Chapter 3

METHODOLOGY AND DESIGN

The main concerns of the chapter deal with the rationale, the methodology, data sources, method, the field, analytical framework, and organisation of chapters of the thesis. The methodology used is qualitative. The method utilised is mainly interviews and discussions. Other data sources include studies, documentary films, and reports and recommendations of the government and NGOs. Most of the primary surveys were done at Kainakary village in Kuttanad taluk, located at the lower part of Kuttanad.

Introduction

Methodology is shaped by research objectives and questions, which in turn evolves the sort of information that needs to be gathered. Hence methodology is intimately linked to the method (of gathering evidence/data). On the other hand, it is intimately linked to the theoretical & epistemological premises of the discipline. Carter and Little (2007) describes methodology as 'a theory and analysis of how research should proceed ...provides justification for the methods of a research project'.

Kuttanad as examined in Chapter 1 brings forth reflections on its distinct region formation. People’s imagination of Kuttanad was utilised to illustrate their multiple and collective consciousness. Their articulations reflect the continuity and change in the relations with the environment and the social structure/practices. Literature survey has shown a number of interesting economic and sociological studies on Kuttanad across years, and the contemporary trend of greater recognition of spatial dynamics in social processes. But there are hardly any scholarships that focus on the region formation processes of Kuttanad. The interest inspiring the present study is of historical-geographical materialism that evolves regions, but which needs to be distinguished from an examination of the past through its historical social happenings and events. Instead, it is a time-space continuity as well as changes, that can help us to examine the spatial 'underpinnings', as emphasised by Lefebvre (1991) that lead to the formation of regional specificities through a territorial complex. This
is distinctly and uniquely a geographical perspective and methodology. The 'layering' of socio-spatial processes (Massey 1984), and the development of territorial complexes (Anuchin,1960) emerge from the inter-relations of the ecological/natural and the socio-economic in the region.

The theoretical frame discussed in Chapter 2 requires to be linked with an analytical frame, through which the data would be interpreted. The chapter discusses the design of the study in terms of aims and objectives, research questions, methodology, method, some details of the field, analytical tools, and the organisation of chapters in the thesis.

**Aims and Objectives**

The main aims and objectives of the study are as follows:

1. to trace the emergence of Kuttanad as a territorial complex or region from the second half of 19th century onwards.
2. to examine the changes in the geographical and social divisions of labour through state policies, technological interventions and labour organisations.
3. to analyse the role of neoliberal environmental discourses in contemporary Kuttanad, and to compare it with environmental problematisations of the people.
4. to analyse the spatio-political thrusts of labour, and dalits and women within it, and of fisher-folk and people involved in other geographic divisions of labour.

**Research Questions**

What are the intersections of ecology and society through the interventions of the colonial, princely and the independent Indian states across time, that shaped Kuttanad as region? What are the roles played by the social and geographic divisions of labour in shaping Kuttanad? What are the roles played by political and institutional formations of Kerala and Kuttanad? What are the scalar changes of operations of capital and labour? What underpinnings act to enhance them? What sort of neoliberal changes on 'development' are happening in contemporary Kuttanad where 'environment' becomes a discourse of capital and at the same time is problematised in the daily life experiences of people? What are the specific situations and articulations of class, caste, patriarchy? How do they inter-relate in the process of region formation?
Methodology

In discussing methodology, the general categories of qualitative and quantitative are most often treated as dichotomies. But increasingly there are articulations by scholars on the need to go beyond such polarity. Therefore the essential question is of the suitability of a particular approach or combinations for a particular research. Whereas qualitative methodology has the potential for bringing out an in-depth examination of the field, quantitative methodology can measure in terms of reliability, validity and generalisability. But it is often futile to go for detailed comparisons between the two as, for instance, 'the notions of reliability and validity... are so irrelevant to qualitative work' (Lunt and Livingston via Richards 2003: 7).

As concluded in Chapter 2, the theoretical framework of the research focuses on the composite processes of region formation of Kuttanad. Hence the challenge of data collection lies in the fact that information need to be collected on and from a large number of socio-geographic intersections. Data is required to examine the historic geography of the region, as well as the contemporary developments. It is perceived that the primary data collection would be most apt through qualitative methodology. The multiple locations of geography and society, and the imaginations and perceptions of people can be most suitably gathered through such a methodology.

The nature of data required for the research include (1) secondary sources like books, journals, films, gazetteers, governement reports, recommendations to the government and so on; and (2) primary data collection from the field.

The secondary sources have the potential to help trace the happenings of the past, such as the role of the state, perspectives of people and institutions, and information on specific issues that have been studied by scholars at different time periods. The primary data, that is the most important part of the design of the research, holds the flexibility to derive and/or search for information that are contemporary, not available in the secondary sources and which is crucial for the objectives of the research. Hence the primary data collection is a process that is planned as per the needs of the particular research and specifically designed for the purpose. The design and method would be discussed at length, for instance, what sort of data would be collected, and the rationale for the path chosen.

Methods

In order to gather nuanced information, especially on contemporary socio-spatial changes in Kuttanad, we need to get to the experiences, perspectives, apprehensions and hopes of
people living in Kuttanad. There cannot be an alternative to these documentations because of their contemporariness and because they provide the nittigritties of lived experiences of the relationships of nature-labour-capital. They reveal the power relations, and the political articulations, tussles, and negotiations. They also narrate the solace of nature, and the comradeship of humanity. Hence a number of discussions and conversations with people were planned as the main idea behind field inquiry. Most of these were done with persons or with groups like agricultural labourers, women, dalits, fisher-folk and so on, and with institutions like trade unions and civil society organisations. There was no prefixed questionnaire or sequencing of discussions, it was open ended, but with a broad frame of issues of discussion, drawn out separately for the different categories of people consulted.

The methods of study can be listed as follows:

- Interviews of persons/ organisations
- Analysis of secondary data like films and publications
- Review of Government reports and recommendations of committees

**Interviews**

The multiplicity of 'locations' from which responses could be gathered is immense. These emerge from the sites of social structure (class-caste and patriarchy), production (capital and labour), labour organisations, environmental organisations, and the state. In conducting interviews the understanding pursued is that the persons interviewed become participants in the research by providing information and also by interpreting and analysing situations. Thus they also have agency in the research process. Some concrete locations of interviews are listed below:

Agricultural labourers: who has always been the backbone of the labouring sector in Kuttanad.

Women agricultural labourers: are very prominent in paddy cultivation, but they are facing the largest displacement through increasing mechanisation. Their terms of labour continue to be governed by patriarchal world views.

Dalit agricultural labourers: They have played a historic role in the actual development of Kuttanad through land reclamation and cultivation. But historic and contemporary socio-political processes that have changed the prospects of the middle castes could not make a comparable change in the prospects of the dalits.
Agricultural labourers' union (Communist): that had played a very crucial role from the 1930s onwards, notably in actualising land redistribution in the 1970s. The union continues struggles over land-related issues.

Large farmers: The land ceiling that happened effectively in the region curbs the emergence of 'large' farmers. But through a process of 'reverse tenancy' some farmers operate hundreds of acres of land through leasing in.

Small and medium farmers: These are farmers who operate small holdings, of which they are owners, or leased in from others.

Fish workers: who form the next most prominent labour force after the agricultural labourers in the region. They fish from the waters of the Vembanad Lake, and whose livelihoods are threatened by water pollution and water-control projects.

Mussel gatherers: Two types of mussel gathering happens from Vembanad Lake – (1) Black mussels, whose meat is sold for food and (2) White mussels, which are under-water deposits that are 'mined' for use in cement factories. Mussel gathering is organised and governed through co-operatives.

Duck rearers: who are individual entrepreneurs, who directly sell to hotels and restaurants, or on whole sale to middle men.

Toddy tappers: who are licensed workers and are also under the category of agricultural labourers, but face detrimental situations mainly because of neglect of coconut palms by land holders.

Toddy tappers' union: This is a subset of the Agricultural labourers’ union.

Environmental organisations: who have been articulating on issues regarding rice cultivation and policy issues impacting the region.

NGOs: like M.S.Swaminathan Foundation that plays a prominent role through the Swaminathan Committee Recommendation, 2007 that seeks to restructure the economics of Kuttanad.

Civil society groups: prominently Kerala Shastra Sahitya Parishad, that has an all-Kerala presence on the issues of environment and has conducted studies on Kuttanad and is involved in campaigns on issues regarding the Vembanad Lake.

Most of the interviews of people were done from Kainakary village in Kuttanad taluk, located at the lower part of Kuttanad. The locational focus on the village was purposely done
due to some significant aspects of the village that are both historic and contemporary. The historically noted large-scale land reclamations initiated by Muricken\(^1\) are located in Kainakary. It was also one of the prominent areas of agrarian radicalism in the 1940s-1950s. Its easy accessibility to Alleppey town as well as to Vembanad Lake make it a location from which a cross-section of all traditional and contemporary production activities can be studied. The ecological setting makes it prone to pollution, more so as the river Pamba joins Vembanad at this location, bringing with it the wastage from Sabarimala pilgrimage centre and from the rubber and other plantations, all located in the Sahyadris (Western Ghats). The local sources of pollution are described as:

> Since the agricultural activities are more in Kainakary, it has made the rivers toxic by the presence of pesticides. The number of medical cases reported including epidemic outbreaks and cancers are highest in Kainakary (Varghese and George 2013: 93).

The other local source that is very prominent in the present times is the tourism industry, for which Kainakary is an important space of transit and an emerging one for parking of tourist house boats. It is also a noted site of the infrastructural constructions being done through the recommendations of Swaminathan Committee (SCR 2007).

Since the research framework is not of testing hypothesis, the methods used are designed to help analyse in an interpretative manner. This mainly utilised an approach of open questions on experiences and processes. Whereas in most cases the responses were gathered from single individuals, in some cases group discussions were done with persons of the same category (eg: women agricultural labourers) or with family members present who also responded to the discussions (eg: fish workers and mussel gatherers). All interviews were recorded and photographs maintained as much as possible. The recordings were later transcribed as a rich data source of people, organisations and institutions that continue to shape Kuttanad as a region.

**Mapping Kainakary**

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\(^1\) Thomas Joseph known popularly as Muricken had organised the most extensive reclamation at Chittira, Marthandam and Rani totalling to 2000 acres in Kainakary village. He was crowned 'Krishi Raja' during Nehru's Prime minister-ship.
Fig 3.1: A visual glimpse of Kainakary village

Fig 3.2: Bridges and canoes through which people travel across the 'land of waters'

As characteristic of most parts of Kuttanad, Kainakary is also criss-crossed by water bodies: lakes, rivers and canals. Coconut palms most visually mark the landscape. Houses on water fronts is another characteristic feature of life in the water-rich Kuttanad. Given below is a sketch of Kainakary village and its vicinity.
Sketch 3.1: Kainakary and its vicinity
Note on the sketch:

1. *Kayal* means Lake in Malayalam

2. Rani, Chittira and Marthandom *kayals* are prominent land reclaimed areas of Kuttanad and the most extensive ones

3. A-C Road is Alapuzha- Changanacherry Road which was built along with the A-C canal. This was part of the Kuttanad development scheme, the other features being the salt water barrier at Thanneermukkom and the spillway at Thottappally.

4. Mancompu has a Rice Research Station

5. R-Block – The reclaimed land here was consolidated by the construction of permanent bunds. Thus an area of 566.6 hectares of land was protected from the entry of water in the model of the dykes of Holland (there are no connections with Holland in its implementation). This was done with the intention of raising a second crop. But that did not happen and today most of the area is under coconut and sugarcane cultivation. Toddy tapping is a significant economic feature of the area.

**Secondary Data**

The following secondary sources of data were utilised:

(1) Literature, reports, books and articles that provide qualitative and quantitative analysis have been useful for the present study.

(2) Films have helped to understand the spatial and socio-economic relationships in the region. Especially significant is the documentary film made by Rajagopal\(^2\) that becomes a rich source of data. This is a series of 28 hours of audio-visual documentations. It captures the environmental debates on the region. It includes interviews with personalities like M.S.Swaminathan who had played crucial roles in shaping the region during the 'green revolution' phase and continues to do so through SCR, 2007. The film also captures divergent views on the issue, for instance of Thomas Isaac, former Finance Minister, Kerala and erstwhile faculty of the Centre for Development Studies, Trivandrum; and Usha, environment activist/ agricultural scientist by training. \(^2\)

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\(^2\) In 2008, I was part of a text book writing process in Kerala for schools. This was initiated by the SCERT (State Council for Educational Research and Training), Trivandrum and we had written a chapter on social geography of Kuttanad for the eighth standard. This chapter was chosen for making a film to be used as a class room resource by Rajagopal who worked with the support of SCERT.
(3) Government Reports and Recommendations of Committees

One of the noted recommendations on Kuttanad in contemporary times is that put forward by M.S.Swaminathan Research Foundation in 2007, titled 'Measures to mitigate agrarian distress in Alappuzha and Kuttanad wetland ecosystem'. Alappuzha district along with the Kuttanad wetland ecosystem was chosen by the Ministry of Agriculture, Government of India, for special consideration in view of the prevailing agrarian distress. The document studies the problems of the region and recommends solutions as well as monitoring and implementation mechanisms.

Analytical Tools

The data would be used for a space-time examination of Kuttanad, in order to understand the processes of region formation of Kuttanad and to link it to the contemporary developments in the region, that show an acceleration of capitalist relations in agriculture and in tourism, both of which together bring major spatial, ecological, and socio-economic changes in the region. The main analytical tools used are:

(1) 'Territorial complex' – discussed in Chapter 2 in the theoretical frame, derived from Anuchin (1960) holds the analytical frame of identifying and linking the geographic and social divisions of labour in a region. It is the interlinked processes of these two aspects that evolve the territorial complex or region.

(2) 'Layering' – discussed in Chapter 2 helps to examine the continuous processes of region formations as articulated by Massey (1984). It is important in the analysis to specifically identify the historic layerings which could be caused by the role of the state, the organised efforts of people, ecological uniqueness and specificities and so on. This is similar to the analytical frame that Lefebvre (1991) refers to as underpinning that leads to spatial change.

(3) 'Production of space' – as used by Lefebre (1991) identifies different categories of spatial processes as:

Spatial practice (or the perceived space)- Spatial practice of a society secretes that society's space. It produces it slowly and surely as it masters and appropriates it.

Representations of space (or the conceived space) – This is planned space, the abstract space of capitalism, the space of the scientists, planners, technocrats and social engineers. This is the dominant space in any society/ mode of production.
Representational space (or the lived space) – This is the space as directly lived through its associated images and symbols. This is the space of inhabitants, users, writers and artists; this is the dominated space. This contains non-verbal symbols and signs.

Relations between these three levels of space are not simple or stable. Together they contribute to the production of space according to their qualities and attributes, according to the mode of production and the historical period. Lefebvre also pays great attention to the abdication of understanding:

...to underestimate, ignore and diminish space amounts to the overestimation of texts, written matter, and writing systems, along with the readable and the visible, to the point of assigning to these a monopoly on intelligibility (1991: 62)

Organisation of Chapters and the Main Findings

The thesis is organised in to eight chapters, whose titles and summaries are given below:

Chapter 1: Imagining Kuttanad

Kuttanad is imagined differently by distant-viewers and by people living their every day lives in the region. Whereas the former is a ‘scene’ changing with time, the latter reveals the socio-economic and political processes through which the region is continuously created. Whereas the former is more or less homogeneous, the latter holds multiple imaginations, signifying tensions and contradictions. The chapter examines these imaginations, as well as the perspectives through which scholarships on Kuttanad have evolved. These two knowledge areas help to take stock of the status as well as gaps in scholarships. The overall changes happening in Kuttanad in neoliberalism and their social and spatial implications have not yet been studied. Moreover studies have not focussed on region formation.

Chapter 2 : Region and Space

"Region’ is a core perspective and methodology of geography, which has conventionally developed the study of the relationships between nature and society. The knowledge creation of geography has been exceptionally impacted by imperialism and capitalism. The mid 20th century marked major transitions in the understanding of space and regions. Critiques on conception of space only in a physical sense, and on the neglect of the 'social' in theorising the 'spatial' were important turning points, that gave way to these two aspects being theorised as simultaneous and interlinked processes. The turning point in geographic theorising was deeply influenced by Marxism, and evolved through insights from feminism and from processes of racial marginalisations. Social theories and spatial theories together
wove a new theoretical fabric, but the separate enquiries on class, caste and patriarchy in social science that too often fail to build inter-linkages amongst them, has crept in to the new theories of space as well. Therefore the most important theoretical aspect proposed in the thesis is that the framework of 'region' can bring together the ecological relations of production as well as class, caste and patriarchy through their interrelations. The chapter contextualises region formations in Kerala, and evolves a framework for the conception of Kuttanad as region.

Chapter 3: Methodology and Design

The methodology, data sources, method, some details of the field, analytical framework, and organisation of chapters of the thesis form the contents of the chapter. The methodology used is qualitative. Data sources are: (1) Interviews and discussions (2) Studies, reports, statistics, documentary films (4) Reports and recommendations of the government and NGOs. The method utilised is mainly interviews and discussions. Interviews were conducted of agricultural labourers with specific focus on dalit and women, large and small farmers, fishers, mussel gatherers, duck rearers, toddy tappers, trade unions and civil society groups. Most of the primary surveys were done at Kainakary village in Kuttanad taluk, located at the lower part of Kuttanad.

Chapter 4: Historical Geography of Kuttanad: 2nd half of 19th Century to the End of the 1940s

The spatial identity of Kuttanad as a region of burnt wood or 'kari' lands, associated with geological formations, was replaced by that of material production. The land reforms of the Travancore state in 1865 gave way to private property and entrepreneurship, altering the mode of production. The state encouraged land reclamation in Kuttanad. As Kuttanad evolved as a commercial paddy land, trading centres developed as towns on its peripheries. Oil pumps for dewatering and the construction of permanent dykes/bunds systematically displaced labour. There was a transition from attached to casual labour. Whenever the price of paddy fell, land lords often left land fallow. These situations were disadvantageous for the labourers. The second decade of the 20th century saw the emergence of social reform movements in Travancore. Their synergies and that of the Communist trade union that emerged in the 1940s, made Kuttanad a hub of agrarian radicalism. Paddy cultivation developed as the fulcrum of spatial change, others like fishing and toddy tapping did not develop in such ways. Spatial change was accompanied by social divisions of labour governed by class, caste and patriarchy.

Chapter 5: Developing the territorial complex: The 1950s to the end of the 1980s
In post-independence, the erstwhile princely states of Travancore and of Cochin, and the British-ruled Malabar, which were merged on linguistic grounds in 1952 to form the modern state of Kerala, was deeply impacted by Communism. The region was impacted by the policies of the Central government, the state (Kerala) policies, science and technology, entrepreneurship, and labour assertions. Trade unionism and land reforms made notable spatial and social changes in the 1970s that altered the situations of extreme impoverishment of the labourers of the 1950s and the 1960s. The 1970s also saw ‘green revolution’ inputs dramatically increasing production. These aspects brought prosperity to the land owners and also improved labourers’ lives. But by the end of the 1980s several land owners opted not to cultivate, taking the labourers to cross roads. Women and dalits were most impacted. At the same time, as technological interventions arrested natural water flows, and pesticides flowed in to the water bodies, the livelihoods of fishers and mussel gatherers were detrimentally impacted.

Chapter 6: Reorienting Agriculture in Neoliberalism

Kerala accelerated its shifts to cash crops, marking an overall decline in food crop cultivation. But such attempts in Kuttanad in the 1990s were abandoned, setting in a phase of return to paddy in the 2000s. The role of the Kerala state needs to be positively, yet critically recorded because in the neoliberal phase of India, with the rolling back of welfare schemes, Kerala has developed new legislations and schemes to ensure support to farming. But in Kuttanad, the spatial practices changed radically through large scales of operations through leasing in, and the entry of harvesters for the first time in the region. The elimination of labour from farm operations and thereby from agricultural profits, hold differing implications for women and dalits. Toddy tappers and fishers, mussel gatherers are also facing detrimental situations.

Chapter 7: Tourism in Neoliberalism

in the last 15 years, the lands of the subalterns, engaging with fishing, or with agriculture, are being purchased by tourist entrepreneurs and corporates. The space of operation of fishers and mussel gatherers experience a direct conflict with tourism in Vembanad Lake. As for employment in the tourism sector, local persons are employed only in the house boats, and not much in the resorts. The houseboat employees are generally Ezhavas and other OBCs, and not dalits. For women labourers, tourism offers no employment options. There is a deep cultural problematisation of sex trade in house boats, and of toilet wastes dumped in the water bodies, by people living in Kuttanad. The resistance to encroachment of spaces, and for environment protection and labour rights done by CPI(M), its youth wing, DYFI, civil society groups like KSSP and environmental groups, are localised. These are yet to
make an impact on the whole region. The environmental discourse of NL is amply brought out in SCR, 2007 that seeks to convert Kuttanad into a tourism zone. It proposes Special Agricultural Zones in Kuttanad, as cultivation provides greenery for sustaining tourism. The environmental discourse of NL contradicts with the environment problematisations of people based on day-to-day life experiences.

Chapter 8: Conclusion

The territorial complex or region as a theoretical framework was utilised in the study of Kuttanad. It is not simply a matter of concreteness that enriches the study, but the framework as capable of looking at interlinkages of concrete processes. The NL experience in Kuttanad has been a process of elimination of labour from surplus production. The patterns of land ownership and traditional occupations place dalits and women labourers in a comparable situation. NL has displaced them completely from agriculture and they have no employment options in tourism. Paddy cultivation and tourism restructure the region through capital accumulation being vested in the hands of the upper class-caste and men. The medium and small enterprises as well as labour emerging from the economic linkages are occupied by OBC men. The contemporary solidarity in spatial struggles of the Left-political and environment groups in Kuttanad require special mention, as a very encouraging scenario that shows labour and environment as two sides of the same coin. Such solidarity and dialogue needs to be built across dalit, Left-political, environmental and women's groups to strengthen the struggles for reclaiming social spaces in Kuttanad for labour, dalits and women.