalition politics forces the public and the state to compromise on their concern to the environment even if Kerala had a successful history of environmental movement in the 70s. The public, political affiliation and CSOs support the issues of conservation based on position of the coalition and electoral politics as conservation concerns are politicised over the period in Kerala. Since the relationship between conservation and livelihood is not an exactitude and conundrum of the issue, the State found no reason to save the Western Ghats even in the pre-implementation phase.

Chapter 5

Instituting Forest Governance: Process of Decision Making and Implementation of Regulation

5.1 Introduction

The process of large-scale conversion of forest into non-forest activities and its regularisation shows that major institutions influences decision of the state on evading from the regulatory process and conservation practices in Kerala. In a broader framework, forest governance concerns the process of interaction between and among the institutions that influences decisions, which enables the state in (re)formulation or simplification of regulation and its implementation, which eventually impact on forest management. Forest governance is the process of decision making and about institutions, both formal and informal entities, at different levels of power. The institutions are layered at different levels—national, regional and local —that constitutes various forms of relations and responses to enforcement and evasion of regulations. Arts (2014) has conceptualised the term and use of forest governance and stated that governance is practices not only within the geographical boundaries of the particular country/region state, but also in the realm of international policies and global governance. As discussed EDP is an outcome of multilevel governance, which was formed with financial and technical support of international organisations and implemented through the various departments of the Centre and the State governments.

The chapter attempts to see how various institutions—formal and informal—could evade enactment of regulations and influence favourable and unfavourable decisions on forest governance in the Western Ghats of Kerala. The responses of the institutions are formed and linked to the social positioning and power relations among them and between institutions and beneficiaries. The second section of the chapter discusses the rampant encroachment of forest land and claiming property rights for non-forest activities by prominent social groups in the post 2000s as an example to discuss the role

of institutions in the livelihood-conservation discourse in Kerala. The third section of the chapter observes how the same community/institution ‘uses officials’ from the formal institutions to get a favourable decision on claiming encroached forests, while at the same time, ‘blaming the officials’ for their ‘vested interests’ in case of any eviction drive by the State. The fourth section addresses land alienation and landlessness of the tribals in the midst of large-scale forest conversion in the Ghats of Kerala. The section also addressed few questions that include: Who are the encroachers who are negotiating for rights over ‘their’ property? Whether the State or public ever addressed landlessness tribals, Dalits and the workers in the plantations—those who are at the low end of the value chains—and how they added high profits to the plantation companies owned by multinationals?.[99]

The fifth section addresses key questions and insinuations regarding forest governance in Kerala. The section addresses few questions such as how certain social groups get rights over resources by evading enforcement of regulations and how others are alienated from their rights; how relevant it is to understand the evolutionary process of the institutions to infer the challenges and validate the responses of the institutions which directly or indirectly favour the dominant stakeholders in the contested space of regulation and livelihood. Moreover, it questions as to how corruption of officials and various institutions influences decision and implementation on forest management. The chapter relies on the data collected from ethnographic research, focused group discussions and on documents in the public domain on ongoing debates of forest regulations, forest encroachments and forest governance in Kerala. The analysis shows that the role of institutions in forest governance, which is located and functions in multilayers, are not directly linked to the forest-livelihood dichotomy but are determinants in the success or failure of environmental regulations and its enforcement.

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[99]A major share of agricultural land is still with a few plantation companies owned by multinationals in Kerala. The Munnar region is well known for tea estates owned by Tata Tea with 19 per cent stake in KDHP (Kannan Devan Hills Plantations). HML (Harrison Malayalam) is one of the largest plantation companies in Kerala in terms of land share and business in multi-plantation crops. It is reported that the company holds about 14 per cent forest land illegally. Many cases have been filed against the company in the High Court of Kerala on the issue of encroachment of forest land (GoK, 2007: 37). Tea workers live in what are called line rooms and they are forced to stay on in the same line rooms even after their retirement due to their landlessness. It is mandatory that to maintain line rooms at least one family member should be a permanent worker and many of them maintain this ‘facility’ in the estates. Non-workers—retired and other labour force—find odd jobs outside the plantations. Housing is a long-standing issue in Kerala and other tea plantations across India. The planation companies still hold major cultivable land share in Kerala (Scaria, 2010; Rammohan, 2008).

5.2 Forest Encroachments, Property Rights and Non-Forest Activities

The section examines the massive encroachment of forests reported in the Western Ghats in Kerala by violating environmental regulations and evading the Forest Conservation Act, 1980(FCA).[100] The encroachments and large-scale conversion of forests into cultivable land are a matter of concern in Kerala. However, the prominent discourses on conservation always link the resource degradation to tribal communities in India, including in Kerala. It has been observed that the State (and the forest department) has always projected the tribal communities' resource use pattern challenges, sustainability of wildlife, and critically viewed the protest for their rights for free access to natural resources (Pandey and Wells, 1997). As noted by Guha (1983) the debate on forest policy has been conducted between two sharply opposing camps—the State and the forest dwellers. The process of converting encroached forest land into cultivable and commercial plots by the dominant communities and industrialists was a common phenomenon during the early 50s in Kerala.

In the participatory phase of forest management tenure, especially since the post 2000s, numerous encroachments of tropical forest were visible in the Western Ghats of Kerala and prominent among them were the years 2002, 2007 and 2017. As revealed forest statistics, KFD (2016), about 7801.116 hectares of forest are under encroached area and about 1099.65 in Munnar forest division itself. However, the media reports reveal that nearly 25,000 hectares of forest land has been encroached upon and illegally occupied in Munnar, and in nearby region of the Western Ghats of Kerala.[101] Other districts in Kerala suffer from land encroachment by the powerful. The data on extent of encroached forest land in Kerala state confirms that nearly 3,819.75 hectares of forest land has been illegally occupied in Palakkad forest circle alone. The table (5.1) shows the encroachment of forest land in various districts and forest divisions in Kerala.

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[100]The Forest Conservation Act of 1980 (FCA) is a forest legislation which forbids activities of handing over of forest land for non-forest purposes. Any move towards this should get prior permission from the Central Government. The FCA guidelines suggest that approval from the Central Government is required for conversion of forest land to non-forest activities. With regard to encroached land issues, the State Government in Kerala has already handed over forest land on a large scale to encroachers for cultivation. However, the State Government always argues that due to FCA, the State finds it difficult to allocate forest land to tribals.

[101]In a reply in the State Assembly then Forest Minister, K Raju stated that the forest department has identified encroachments of over 2700 acres of forest land in Munnar forest division alone (The New Indian Express, 28 April, 2017).

Table No. 5.1 Encroachment of forest land in Kerala

Districts	Circle	Division	Extent of encroachment (in ha)
Pathanamthitta Kollam	Southern Circle	Konni	10.59
		Ranni	1.13
		Thenmala	7.24
		Total	18.96
Ernakulam Kottayam Idukki	High range Circle, Kottayam	Kothamangalam	147.6
		Kottayam	121.49
		Munnar	1099.65
		Marayoor	0.03
		Mankulam	358.43
		Total	1727.2
Thrissur Ernakulam	Central Circle, Thrissur	Thrissur	147.04
		Malayattoor	129.29
		Total	276.33
Malappuram Palakkad	Eastern Circle, Palakkad	Nilambur North	682.53
		Nilambur South	2.11
		Palakkad	190.58
		Mannarkkad	2700.34
		Nenmara	244.19
		Total	3819.75
Kozhikode Wayanad Kannur	Northern Circle, Kannur	Kozhikode	10.4
		Wayanad South	1369.29
		Wayanad North	369.74
		Kannur	11.02
		Total	1760.45
Kottayam Idukki	Field Director, Kottayam	Periyar East	0.0061
		Idukki	5.4
		Total	5.4061
Thrissur	Wildlife Circle, Palakkad	Peechi	193.02
		Total	193.02
		Grand Total	7801.116

Source: Forest Statistics, KFD (2016)

Another large-scale encroachment was reported in 2002 in the dense forest area known as Shola forest region of Mathikettan in the Western Ghats. As in other cases, the settlers' community and hoteliers with support of political parties dominated this encroachment.[102] The encroached area is an ecologically sensitive forest and this shows the encroachers' disregard for the environmental importance of these forests. The Shola

[102]Series of forest encroachments were reported in many cases in Mathikettan, post 1990s. There were large-scale encroachments reported in 1995 and the State could hardly reclaim the land. There was an encroachment even within a national park area, which was established in 2003.

forest is a well-known biodiversity hotspot, which was declared a National Park in 2003, with a total area of about 12.82 sq. km. The state cabinet approved large-scale encroachment in the area, with the then Forest Minster (K Sudhakaran) admitting that about 3000 acres of the land was occupied by the encroachers.[103]

As discussed, there have been various phases of utilisation of forest resources in the history of forests in Kerala. It includes commercial usage for timber, expansion of commercial plantation crops in the colonial period, and due to migrations from the plain lands of Kerala. Chapter 3 overviewed the evolutionary process of the settlers' community in the Western Ghats of Kerala. This section narrates how forest encroachment in the various phases impacted on forest degradation and how the encroachment of forest land was regularised as cultivable land. Clearing of Kerala forests for cultivation began on a large scale in the 19th century. Started by European planters and followed by indigenous planters, the investment in plantations of coffee, cardamom, tea and rubber saw phases of encroachment on a large scale.[104]Bourdillon notes that these lands were initially granted free to the plantation companies for raising commercial crops in the early phase of colonial period (Bourdillon, 1893). Paul Baak has demonstrated that in the princely state of Travancore and in its legislative assembly the 'planters lobby' had considerable access to state administration. The policy of the government (Travancore) and the development of plantations created an opportunity for the expansion of European enterprises (Baak, 1992). In keeping with the interest of British residents to transform 'jungle to cultivation', the Travancore Dewan took special initiative in supporting British planters to start plantations in the hills of Kerala.[105]

The hill districts were highly in demand to meet the high-end requirement for commercial products in Europe. Tucker (2012) stated that timber trading in the 1890s

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[103]The latest such incident which has come to light is the large-scale encroachment and felling of trees in the Mathikettan forest area which is a renowned 'shola' forest spread over an area of 5901.18 acres in Idukki district (Nair, 2002).

[104] Tucker observed how planters use rich forest land for their plantation and for timber, which has a high demand in European markets (Tucker, 2012). Most of the cultivation started in forest land uses tribal people as workers.

[105] A British resident, in a letter written on 30 January, 1862 to the Dewan (Minister of the Travancore Government), persuaded to initiate a policy for the development of the plantation sector. He said, 'I cannot too strongly urge that the Sircar (i.e the Travancore State) should at once declare the policy which it proposes to adopt with regard to these jungles and make the gentlemen who have applied aware whether they can cultivate these jungles…' In a swift response, the government initiated a policy to use forest land for plantation crops, as stated in the Memorandum of March 8, 1862, and quoted by Baak (1992).

in the Malabar region was highly popular and the local rivers were full of Teak trees coming from the high ranges of Kerala. The utilisation of forest resources was administered both by the colonial administrators and later by the plantation companies owned by the multi-national companies in India—Tata and Goenka groups, to name a few. Tucker (2012) also stated how regional plantation associations formed a wider platform, with the United Planters Association of South India (UPASI) in 1894, to negotiate with the state government to retain forest land for expanding commercial plantation of crops. Baak (1992) have observed that the planters and their associations formed, together with the British resident and the colonial government, a strong political lobby, which was putting forward its demands to favour plantation development in Travancore in 1860s. The irony is that now UPASI is one of the major associations in South India providing technical assistance to the plantation companies by doing research on various sustainability challenges such as water productivity, forest conservation and climate change in the plantations. The then state government in pre-independence India financially supported most of their initial research centres.[106]

A notable development since the 1950s was an exodus of settler farmers from the plain lands to the hill ranges of the Western Ghats, including Munnar, which set a new paradigm for land claims and development of the region. The worsening economic conditions and the Travancore government policy of 'Grow More Food' since WW II led to these mass migrations to the Western Ghats.[107] The settler farmers were ably supported by the government, which granted at least 2 hectares of land and monetary compensation (Sivanandan et. al, 1986 and Moench, 1991). In addition to the settler families, a large number—four to five times—of encroached forest land in adjacent areas were given to those who were mostly relatives and friends of the settlers, and this was supported by the State. It was also common to see encroachment of forests by politicians and powerful individuals to sell off to the settlers or to build their own plantation estates (Moench, 1991).

The settler farmers, supported by political parties, and with strong religious-community affiliations, became a formidable force in the later decades and held influential

[106] See details of a brief history and recent projects of climate change and water conservation of UPASI: www.upasitearesearch.org.

[107] The Grow More Food schemes brought the first wave of migrants to the high ranges of Kerala. Other infrastructure developments such as construction of dams and roads opened up wider access to other potential settlers to the area. The approach and support of the government towards encroachments enabled many settlers to clear the forest land and settle in the area (Moench, 1991).

positions in the government. The demand for title deeds for the encroached forest land was very significant.[108] It is observed that nearly 40 per cent of the land then in the possession of settler farmers was forest (Chundamannil, 1993). Since the days of the 19th Century European planters, the infrastructure developed with road connectivity linking various parts of the area. Eventually, major portions of the forest land were encroached upon and occupied by the few plantation companies and rich farmers in the hills of the Western Ghats in Kerala.

5.2.1 Impact of Encroachment on Forest Covers in Kerala

Over the years, the forest cover in Kerala has reduced drastically due to encroachment by the dominant community and industrialists for setting up plantations and infrastructure development projects. Forest encroachments have occurred continuously since the formation of Kerala State (Moench, 1991) and continued even after the Forest Conservation Act of 1980. As stated in previous chapters, it is observed in the fieldwork that socio-economic and political processes also added to the change in forest landscape in the post-independence period. The study demonstrates how encroachments have affected the overall forest cover in the hill districts of Kerala and its wider implications on the ecosystem in the region. The data show that deforestation rates in the hill stations, especially Cardamom Hills were much higher compared to other regions in the State. Idukki district had a covered forest area of 87 per cent in 1905, which was reduced to 65 per cent in 1965. Again, it sharply declined to 33.4 per cent by 1973.[109] The percentage of forest to the total geographical areas has reduced from 87.08 in 1905 to 33.4 in 1973 in the area of the Cardamom hills-Idukki district alone (Sivanandan et, al. 1986).

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[108]There was high demand for regularisation of forest land during each phase of encroachment of settlers. It was closely connected to the politics of Kerala in the 60s. The then Home Minister resigned because of an outcry by the settlers for regularisation of the encroached land. Due to uncertainties and divisions created by the settler community and their supporters in the government, Presidential rule was imposed for the first time in Kerala. The Maniyangadan Committee—Parliamentary Sub-Committee—was formed to look into the issues of settlers. The Sub-Committee headed by Mathew Maniyangadan, a Christian MP from Kottayam, had no professional expertise of earlier committees to look into the issues. The committee supported the demand of the settlers for their encroached land and hardly addressed any issues of protection of forests. The report eventually provided the basis for regularisation of past encroachment up to the date of 01-01-1968 (Moench,1991).

[109]Cardamom Hills is a mountainous area in the South Eastern region of the Western Ghats of Kerala. Cardamom Hills, which constitutes a major portion of the high range division, accounts for 85 per cent of the area and 80 per cent of the production of cardamom in Kerala (Sivanandan et. al., 1986). The Hills also produces other plantation and commercial crops such as tea, coffee, rubber, teak and bamboo. The name of Cardamom Hills is sometimes used for the entire hills of the Western Ghats range of South Eastern Kerala.

The changes in forest cover show the encroachment of forest land into cultivable land during the period of 1905-1973. The large conversion of forest land, along with the larger development, continues to affect the unfavourable climate change in Kerala. The reduction of large areas of forest cover has multiple impacts on the ecosystem and biodiversity. Taking a similar argument, another study based on remote sensing data shows that there was a massive diversion of forest land in Kerala during the period of 1973-2016.[110] The rate of forest depletion for all Kerala during the period of 1973-2016 was 3.6 per cent—the third highest proportion of forest land diversion among Indian states. There has been a negative change in forest cover of about 24 per cent while data shows that there was an increase of about 10.72 per cent in urban area during the same period. There was a huge increase on plantations, which is noted as 21.62 per cent during the period of 43 years. The table 5.2 show the various forms of diversion and utilisation of forest land in Kerala as a whole, and in Munnar.

Table No.5.2 Diversion and other utilisation of forest land in Kerala and Munnar

		Region	Forest covers	Plantations	Agricultural land	Water bodies	Urban area	Open area
Area (in sq km)	1973	Kerala	24953	1850.6	4304.6	349.8	95.1	6143.9
		Munnar	1474.64	75.02	91.89	5.3	0.37	121.35
	2016	Kerala	15888.6	999.5	5179.3	389.4	4136	2103.1
		Munnar	1338.26	134.61	200.67	31.19	50.02	13.78
Difference (in sq km)		Kerala	-9064.4	-851.1	874.7	39.6	4040.9	-4040.8
		Munnar	-136.38	59.59	108.79	25.88	49.66	-107.57
% of area covered	1973	Kerala	66.2	4.91	11.42	0.93	0.25	16.3
		Munnar	83.38	4.24	5.2	0.3	0.02	6.86
	2016	Kerala	42.15	26.53	13.74	1.03	10.97	5.58
		Munnar	75.67	7.61	11.35	1.76	2.83	0.78
Difference (in %)		Kerala	-24	21.6	2.3	0.1	10.7	-10.7
		Munnar	-7.7	3.3	6.1	1.4	2.8	-6.0

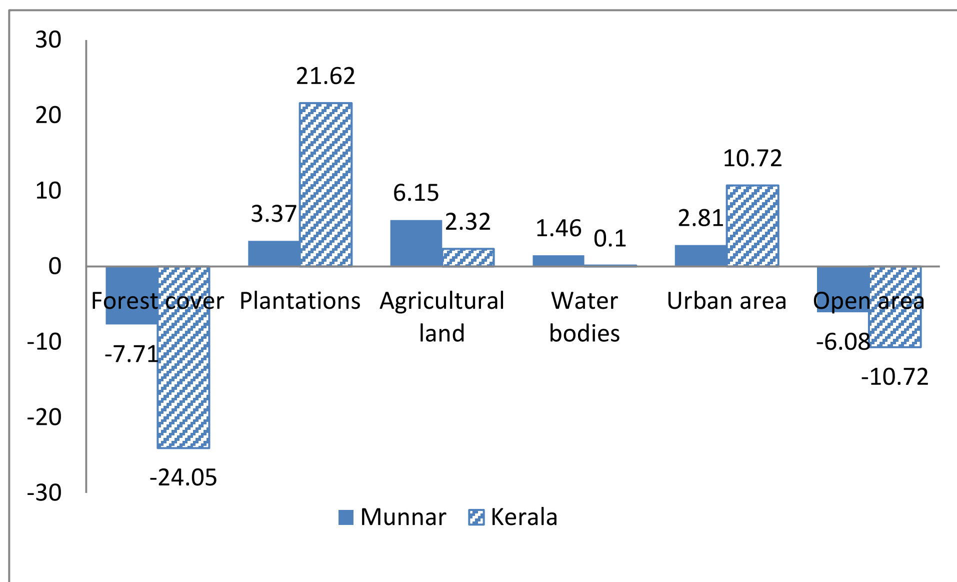
Source: Nidheesh (2017)

The study also reveals that there is a massive diversion of forest land in Munnar. Regarding the disappearance of forests in Devikulam—one of the regions highly debated in public discourses and in the media in the recent past—about 13, 638.43 hectares of forest land do not exist anymore. Devikulam—the revenue block of which

[110]The data of the research is already in the public domain and is part of the ongoing research being conducted by the Indian Institute of Science (Ramachandra) and Amritha Institute of Engineering and Management Sciences, Coimbatore (Rambhadran) with the aid of public-funded satellites in the US using remote sensing data on Kerala forest loss and its drought situation (Nidheesh,, 2017).

Munnar and some surrounding Panchayats are part of—is not a forest any more. The data shows a massive increase in areas under plantation, agriculture and urban settlements while there is a substantial reduction in open areas in Munnar. The data substantiates official reports of rampant encroachment that has facilitated the emergence of Munnar as a top tourist destination—the single biggest reason for the degradation of the region's biodiversity. The figure below shows the comparative figures for changes in utilisation of forest land in Kerala and Munnar.

Figure No. 5.1 Utilisation of forest land in Kerala and Munnar 1973-2016



Source: Nidheesh (2017)

The history of encroachment of forest land shows that the development and hunger for land evinced by the dominant communities have a greater role in forest depletion than the forest dependency of tribals in Kerala. The pattern of agricultural practices in forest land and utilisation of land for building houses have created multiple impacts on the socioeconomic front and ecosystems in the area (Sivanandan et. al 1986). Tucker (2012) has already documented the remarks of the scientist who visited the Western Ghats in Kerala in the early phase (1870s) of the expansion of plantation crops in the State. Looking at the drastic changes in the landscape and forest conversion, the scientist warned that the State might face huge impacts of climate change in the near future.

In the past 10 years, many cases of prolonged droughts have been reported in Kerala. Though drought and the water crisis are becoming major concerns, these changes are

not linked to the forest protection and conservation in Kerala. In spite of erratic rainfall and prolonged drought due to the change in the landscape and forest clearance since the early colonial period, the State is moving ahead with a hydroelectric project in another biodiversity hotspot in Athirapally, Kerala.[111] The project will require the diversion of about 130 ha. of dense forest. The WGEEP has already highlighted the issues and negative impacts of the proposed project, including the vast clearance of the forest and livelihood of the tribal communities who live in the area. The Committee strongly opposed the project after a detailed study of the site, consulting with major stakeholders including the Kadar tribes and the local Panchayat and emphasised wider implications to the biodiversity, ecology and livelihood of the Kadar tribal community. Apart from the report, the Forest Right Act has given significant importance to the rights of the tribal community. The tribal community articulated their dissent about the proposed project based on their rights over the resources as envisaged in the FRA.

5.3 Response of the Institutions in Enforcement of Regulations, Eviction and Forest Conservation

As discussed in the previous chapter, Syrian Christians constitute a majority of the settler community in the hill districts of Kerala. They have become the dominant community—both religious and political—in the hill districts of Kerala over a time. Recent encroachers of forest/government land are communities who were part of the early settlers. Due to pressure exerted by the dominant communities and various interested groups, the intervention of government/formal institutions in these lands are very rare and are condemnable. Other encroachers were industrialists from the mainland who had the support of mainstream political parties. None of the encroachers is from tribal communities or workers in the tea plantations or the landless poor. The forest department is silent on the rampant encroachments in Kerala.

The response of the State towards the recent encroachments in Kerala was minimal as reported earlier. Attempts at eviction and regularisation of the encroached land in later periods were intermittent. For instance, a massive eviction was initiated in Munnar in 2007 and later in 2017, but it wound up within a few days. This was due to the wide

[111]The Kerala State Electricity Board (KSEB) proposed a hydroelectric project—to build a dam across the Chalakkudy River in Central Kerala to generate 163 MW of power. The State announced the proposed project amidst wide protests from the local community and other environment support groups in Kerala. The Gadgil Committee Report also strongly opposed the proposed project by stating the diverse impact it would have on the local community and local forest eco system. The area comes under the Ecological Sensitive Zone-1 according to the Report of WGEEP (WGEEP, 2011: 58-65).

resistance from the settler’s community with support from major institutions—both political and religious. In 2017, at Munnar, the resistance received greater support openly from the political and religious groups, as it was a continuous partnership between the two institutions—Left leaning political parties and the Church—as seen in the resistance against the Gadgil and Kasturirangan reports during 2013-14. Studies (for instance, Moench, 1991) have observed the supporting position of the Left political parties and the Church groups, which were very strong even in the 50s.

The partnership supported the encroachers individually and institutionally, but it was done subtly. Simplifying rules and regulations on eviction through various modifications, delay in action and postponement of eviction procedures in the encroached area were observed. The process was a result of the close relationship between dominant religious groups, high-caste communities and mainstream Left-leaning political groups playing vote bank politics. A reciprocal support mechanism reappeared here as it had in the early 50s as stated by Moench (1991). Similar cases were reported in Mathikettan (2002) and Munnar (2007 & 2017). How the Church and political parties influence and support encroachers at different layers will be discussed in the following sections.

The response of the government reproduces similar patterns seen in the early phase of encroachment since the 50s. It follows a regular sequence, which would start with a series of strong statements from the government. Then, eviction attempts would be blocked by popular outcry; commission formed to evaluate the problem; encroachment prior to a certain date regularised, accompanied by a strong statement concerning the fate of subsequent encroachments (Moench, 1991). Later, the government would call for stakeholder meetings or appoint a committee to look after the encroachment issues to see the possibilities of regularisation. Finally, the government will stop the eviction on one or other reason to protect the interests of the dominant community in the hills by citing a ‘valid’ reason.[112]

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[112]The Chief Minister of Kerala stated that the government will not tolerate any encroachment in the forest area and that the government is committed to strict eviction. The statement was issued at a public gathering organised by the government to assess reaction of encroachment, eviction and public outcry in Munnar in 2017. The meeting was held for environmental activists, heads of major religious institutions and community organisations, media persons and leaders of political institutions. The CM stated that the government would proceed with eviction on large-scale encroachments in an uncompromising manner (Indian Express 25 April 2017).

As stated, the government initiated eviction proceedings in 2007 and 2017, but stopped the evictions for 'various reasons' after a few attempts to demolish religious and commercial buildings which were under the ownership of mainstream religious groups and political parties. The immediate response of the community was in starting a wider protest by claiming that they have rights over the property and that they have constructed the buildings on their own land that was purchased legally. This entire process was repeated in 2017; it started with encroachments, policy formation, eviction procedures, and protests and finally, by putting forward many reasons the government stopped the eviction indefinitely and opted for a public hearing about the possible procedures for eviction. In 2017, the resistance was widely grounded in that encroachments were meant to provide basic infrastructure facilities for the expansion of tourism, which is the key source of revenue in Munnar—a well-known tourist destination in Central Kerala. The political and religious groups protested an eviction by stating that the move of the 'officials' was to destroy the tourism industry in which thousands of poor find a livelihood. The resistance against the eviction in 2017 resembled the resistance of the settler farmers in the early 50s and 60s, which was supported by the mainstream political parties.

The basic responsibility of the democratic State is to regulate rules in the interest of the people and against vested interests, those who are using their social and economic capital for evading the rules and regulations. As a policy initiative of the State to address forest encroachment, the government has initiated a course of action for eviction of encroachers. The policy does not permit illegal rights over public property on encroached land. The implementation of these regulations and its enforcement is the duty of government institutions with different layers of institutions and officials. When law and regulations are equal to all and protect the rights for all, including rights over resources, only then can institutions control vested interests and bind them to rules. The challenges of enforcement of rules should come from within the formal institutions itself.

The responsibility of the State is to initiate an eviction process, which is carried out by officials in the field. For example, officials initiated the process of implementation of the order to demolish illegal buildings and constructions in encroached land in Munnar in 2017. In the case of encroachment in Munnar and subsequent eviction in 2007, it began with much media attention, but had to wind up due to pressures exerted by a

lobby including the Minister.[113] These pressure tactics worked in the 2017 eviction as well. A combined opposition of dominant religious groups and political parties, who stated that their protest was not against conservation, but against individuals, curtailed the eviction process. Elected members of Parliament and Legislatures openly supported the protest of the communities against the eviction in 2017. As stated, the response against eviction came from both formal and informal institutions and public-private property owners and 'farmers'. This time, the Minister of Electricity, Government in Kerala, commenting on the Munnar evictions in 2017 said that the evictions were initiated because of the vested interests of officials. Contradicting the policy of the State, the minister stated that the eviction is not part of a government 'decision'. He made personal accusations at officials who were in the frontline of the evictions including the district collector, the sub-collector and other higher officials. The minister also commented on *Pembilai Orumai*, a women's collective, which had led a successful protest to hike wages in the Kannan Devan Hills Plantations Company (P) Limited (KDHP),earlier known as Tata tea plantations two years earlier.[114]

The minister accused *Pembilai Orumai* and the officials as having some vested interest. He went so far as to say that they were engaging in immoral activities rather than working for the welfare of their community. Reacting to this comment, the women's group started a hunger strike and demanded an apology from the minister. However, local 'traders' attacked the group within a few days by stating that the strike would negatively affect tourism in the region. They argued that 'personal hostilities' (they remarked that the strike was only due to personal differences with the Minister) must not be at the cost of local economy as it mainly relies on tourism. It is reported that hundreds of tourist resorts have been constructed illegally on the encroached forest land

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[113]In the eviction process, the special task force led by the District Collector demolished about 92 illegal commercial buildings and recovered about 16, 000 acres of encroached land for the government. See details in an interview of Suresh Kumar, then District Collector who led the eviction in 2007 in Munnar (Azhimukham.com, 30 March, 2017). However, the massive eviction drive had to stop abruptly without any valid reason. It is also reported that the decision against the eviction came once the bulldozer started razing the Left wing party office in Munnar.

[114]*Pembilai Orumai* (the Women's Collective) had earlier successfully staged a protest for wage hike for tea plantation workers in 2015. The one-and-a-half month long peaceful agitation by thousands of women workers under the banner of *Pembilai Orumai* kept all political parties and trade unions and men activists away. The strike brought out many other issues of plantation workers and raised questions of poor implementation of the Plantation Labour Act (1951) in the plantations (Bhowmik, 2015). Coincidentally, the Minister could also trace his political career as a trade union leader early in his career.

in the past 10-15 years. It is evident that the process of transforming the forest land into commercial and industrial outlets is progressing at a rapid pace in the region.

One way the dominant community portrays resistance against state policy over their property rights is resistance against eviction. Due to political and religious backing, the agitation turned against individual officials in the government departments. It gained abundant public support to the protest.[115]Moreover, they create an image that encroaching on forest land is to gain control over property rights. In addition, they claim that their protest is for the landless—tribes, marginal farmers and plantation workers—in the area. Social institutions fight against individual officials who enforce the law. These officials are either from the revenue department or from the forest department. It becomes the duty of the officials to fight back or provide valid reasons for their administrative stand. In the process, the fight is always reported as individual versus institutions or vice versa. On the contrary, the enforcement against the rights over tribes is never addressed as an individual act, but is part of the policy or regulation which is enacted by the formal institutions; either by the revenue department or by the forest department. These two scenarios are consciously created by the political and religious groups, which support encroachers to regularise property rights over the forest land permanently and label the tribes as poachers or exploiters of the forest.

The role of the Church in evictions and how they use the power of the Cross (a religious symbol) to prevent intervention by the government is often seen in Kerala. In 2017, when the eviction team (revenue department) tried to demolish a Cross, even the Chief Minister intervened and stopped the eviction as the State could not hurt the sentiments of the dominant Christian groups. The cross was built on encroached forest land, aptly represents the responses of the institutions. The current Chief Minister (Since May 2017) stated that officials should stop the eviction as this will hurt the

[115]One way the settlers could create an impression against officials was by showing that this eviction was against the poor farmers, those who own marginal lands. It was a strategy of the 'crowd' led by the political and Church groups to create empathy for poor farmers. Church groups opined that evictions should start from high-end industrialists and not target poor farmers. The demolitions started with multi-storied buildings and listed out encroachers with large-scale encroachment. A similar support from the public was garnered in an eviction in the 60s. The evictions became a political issue, which resulted in a change in government from the Left to the Congress. The suspended eviction of 1958 was re-started in May 1961 by the Congress government. However, the timing was at the end of the dry season just at harvest time. Many crop failures were reported. It worsened during the monsoons and many farmers were moved to a temporary shelter. Many of these factors contributed to widespread public sympathy for the settlers and the government was forced to stop the eviction (Moench, 1991 and Sivanandan et. al, 1986).

sentiments of the religious and migrant communities.[116] The community could therefore easily evade serious issues of encroachment of forest land and its diversified use. This clearly reveals the structure and response of the institutions in forest encroachment and eviction. For instance, a major part of the government land in Munnar is allotted or identified to be distributed to the landless tribes in the vicinity. The local system allows the dominant social groups to create a favourable condition for encroachments. The local government institutions have extended their support by granting permission for construction of buildings at various levels. Moench (1991) observed that the eviction history in Kerala shows the political impossibility of conducting large evictions from forest lands and that there is a community-based political power of the settlers in the High Ranges. One of the important evictions was about the encroached forest land at Ayyappancovil in 1958, which was curtailed due to heavy protest from Church groups, the Congress party and the Left. Left leaders led by A K Gopalan, parliamentarian and prominent leader, who joined the protest of Christian Priest Fr. Vadakkan. The priest had been a leader of the *Vimochana Samaram*—a state wide protest to remove the communist government from power in 1959.[117]

Formulation of regulations and its implementation is the responsibility of the State and its institutions, which are directly involved in enforcement of regulations or law. Very often individuals representing the State and its institutions use their power to take the law into their own hands to protect vested interests of the many social institutions. In the process, they use public property or public resources for their own purpose, which is beyond the existing law/regulation. The protestors at Munnar in 2017 were connecting this eviction with the reports of Gadgil and Kasturirangan on the Western Ghats as the evictions by the State is part of the implementation of the reports. It

[116]A Cross was set up in the encroached forest land by a Christian religious group known as 'Spirit of Jesus'. The demolishing team attempted to bring down the Cross since it was set up in an encroached land. The Chieftain (Tom Sacaria), along with two of his family members is in the list of encroachers with more than 43 acres of encroached forest land. Though many supported this move, including mainstream Christian leaders, the Chief Minister of Kerala (CM) opposed the move. Instead of questioning the erection of the Cross in the encroached forest land, the CM questioned the demolishing team as to 'what mistake did the Cross commit? The demolition of the Cross was not with the approval of the government. Rather, this action made that the government is against the cross and the section of the people those are believers' (Indian Express, 22 April 2017).
[117]A K Gopalan, popular communist leader and then the Member of Parliament went on a hunger strike, and the government was forced to end the eviction and promised alternate lands and other support to those were already evicted. See Moench (1991)for the details of how the Left has led the protest in support of encroachment.

gathered wide support from various sources.[118] As Nidheesh (2002) noted,the protestors represented by the political and religious groups, gathered to protect many for different purposes and at different levels. They protected houses of 'poor farmers', investment for builders and secured the demand of the various classes of voters for political parties. Jose (2005) also observed that the settler farmers grew politically strong and mobilised themselves, and until the 1980s, intermittent regularisations of the encroached lands were a common feature along with the issuing of the *Pattas* to the land.

The responses of the State towards encroachment of forest land in the post-independence period show that the State itself was delaying and evading the enforcement of the eviction process. On the one hand, there were heightened conservation programmes aided by international donor agencies (EDP, for instance), and on the other, there were corrupt institutions (local government authorities such as revenue department and village office etc.). The protection of forest would be in challenge if there exist corrupted practices among the officials. Most of the encroached land in Mathikettan and Munnar area are notified and identified earlier as land for redistribution to the tribes. This shows the response of the State towards land alienation of the tribal population in Kerala. At the foremost, it delineates the network among the dominant stakeholders in conservation. In this process the community, who are historically underprivileged and those who has no or less social capital are excluded. C K Janu has observed that landlessness also exclude the tribals from availing any support given by the State for the poor.[119] The basic criterion is ownership of land that is a requisite to avail most of the development schemes, housing, subsidies and projects of the State.[120] The majority of the tribal population still live under the monitoring of forest officials on the fringes of the forests in Kerala. The farmers groups from the settler's community are the participants of the enforcement of forest regulations along

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[118]Both political and religious institutions created an impression in the public mind that this eviction is against the landless poor and marginal farmers. It was similar to the move by these institutions during the protest against the Gadgil Committee Report in 2013. They also created the opinion that this move would negatively affect many of the poor tea estate workers and Adivasis as they are the majority of the workforce in the tourism industry and tourist resorts.

[119]In an interview, Janu, earlier leader of *Adivasi Gothra Maha Sabha* (AGMS) and the leader of the newly constituted political party of Janathipathya Rashtreeya Sabha in 2016, narrated how they have lost their land and are still waiting for the promise of the State based on the bill on land rights. Janu also stated that lack of support from dominant institutions, either religious or political, was the major reason for the inability to negotiate with the State to regain their rights over land and other development schemes (Gatade, 2005).

[120] Ibid.

with the forest officials. In a private interview, some forest officials stated that migrants are more efficient in enforcement of the regulations and they understand it better than the tribals.[121]

In this context, the State becomes a welfare state and the poor people are waiting for welfare-oriented development projects once they become part of the institutionalised marginalisation over a period. An example is the tribe's response in Muthanga and Dalits' encroachment for Chengara to acquire right over land and equitable land distribution, which was already being offered a few years back in Kerala. [122] They lack support to enhance capabilities to protect their rights or claim their stake or resources, and the only support seems to be from extremist ideology. This can happen because they lack support from formal institutions. Both cases of the struggle for land of the marginalised community (Muthanga and Chengara), was labelled by the State as a movement of conspiracy with extremists. By thus labelling the struggle as a 'conspiracy allegations' the State evades its own responsibility without addressing issues of land rights and property rights of the traditional forest inhabitants in Kerala.

5.4 Land Alienation and Claims over resources and influence of institutions

Alienation of land and its redistribution to the tribes have always been a debatable issue in Kerala. Though there are many regulations, and rules were formed to protect land alienation and redistribution of land to the tribes, the enforcement of rules were delayed and postponed for many reasons. As discussed, the tribes were not part of the beneficiary groups of these developments—converting forest land into agricultural land in settlement areas and plantations in the hill districts of Kerala. A majority of land was earlier under the ownership of Adivasis (George and Pampackal, 2017). The tribes were deceived in these programmes on land and development. Even in the land reforms

[121]Interview with the high officials of Periyar Foundation, Thekkady. October, 2014.

[122]The land struggle in Chengara, Pathanamthitta district of the Western Ghats of Kerala in 2012 was a movement of the landless who belong to many castes, religions and ideologies. A good number of them are Dalits and the rest include other marginalised, backward and high-caste social groups. The struggle and movement was to re-claim ownership of land that has been part of a long-standing promise of the various governments in Kerala. The people, about 5000 families, occupied about 100 acres of rubber plantation of Harrison Malayalam Pvt Ltd. They demanded permanent ownership of the land be given to the landless communities. As in other struggles of marginalised communities, the mainstream political parties, including the Left, accused the group of involvement with extremists and foreign funded agencies. The struggle also questioned the 'revolutionary land reforms' in Kerala where Dalits and Adivasis are still landless. It gave importance to the new land policy, which could address caste and community aspects in terms of land share in Kerala. Though many promises of the State are still not implemented, the struggle is of social, economic and political significance in the contemporary development scenario of Kerala (Sreerekha, 2012).

in Kerala (the Kerala Land Reforms Act, 1963) in the 60s, tribes in Kerala, instead of benefiting from the reforms, lost their land. The settlers' community used tribal households as landowners, but considered them as tenants (Sivanandan, 1979). After the various reforms of land and forest, the Adivasis were officially alienated from their land through encroachments of the State and settler farmers.[123] However, the government and civil society continuously failed to meet the legitimate demands of the tribal community, i.e. restoring alienated land to the tribal community (Suchitra, 2014b; Sreerekha, 2010; Bijoy and Raman, 2003). Over the years, there was no law enforcement and land alienation for the tribes continued.

The State passed a bill in 1975 in the Assembly to redistribute land to landless Adivasis. However, the official notification was published only in 1986. The implementation of this bill was postponed continuously due to one or other reason or without any valid reason. The State failed to enforce the rules. Over the period, the State could distribute land only to very few households. The issue of delaying land distribution to the tribals was brought up in the High Court and the Supreme Court. Passing through the various hearings in the High Courts, the case was finally filed in the Supreme Court. The Supreme Court verdict was against the State. The verdict clearly mentioned that distribution of land is the State's responsibility and will be strictly implemented and land distributed to all identified tribal households. In 2010, the Supreme Court ordered the State government to complete distribution of land by 31 March 2011. There was no procedure and implementation status was not available in the public domain after this verdict.

The land rights of the tribes were simplified over the years and even then, it was never implemented. Even after 18 years of the 1999 bill, land distribution is not yet completed. In a recent statement to media the Minister of Revenue, Government of Kerala, expressed his view that he is not clear as to why the land is not distributed to the Adivasis. There are many procedures that the State has to cover to ensure the

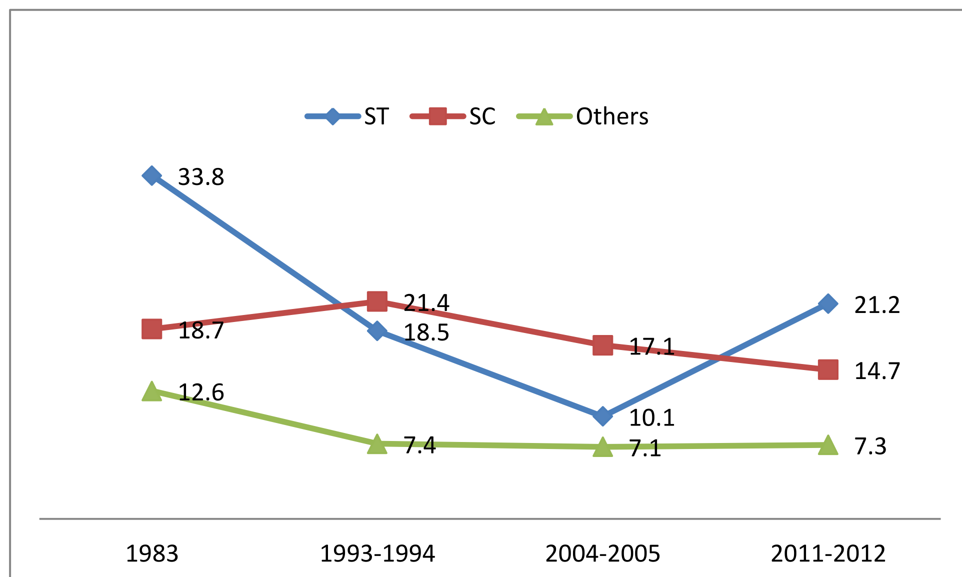
[123]The approach of the ruling governments towards the struggle and demands of tribals for their alienated lands left them as landless social group in Kerala. The inefficient enforcement of existing bills on regulations resulted in a majority of tribals being landless with no rights over traditional land and forest. Janu has stated that tribals consider land not only for their livelihood but also as a way of life. Land and its cultivation is integral to the life of the Adivasis. She pointed out that people occupied land through forest encroachments and encroachment of tribal land, which is considered as a capital for generating income. This approach of mainstream society might have also contributed to farmers' suicides in Kerala. It will not happen to traditional tribals (Janu, 2004).

redistribution of land/distribution of forest land to the landless tribals. The key procedures required for land re-distribution to landless Adivasis is outlined below:

Title deeds to the land provided by the revenue department,
Permission from the Central Government is required to provide forest land to the Adivasis,
Revenue department has to verify the allotted land as cultivable land or suitable for habitation,
Revenue department has to verify the antecedents of the landless people by conducting surveys and distribute title deeds,
Rehabilitation and institutional support have to be provided by the department of ST,
Forest department has to clear the permission after getting permission from the Central Government.

Tribals in Kerala constitute a major proportion of landless social groups. The data based on NSS Employment and Unemployment Survey (Yadu, 2015) from 1983 to 2011-12 reveals that there is a declining trend in landlessness for all social groups in Kerala. However, the proportion of landlessness is still 21.2 per cent among ST communities where as it is 7.3 per cent for others. In 1983, it was 33.8 per cent, which reduced to 10.1 per cent in 2004-05 and increased to 21.2 per cent in 2011-12 as shown in the figure. The change is almost stagnant in SC households where landless households have reduced from 18.7 per cent in 1983 to 14.7 per cent in 2011-12.

Figure No. 5.2. Proportion of landless households in Kerala



Source: Yadu (2015)

Landlessness of the Adivasis is not because of inadequate land but because they do not have access or power to claim the resources. As Sen argued (Sen, 1981), 'not being

enough' can be one of the many causes for people 'not having enough' of food. The large-scale encroachments in forest land by the dominant groups—including industrialists, settler community and plantation companies—shows that lack of access to claim resources is the cause of landlessness of the Adivasis in Kerala. As Sen observed, absolute lack of resources may be only one of a number of reasons for people not gaining access to the resources they need for sustaining livelihoods. The dominant groups received support from the various local government departments and formal institutions to claim their rights. This shows how tribal and other marginalised communities have undergone institutionalised exclusion from their rights over property, knowledge and local systems over the period in Kerala.

The Muthanga land struggle of the Adivasis has to be understood in the larger context of land alienation, the conservation act and forest policies. The lingering issue of land alienation of tribals got a fillip through the Muthanga agitation. They have faced various phases of land alienation starting from the colonial period, early settlement, and contemporary developments in Kerala. The following section explores why a certain community fails while others are successful in claiming their rights on public or forest land, legalisation of traditional rights and development projects in support of their claims. One could see that land alienation is substantial in the case of tribals and remain unaddressed though large-scale forest encroachments are still widespread in the State. How are certain groups unable to or lack the capacity to claim their property rights, and how institutions support to incapacitate the groups claiming their rights are matters of concern?

5.5 Property rights: Forest land vs Revenue Land

It has been observed that the encroached land is always under dispute over property rights in Kerala. One dispute is over land rights between State institutions—the forest department and the revenue department. As in the settlement period, there are multilayer of rights over forest as a property right. Rights over land are with the revenue department and rights over trees are with the forest department (Sivanandan et. al, 1986). It was observed during the fieldwork that both the departments blame each other if any encroachment of forest land is reported in the area. The bifurcation between forest land and revenue land is a perennial problem leading to prolonged

litigation.[124] The forest department declares that the lands in dispute in Munnar belong to the revenue department and it is incumbent upon them to take measures to reclaim the land. According to reports submitted to the Supreme Court of India nearly 86,000 hectares of forest land in the Munnar region has been appropriated, and these lands fall under the revenue department of Kerala. Many encroachers use this confusion and division of rights in the departments to secure their encroached land.

Other claims are between the social institutions/communities based on their rights over land occupied from post 50s onwards. The encroachers legitimise their encroachment in most of the cases as in the case of Mathikettan and Munnar by stating that they have *Kuthaka Patta*—title deeds.[125] In Mathikettan, for instance, nearly 400 acres of the area were given *patta* by the erstwhile Travancore State authorities to then farmers/migrants in the early 40s. As observed by Patibandla (2013), in several parts of India as also in major parts of the Western Ghats of Kerala, the property rights on land remain tenuous and are subject to the high transaction cost of enforcement. It was observed during the primary survey that there were a series of *Pattayams* (title deeds) distributed in the hill districts of the Western Ghats of Kerala. A few respondents stated that most of them were fake documents. Each pattayam was known under a different name given by the ministers/ government under their regime. As a result, the price of the land was primarily fixed based on the 'name of the pattayam'. The sellers and buyers would clarify the type of pattayam they hold for their land. It is also widely known that those who managed to get pattayam for five acres have extended/encroached the surrounding areas and acquired possession of more than 50 acres. In 2005, an empowered committee appointed by the Supreme Court visited Munnar and discovered hundreds of forged title deeds, prepared to encroach on forest lands. The violators included then parliamentarians, relatives of ministers and political leaders (Nidheesh, 2017).

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[124]In most of the cases, both the departments would not take any action if the case related to high profile groups. Forest officials are responsible for any tree felling even if the land is under the revenue department, Interview with the forest officials at Thekkady. Similar opinions were also shared by the local people, Interview conducted during the fieldwork, October 2014. The environmental activists also urged the government to bring the disputed area of Munnar under the ambit of forest laws. The environmentalists stated in the meeting with CM of Kerala on the Munnar issue that revenue laws are weak. The country has strong forest laws. Once the disputed land comes under the forest laws, then it can stop encroachment by resorts and plantations (New Indian Express, 2017).

[125]*Kuthakapatta* is a title deed given to early settlers that allowed a farmer to use the land for subsistence cultivation and construct a home (Sivanandan et. al, 1986).

5.6 Establishing Support and Accreditation with Formal Institutions

Another way of claiming the encroached property is that the encroachers establish a formal support, including financial support, from various institutions in the locality. The community takes the help of individuals representing government institutions (corrupt officials), using political and religious pressure, influence and bribes, to evade rules and granting of permission for their encroachment and illegal commercial activities in the region. The encroachers would avail their support for infrastructure development of the formal institutions by using their social capital and their social network on influencing officials from these government institutions.

They establish basic access to both infrastructure and government services. The encroachment of Mathikettan Shola forests in 2002 is a classic case in this context. The land sharks made use of the state public works department to construct roads into a protected Shola forest and the local self-government institutions earmarked funds for road construction.[126] Here, the community approached the state department to extend basic services to the society. They labelled it 'support from authorised institutions' and, in a way, the support from the formal (government) institutions also 'justified' their encroachment of forest land. Once the basic infrastructure is established within the encroached forest land, the rights over property will be justified publically.[127] For example, along with other political leaders, local MLAs (elected in May 2016) stated that the commercial buildings in the encroached land in Munnar are not illegal. The resorts, other commercial buildings and basic infrastructure are not constructed overnight or illegally.[128] They have received permission and acquired NOC from all concerned departments whenever it was required. They have received permission from

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[126]Encroachers managed to involve state public works department to construct a road through the encroached land of dense rain forest. The encroachers, with the support of local political groups and the local institutions, used public money for the construction of the road. The state public works department (PWD) allocated an amount of 3 crores. In addition, Idukki district Panchayat and Santhipara Grama Panchayat allocated 19 and 5 lakhs respectively (Nair, 2002).

[127]The encroachers claim that the land is authorised for road construction and supported by the State. This claims also supported by the officials from lower rank, either from the Panchayat or from the revenue department. The same officials do verification of the documents. Similarly, they use forged documents as title deeds; it is very difficult to cross check with the revenue department since the department does not maintain systematic records. Interview with landless tea estate workers and tribals: October 2014.

[128]This is the same argument made by sitting MLA against eviction. There are allegations that the MLA himself built his house on encroached land. The argument is that the buildings were not constructed overnight. The buildings were constructed with all required permission from local institutions. These resorts provide employment opportunities for local people and so on. The MLA argues that if these buildings are illegal, why the government had not evicted earlier.

the local Panchayat, village office, revenue department, fire department, pollution control board and so on to create an authentication of the legality of their encroached land to the public. Hence, it is legal as stated by the protectors. These encroachers knew that it was easy to get *patta* once the encroachment was legitimised by the revenue and local self-government institutions.

However, the same communities allegedly blame the officials of the government institutions if they take any legal actions on evictions and demolitions. When evictions started, the same groups argued that 'the move is based on the vested interests of the officials' and not from the institutions/government.[129] The resistance of these institutions—an alliance of political and religious groups—was not against the government institutions that were responsible for implementing orders of the State, but for the officials/individuals who are at the frontline of the eviction. When the debate surfaced, the State justified that the officials of the local institutions due to their 'professional ignorance' grant these kinds of short-term permission.

The Munnar encroachment in 2017 was legitimised in this way.[130] In this context, the statement of V Sriram, Sub Collector, who initiated eviction of illegal buildings in Munnar in early 2017, becomes important. "All the commercial establishments were functioning with official permission from the local authorities such as the pollution board, fire and safety board and so on. How can someone not know about the law in all these agencies? Even if they were all ignored, ignorance of law is not a license to violate it".[131] However, apart from the responses from the higher officials the State was unable to act more constructively to prevent further encroachments and illegal constructions.

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[129]The Kerala minister from the same district accused the Sub-Collector for eviction by stating that the official should be banished to a mental asylum. The minister made this ill-advised comment at the eviction team demolishing a Cross, which was erected in encroached land (Outlook, 23 April 2017).

[130]The land evicted in Mathikettan after the encroachment of 2002 is once again encroached by the same people. They have used the title deeds that were cancelled in the eviction of 2002 by paying land tax in 2017. The officials of the Udambanchola Taluk office support the illegal act. The Additional Tehsildar also admitted the irregularities reported (Informal discussion with the workers of Tea estates, KDHP and members of trade union leaders in Munnar: January-June, 2017).

[131] It is reported that the encroachment and allied activities in Munnar is alarming. The tourist population is also rising during the peak season. The officer opined that both elements should be regulated and controlled. The initiative of V. Sriram to fix the damage caused by the influx of builders. Majority of the social institutions were against this move. As builders were worried about their investment and local residents were worried about their home and the land, which they have occupied with temporary title deeds.

5.6.1 Customary Rights and Legitimisation

In contradiction to the dominant community, the claim of tribals is based on their customary rights. However, the dominant community and the State develop formal rights over resources, which are against the existing customary rights of the Adivasis. As Kulkarni (1982) observed, tribals used their customary rights over property in the pre-British period. Leach et. al, (1999) also agreed that traditional in habitants have their customary rights. The customary rights or informal property rights are legitimised by social norms and codes of behaviours. These are legitimate in the eyes of those local resource claimants who regard government reserved land as ancestral farmland, but illegal in the eyes of the State. But the land legitimisation history in Kerala works the other way round. The 'farmers' illegitimately claim the forest land after encroachment based on the claimants of earlier 'title deeds', but it is gradually legitimised by the State. The unlawful approach of the State over customary rights of the tribal people was implemented through the actions of the forest department and the settler community.

Different social actors have very different capacities in voicing their stake on claims. All negotiation processes will reflect the prevailing power relations, and if powerful groups do not achieve their desired outcome through open negotiation, they are likely to do so through other means (Leach et. al, 1999). For example, in the Muthanga struggle, the tribal leader, Janu, was beaten up badly by the 'public'. The police reported that it was done by the locals.[132] The State observed that the locals took this step because in their eyes the claim of Adivasis for their customary rights is illegitimate. The eviction of tribals from the forest was a shared responsibility of the settlers along with the forest department. The tribals lack institutionally grounded claims and support from various institutions, which makes them powerless and thus unable to stake claims against those powerful forces. For example, even if allocated land were included in the encroached area in Munnar by the dominant groups, tribalscannot make their claims from the State. As stated in the previous chapter, the

[132] The locals were taking the law into their hands in the presence of police officials. The locals are part of the migrants who were partially responsible for the land alienation of the tribals in the early phase of migration to Adivasi area of Kerala. They were always against land distribution to the tribals in Kerala. Few other cases were also reported in Kerala that 'the locals' were attacked by protestors, those (Adivasis and Dalits) who protest against the state. The latest case reported a lynching of an Adivasi youth in Palakkad district of the Western Ghats in February 2018 by the locals, accusing him of stealing food items. Police were onlookers in all of these interventions from the locals.

response of the local community and the forest department is identical to that of hunting an 'illegal tiger' in the settlers' agricultural land.

The cases of encroachments in Munnar, Mathikettan and nearby areas of the Western Ghats show that the community relies on different institutions to legalise their claims. The Syrian Christians who were the majority of settlers, and early European settlers in the High Ranges, brought the Church with them (Moench, 1991) to claim their encroached forest land during the British and the post-British period. Kapikkad also observed that when the migrant farmer travelled to higher ranges, the Church and police also accompanied them, institutionally supporting them to claim command over resources (Kapikkad, 2017). Encroachment of land led by various interest groups, including religious communities has in fact affected the legitimate claims for land by the marginalised castes and communities in Kerala. Tribals and plantation workers are the most alienated in this context. The alliances of the powerful keep questions of equity and environmental justice at bay, while the landless plantation workers and tribals become a part of exploitations of resources even in the participatory forest management programme of the State aided by international donor agencies. This has been a raging problem in the Periyar Tiger Reserve as well.

5.7 Forest Conservation and the State

Few cases depicted above show how formal institutions and the government were indifferent while they approached Adivasi encroachments in erstwhile Kerala. The following section also discusses how foresters become the guards of violation of rules of social groups on encroachment of forest land, while typecasting the tribes as exploiters of resources and denying them their customary rights over access to the forest resources. The forest department is an established department with a wide range of positions starting from forest guard (reserve watcher) and beat officer (beat forest officer) to chief conservator of forests and other officers at a higher level going right up to the Minister in the State. Despite this, they are hardly observant about encroachments and illegal constructions in forest land by communities and religious institutions of mainstream and dominant social groups. It shows how locally existing power structures impede conservation activities and how the State and FD are mere onlookers of structured and planned encroachments and establishments. Forest officials stated that since forest is State property, encroachment of forest land is considered a crime. The forest officials claim that they will not allow encroachment of forest land by

anybody, but while addressing those incidents they stopped several strikes by the Adivasis including brutally ending the strike at Muthanga in 2003.

The State's authority over forests imposed by succeeding legislations has been a recurring theme in the opinion of officials of forest department on forest protection policies. They would take action against any encroachment and cited an example as to why they had taken action against Adivasis in Muthanga. As stated, in the context of tribal agitation and encroachment for a few days in a sanctuary in Muthanga and other cases of resistance by tribal communities in Kerala, the forest officials reiterated that the property rights of forests lie with the State. Kjosavik has narrated that during the days of strike they owned rights over property though it was temporary in nature. However, that ownership itself brought out hope and happiness in their lives, and they 'hoped that the government would let them stay over there (Kjosavik, 2015: 139)'.

The forest department is often silent on encroachments by the dominant communities across the Western Ghats in Kerala. For instance, a private engineering college infringed upon forest land for constructing a playground. The college was in public discourse recently due to the unnatural death of a student and the illegal relationship of the management with high officials and politicians in Kerala. Many land encroachments were already under debate in the public domain and under litigation in the High Court in Kerala and the Supreme Court of India. However, when reports of land encroachment of the college emerged, the forest department refused to take action by stating that the matter was not under their purview and that they would take judicial permission for further action in the matter.

Many protected areas in India are transformed into tourist spots under the pressure of tourism. Guha has shown how Jim Corbett National Park has been moulded to highlight its tourism potential (Guha, 1983).[133] The tribes inhabiting PTR question the necessity of making the Reserve a tourist destination and in the face of displacement and curtailment of forest rights. They raise crucial question on conservation and tourism and highlight the need to prioritise between the two conflicting concepts. Vasan stated that the urban privileged elites are the important protagonists in wildlife

[133]Guha (1983) observed that roads are carved in and around protected areas for creating access for pleasure trip for tourist in urban areas and not for providing better access for local people. Even if surrounding roads are not constructed and maintained well, the straight roads from city to the forests or protected areas are connected to prominent highways and well maintained.

conservation. The study observed that national parks and sanctuaries are preserved for the elites from pre-colonial, colonial and post-colonial period. They use the resources for their holidays and for hunting (Vasan, 2005).

Guha also raises this point and quotes a tribal informant who shared the view that if the tiger is to be protected, then why does the State convert protected areas into tourist hotspots?. Guha (2003) narrates about the questions raised by a local community member to a tourist in the context of conservation of forests and protection of the tiger. 'Why can't urban elites take a tiger and protect it within their city itself, he asked? Cities can also be a tiger reserve'. The tribes near the PTR have raised similar questions. It was also shared in the primary survey that the legacy of the colonial forest policy continues even today, where forest resources are considered as income generating sources for the State. There is hurried infrastructure development in Munnar though it is under the pretext of tourism. Many tourists visiting Munnar are hardly aware about the unplanned growth of the 'tourist hotspot', but one could see pristine farm lands being converted into tourist villages and resorts.[134]

The creation of national parks and sanctuaries on forest lands further excluded these communities from their survival base. While conservation of the flora and fauna was recognised as an urgent need, the settlement of Adivasi rights to forest and its produce was not taken up with the sincerity and seriousness that it deserved (Munshi, 2012: 06). Even when conceding to the tourism potential of Munnar, the havoc that unplanned tourism activities bring to Munnar brings into focus its wider impact on the local environment. Besides the rapid growth of buildings and allied activities in the region within a short period, unscientific waste management has become a perennial problem in Munnar.

The survey brought into focus the fact that there is no scientific mechanism for waste management; rather all the wastes are dumped on the roadside and scattered within the city. The hill station is also known as the origin for major water bodies in Kerala. Contamination of water bodies including the rivers in the upper stream affects the people downstream, as far as Cochin.[135] Pointing to the construction of a high-tech road

[134] Personal interview with the local stakeholders and tourists, Munnar, October-December 2015.
[135]The waste management practices are widely criticised due to the havoc of viral fever spreading across Kerala. In recent years, the people have been victims to diseases of various hues including chickengunia, dengue, H1N1 etc.

in one of the Adivasi areas in Wayanad district of Kerala the Adivasi groups said that they require basic livelihood assets like drinking water, houses etc. rather than this high tech road. Obviously, these roads are meant for pleasure trips for the urban elite rather than for benefiting the tribal community.[136] These facts are ignored in the 'development' of the dominant institutions, even in the early phase of post-independence Kerala.

5.7.1 Participation of the institutions and decision-making process in Forest Governance

One of the main conservation agendas—participatory forest management—in Kerala is technically initiated by the World Bank, that is, the Ecodevelopment Project. The project envisaged a new regime of participatory management, which has high priority in forest management in Kerala today at least in the policy documents of the State. However, the participatory conservation impedes the day-to-day life of tribes more than ever before. Participation works at three levels, which plays a major role in decision making of the State and its process of change in governance of forest. First, participation of traditional inhabitants: participation in the regulatory process of the project implementation, which includes participation of beneficiaries, regulatory teams and role in decision making of regulatory process. Secondly, participation of migrants-dominant groups: participation of the dominant groups including the resistance tothe move of the State either to ensure conservation or regulatory process such as initiating Gadgil Committee report to save the Western Ghats. The resistance against the eviction of encroachments is also participatory process of the dominant groups. Thirdly, participation of officials of various department including from forest department, revenue department and other village administration: their participation to facilitate forged documents to support claims of the dominants groups for encroached forest land, illegal access to the forest resources and facilitating infrastructure to develop commercial activities. The encroachment and regularisation process infer that local community—settlers, for instance, have a major role to play in resource management. They are the major drivers of forest encroachment even if the participatory framework

[136]The transformation of an Adivasi village into a tourist village in Wayanad district of Kerala is a widespread activity over the period. Many studies have observed about the conversion of paddy fields and wetlands into dry lands for both dry land cultivation and construction activities become rampant. About 20,000 hectares of paddy field has reduced in 20 years from 1980 to 2001(George and Krishnaprasad, 2006: 71). However, paddy fields provide work, wage and food for tribals, which are alienated in the name of homestay and resorts.

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of forest management does not envisage their participation. The concept of participation and its discussion are centred on the tribals and local inhabitants. However, the observations discussed above infer that it is important to consider beneficiaries and recipients—intended beneficiaries and passive recipients. Over the period, discourse of forest governance in Kerala has changed to participatory in nature. However, the State gives priorities to the dominant institutions and excludes tribes in the participatory process of conservation agenda and forest governance in Kerala. For example, all stakeholder meetings led by the Chief Minister of Kerala on the Munnar eviction issue excluded the tribal communities, though the major portion of land encroached was previously allotted to the tribals. It shows that in the general discussion on encroachment and conservation, tribals are excluded even if they are one of the major stakeholders. Similarly, in discussions of addressing challenges of forest conservation due to forest dependency mainly centred on dependency of the poor and not the dependency and resource use of other institutions such as State, industrialists and other commercial interests. However, tribes are not included even in the discussion on tribal dependency and its threat to conservation.

The concept of participation at the implementation level may be mere participation and nothing more. Lack of skills or claims to being part of the regulating body or in the process of decision making may also compel the community to accept what 'the system' allows. For example, in the implementation of the Ecodevelopment Project, the tribals resisted the system initially but later they were integrated into innovations for the conservation mechanism of the forest department. The local community also considered patrolling the forest in the night and being a forest guard as under-paid or free service as participation by the local community and the forest department. However, their participation in 'conservatory programmes' was minimal, as quoted by forest officials. Forest officials claim that the communities support conservation programmes only if there is strict monitoring and close instructions from their side. The community (especially tribals) will be interested in any conservation programme whether participatory or not, only if there is some direct monetary benefit.[137]

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[137]Personal communication with forest officials, Thekkady, November, 2015. The response of the forest officials also shows that participation is minimal at the local level and various levels of awareness are required at different stages of forest governance. As pointed out by Baviskar even if participation is still on record conservationists are hardly concerned about training to understand community participation and knowledge about local community and their traditional practices (Baviskar, 2003).

In the case of implementation of the Gadgil and Kasturirangan reports, the dominant stakeholders resisted and used their institutional network to overpower the forest department and State authorities towards implementation of regulations. The response of the State was not in enforcing the regulations, but to develop a more simplified version of the reports, which hardly addressed major arguments of the original version of the reports. The process brings out the further role of institutions in regulations and produces new forms of regulations, which are more accessible to the claimants of the environment. The challenges of participatory development initiatives, then, can be thought of in these terms, whereby the links between local negotiating capacities and power relations are firmly made. This requires an approach to participation that takes the dynamics of power relations between social actors involved in the development process seriously (Nelson and Wright, 1995).

5.7.2 Partnership with other Government Institutions and Institutional Structure of the Forest Department

The forest department is the major stakeholder in the implementation of various regulations in the region. Since the colonial period, the forest department has worked as an institution engaging in both conservation and livelihood activities (Gadgil and Guha, 1992). The forest department has evolved over the period as a powerful institution and the formation of forest laws and its regulation is their sole responsibility (D'Silva and Pai, 2003). The failure and success of regulations also depend on the functioning of the forest officials in each region.[138] Various participatory resource management programmes, especially EDP, enabled the FD to extend their control over the lives of the local community, especially on the tribes. The unrestricted authority exercised by the forest department on the community living in the fringe areas of the forest often stir up various forms of conflicts among the stakeholders in the area. Conflicts between other State institutions over development projects have also been observed in the field. For example, a forest official often intervenes in the renovation and development activities of the Grama Panchayat in the tribal community settlements.

[138]Many households agreed that their response towards the law and regulation also depends on the behaviour and commitment of the officials. If they find heavy corruption among officials, then there is laxity in following the rules.

The Panchayat is an implementation body of the welfare and development schemes of the State at the village level.[139] Since the settlement of the tribal community is located at the fringe areas, the forest officials treat the villages as being under their jurisdiction of power and monitor day-to-day activities of the people. A recent order by the Wild Life Chief Conservator of Kerala on the rights of the forest-dependent community states that FD will not be an obstacle to any developmental activities, which have a positive impact on the community. It includes road development and providing other basic infrastructure facilities. However, the forest department claims that the development activity of the State is very limited in the region and there is a huge gap in coordination among various stakeholders on any developmental activities of the State and centrally sponsored schemes. As noted by high officials of the forest department: 'During the colonial period, forest department shared complete responsibility for the conservation of the natural capital and welfare of the inhabitants. In contemporary developments, the responsibility of the department is completely on conservation of forest and not into the development of the community. The concerned departments of the State, for instance, Social Welfare Department, SC/ST Department and local governments are the responsible stakeholders in the development of the community. However, there is a huge gap in coordination among the stakeholders. It has been observed that other departments and concerned authorities are not coming forward to provide any developmental support to the community. Everybody thinks that it is the responsibility of the forest department, but we are helpless'.[140]

However, the FD intervenes in the day-to-day issues and development activities at Mannankudi, a major settlement of Mannan tribes, a jurisdiction under the fringe area of PTR. The FD also has the upper hand to decide what development activities should be implemented in the area. For instance, a conflict ensued because of a dispute between officials from the local Panchayat, forest officials and members of the community. As part of the road upgradation programme, the local Panchayat refilled the road at Mannankudi, since the road was almost washed away during the previous rainy season. Following communication and request from the community, the Panchayat repaired the road. But when the Panchayat came to repair (filling up) the

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[139] Kerala enacted the Panchayat Raj Act in 1994 in compliance with the 73rd Constitutional Amendment to form a three-tier administrative structure (Panchayat Raj Institution) which includes Gram, Block and District level Panchayats.

[140] Informal discussion held with the Deputy Director of Periyar Wildlife Foundation, Periyar Tiger Reserve, Thekkady, June-October, 2013.

road, a few forest officials at the site confronted them by contending that the Panchayat required prior permission from the forest department to do any infrastructure activities at the settlement. They also asserted that the area is under their jurisdiction that it is regulated and controlled by the FD.[141] The officials of FD argued that the road re-filling activities are part of the infrastructure development, which may lead to further forest depletion and negatively affect the eco-system. During the confrontation, one of the community members questioned the forest officials by pointing out that there was construction of a road in the forest a week ago by the forest department itself. The forest department claimed that the road, which is constructed in the buffer zone, would support the easy monitoring of conservation and forest protection. However, the community argued that the road would only facilitate the officials to reach the core area of the forest for entertainment, which is noticed very often by the local community. The respondents stated that officials do entertain their friends and relatives in the core area of the forest engaging in leisure time rather than in official monitoring. The forest officials reported this confrontation as a violation of the forest law and as a confrontation with the official duty of the department. The officials reported the matter to higher authorities and made charges against a few people. At the interrogation, high officials questioned the community members of Mannan about their social positioning to stand up to the forest officials in front of the staff from the Panchayat. They demanded, 'who has given the power to you people to talk to a forest official in a face off manner?' The villagers replied that to communicate with the people whether they are from the department or not, there is no permission required. Since many households gathered in the area, the officials set them free without charging any case of 'violation of forest law'.[142]

The basic rights of the community are controlled by the FD to limit their interaction with the outside community. This case was about the same community and described another confrontation on basic rights of the community at the settlement. The settlement of Mannan community located at Mannankudy is an area of more than 1000 households, which is controlled by the FD of the Thekkady region. FD built a gate at the main entry to the village settlement for the community and created a rule that entry of outsiders without prior permission from the officials will be restricted. FD also put a

[141] Informal discussion held with the members of the local Panchayat, Kumily, June-October 2013.
[142] Gathered the details from the focused group discussion held in Mannankudi, October-November, 2013.

notice board at the gate clearly stating that 'no one is allowed to walk inside and, if any, trespassers will be punished under the violation of forest law'. The forest department used to lock the gate at 6 p.m. and keep the key with them. Even community members could not enter/exit through this main gate without prior permission after 6 pm. There is one narrow alleyway/footpath to the settlement village for people to enter and exit. The main gate is the only point of entry for any vehicles to the settlement. The regulation has been enforced and observed for many years. One day the community members broke open the gate when they had a medical emergency during the night. The neighbourhood could not contact any officials as their phone calls to the officials went unanswered. Then they decided to break the lock and open the gate to take the patient to the hospital. In response to this, a dispute arose; conflicts emerged between the officials and the community and it went on for days. The community demanded free entry/exit and the right to keep a duplicate key with them. Finally, the officials from FD agreed to the demand and relaxed the regulation due to the open challenge of the community. The conflict ended up with a mutual agreement that people have the right to keep the key. The agreement was made with the condition that the community would ensure that the news was not reported in any of the media. Thus, the community challenged the officials and negotiated for their basic rights to access the road, which is shared by the community. As stated by a member of the community:

> 'We were living just like animals in a zoo. Even now, the officials of FD question if someone enters the village. We may require prior permission from the officials to engage with any 'outsiders'. It is quite strange that they believe that we do not have any friends or well-wishers outside the community. In contrast, the officials always entertain their guests and relatives inside the forests, even during nights with food and alcohol'.[143]

Though there are dissents from many against this unofficial regulation and intervention of the forest department, nobody challenges them as they hardly get any support within the community itself. Trivial cases related to the forest resources were registered against several members if they showed any dissent against the officials. As stated by the one of the members of the Paliya community: 'There is some evidence required as proof in any civil case in the police station. It is easy to register any case against us by the forest officials because officials can make up any evidence; a piece of timber is

[143]Informal discussion with the households at Mannankudy settlement, October, 2013.

enough. Any wooden part can be transformed into sandalwood for the sake of the case (until unless the authority disproves it). The case will take its own time'.[144]

Assertion of the community regarding their basic rights is treated as a non-compliance of the law. Such assertions would often lead to conflicts between the forest department and the community. At times, the response to any particular rule was a result of a collective decision of the community. Mostly, the dependency on and use of resources are collective attempts by the households rather than an individual choice of a member of the community. Similarly, no single and static process is enough to understand the response of the community and the individual user towards compliance; rather it is a dynamic and multifaceted process. It embraces the relatively well-established assumption that rationality of the individual and community behaviour cannot be understood by a single all-encompassing model but requires a multiple model approach that incorporates a broad range of social, psychological and contextual influences (Henrich et. al, 2001). As stated earlier, the various methods the officials of the forest department use to regulate economic and cultural activities and the lives of the community in the fringes of the forest are connected to the lives of tribal communities in the region. It goes without saying that for forest-dependent communities, the forest department and the officials are the administrators and enforcers; regulating their relationship with the forest and day-to-day life.

5.7.3 Social Institutions and Instituting Illegitimate Rights

The role of institutions in relationships between people and the environment and constructing a new environment is determined. Diverse institutions, both formal and informal, and often acting in combination, shape the way in which differentiated actors access, use and derive well-being from environmental resources and services and, in so doing, influence the course of ecological change (Leach et. al, 1999). Key actors, both individual and groups interact over a period of time, which produces institutions, environment and the relationship between people and the environment. It also creates institutionally influenced environment (forest-encroachment-eviction) where encroachment is justifiable in terms of its historical instances, *kuthakapatta* (temporary title deeds), development, tourism and so on. The role of the government is to recognise the functions of the institutions and its relationship with individuals and social

[144]Focused group discussion with the members of Paliyan Community, October-November, 2013, Paliyakudi, Thekkady.

institutions. It leads to technical limitation for the excluded community. As stated in the institutional economic framework, once the institutions are supporting the community with vested interests or beyond allowed rules of the ‘representatives of the institutions’ the only choice for the public is to opt for new institutions/government.

The governance of forest management is working here with the complexity of the institutions and its different layers of enforcement officials. The role of government is to strengthen their implementation, through its representative, to ensure the control of the action and intervention—division of enforcement in an implementation—of the dominant class by using various forms of capital. It would strengthen existing institutions to respond to the vested interests among certain communities and officials. It could support the process of an inclusiveness approach to the state of governance in forest management. For instance, the government publicly declares that they are on the side of tribals in implementing FRA, but hardly paid attention to the tribals’ decisions against the proposed Athirappally hydroelectric project. The response of the State to recognise institutions and its role (as in the case of the FRA) have a major impact on the rights of the Adivasis and on their role in forest management. In another example, the government stated that they will not entertain encroachment and the government has a strict policy against the encroachment of forest land. However, at the implementation level, the State does not provide any support to the officials, instead transferring the concerned officials who have taken initiative to implement the State order for eviction.[145]

By using an environmental entitlement framework, Leach et. al, (1999) observed how access to and control over these resources is mediated by a set of interacting and overlapping institutions—both formal and informal—which are embedded in the political and social life of the area. By supporting encroachment, the discussion shows how a single institution works on multiple scales and, in a similar way, multiple institutions work at different levels. Diversified resources and dynamism of communities are influenced by the various layers of the same and by multiple

[145]For some reason the government stopped the eviction in 2007 and 2017. With the support of local political parties and locals, the resort owners opposed the eviction. They have also taken this matter to the High Court. The verdict was against the hoteliers and the High Court asked the government to complete the eviction as planned. However, the day after the verdict from the High Court, the government transferred the Sub-Collector, who was a driving force behind the evictions (Indian Express, 5 July 2017). The transfer also shows how powerful the land mafia is in usurping government property illegally and their linkages to politics and power in the State.

institutions. The diverse institutions operating at multiple-scale levels from micro to macro, influences who has access to and control over what resources, and arbitrate contested resource claims (Leach et. al, 1999). For instance, the Church supports encroachments at different levels. Moench (1991) elaborates how the Church works at different levels. In the 50s and the 60s, contrary to present scenario, the Church was not operating from the front. However, today the Church is in the forefront as depicted in their response to encroachments post 2000 and against the Gadgil Committee reports. The priest could exercise power through his congregation and through the religious minority status of Christians.

The Church did not advocate or encourage encroachment and settlement in the forest and government lands. It did protect the interests of settlers once occupation had occurred. This worked in many ways. At a local level, the mere presence of a Church provided some protection. The settlers build Churches as they always play a role in protecting their interests. Even when there are a small number of encroachers, they build a small shed that functions as a church. Therefore, when the authorities come, they cannot touch the Church. When forest officers come they can evict the people, but they cannot touch the Church. The encroachers always went to a cross. It was not the priest who led them, though they wanted the priest to come and protect them.[146] This strategy worked even in the case of Munnar in 2017.

A case of forest land encroachment for building an illegal water theme park shows that how institutions—formal and informal—support decisions to protect claims on property by the dominant groups in the State. The encroachments and constructions are owned by MLAs of the ruling party in Kerala. The media reported that the water theme park constructed in Nilambur—dense forest villages of Kozhikode districtin Kerala—is functioning illegally. The region is located close to the Nilgiri Ranges of the Western Ghats. The park is built 2000 ft. above sea level after demolishing a natural hill in the biodiversity hotspot of the region. Restaurants and allied buildings are also built on the premises.

The Department of Mining and Geology has submitted a report to the District Collector to take action against the construction of buildings and restaurants, as it is illegal.

[146]Moench (1991) stated how important a role the Church has played in early settlers' period to avoid eviction from the forest land. He documented the process from a personal communication with a local observer who observed how churches use their multilevel operations to support encroachment over a period.

Based on the report the District Collector signed a memo to stop the construction. However, the owners approached the local Panchayat for permission and ignored the two showcause notices. The Panchayat gave permission without conducting a proper enquiry. However, the Panchayat claimed that they appointed an enquiry committee to look at the issues and found there was nothing illegal. The Panchayat secretary has given a temporary license to the theme park, which is built over 1409 square feet of land. The committee was constituted of only their members. In the plan of the buildings, the water source is mentioned as coming from rainwater harvesting. However, it was a check dam illegally constructed over a local stream, which is the major source of water for the local tribal community. The forest department and District Collector found out that the check dam was illegally constructed and ordered its demolition. Before eviction could start, the District Collector was transferred. The table No.5.3 below summarises a number of violation of regulations and laws.

Table No. 5.3. Violation of rules and support from the institutions

cases	Key violation reported in each cases
1	Demolition of hills without prior permission from department of geology
2	Construction of check dam in forest land without permission from the forest department
3	Construction of buildings and park started without availing permission from local Panchayat
4	Constructed all allied buildings with temporary permission—NoC availed from fire department only for temporary building.
5	Granted permission from local Panchayat for all buildings which are constructed illegally
6	Illegally constructed a check dam restricting the flow of the river, which is the source of water to local tribal communities.
7	Construction of the restaurant by over-ruling the stop memo from the district collector
8	No permission availed from the chief town planner
9	No mechanism adopted for waste management system
10	All documents submitted to the Panchayat were forged and undermined memo and show cause notices from the district collector and other departments
11	Finally, received a clean chit from all political parties and the ruling government

Sources: Formulated from the field work and media reports

In addition, they are also constructing a ropeway through the nearby forest without prior permission. Though there are many formal institutions and the forest department had to provide permission to construct the water theme park in the area, the owner could manage to complete the construction of the project without any hurdles. The process shows that the team could manage to influence all the formal institutions to

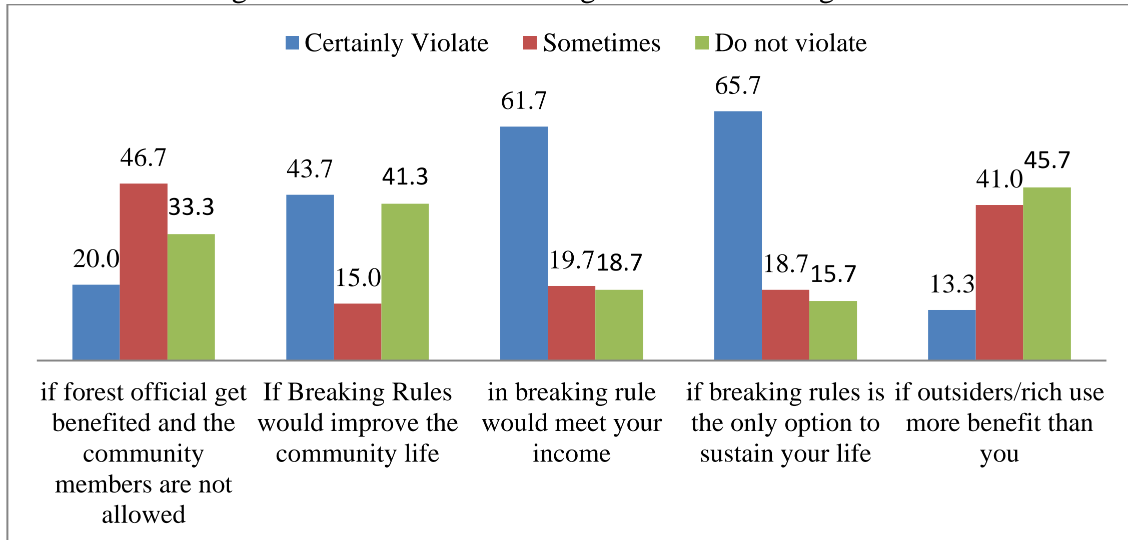
manipulate decisions in their favour. The process of interaction of institutions shows how resources and institutions are locally used, managed and contested and how multiple institutions are involved in resource management. It also shows how different people rely on different institutions to support their claims on environmental goods and services and that there are other stakeholders and institutions that have a direct stake in regulations and its implementation. Generally, these institutions are not framed into the discourse of forest governance and its management. For most of the activities, they combine sets of claims supported by the different institutions (as in the case of encroachment and construction of water theme park by the politician).

Another example also shows how institutions support illegal encroachments by delaying implementation and evading enforcement of the eviction order by higher authorities. As reported in the media, 'Idukki District Collector, suspended Munnar Special Tahsildar, K S Joseph for dereliction of duty and misreporting to the government about the eviction proceedings in Munnar' in August 2017 (The New Indian Express, 18, August 2017). This was about evicting construction of houses in an encroached upon government land by the Special Tahsildar. Special Tahsildar, Revenue Inspector and members of the Public Land Protection Force reached the spot for eviction based on order of the Sub-Collector. The team could not complete the task because of threats and protest along with the local support. However, the Tahsildar submitted a report to the Sub-Collector stating that the building was completely demolished and the encroachers evicted. As he received information contrary to the report, the Sub-Collector conducted an inquiry on the same day and found that the building was not demolished. Ensuring smooth conduct of the eviction process was the prime responsibility of the Special Tahsildar.

5.7.4 Corruption of the officials

The figure 5.3 shows that about 20 per cent of the respondents stated they would also violate the rules, if they notice that officials and outsiders use resources more than the local community. On the contrary, 45.7 per cent households reported that they do not violate the rules, even if rich and outsiders benefit more resources than the local community.

Figure No. 5.3 Factors leading to violation of regulations



Source: Primary Survey

The illegal relationships with the forest officials and local elites have been discussed in many informal interviews with the various social groups. As shown in the figure more than 60 per cent (65. 7 per cent) are willing to violate the rule if that would be only option to meet their livelihood. However, about 20 per cent reported that they would certainly violate and 46.7 per cent would ‘sometimes violate the rule ‘if forest official get benefited and the community members are not allowed due to rule. The same relationship isalso statistically significant (Kruskal Wallis test statistic =92.9, df=3, where the p-value (0.000) < α (0.05)). The pairwise comparisons showed significant difference in the opinion made by the migrants (p-value (0.000) <α (0.008)) while rest of them opined the same. The studies pointed out that the local community are often victims of the nexus (Springate-Baginski and Blaikie, 2007). It is also widely discussed in the media about the nexus between the forest officials and the outsiders —timber and sandal mafia— and how the court cases ended up with acquittals.[147] As quoted by a restaurant owner:

> ‘We pay Rs.1000 for a bundle of firewood. We required about 30-40 bundles of firewood in a season. We used to collect firewood ourselves earlier. We could legitimise firewood collection with support from the local forest officials. It depends on the amount of bribe we could offer to the officials; it is

[147] The Kerala High Court today observed that ordering of a vigilance inquiry against the forest officials who conducted raids on a factory showed that the accused in the case had direct access to the Minister for Forests, K.P. Vishwanathan, and were capable of getting any order from the State Government. (Hindu, 2005).

> a matter to waive the rule and bring it into the compliance structure. It's also a matter of the community of the violators.[148]

The respondents in the informal discussions said that the illegal relationship of forest officials and outsiders are well known and 'it is a regular practice' and 'we don't act accordingly'.

The dominant communities among the settlers use their social capital in furthering their interests.[149] For example, encroachments in the Western Ghats in Kerala show how powerful community groups transform property rights from government to private and utilise agriculture land for commercial purposes. This also shows how individual groups influence officials in the government institutions to evade policy in their favour. For instance, a multi-storied building in 22 cents under government land was a central point of debate between the eviction department and the public led by a mainstream political party. The land was handed over illegally and the present owner claimed that he has purchased it. However, the local government institutions have granted permission at various stages of construction of multi-storied buildings for hotels where the land was public property. The 'owner' approached the High Court, but the verdict supported the government decision to evict the property. However, the government took no action.[150]

Land is the key initial endowment, which differentiates social groups in Kerala. Major structural changes occurred in Kerala in the post land reform phase. Conflicts and competing demands for land have spearheaded wider discussions in Kerala in recent decades. The issues that are debated in civil society in this connection include encroachment of forest and revenue lands by the dominant settlers, political parties and hoteliers. As the media reports, the encroachments were instigated by various

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[148] Discussion with the migrants families those who engages in eatery shops during the Sabarimala season: October 2013.

[149] Social capital is described as a variety of common entities and social structures, which facilitate certain actions of actors—personal or corporate—within the social structures. It also attributes or facilitates not only informal and local relationships but also formal institutions such as government, the political regime, rule of the law, the court system, and civil and political liberties. They use social capital to influence formal institutions to get an access to public property at the local level. Social capital facilitates the support of the dominant community for informally barring tribals from seasonal employment in tourism and during the pilgrimage season. Social capital also facilitates better outcome for access to information from both formal and informal institutions. It is noted that in the vicious circle of encroachment and eviction, very often, local administrative offices observed many files of land records were missing in village revenue departments.

[150] Sub-Collector of Devikulam region in Munnar has given a list of encroachers to the government. The list also includes resorts and buildings: among them, a few are already constructed and others are under construction—some are illegal and are government property.

interested groups for illegal mining, buildings and resorts. Assertions and encroachment of land by various interest groups and the demands to get rights over encroached land raise questions of livelihood and forest conservation on the one hand and hegemonic and heterogeneous social groups making claims on land resources on the other hand. In the process of negotiations over implementation of regulatory measures and its enforcement, dominant communities could gain while the displaced workers, particularly plantation workers, landless Dalits and land alienated tribal become outliers.

5.8 Conclusion

The chapter attempted to see how community could evade enactment of regulation and how various institutions—formal and informal—operating at different scales influences favourable and unfavourable decisions on governance in forest management in the Western Ghats of Kerala. The encroachment of forest land, the eviction process and regularisation of forest land into cultivable land or for non-forest activities were intermittent phenomenon in Kerala in the post 50s. The encroachment of forest land is more rampant in post 2000s, which is a matter of concern in the phase of participatory regime of forest governance. The recent encroachment by prominent groups or politicians and the response of the State are presented as an example of an attempt to analyze the role of institutions in the forest development discourse in Kerala.

The field observations emphasise that since tourism and allied infrastructure are widely accepted in the discourse on wildlife and forest protection, most of the encroachments in the recent history of Kerala use tourism and its allied backward and forward linkages to livelihood as a way to legitimising their encroachments. Studies (Sivanandan et. al, 1986; Tucker, 2012) have pointed out that rampant conversion of forests will have wider implications on natural biodiversity and climate change. It is already being experienced in Kerala now. Apart from severe drought and erratic rainfall, there is a reduction in forest cover of -9064 Sq. Km from 1973 to 2016 in Kerala. Similarly, the percentage of forest area has reduced to 42.15 per cent in 2016 from 66.2 per cent in 1973. In the case of Munnar—a hotspot for encroachment in the recent history of Kerala—the forest cover has reduced to 75.67 per cent in 2016 from 83.38 in 1973. There is a 2.81 per cent increase reported in urban area, 3.37 per cent increase in plantations and 6.15 per cent increase in agricultural land in Munnar alone compared to the data in 1973. However, intervention of the State in the sphere of forest

conservation and livelihood is very limited. Rather, the State still holds a major stake in legitimising rampant encroachment and advocating dam and power projects etc.

The evolutionary process of encroachment and eviction in the Western Ghats of Kerala show how relations of individuals with formal and informal institutions are forming and how this relationship influences occupying forest resources illegally even today. It shows how dominant communities could still overrule the attempts of the State to enforce forest regulations in Kerala, for instance, evading enforcement of anti-forest encroachment bills of the 1980s. Contradictory to the policy initiatives at the State level, institutions and stakeholders at the local level play significant roles in decision making and governance of forests. Since governance include different layers of institutions, multi-levels of operations of same institutions—for instance political party (state vs district) and Church (Bishop house/parish) —they have an influential role in forest governance. The communication and management of local institutions are important, to ensure the implementation of regulations, which is framed very often at the state level. For example, many eviction processes are stopped due to heavy protest from political and religious groups at the local level.

The institutions located and operating at multi-layers were often not directly linked to the forest-livelihood dichotomy. However, it played a determinant role in the success or failure of environmental regulations and eventually in forest governance. The local elites—religious and political—made every effort to legitimise encroachment of forest land and opposed attempts by the State to grant property rights to the landless tribes in order to protect wildlife sustainably. Unfortunately, the attempts of the State in creating and defending institutions for forest governance hardly saw participation by the tribal communities and rather by dominant groups, churches and mainstream political groups and so on. This process only reinforced the earlier practice of legitimising encroachment of forest land and hardly addressed the dynamics of conservation and livelihood, resulting in rampant forest depletion.

Chapter 6

Conclusion and Policy Implications

6.1 Introduction

The central concern of this study has been to understand the response and decisions of institutions in implementing the forest regulations that make effective governance of forest the primary task. Situated in the context of the Western Ghats of Kerala the study attempted to analyze how the term ‘livelihood of the inhabitants and conservation of forest’ technically used by the institutions address challenges in forest governance. The responses of the formal, social and political institutions on implementation of regulatory measures show that forest governance is concerned about conservation and livelihood in the Ghats of Kerala. The responses show how decisions and regulatory measures are formed and implemented in the State in relation with forest governance. The forest sector and economy is threatened and challenged by numerous factors, including various regulatory measures, forest encroachments, forest dependency of various stakeholders for livelihood, development projects and commercial options.

In understanding the complexity of various process of forest governance, the analysis and arguments of the study are framed within the three cases/phases of the implementation, which engages on forest governance in Kerala: before the implementation phase; the phase of post implementation; and the case evading the implementation by the State. In the case of before (pre) implementation the study uses the Gadgil and Kasturirangan Committee recommendations to analyze how various institutions influence the decision of the State to stop the regulation in before its implementation itself. For post implementation, the study analyzes the ecodevelopment project that has wider impacts on forest governance and management in the Ghats. The study explores the Forest Conservation Act, 1980 and the eviction process on

encroachment of forest for non-forest activities and analyses the case of evading implementation in the Western Ghats of Kerala.

As the concluding chapter, an attempt is made to discuss the themes that are central to the forest governance in the study area and findings emerged from the research. The discussion of the thesis centred on the following issues: livelihood, regulation, forest dependency and conservation interface, participation of the local community, relevance of social capital and land as major assets of the social groups, and building coherence among institutions in forest governance. These issues individually as well as in combination influence each other and are relevant in unfolding the arguments put forward by the thesis.

6.2 Livelihood, Regulation and Conservation Interface

The study has focused on how livelihood emerged as a concern within the regulatory framework that aimed at protecting the Western Ghats. It is globally recognised that the livelihood of the traditional habitants is centred on forest resources and it is under threat in livelihood-forest-livelihood relationships (Rasmussen et. al, 2017). Livelihood is an asset, such as land, and not merely means with which person makes a living: they also give meaning to the life of an individual/persons. Assets are not simply resources that people use in building livelihoods: on the contrary, they give them the capability to be and to act. Livelihood is redefined to transcend the traditional meaning of dependency on land and recourses. From a critical perspective, it is argued that livelihood provides meaning to the existence of individuals and communities. As observed by Bebbington (1999) livelihood assets not only allow for survival but also empower to act and to reproduce the agent. It would challenge or change the rules that govern the control, use and transformation of resources. It is in this context that the study has analyzed how social groups could negotiate and govern either against or alongside the implementation process of the regulations.

Evidence from the primary survey indicates that tribal communities are predominantly dependent on forest and forest economy for their livelihood. Large majority have already lost their traditional entitlement and control over forest resources over the period due to the forced displacement, top-down development initiatives and conservation policies. The displacement of tribal communities from their intimate ecosystem by the 'new space' created as part of the mainstream development process

deprived them of their intimate physical, social and cultural environment (as noted by Lasgorceix and Kothari, 2009). In the new settlement, tribes are replaced from traditional habitats into new 'field', which is highly regulated by the dominant power structure either from the forest department or from the state administration. This relocated place is known as tribal colony or tribal settlement or colony (for Dalits) and they are forced to rely on the market economy where they do not have any 'skills' either in labour or capital. Climate change is a global concern and many other locally determined factors reduce the livelihood of the community and those who rely on forest for their livelihood. The controlling measures on access to the resources as part of the regulation would further impact their livelihood. By focusing on cases at three different phases—pre implementation; post implementation; and evading the implementation, the thesis narrates how the forest-dependent communities continues to face livelihood challenges despite a concern to protect the livelihood in the regulations. The chapters discuss how concept of livelihood is used strategically at the level of policy and in the implementation phases. The Ecodevelopment Project (Chapter 3) gave a high priority to livelihood and the community of those who relied on the forest for their livelihood. Livelihood was the key concern of the peer groups—led by the Left and the Churches—those who protested against the report to protect their 'livelihood' (Chapter 4). In chapter 5, on forest governance and encroachment (evading implementation phase), 'livelihood' was the State's subject to protect the demand of dominant local institutions—social, religious and political—by regularising ongoing forest encroachments in Kerala.

The EDP offered short-term financial assistance to seek alternative livelihood to the forest-dependent communities to reduce pressure from the forest. Many of the short-term investments actually ended up within short-term period itself and could not reduce forest dependency substantially. Further, most of the short-term plans were either not suitable to the region or hardly contributed to sustainable growth in the region. The diversification of livelihood was very limited for tribal groups as their socioeconomic and cultural life was integrated with the forest. It limits their integration into the market economy or other temporary livelihood options in the service economy, which otherwise contribute significantly to Kerala's economy. Without viable economic options, the tribal communities in the study region were forced to rely mainly on forest resources for their livelihood, thus limiting the scope to enhance their livelihood and development. In the context of failures of alternative livelihood options, the study

suggests that the only solution is the provision of adequate land as an asset to generate income and other forms of capital, which could sustain their livelihood. However, the question of land distribution and rights over land is still under debate and hardly address the landlessness of the majority of the tribes in Kerala. Ironically, the regulations of the EDP resulted in making the local elites more powerful by providing them more rights to appropriate forest resources. This is evident as in the case of tribal women having to seek permission from higher caste women to enter the forest to collect firewood and Tamil Sambavar relying on migrant community to use their entry card to access bamboo for basket making as analyzed in Chapter 3. While undermining the role of local communities in forest management and their contribution for forest services, the eco-tourism projects offered better 'livelihood projects' to local elites than the tribes. It is observed in chapter 5 that though there are initiatives of nature-based tourism in many regions in Thekkady and Munnar, tribes hardly get any role either in terms of their participation or in the beneficiary groups of these developments. By introducing various livelihood projects—ensuring access to forest resources, participating in conservation programmes, short-term financial assistance, and the establishment of many formal and informal institutions—the forest department increased their control over the livelihood and development of the tribal community in the area. The challenges in the dichotomy of the forest and the market economy were undermined, while implementing the much discussed Ecodevelopment Project in the PTR.

The reports (Gadgil and Kasturirangan) hardly indicated any threats to the livelihood of the poor; however the peer groups created a panic situation and brought uncertainty in the lives of people. They have argued that the committee proposals would adversely affect their 'livelihood' and their 'traditional' rights over land in the hill districts of the Western Ghats. However, the reports primarily focused on and were confined to ecological concerns and relatively less attention were paid to livelihood challenges and their impacts on the local community (Chapter 4). The dominant groups to protect their rights over encroached forestland use the discourse of livelihood. Conservation was never a matter of concern. However, the logic was reversed—conservation over livelihood—while addressing the issue of land distribution to the tribals in Kerala. In the context of the rampant protest of the dominant classes including dominant political parties and religious institutions in terms of 'livelihood', the challenges of livelihood

and severity of landlessness of tribal communities and marginal farmers in the Ghats were undermined. The dominant institutions in a way hijacked 'livelihood of the poor' and the term 'livelihood' became more political in the conservation debate of Kerala.

The term livelihood was also used by the state authorities and formal institutions while supporting non-forest activities and encroachment by the local elites in the context of continuous encroachment in Munnar, Mathikettan and other biodiversity hot spots of the Ghats in Kerala (Chapter, 5). Ironically, the term 'livelihood' was used by the State to legitimise transformation of forest land into non-forest activities and regularise (pre) legal encroachment by the dominant communities and institutions. The proliferating encroachment of forestland and claiming property rights for non-forest activities of prominent social groups in the post 2000s are presented as an example to discuss the role of institutions in the livelihood-conservation discourse in Kerala. Field observations emphasised that since tourism and allied infrastructure were widely accepted in the discourse on wildlife and forest protection, most of the encroachments in the recent history of Kerala used tourism and its allied backward and forward linkages to livelihood as a way to legitimising their encroachments.

6.3 Land as an Asset for Negotiation and Participatory Governance

Since 1800, the Western Ghats of Kerala has witnessed large-scale conversion of forestland into plantations by the British colonial companies, which were free grants by the State. Over the years, the right over forest resources was 'owned and shared' by the colonial administration, private plantation companies and migrants. The process is rampant even in the participatory phase of forest management in the post 1990s and continues even today. However, the prominent discourses on conservation debates are centred on forest dependency of traditional inhabitants and loss of biodiversity and forest depletion. The majority of tribes, Dalits and plantation workers are landless and continue to play limited role in conservation and governance discourse in Kerala.

Ownership over land enabled access and better options to many other livelihood assets through various institutions for individual and community. Rights over land could help the community to negotiate effectively against the dominance of the state and forest department for their role in participation and forest governance, as stated by C K Janu—the leader of the *Adivasi Gothra Mahasabha (*Janu, 2004*)*. As Bina Agarwal noted (Agarwal, 2010) assets or rights over land make vulnerable communities,

especially women more empowered and provides them better options to negotiate themselves either to retain their assets or to avail new options available as part the implementation of the regulations. Janu has also observed that landlessness exclude the tribals from availing any support given by the State for the poor.[151] Communities shared their concern that land, ownership of land, and *Patta* as the prime document were necessary to avail any government scheme under the development, agriculture and other welfare projects as observed in the field. In most of the cases, the tribals could not avail any of the schemes and largely looked for projects, which is specifically allotted to them. However, due to failure and delay in the implementation of the projects majority of the funds lapsed or ended in the project document.

Scholars have already analyzed the encroachment of the Adivasi lands of Western Ghats by colonial state, planters, migrants, and private plantation companies (for instances: Tucker, 2012; Baak, 1992; Moench, 1991; Kooiman, 1989; Tharakan, 1976; Bourdillon, 1893). The plantation companies continue to hold a major share of landholding in Kerala. The colonialist and migrants were encouraged to use the forest land for cultivation, which led to wider clearance of forest land for agricultural crops as the settlement was fully supported by the State. The process of encroachment to regularisation in the Western Ghats is narrated by Darley, J Kjosavik thus: 'for migrants, the encroachments on Adivasi lands (lands controlled and cultivated by them), state property (revenue forests, revenue lands, and reserve forests), private property (agricultural lands and forests owned by landlords), or dewaswom lands (owned by temples) were merely pre-legal phenomena. It would seem that they operated with the conscious assumption that what was pre-legal 'today' would become legal 'tomorrow' (Kjosavik, 2011: 129).

Sivanandan (1979) has stated that land reforms were in reality a continuation of land alienation for the tribes as the act labelled the Adivasis as landowners and passed on their land to the non-Adivasi migrant settler-tenants. Landlessness of the Adivasis is not because the land is not enough, but because they do not have access or power to claim the resources. The forest land encroachments of the dominant groups show that lack of capability to claim resources is the cause of landlessness of the Adivasis in

[151] Janu has observed that right over land is the only one the community is demanding. The community prefers to follow traditional way of cultivation which ensure enough water, food and protect environment. She narrated the changes over their culture due to intervention by the outsiders, forest department and the State. See details an interview with Janu (Jan and Madai (2017).

Kerala. Tribals and other landless communities such as workers in the plantations were not part of these encroachments of forest land. However, most of the encroached land in Mathikettan and Munnar area are earlier notified and identified as land for redistribution to the tribes. Their inability to claim their alienated land is continuing, which is an obstacle for them to play their role in the participatory forest governance where settler community act as agent for conservation.

Given the scenario of high landlessness among the tribal community in Kerala (about 22 per cent), different ruling parties have failed to address the issue, rather label land struggle of tribes as 'anti-development'. Thus by charging 'conspiracy allegations' the State evades its own responsibility without addressing issues of land rights and property rights of the traditional forest inhabitants in Kerala. The regulatory initiatives in the State are local specific even though regulatory rules at higher level are more general in nature. For example, it is observed that the State blames difficulties to find, allocate and distribute land to the landless tribes in Kerala due to the multilevel governing system of the Centre and the State to allocate land. However, the State could easily evade NCA while regularising forest encroachment of the local elites in the ecologically sensitive regions of the Western Ghats. The State is following the colonial legacy by alienating access and right to the forest and land for tribal communities while outsiders flow into the forest under regime of 'private property'. Encroachment and demand for the regularisation of the encroached forest land by the dominant 'peasant community' and the regularisation of land by the State has become a regular phenomenon in Kerala.

6.4 Social Capital as an Asset for Negotiation and Enhancing Livelihood

It becomes clear from the discussion that among the many factors, social capital plays a vital role in instituting dominance among the social groups in the decision-making process, capacity building, adopting alternative livelihood strategies and taking lead roles in the implementation of regulations. The study has analyzed how social capital could be mediated by certain social groups to protect their agenda and interests with the State and other institutions. The contemporary use of the term social capital is mostly attributed to Bourdieu (1986), Coleman (1988), and Putnam (1995).

This study does not attempt to quantify 'social capital' per se, it rather examines how social capital become an invisible strategy of the dominant social groups in strategic

areas of implementing forest regulation. However, the study used cross-sectional data analysis to observe the differences among social groups in their institutional network and affiliation to social and political organisation in the area (Chapter 4). As De Haan (2000) observed the prominent institutions grounded in the area acquired access and claims based on their networks, institutions, or relationships that constitute social capital of the communities. For example, social capital facilitates the support of the Syrian Christians for informally barring tribals from seasonal employment in tourism zones and during pilgrimage season (Chapter 3). The data reveal that the migrants are highly connected with the dominant institutions, political and religious, whereas the tribal communities are unable to maintain high trust at the interpersonal and institutional level. About 81.6 per cent of the migrants reported that they have a high trust level among the community members, whereas this trust is only 35.2 per cent among tribal communities. Whereas in community organisations, there is a relatively high level of trust among tribal communities, the migrants show relatively low trust compared to their trust with other institutions (Chapter 4). They could also influence formal institutions to gain access to public property and enable the State resources to build infrastructure to legitimise their rights over encroached property. They could use their network for better access for creating 'land records' to claim legal backing to their property holding; they are likewise able to facilitate 'missing files' in case of an official enquiry at the same level. It is observed that many files on property transactions and land records were missing from the village offices at the time of enquiry from the higher officials of the revenue department. It was quite often reported while the issues on encroachment and eviction were prominent in public debate. In most cases, the enquiries were stopped abruptly due to these missing files (Chapter 5). In the context of the present research, it is argued that social capital also became an 'asset which is the basis of the agent's power to act and to reproduce, challenge or change the rules that govern the control, and the use and transformation of resources'.

Many Syrian Christians and other dominant social groups in the project area of EDP were considered as agents for conservation by the FD and took a lead in many short-term investment/plans on regulation. The higher officers from FD stated that participation of settlers' community is easy because they could understand an 'intricacy of conservation'. Social capital and institutional trust of the community helped to bring together two powerful forces—the Left and the Christians—that had otherwise

followed contradictory interests and positions, against the initiative of the two committee reports on the Western Ghats. The Syrian Christians joined the platform of the Left to create a threat to the forest in the Ghats and pressurise the State to bring change in 'governance' itself by forming new regulations to protect their demands. Even if they create panic and destroy forest offices, they would get public support, which is impossible in the case of any other resistance or movement of the tribes. An extensive analysis has been done on how social capital of certain social groups could even wash out an implementation of the FCA and halt the eviction process on encroachment of forest land. In the process, they still claim their 'traditional rights' whereas tribes are unable to claim their rights over forest resources or land. In another example, killing a tiger with the support from the State itself, narrated in Chapter 4, shows how the dominant communities use their social capital to pressurise the State along with the support of major political parties in the State. At the same time, the conservation agenda of the country get technical and financial support from international organisations—to 'save the tiger'.

It is apparent that social capital plays a major role in the process of negotiations with the dominant community and lack of it prevents the tribal community from negotiating effectively for their rights. The ongoing governing structure and practices in the forest villages show that the livelihood assets and capacity to claim their rights by the community in the forest frontiers totally depend on the 'permission' given by officials from the forest department. Along with the high-caste groups of migrants, the Urali and the Malai Araya tribal community controlled and held their rights over their traditional resources, especially rights over their land even in the fringes of the forest. Both the communities use small-scale stone mining for construction of houses, which is not permitted. The communities are very clear that their 'capital' facilitates better 'relations' with the officials. Those communities who hold high social trust within the community find it easier to negotiate with the officials to ensure better options for their livelihood. These practices are never observed among other tribes and the poor living in the fringes. Due to lack of trust and network within the community, there are several cases of 'violation and non-compliance of forest rules' reported against other tribal groups and Dalits. Officials use the pretty rivalry among the tribes, especially noted among the Malapandaram tribe, to charge several cases against them such as 'poaching, holding arms and other violations'.

Chapter 5 documented a series of encroachments in Munnar and other ecologically fragile forest regions. It shows how local elites—both political and social—influenced officials in the government institutions to evade the rules to transform property rights from the public to the private for agriculture and industrial initiatives. The institutions colluded with the elite in encroachments at various biodiversity hotspots. Their social and political manoeuvring facilitated them to gain better access to formal institutions and avail financial assistance to build infrastructure—roads (Mathikettan), constructing resorts and buildings (Munnar)—in the encroached land. The officials, mostly supported the interests of the local elites rather than the State; as institutional economic theory says an individual is a cultural animal and the behaviour of the individual (for instance, here official) is constituted through the response of the institutions which they represent.

It is observed in this study that dominant community/social institution 'uses officials' from the government institutions to claims their rights over the encroached forest and revenue land. Later, they claimed they have received approval from the particular government department. However, if there were any move against this claim or for an eviction as per the policy at the State level, the same landed class would describe this move as the vested interest of 'the officials'. They interchange officials for institutions, and institutions for officials to protect their claims. In addition, encroachers would also accuse the officials that the eviction was an affront on their religious sentiments. The response to the officials' attempts to demolish the Crosses erected on an encroached forestland in 2007 and, 2017, is a case in point. The social positioning of the migrant Christian community and their wider network in the social and political arena gave them command over natural resources that was instrumental in enhancing their capital. The formal institutions support illegal encroachments by delaying implementation and evading enforcement of the order to evict the illegal occupants by the State even if a specific regulation existed (Forest Conservation Act, 1980). In the process of protecting 'traditional rights', the State fails to address the concerns of the significant landless—tribals, Dalits and plantation workers—marginalised social groups in the western Ghats. Even if Kerala has been witnessing encroachment and non-forestry activities in the forest zones since independence, the dominant institutions, especially the state and FD are not recognising this process and continue to legalise their encroachment. As

Kaimowits (2003) noted, recognition from the outset itself is a matter of concern, if they recognise the challenges of encroachment and non-forest activities.

6.5 Participation of the Local Community as a Core Strategy of the Regulations

The study laboured to understand how regulatory and conservation framework engages with 'participation' while addressing forest governance. Participation of local communities in forest management is one of the key agendas in the Joint Forest Management (JFM) and Ecodevelopment Project (EDP) implemented since the 1990s in India. As discussed in the third chapter, one of the key objectives of the EDP was to increase opportunity for local participation in PA management activities, decision making to increase collaboration of local people in conservation efforts. However, in the process of implementing EDP, migrant settlers emerged as protectors of forests along with the forest department, and the tribal community ended up as workers in the various short-term livelihood and conservation schemes of the project. On the contrary, the participation of migrants was ensured at strategic planning and their inclusion as beneficiaries of the EDP. The project, over the years of its implementation, transformed the discourse of forest management from a centralised system of governance to participatory one, although participation continues to be rhetoric at the grass root level. Ironically, the project was against the centralised governance—top down approach—that used to be the norm for the majority of the government funded projects on conservation (World Bank, 1996: 18). However, the concept of participatory conservation is well 'recognised' by the forest department and the concept of 'participation' is a highly celebrated term in most of the project guidelines of the FD.

The case of the pre-implementation phase suggests that participation of dominant religious and political institutions was visible along with their followers from the dominant local community. However, the support of tribals and few environmentalists to support implementation of the Committee (Gadgil and Kasturirangan) reports were undermined. The support of the group was at a very limited level. The participation of the dominant migrant social groups, local elites and industrialists with the support of political parties was widely accepted by the State in the case of evading implementation of the FCA and in the case of encroachment.

Chapter 5 have analyzed the need for an effective participation of local communities in forest governance and the factors that might contribute to participation of locals. It

emerges that the legitimacy of the decision-making process and the participation of the community are the most significant factors that lead to compliance or non-compliance by the communities. However, evidence indicates that the majority of the community, especially the tribals, did not meaningfully participate in the decision-making process of forest conservation, though many of them were appointed as temporary guards and offered low remuneration. Clearly, it emerges that the participation of the poor and tribal communities in the decision-making process would have more impact on the compliance level of the enforcement process. Unfortunately, in the attempts by the State to (re) create institutions for forest governance one could hardly find efforts to ensure meaningful participation of tribal communities. On the contrary, such institutions continue to be controlled by dominant groups, churches, mainstream political groups and so on. This process only reinforces the earlier practice of legitimising encroachment of forest land and hardly addresses the dynamics of conservation and livelihood, resulting in rampant forest depletion.

6.6 Participation of Tribal Women

The case study of tribal women was undertaken to understand how the changing framework of forest governance participatory forestry regimes engage with the tribal women living on the fringes of the Periyar Tiger Reserve, one of the largest Pas in the Ghats, as part of the implementation of the EDP (Chapter 3). The case study of the women's protection group observed that an 'access to forest' was enabled by forming the group comprising of women from the settlers' community. It narrates how the Vasanthasena—a protection group where all members are from dominant migrant communities—emerges as a powerful institution and how they institutionally excluded the tribal women in the process of conservation and livelihood. The forest department uses 'participation' to re-construct a binary division among tribes and migrants as agents for poachers and protectors based on their social positioning shaped up over a period of time. Beyond the patrolling 'duty', the group was increasingly directed to regulate 'Adivasi women poachers' by availing 'free access' to the forest. Through the diversified conservatory schemes, the Sena emerges as a powerful institution for conservation in the Western Ghats, de-constructed the contribution of tribal women, and labelled them as mere poachers. One can see how the Vasanthasena used a social hierarchy of caste, extended into the ecological space of the tribal community, especially the women folk, and made them ecological refugees in their traditional

habitats in the EDP. Previous studies have suggested that assessment and recurrent revisions are required to contextualise interest, values and hopes based on gender leading to inequitable resource management and conservation plans though it is lacking in the field. It is also observed that it is important to see differences of interest and hopes of women belonging to different social groups in the local society. As development conservationists, the forest officials mainly handle the entire implementation without addressing the social dynamics in the society and thereby within the new governance framework.

6.7 Building Coherence among Institutions in Forest Governance

The responses of institutions, operating at different layers, are determinants in implementing regulations, which could impact on forest governance both at the local and higher levels—national and international. Decision making at the policy levels are interconnected which includes contributions (funds) and services from international organisations (World Bank, UNEP, WWF etc.) and formal institutions (Central and the States). It also matters to governance as responsibility of the implementation moves from high officials at FD (those who are aware of policy changes and undergoing training under new regulations) to the forest guard (in addition to day-to-day jobs the guard holds responsibility in engaging with the local community in 'joint' management).

The issues at the global levels—such as climate change, degradation of forest resources and various regulatory policies—have impacts on the local level in terms of resource use patterns of the community. The challenges on encroachments, development projects and unsustainable growth of tourism/nature-based tourism etc. have multilevel implications at the global level as well. However, the operational implementation of the policy decides how effectively the particular policy/regulation impact on forest governance and forest management. The institutions located and operating at multi-layers were often not directly linked to the forest-livelihood dichotomy. However, it played a determinant role in the success or failure of environmental regulations and eventually influenced forest governance. For example, the local institutions—religious, political and various local administrative bodies—made every effort to legitimise encroachment of forest land and opposed the attempts by the State to grant land rights to the landless tribes in Kerala. In both cases, the State failed to make an intervention of the local institutions at the operational level, and it had a direct impact on forest

governance. Contradictory to the policy initiatives at the State level, institutions and stakeholders at the local level played significant roles in decision making and governance of forests. Since governance includes different layers of institutions, multi-levels of operations of same institutions—for instance, political party (state vs district) and Church (Bishop's house/parish), Panchayat, and village and revenue administration—they had an influential role in forest governance.

The responses of institutions affect both levels in forest governance—global changes impacts on implementation at local level. Similarly, the outcomes and shortcomings of the implementation at the local levels would reflect in the frameworks at the global level while forming new regulatory frameworks. Secoot et. al (2014) observed that governance frameworks of international and national level influence (positively or negatively) the implementation of local programmes and performance of governance at local levels. The effects on the ground may impact policy formation at national and global level. It would also contribute to shape forest governance at higher levels. However, observation on policy intervention on encroachments in Kerala offers lessons on policy implementation at the local level and their rather negative impact on the higher levels to protect the vested interests of the local institutions. Response of the Chief Minister (CM) of the ruling government in Kerala (2017) to the action of the eviction team (revenue department) to demolish a Cross, which was built on encroached forest land aptly represents the responses of the institutions. As discussed, the CM responded that before touching the Cross the officials should have remembered that there is a government, which governs for all the people in the State. The government will not destroy the belief system of the certain sections of the society. The CM added that what mistake did the Cross commit? The open statement of the CM stopped eviction attempt completely. The responses of various institutions on many cases analyzed in the study imply that 'forest' is a political product in Kerala. The forest becomes political goods from the status of public goods in conventional literature. Conservation became a political agenda of the political parties (Chapter 4). The vested interests of the coalition politics forced the public and the State to compromise on their concern for the environment, though Kerala had a successful history of environmental movement beginning in the 1970s, with the Silent Valley protection movement.

The public, political affiliation and CSOs support the issues of conservation based on the position of the coalition and electoral politics as conservation concerns are politicised over a period in Kerala. During negotiations on the recommendations of the reports, the Centre extended the role of the State by asking them to bring in their own report, thereby enhancing the role of the State in forest governance, despite contrary evidence indicating that if forest governance is considered as a state subject, the forest became a political product which can be used to polarise vote bank by various political parties. The response of the dominant social, religious and political institutions are embedded in local unequal practices and constituted by electoral politics.

The ‘ownership’ approach of the forest department is more problematic in the decentralised governing structure in Kerala. In many ways the short-term plans of the ‘regulatory projects’ have backward and forward linkages to the rural development, which requires support from the officials of the various administrative departments in the State. However, very often the approaches of the FD create obstacles in the initial stage itself, which rather develops into conflicts at the local level. The unrestricted authority exercised by the forest department over the community living in the fringe areas of the protected region often stirred up various forms of conflicts (Chapter 5). The local institutions—formal, political and religious—are embodied socioeconomic and cultural elements of the local society and apparently reflect their responses on implementation of the regulations. The institutions, due to the exclusive nature of the forest department, often sticks to their own agenda, which often fails to achieve wider strategic and socially responsive concerns shared by many higher level institutions globally.

Partnership between various government departments and other institutions would be a step to enhance forest governance in the participatory and decentralised framework in Kerala. The study also posits transparency in forest governance that would require a collaborative partnership approach with a wider number of institutions and stakeholders from the sphere of regulation-conservation-livelihood. The challenges and possibilities of partnerships among private, public and civil society remains as the concern of conservation in forest governance discourse globally. Various forms of partnership are also suggested for better implementation of the regulations initiated by international institutions. However, as discussed earlier, the partnerships in forest governance in Kerala is still only on paper due to various institutional reasons and challenges. Many

policy initiatives hardly reach the operational level mainly due to socio-political and electoral interests of the region. Lack of co-ordination among various government departments itself is a major challenge in the forest governance in India, which has been pointed out by many scholars (Lele, 2016; Satyapalan, 2010; Aggarwal, 2010, Mahanty, 2002). The possibility of partnership with the organisations of government and civil society, and research institutes (and many more) would help the major regulator (FD) to implement the regulation as per the objectives and expected outcome of the regulations. For example, the EDP aimed to address the livelihood and conservation issues with accountability and participatory forest governance with the participation of traditional inhabitants. Participation and partnership of tribes in decision making, conservatory mechanisms and as beneficiaries and could lead to a healthy participatory forest governance. However, that is lacking due to the approach and practice of the FD in the implementation. The partnership would also facilitate the forest department to take decision and necessary action against violations instituted by the dominant groups. The FD approaches the court for judiciary support for their intervention (for forest management) in many cases of non-forest activities in the encroached forest land and illegal timber trading and encroachments (Chapter 5).

6.8 In Conclusion

The study intended to understand the responses of the institutions, which are in the process of implementation of forest regulation in the context of 'participatory' forest governance where conservation and livelihood gets equal importance. An overview of forest regulation shows that the priorities in forest governance have changed from State centred to a community-participatory regime of forest management in India. Forest dependency of the inhabitants, encroachment and conversion of forest land into various non-forest activities are matters of concern for the forest governance debate in Kerala. The historical context of the locality and institutional background of the communities are key factors that would help to understand how the response of the institutions influences forest governance at various levels. By drawing on a framework of institutional economics (where the social entity is also an institution equivalent to structured organisation), the study situates key institutions and relationships between and among them in the region. To illustrate this, an empirical analysis was conducted among the various institutions in the high ranges, which are administratively shared—Pathanamthitta, Kottayam, and Idukki districts of the Western Ghats of Central Kerala.

The migrant community are powerfully positioned and dominated the tribes based on their caste and high social capital since the early phase of migration in Kerala.

The responses of the institutions are not a mere response to implement a regulation (in the case of the EDP, the committee reports, FCA) but a strategic move by the mainstream institutions, which are embedded historically. Through various participatory forest management programmes, the conservation agenda of the State in forest governance is made more participatory. The forest officials maintain an upper hand in implementing forest regulation and uses 'participation' to re-construct a binary division of tribes and migrants as the agents for poachers and protectors based on their social positioning. The deep integration of forest and socio-cultural life of the tribal communities confines them to rely on the forest economy even today. In the context of failures of alternative livelihood options, the study suggests that only farm income with adequate land could substantiate and sustain their livelihood. A right over land would also support the community to enhance their capabilities to negotiate for both material and non-material capital within the dominancy of power structure in the mainstream institutions.

'Livelihood' was a most discursive term used by the State and dominant groups to protect their rights over encroached forestland and conservation never really figured as a matter of concern. However, the logic was reversed while addressing the issue of land distribution to the traditional inhabitants and other landless social groups in the State. Through the diversified 'micro-plans' migrant social groups, including women's group emerged as a powerful institution which de-constructed and undermined the contribution of tribal women and other traditional inhabitants and made them ecological refugees in their traditional habitats. The response of the institution shows that there is a deliberate attempt to keep away the traditional inhabitants in the conservation agenda by undermining their contributions and practices, rather labelling them as poachers and agents of destruction of forests. The attempt of the State in creating and defending institutions for forest governance hardly has the participation of tribal communities. The State propagates participatory agenda by ensuring participation only by the dominant social, religious and political institutions.

As observed, many issues are still persistent and dominate forest governance in the Ghats. There are many cases observed in the study, which have multiple impacts on forest governance and its formulation. Some of the cases note the lack of accountability

of participation of traditional inhabitants in the various phases of implementation, decision-making process and even in beneficiary groups of the conservation-livelihood projects (Chapter 3). In Chapter 4, officials remain inactive for certain violations due to corruptions at different levels. This can be eradicated by bringing transparency and providing clarity on regulatory projects. In another case noted in Chapter 5 which is presence and absence of the documents (forgery documents and records) in land rights and encroachments and so on. The global concern about climate change and the local challenge of encroachment need to be addressed as they have direct impacts on livelihood, conservation and forest governance. The process of implementation of the regulations and responses and decision of the various institutions, which are analyzed here will not strengthen widely discussed participatory regime of forest management. It would rather weaken and become rhetoric of many critical concerns in the process of decision making, implementation and practice of forest governance in contemporary Kerala.

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Annexure-1

Survey Questionnaire

Purpose: Purpose of the survey is to understand dynamism of forest governance and response of the community towards the forest regulations and its implementation at the Western Ghats in Kerala. This survey is part of the study of the completion of the PhD Programme in Economics, CSRD, School of Social Sciences at Jawaharlal Nehru University, New Delhi. The information collected through the survey will be used only for the research purpose.

Section I: Household Characteristics and Profile

A Respondent Identification

A1. Name		Address Mobile No.
A2. State and code 1-Kerala, 2-TN		A3. Caste Name
A4. Village and code		A5. Origin
A6. Community Name		A7. Religion
A8. Major job of the community		A9. Other jobs of the community
10. Type of house		11.Distance from forest entry point (in km)
12. Source of Drinking water		13. Sanitation facilities
14. Availability of Electricity		15. Total Land size
16. Was there any fragmentation		17. Do you have Title deed[1-yes, 2-No]
18. Land size before sale/division		19. Reasons for land fragmentation
20. Major agricultural crops		21. Number of livestock
22. How long your family shifted to this house		23. If shifted, where was your **original** house located

[**A3.Caste** 1-ST, 2-SC, 3-Back ward, 5-Others; **A5**:**Origin** 1-Indigeneous, 2-Traditionally lives in the region but not indigenous community, 3-Migrants, 4-inter-marriage settlements, 5, others, if any. **A6**: **Community Name** is the name of the tribe. **A7**. **Religion:** 1-Hindu, 2-Christion, 3-Muslim, 4-others; **A8**: 1-Forest, 2-Fishing, 3-collect and market of NTFPS, 4-Daily Wage, 5- casual work with forest department, 6-work with forest regulation monitoring team, 7- handicrafts/basket making etc, 8-others; **A9**: 1-Forest, 2-Fishing, 3-collect and market of NTFPS, 4-Daily Wage, 5- casual work with forest department, 6-work with forest regulation monitoring team, 7- handicrafts/basket making etc, 8-others]

1. Household Characteristics

Household characteristics					
1. Household Head: Male/Female			2. Household size:		
Name of the Members	**Sex (a)**	**Age (b)**	**Edn. ©**	**Main job (d)**	**Other Jobs (e)**
3. Head of the household					
4. Respondent					

5.					

[**Head**: 1-Male; 2-Female; **Education**: 1-illiterate, 2-literate but no formal education, 3-school up to 5th class, 4-school up to 6-10, 5-+2 and above, 6-Degree and above. **Type of the house:** 1-Tiled, 2-sheet,3- traditional, 4-concrete, 5-Hut/THACHED, 6-semi Pucca, 7-temporaty plastic sheet 8-others); **Main occupation**: 1-Forests related 2-Daily Wage, 3-Own cultivation, 4-handicrafts, 5-Private office job, 6-Government Service, 6-Home maker, 7-Unemployed, 8-Fishing, 9- casual work with forest department, 10-work with forest regulation monitoring team, 11- others ;Another source of Income: **Other Subsidiary occupation**: 1-Forest related 2-Daily Wage, 3-Own cultivation, 4-handicrafts, 5-Private office job, 6-Government Service, 6-Home maker, 7-Unemployed, 8-Fishing, 9- casual work with forest department, 10-work with forest regulation monitoring team, 11- others]. **Distance in km**: 1-<1, 2: 1-2, 3:2-4, 4:4-6, 5: above 5; **Drinking water**: 1- Tap in the house, 2- public tap, 3- bore well/hand pumb, 4- well, 5- pond, 6- others; **Electricity**: 1-Yes, 2-No; **Sanitation**: 1-Private by own home, 2-temporary, 3-public, 4- others; Land size: 1- No land owned. 2-<1 acre, 3: 1-3,4: 3-6, 5; 5 and above. **Fragmentation**: 1-Yes, 2-No; previous land size, 1- No land owned. 2-<1 acre, 3: 1-3,4: 3-6, 5; 5 and above; **Reason for land fragmentation**: 1-debt, 2-for livelihood sold the land, 3-meet heath expenditure, 4-partition for family, 5- lost due to forest law, 6- any others]

24 Have your parents/grandparents changed their main job over a period of time?: **1-Yes/2-No**

25 Have you changed your main job over a period of time? **1-yes, 2-No**

26. If **Yes/No**, please provide reasons:

- --
- --

27. Change in the re-location (settlement/residence) : If you have re-located from the forest: please provide details of **when, from where and what was the reason**,

- --

28. Major expenditure of the household (last six months)

No	Items	Monthly average (a)	No	Source (b)	Monthly average ©
28.1	Household expenses		28.5	Saving	
28.2	Health		28.6	Loan repayment	
28.3	Education		28.7	Others, if any	
28.4	Penalties/cost related to violation of forest entry		28.8	Others, if any	

29. Details of the income of the household

No	Source	Yes/ No	1-Yearly/ 2-Monthly/ 3-seasonal 4-daily, 5- sometimes	Number of days/ months/ times	Average Income	remarks
		(a)	(b)	©	(d)	
			Last six months			
29.1	Daily wage				Wage per day:	
29.2	MGNREG				Wage per day:	
29.3	Rewards of conservation activities					
29.4	Forest regulation activities					
29.5	Working as forest guard etc					
			Last one year			
29.6	Land/agriculture					

29.7	Livestock					
29.8	Fishing					
29.9	Forest products					
29.10	Unprocessed					
29.11	Processed					
29.12	Selling Handicrafts					
29.13	Any other seasonal works					
29.14	Others, if any					
29.15	Others, if any					

30. Any remarks on income in general:

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Section II. Livelihood

31. Livelihood Assets: Please provide details of the availability /assets which you own as a household member and as a member of the community

	Asset options	Yes/ No (a)	Km-distance/ visiting time (b)	Asset options ©	Ys/No (d)	Km distance/ visiting time/reported (e)
Infrastructure –financial	31.1 Road in the village			31.8 Market		
	31.2 Banks in the village			31.9 Religious places		
	31.3 Post Office			31.10 Others, if any		
	31.4 School			*31.11 Balawadi*		
	31.5 Other educational institutions			31.12 PDS shops		
	31.6 PHC			31.13 Ration card 1-BPL/2-APL Card		
	31.7Others, if any			31.14 Others, if any		
Household Asset		Yes/ No	How long		Yes/No	How long
	31.15 Do you have cash deposits/savings			31.19 Any investment		
	31.16 Mobile			31.20 Bicycle		
	31.17 TV			31.21 Vehicle		
	31.18 Any others			31.21 Tractors related to the agriculture		
		Yes/ No	long/extend		Yes	How extend/ severe
Natural resource Assets	31.22 Forest nearby			31.27 Do you have right to enter the forest		
	31.23 River nearby			31.28 Whether Clean water available		
	31.24 Have you noticed biodiversity degradation			31.29 Have you noticed any environmental pollution		
	31. 25 Any flood noticed			31.30 Any fire noticed in the forests recently		
	31.26 Drought			31.31 Any others, if any		
	Asset options	Yes/ No	How long	Asset options	Yes/No	How long
Socia	31.32 Membership of any social/community club/group			31.39 Do you share trust within the community		

	31.33 Member of SHG/any local groups			31.40 Do you work together with region/community		
	31.34 Any women's group			31.41 Any service/exchange within the community/ within groups		
	31.35 Member of political party			31.42 Members in trade union		
	31.36 Active member of religious gathering/groups			31.43 Any youth club in the locality		
	31.3 7 Do you avail any credits from these groups			31.44 Sources of credit		
	31.38 Amount of loan			31.45 Interest paid in the last month		

32. Do you get necessary food items at local PDS: **1-Yes/2-No**
33. Are you satisfied with the quality, availability of food at PDS: **1-Yes/2-No**
34. Do you get necessary food items from Government through Aganwadi: **1-yes/2-No**
35. Are you satisfied with the services at the local Government hospital: **1-yes/2-No**
36. What are the other alternative medical treatment do you opt: 1- Ayurveda, 2- Traditional, 3-others
37. What are the main livelihood issues/ threat (or main threats to livelihood) that you face currently

No.	Major concerns	Ranking	No.	Major concerns	Ranking
37.1	Drinking Water availability		37.6	Many rules that restrict the use of forest products (access to the forest)	
37.2	Unskilled situation		37.7	Limited access/availability of other options	
37.3	Low education to avail any skill development programme		37.8	No stable market to sell the products/fish etc	
37.4	Lack of ability find other options		37.9	Low agricultural yields	
37.5	Others, if any		37.10	Others, if any	

Section III: Value of Forest and Perspectives

38. Do you see any economic value for forests : 1- Yes / 2- No
Please provide values which you considered it is highly related to you.

Use of Forest Values-Mostly economic and income generating		**High priority**
38.1	Economic /more revenue:	
38.2	Subsistence:	
38.3	Environmental:	
38.4	Aesthetic:	
38.5	Medicinal plants:	
38.6	Any others, if any	

39. Why did you rank *X* values as the first one and *Y* value at the last one. Please provide answers with examples

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40. Apart from the economic and material benefits, please rank based on Non-materials use of forest values:

	Non-Use of Forest Values: mostly non-economical and subjective	Ranking
40.1	Believe in Cultural as of the national resource:	
40.2	Give value because Moral and duty	
40.3	Giving importance of Future Values:	
40.4	Religion and rituals:	
40.5	Spirituality:	
40.6	others if any	

41. Why did you rank x value as most important and y value at the least important.

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Section IV: Forest Resource: Rights, Access and capabilities

Rights in the past

42. Whether your household had rights to use forest resources in the past which is better than now: **1-Yes/2-No**

43. Which are the rights you had earlier

- 43.1 --
- 43.2 --

Rights at Present

44. Do you have rights at present to take forest use as your requirement: **1-Yes/2-No**

45. If No, why

- 45.1 --
- 45.2 --

46. Do you depend on forest for any use : **1-Yes/ 2-No**

47. Are you use forest products directly or indirectly**: 1-Directly/2-Indirectly**

48. Do you use forest products for your livelihood/subsistence: **1-Yes/ 2-No**

49. If yes, please provide details below.

Forest resources	Use	When	Number of persons involved	Average quantity in year	Selling practice	Price received
49.1						
49.2						
49.3						
49.4						
49.5						

[Forest resources: Name may write in the local language as well. **Usage**: 1-own consumption/use, 2-sell to the market, 3-to make the final product, 4-use to meet seasonal market/engage in trade. **When**: 1-Regular, 2-Seasonal, 3-based on external demand comes/high trade benefits occasionally. **Selling practice**: 1- Middleman, 2-Govt approved society, 3-nearby open market, 4-used for value added products, 5-used for exchange commodities, 5-NGOs, 6- direct to customers at the local market]

50. Apart from any use, do you consider forest is integral part of your life:**1-Yes, 2-No**

51. Do you get market access to sell your forest products regularly: **1-Yes/2-No**

52. If you get an option, where do you prefer to sell the collected products: 1- Open Market 2-Direct to the consumers 3- Society, 4- Others

53. Do you know any govt policies on collection and marketing of the products: **1-Yes/ 2-No**

54. If yes, which are the policies:

Policies (a)	On what (b)	Which year ©
54.1		
54.2		
54.3		

Section V: Regulation and its enforcement

55. Doe you aware about any policies/regulations recently implemented/enforced which has direct impacts over your access and rights on forest resources: **1-Yes/2-No**

56. If yes, list few of the policies/regulations have you noticed recently implemented

Policies (a)	On what (b)	Which year ©
56.1		
56.2		
56.3		
56.4		
56.5		

57. How did you come to know about it?

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58. Do you think this new law/policy go against the traditional community (informal) law and thus curtail the traditional rights : **1-Yes/2-No**

59. Are you part of the process related to the enforcement and monitoring: **1-Yes/2-No**

60. Please provide some details of the regulation as you have noticed from your own experience

Rules/policies and time of enforcement	How it affected you	Have you ever violated the rule	Have you ever noticed others violating the law	Reasons for violating the law by you
	(a)	(b)	©	(d)
60.1				
60.2				
60.3				
60.4				
60.5				

61. According to your opinion, who should have right, state or community, over forest and its management: **1-state 2-community, 3- both**

62. Do you feel these rules and laws are applicable only for the poor: **1- Yes/ 2-No**

63. Was there any collective ownership of the community over resources: 1-Yes/2-No

64. Was there any representation from the community in the decision making of the process, monitoring and implementing the regulation in your locality: **1- yes, 2- No**

65. If Yes, plz provide how , If No, provide any reasons:

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66. Do you have any alternative source of income other than forest: **1-Yes/2-No**

67. Have you made or find any strategy for your alternative livelihood options **: 1-Yes/2-No**

68. What are the strategies you made to find alternative livelihood at household level

Section VI-Compliance and non-compliance regulation/law enforcement

Please provide your option among following possible statements in violation and obey the regulation; **[1-Certainly do it, 2-sometimes, 3-Never, 4. Don not Know]**

69. Possible options may lead to violation and break the forest regulation

	You may violate/break the regulation, if	response
69.1	If the forestry officials get benefited and you are not allowed	1
69.2	If breaking the rules would improve the community life	1
69.3	If breaking the rules would meet your income	1
69.4	If breaking rule is the only option to sustain your life	1
69.5	If outsiders/rich use more benefit than you	1
69.6	If your neighbor will get access and you do not	1
69.7	If obeying the rules is difficult and expensive	1
69.8	If the law is against traditional rights	1
69.9	If the law deny your religious practices	1

69.10	If nobody will know about it	1
69.12	If you know the level of corruption is high among officials	1
69.13	If there is a high price in market for forest products	1
69.14	If you or your community have no representation in the decision making process of enforcement of the law	1
69.15	If you or your community have no representation in the monitoring team as part of the enforcement of the law	1
69.v16	If you do not have no sufficient alternative source of income	1
69.17	If there is a chance for a good offer from middlemen nearby you	1
69.18	Situation will be like, even if you violate the rule, your community has trusted on you	1
69.19	Any other	1

70. Possible options to support and obey the regulation due to following statements. **[1-Certainly do it, 2-sometimes, 3-Never, 4. Don not Know]**

	May support and obey the regulation	Response
70.1	If you get **some compensation/reward for protecting the forest**	
70.2	If there is a **fear of law and penalties**	
70.3	If it is **a collective decision by the community and not an imposition** from above	
70.4	You or your community **member is part of the forest regulation team**	
70.5	Because forest **has a right to exist for its own sake-even without benefit to people**	
70.6	If the **rules protect sacred groves and religious places**	
70.7	If you **obeyed traditionally**	
70.8	If your **religious leader has preached that breaking the laws and rules as sin and offence to God**	
70.9	Because **protecting the forest for your future generation**	
70.10	Because if you obey it will **get shared benefit to the entire community**	
70.11	Because I **prefer better environment**	
70.12	Because **not obeying may cause forest degradation**	
70.13	Because not obeying **may affect animals** and their habitat	
70.14	If your **basic subsistence already secured**	
70.15	Any others, please specify	

71. Have you noticed any conflicts with forest official and community members related to the law enforcement and access to the forest resources: **1-Yes/2-No**

72. if any, please describe

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73. Any suggestions to reduce such conflicts in the future.