The Production of Space and Construction of Frontier:
Contesting a Cambodian Resource Landscape

Sopheak Chann

A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy (Human Geography)

School of Geosciences, Faculty of Science
The University of Sydney

March 2017

I certify that the intellectual content of this thesis is the product of my own work and that all the assistance received in preparing this thesis and sources have been acknowledged.
Abstract

This research employs Henry Lefebvre’s concept of “the production of space” and the notion of frontiers – empty or unused space – to explore the complex spatial contestations over resource landscapes in Cambodia. The study focuses on the construction of frontiers by examining how socio-spatial relations are produced in relation to how the frontier is constructed. In this research, two groups of actors and processes are involved: (1) the state and its associated elite actors/agencies who employ spatial representations (maps) to organise the landscape; and (2) the local actors who construct and organise space by directly living in it. Regarding the state-based spatial arrangements, this research employs critical cartography to examine formal boundaries made by the state and its associated agencies, including the political elites, conservation organisations and development agencies. In regard to informal local level spatial arrangements, place-making processes are examined to understand how land and resources are organised by local actors. The thesis focuses on one case study site located in Northwest Cardamom – an upland area of the western part of Cambodia near the border of Thailand and a former Khmer Rouge stronghold.

This thesis argues that frontier – empty or wasteland – is not an absolute geographical space, but a produced space. Frontier construction is at the centre of land and resource conflicts over the landscape. This produced space is the outcome of dialectical relations of spatial idealisation, the representation of space and direct spatial interaction among different actors whose interests are to access and control the landscape. This research found that being able to use maps, the state and its associated elite actors and agencies are able to formally exclude local communities from accessing land and resources by making landscape appear empty or unused. The local spatial organisation and socio-spatial relations are also constructed within the notion of a frontier, which is the outcome of a traumatic political history and physical traits of the landscape. With the long-term experience of organising local landscapes, the ex-Khmer Rouge (ex-KR) tend to have more control over land and resources compared to new in-migrants
moving to search for land. Two forms of interaction between state-based and local-based spatial representation and organisation can be observed. The first is state enforced abstract boundaries which directly exclude people from accessing land and resources. The second is state-based private land titling which delegitimises local villagers’ land claims.
Acknowledgements

This research would not have been possible without contributions and support from the following people. First and most importantly, I would like to thank local participants whose information and stories are the centre of this thesis. Thus I thank villagers of Chamkar Chrey Tbong and Samlanh. Especially, I would like to thank the families who offered great hospitality during my fieldwork. Thanks for treating me like your own family member while I was staying in your homes.

I would like to thank my supervisors Professor Philip Hirsch and Dr Josephine Gillespie for their emotional and academic support since the beginning to the end of this research. Thanks, Professor Philip Hirsch who had supported me before I started this PhD project by encouraging me to apply for a scholarship. I thank Phil for his supervision throughout the four years. I would like to thank Dr Josephine Gillespie for her intensive support and supervision during the fieldwork and writing period. Without her support, I would not be able to accomplish this project.

This thesis would not be possible without friends who have provided emotional, social and intellectual support. Thanks Tim Frewer for reading my drafts and providing feedback, Matthew Kiem for sharing interesting intellectual discussions and Greg Harriden for emotional counselling. I would like to also thank friends including Alistair, Anna, Ben, Dave, Emily, Josh, Kate, Kristin, Kristy, Laurence, Mark, Mattijs, Ming, Nat, Nathan, Ness, Nicky, Ranee, Rottanak, Rotha, Sophia, Tubtim, Wenny, and many more whose names I cannot mention here. You guys are amazing people and I am very lucky to come all the way to the other side of the world to meet you. Without you, these four years in Sydney would not have been so exciting and interesting.

I would like to also acknowledge academic staff in the Geography department at Sydney University and outside the university who provided intellectual support. I thank Professor John Connell, Associate Professor Kurt Iveson, Dr Robert Fisher, Dr Jeff Neilson, Dr Yayoi Lagerqvist. Also, special thanks to Dr Jean-Christophe Diepart who also provided advice on research
matters in Northwest Cambodia and the translation of some maps. I thank Mark Grimsditch for advice on land and legal issues in Cambodia. I would like to also thank the Australian Award Office at the University of Sydney. I would like to thank, Bojan, Annie, and Amy for their assistance during the four-year PhD with my Australia Awards Scholarship at the University of Sydney. I would like to also thank my colleagues in Cambodia including Kimkong, Sophat, Chanrith, Nyda, Naret and Sithirith for their support before and during the data collection period. Special thanks to Rebecca Bradford for her thorough editing of this thesis.

Last but not least I would like to thank my family and relatives who are always here for me. Thanks, mum and dad for your love and care. Chan, Geg and Huy my brother and sisters, thanks for always being part of my life. I also thank my two little nieces, Lisa and Amelia, for giving me a lot of energy while going through the fieldwork and writing.
Contents

Abstract ........................................................................................................................................ i
Acknowledgements ................................................................................................................... iii
List of figures: .............................................................................................................................. x
List of tables: ............................................................................................................................... xiii
Acronyms .................................................................................................................................... xiv

Chapter 1: Introduction .............................................................................................................. 1
1.1. Resource landscape, frontier and space ............................................................................. 1
1.2. Research problems ............................................................................................................. 3
1.3. Rationale and research questions ..................................................................................... 7
1.4. Key arguments ................................................................................................................... 9
1.5. Thesis structure ................................................................................................................ 11

Chapter 2: Production of Space and Construction of Frontier ................................................. 14
2.1. Introduction ...................................................................................................................... 14
2.2. The production of space ................................................................................................. 16
  2.2.1. Conceptualising the production of space .................................................................. 16
  2.2.2. Representation of space and state ............................................................................. 19
  2.2.3. Everyday life and the local production of space ......................................................... 21
2.3. Critical cartography and space ....................................................................................... 22
  2.3.1. Maps and space ........................................................................................................ 23
  2.3.2. Challenging the power of maps .............................................................................. 25
  2.3.3. Maps, natural resource and territory ...................................................................... 28
2.4. Place-making and spatial practice .................................................................................. 32
  2.4.1. Place-making and the conception of space .............................................................. 32
  2.4.2. Identity, territory and place ..................................................................................... 34
  2.4.3. Knowledge and spatial arrangement of place .......................................................... 35
2.5. Political ecology of frontier .............................................................................................. 37
  2.5.1. Frontier and space ................................................................................................... 37
  2.5.2. Frontier and political ecology ................................................................................ 39
2.5.3. The new frontier in Southeast Asia ................................................................. 40
2.5.4. Southeast Asia and the state-based frontier .............................................. 42
2.5.5. Everyday life in the Southeast Asian resource frontier .......................... 43
2.6. Summary .......................................................................................................... 46

Chapter 3: Cambodia and Its Resource Frontier .................................................. 47
  3.1. Introduction ...................................................................................................... 47
  3.2. Cambodia: a spatially contested nation-state ................................................ 48
      3.2.1. History of state, land and people ............................................................ 48
      3.2.2. Contemporary land issues ................................................................... 59
      3.2.3. Cambodian cartographical history and the classification of space ........ 64
      3.2.4. The apparatus of the state .................................................................... 79
      3.2.5. Resource landscape and the state .......................................................... 81
  3.3. Cardamom Region: the frontier under construction .................................. 82
      3.3.1. Geopolitical landscape ......................................................................... 83
      3.3.2. Post-war zone ....................................................................................... 88
      3.3.3. Conservation frontier .......................................................................... 89
      3.3.4. A new development frontier ................................................................. 93
  3.4. Conclusion ....................................................................................................... 94

Chapter 4: Methodology and Methods .................................................................. 96
  4.1. Introduction ..................................................................................................... 96
  4.2. The political ecology of frontier and the production of space ...................... 96
      4.2.1. Critical cartography .............................................................................. 97
      4.2.2. Place-making ....................................................................................... 98
  4.3. The case study ............................................................................................... 100
  4.4. Data collection ............................................................................................... 103
      4.4.1. Fieldwork and timeline ....................................................................... 103
      4.4.2. Participant observation ....................................................................... 105
      4.4.3. Semi-structured interviews ................................................................ 107
      4.4.4. Secondary data .................................................................................. 109
  4.5. Information and interpretation ..................................................................... 109
4.6. Positionality and reflexivity ............................................................... 111
4.7. Ethical and legal considerations ...................................................... 114
4.8. Summary ............................................................................................... 115

Chapter 5: Cartography and the Frontier in Abstraction ......................... 117
5.1. Introduction ........................................................................................... 117
5.2. Veal Veaeng - a district of political compromise .................................. 118
  5.2.1. Two decades of political tension and compromise .......................... 118
  5.2.2. Dividing up landscape and the abstraction of geopolitical space ......... 120
  5.2.3. The invisible ...................................................................................... 124
5.3. The Phnum Samkos Wildlife Sanctuary (PSWS) and conservation territory ... 128
  5.3.1. Phnum Samkos Wildlife Sanctuary and early 1990s conservation ...... 128
  5.3.2. The overlapping territory ............................................................... 133
  5.3.3. The division of human versus biodiversity ...................................... 134
5.4. Land concessions and economic development .................................... 146
  5.4.1. Economic rationales and other financial returns ............................. 147
  5.4.2. Spatial designation of the concessions ........................................... 149
  5.4.3. Ambiguous procedures .................................................................... 153
5.5. “Resolving” the mess and the Order 01 Land Title Campaign .............. 155
  5.5.1. The politics of securing private land security ................................... 156
  5.5.2. Results of O01LTC .......................................................................... 157
  5.5.3. Criteria and titling processes ......................................................... 159
  5.5.4. The shape, size, and location ........................................................... 161
  5.5.5. The “last land to be given” .............................................................. 162
5.6. Summary .................................................................................................. 163

Chapter 6: The Landscape in Transition .................................................... 165
6.1. Introduction ........................................................................................... 165
6.2. Regionalising Northwest Cardamom ................................................... 166
  6.2.1. Journey to and within the site ....................................................... 166
  6.2.2. Topography, water, resources, and soil ........................................ 169
  6.2.3. History and political transition ..................................................... 171
Chapter 7: Frontier in Perception and Confrontation in Space

7.1. Introduction ........................................................................................................ 210
7.2. Background maps .............................................................................................. 211
7.3. KR and their frontier of survival ....................................................................... 214
    7.3.1. Becoming Khmer Rouge ........................................................................ 215
    7.3.2. Lives in the battles ................................................................................ 218
    7.3.3. Stronghold and home ............................................................................ 221
7.4. Migrants and the new frontier ......................................................................... 223
    7.4.1. Postwar struggle and land ..................................................................... 223
    7.4.2. Pressure to move and land .................................................................... 225
    7.4.3. Northwest Cardamom - a spacious frontier ......................................... 228
7.5. Everyday life in a confronting space ................................................................ 231
    7.5.1. The inhospitable landscape ................................................................. 231
    7.5.2. Isolation ............................................................................................... 233
List of figures:

Figure 1.1 The Cardamom Mountain Range and the Cardamom region ........................................ 2
Figure 1.2 Development and conservation areas in Cambodia ......................................................... 6
Figure 2.1 Lefebvre’s (1991) dialectical production of space demonstrated by the author ................... 18
Figure 3.1 The US bombing sites in Cambodia between 1967-1973 .................................................. 52
Figure 3.2 Khmer Rouge military strongholds during the 1990s ....................................................... 56
Figure 3.3 Communes where land registration had taken place by 2011 ............................................. 62
Figure 3.4 A French map showing provincial boundaries of Cambodia during the 1930s ..................... 65
Figure 3.5 Administrative map of Cambodia in the 1970s ................................................................. 66
Figure 3.6 Democratic Kampuchea military zones ........................................................................... 67
Figure 3.7 Provincial map of Cambodia in 1991 .............................................................................. 68
Figure 3.8 A protected forest map created in the 1930s by the French colonial .................................. 70
Figure 3.9 Protected Areas in Cambodia by 1993 ............................................................................. 72
Figure 3.10 Forest Concessions ........................................................................................................ 73
Figure 3.11 PAs and PFs .................................................................................................................. 75
Figure 3.12 Spatial divisions of Cambodia’s land and resources ......................................................... 76
Figure 3.13 Locations of the camps along the Cambodia-Thai border 1979-1984 ............................. 84
Figure 3.14 Locations of UNBR camps between 1985-1990 ............................................................ 85
Figure 3.15 Suspected minefields ..................................................................................................... 87
Figure 3.16 Key biodiversity and bird areas ...................................................................................... 91
Figure 3.17 Development projects in the Cardamom region ............................................................ 93
Figure 4.1 The research site .............................................................................................................. 101
Figure 5.1 Boundary map Veal Veaeng District and Phnum Kravanh District ................................. 121
Figure 5.2 Veal Veaeng – a former KR stronghold in the 1990s ..................................................... 122
Figure 5.3 Veal Veaeng administrative boundary map ..................................................................... 124
Figure 5.4 Villages of Cambodia and Veal Veaeng from 1998 census data ..................................... 125
Figure 5.5 Villages of Cambodia and Veal Veaeng from 2008 census data ................................................................. 126
Figure 5.6 Population status of the villages in Krapeu Pir commune ................................................................. 127
Figure 5.7 PFs during French Colonial rule (top left), PAs (top right), Colonial Protected Forest in Northwest Cardamom (bottom left), and the PSWS (bottom right) ........................................... 130
Figure 5.8 FC (top) and PA (bottom) .............................................................................................................................. 132
Figure 5.9 The overlap between the PSWS and Veal Veaeng District ................................................................. 134
Figure 5.10 The processes of defining Zones 1 and 2 ................................................................................................. 137
Figure 5.11 Zoning map produced by 2006 ................................................................................................................. 139
Figure 5.12 The zoning classification of the PSWS by 2013 .................................................................................... 141
Figure 5.13 Villagers transporting wood in the plantation (left) and logging inside the company’s land (right) .............................................................................................................................. 149
Figure 5.14 Land concessions ........................................................................................................................................ 152
Figure 5.15 Road in Thmar Da (left) and the unfinished casino (right) ................................................................. 153
Figure 5.16 The O01LTC land title and other land classifications ..................................................................................... 158
Figure 5.17 People waiting to collect their land title (left) and a man inspecting his land title (right) ........ 160
Figure 5.18 Land title (left) and pole and tree demarcating land ownership on the ground (right) ............. 162
Figure 6.1 An overview of the geographical location of the site ........................................................................ 167
Figure 6.2 The district centre of Pramaoy (top let), the road from Pursat to Pramaoy (top right), road from Samlanh to Battambang (bottom left), and a bridge connecting the road leading to the Thai border (bottom right) ................................................................................................. 168
Figure 6.3 Topographical map of Northwest Cardamom ......................................................................................... 170
Figure 6.4 The location of Aoral District .................................................................................................................. 177
Figure 6.5 A new settler’s house and an old resident’s home .................................................................................... 183
Figure 6.6 Regional connection map in the 1990s described by ex-KRs ........................................................................ 186
Figure 6.7 Population distribution in Chamker Chrey Tbong ................................................................................. 191
Figure 6.8 Newly cleared land in Okanglan (left) and villagers walking to that location in the wet season (right) ........................................................................................................................................ 194
Figure 6.9 Chamkar Chrey Tbong’s land distribution ............................................................................................... 196
Figure 6.10 Population distribution of Samlanh ................................................................. 205
Figure 6.11 Land use and population distribution of Samlanh ........................................ 207
Figure 7.1  Northwest Cardamom and its surroundings ..................................................... 213
Figure 7.2  Provincial map of Cambodia ............................................................................. 214
Figure 7.3  Debris of a bomb found in a farm ................................................................... 232
Figure 7.4  The unfinished pagoda in Samlanh (left) and a local water source near Samlanh (right) .... 235
Figure 7.5  A classroom in Samlanh (left) and a school near Samlanh (right)......................... 236
Figure 7.6  Le, Laiy and Thuerm’s families helped to seed Thuerm’s farm ......................... 238
Figure 7.7  Samlanh and the MC boundary ......................................................................... 246
List of tables:

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 4.1</td>
<td>Fieldwork time table</td>
<td>104</td>
</tr>
<tr>
<td>Table 5.1</td>
<td>Geographical overlap between the PSWS and Veal Veaeng District</td>
<td>133</td>
</tr>
<tr>
<td>Table 5.2</td>
<td>The result of the Zoning Project by the early 2010s</td>
<td>141</td>
</tr>
<tr>
<td>Table 5.3</td>
<td>Overlapping area of concessions: PSWS and Veal Veaeng District</td>
<td>150</td>
</tr>
<tr>
<td>Table 5.4</td>
<td>Summary of concession profiles in Veal Veaeng District</td>
<td>150</td>
</tr>
<tr>
<td>Table 6.1</td>
<td>Key historical events and consequences in Northwest Cardamom</td>
<td>171</td>
</tr>
</tbody>
</table>
Acronyms

CBNRM – Community-Based Natural Resource Management
CGDK – Coalition Government of Democratic Kampuchea
CPA – Community Protected Area
CPP – Cambodian People’s Party
EIA – Environmental Impact Assessment
ELC – Economic Land Concession
EU – European Union
Ex-KR – ex-Khmer Rouge
FA – Forestry Administration
FC – Forest Concession
FFI – Fauna and Flora International
FUNCINPEC – Front Uni National Pour un Cambodge Indépendant, Neutre, Pacifique et Coopératif
GIS – Geographic Information System
GIZ – German Society for International Cooperation
GPS – Global Position System
KPNLF – Khmer People’s National Liberation Front
KPR – People's Republic of Kampuchea
KR – Khmer Rouge
 LICADHO – Cambodian League for the Promotion and Defense of Human Rights
LMAP – Land Management and Administration Project
MAFF – Ministry of Agriculture, Forestry and Fisheries
MC – Mining Concession
MoE – Ministry of Environment
MoT – Ministry of Tourism
MOWRAM – Ministry of Water Resources and Meteorology
NADK – National Army of Democratic Kampuchea
O01LTC – Order 01 Land Title Campaign
ODC – Open Development Cambodia
PA – Protected Area
PAL – Protected Area Law
PES – Payment for Ecosystem Services
PF – Protected Forest
PM – Prime Minister
PSWS – Phnum Samkos Wildlife Sanctuary
RGC – Royal Government of Cambodia
SEZ – Special Economic Zone
SLC – Social Land Concession
UN – United Nations
UNTAC – United Nations Transitional Authority in Cambodia
VN – Vietnam
Chapter 1: Introduction

1.1. Resource landscape, frontier and space

A mountain range lying in between Cambodia’s highly populated area of the Mekong-Tonle Sap lowlands and the Thai border is named after a well-known native spice, Cardamom, signifying the landscape’s ecological identity. The Cardamom Mountain Range and the Cardamom region (Figure 1.1), taking up over 30% of Cambodia’s total territory, attract conservation attention, being home to more than thirty types of animals classified as globally endangered species (Killeen, 2012). The landscape’s natural resources and land are also known to have the potential to generate state economic revenue to feed the rapidly developing state of Cambodia (Japan International Cooperation Agency, 2009). However, underneath this “unique” biodiversity for conservation and the “treasure” of natural resources and land for development, is a place that has been exposed to the political trauma of the Cambodian civil war – the political conflict between the central government and the Khmer Rouge (KR) (Zucker, 2013). Additionally, the Cardamom is also home to highland indigenous communities whose lives are crucially interconnected with the land and resources of the region (Ferguson and Vong, 2007, Ironside, 2005).
An applicable term to portray such a landscape would be a frontier, implying an unused or unclaimed space full of the potential to be exploited, conserved or governed by multiple actors – in Khmer this notion of frontier can be referred to as Dei Tomne (wasteland) or Dei Prei (woodland). From the conservation point of view, this mountainous landscape contains a high biodiversity potential to be conserved within a relatively sparsely populated area of Cambodia’s highlands. From the development aspect, the land and natural resources have not reached their

---

1 The circled areas showing the Cardamom Mountain Range and the Cardamom region do not represent official boundaries of the Cardamom Mountain Range and the Cardamom region. They are broadly defined by the author to communicate the geographical context of this thesis. In this research, while the Cardamom Mountain Range refers to a collection of three groups of mountains, namely Phnum Samkos, Central Cardamom and Phnum Aoral, the Cardamom region refers to the entire mountainous area and the surrounding areas extending from southwestern to northwestern Cambodia.
high economic potential because they have not yet been extensively utilised. Geopolitically, the landscape is located on the borderlands of Cambodia and Thailand, a post-war zone that accommodated former rebellions.

Imposing state-based spatial organisations on the complex localised process of socio-spatial formation has potentially made the Cardamom region one of the most highly contested landscapes in Southeast Asia. In the Cardamom region, different actors have introduced diverse forms of rationales and territories to govern socio-spatial relations so that land and resources can be utilised or conserved (see, for example, Frewer and Chann, 2014, Diepart and Dupuis, 2014, Killeen, 2012). Taking Northwest Cardamom – a sub-section of the Cardamom region – as an example, the complexity of these spatial arrangements and contestations can be observed. At least four different forms of spatial classification, namely a district territory, a wildlife sanctuary, four land concessions, and a private land titling program, have been imposed by or through the state on a former KR stronghold, where land and resources have played an important role in the local lives and history of the place (Kamboly and Dearing, 2014). The research explores the territorial contestations of the resource landscape by examining relationships between the notions of space and frontier. In that regard, this research observes how space is produced, in relation to how frontier is constructed, by examining different actors’ characterisations and arrangements of the resource landscape. In this research, Northwest Cardamom will be examined as a case study of such contestations and relationships.

1.2. Research problems

The intensified conflict over land and resources in the rural landscapes of Southeast Asia has become a concern in political ecology scholarship (Gururani and Vandergeest, 2014, Peluso and Lund, 2011). Nonetheless, little literature has employed Lefebvre’s (1991) production of space in relation to the notion of frontier in order to unpack the complexity of the conflict. Resource landscapes, e.g., forest, wetland, highland and borderland, in Southeast Asia have become highly controversial because of the region’s rapid economic development transition, global
environmental concerns and regional geopolitical pressure (Woods, 2011, Gururani and Vandergeest, 2014). As a result of these rapid changes, local communities have lost their access to land and resources and the environment is becoming depleted (Li, 2014, MacInnes, 2015, Mertz et al., 2009). Political ecology scholars have used the notion of frontier as a way to describe the landscape, emphasising the complex nature of change and conflict (Barney, 2014, Peluso and Lund, 2011, Gururani and Vandergeest, 2014). These new frontiers – as Peluso and Lund (2011) term those contested resource landscapes – have been constructed by diverse actors, introducing new knowledge and territories to construct, extract and conserve resources and land (Peluso and Lund, 2011, Gururani and Vandergeest, 2014). A range of ecological studies of forests, water, and soil erosion, has critically examined socio-ecological issues in the resource frontiers (Peluso and Vandergeest, 2011, Le Billon, 2001). However, very few studies have attempted to explore the notion of frontier in itself, as a form of produced space through the interconnected range of constructed ecological, economic and political knowledge of the landscape. Lefebvre (1991) suggests that the modern socio-spatial formation of a particular space is the product of the dialectical relation between spatial idealisation, the representation of space and direct spatial interaction. This research attempts to explore how frontier is constructed by observing how space is produced using Lefebvre’s production of space to examine different actors’ characterisations and organisations of the resource landscape.

In addition to rapid economic transition and global environmental concern, the consequences of a traumatic history have deepened land and resource contestations over Cambodia’s resource landscape, especially at the borderlands. These contestations require comprehensive observation. Land and resources have played an important role in shaping Cambodia’s socio-political history (Le Billon, 2002, Kiernan and Boua, 1982), thus the evolution of the socio-spatial formation of Cambodia’s resource landscape is inseparable from the country’s historical journey. Contestation over the resource landscapes near the Cambodian-Thai border, in particular, was intensified by civil war between the central government and the KR military up until the late 1990s. These areas were the last resource landscapes to be reached by the central government. The land and resource organisation of those areas is influenced by the historical interactions between the ex-KR and the landscape, and this is not understood well (Diepart and
Dupuis, 2014). In addition to traumatic political struggle, current conservation and development projects have added further complexity to the land and resource conflicts in these landscapes, by introducing more actors, knowledge and territories. Within the last three decades, Cambodia’s rural landscape has been spatially divided into different conservation and economic zones, e.g., land concessions and protected areas (see Figure 1.1), which tend to overlook the complex socio-political history that has taken place in the landscape (Diepart and Dupuis, 2014). Thus this research attempts to establish comprehensive knowledge on the land and resource contestations in Cambodia’s rural resource landscape by observing the dynamic relations and contradictions between the construction of the resource landscape introduced by the state, and the local socio-spatial formation developed by socio-political struggle over the last four decades. Different relevant actors including political elites, conservation organisations, economic agencies and local villagers and their territorial strategies and processes will be discussed in this study.
Maps have been widely used in governing land and resources in Southeast Asia, but very limited research has critically examined how they have been involved in the construction of resource landscapes by multiple actors. Particularly, not many studies have critically observed the history of maps and interactions between different maps in land and resource governance. In Cambodia’s case, for example, geometrical maps were introduced to govern land and resources by the French colonial administration in the 19th century (Fox, 2002, The Atlas of Cambodia, 2006). Since then, maps have been involved in (re)creating different forms of spatial divisions and territories over land and resources, e.g., protected areas, land concessions, and political administration (Chandler, 1991, The Atlas of Cambodia, 2006). According to maps, by

Figure 1.2 Development and conservation areas in Cambodia (source: the map is made by the author and the geodatabase is from Open Development Cambodia (2016a)
the early 2010s, 26% of Cambodia’s total land had been classified as an area dedicated for environmental protection (The Atlas of Cambodia, 2006) and another 32% had been allocated for land concessions (Diepart and Schoenberger, 2016). The introduction of these spatial divisions into the rural landscape has marginalised local communities from accessing land and resources (Spiegel, 2016, Work and Beban, 2016, Dwyer, 2015). Landlessness in rural Cambodia has considerably increased over the last decade (Phann et al., 2015).

Northwest Cardamom is one of Cambodia’s highly controversial landscapes due to its political history, development potential and biodiversity potential. However, not much is known about the region’s history and its contemporary spatial contestations over land and resources. The region was one of the last Khmer Rouge strongholds, which plays an important role in Cambodia’s political narratives (Kamboly and Dearing, 2014). Since the end of the Khmer Rouge’s brutal regime in the late 1970s up until the late 1990s, the Cambodian-Thai borderlands in the Northwest Cardamom region had been traumatised by the intensive civil war (Kamboly and Dearing, 2014). During the early 1990s, the KR had established a stronghold on the northwestern region of the Cardamom region – Western Cambodia. Currently, the region’s land and resource usages are intensified by development and conservation projects which have brought multiple territorial divisions into the region. However, the complex interactions between state-based spatial arrangements and place-based spatial organisation, as a consequence of the local socio-political history, have not been unpacked.

1.3. Rationale and research questions

This study seeks to better understand the contestations over land and resources in the rural landscapes of Southeast Asia, and Cambodia in particular, by examining the relation between the notions of ‘space’ and ‘frontier’. In that regard, this research observes the relationship between the production of space and the construction of frontier by elaborating on how different actors construct and organise the landscape in order to have access and control over land and resources. In this study, two groups of actors and processes are involved: (1) the state-
based actors\textsuperscript{2} who employ spatial representations (maps) to organise the landscape; and (2) the local actors who construct and organise space by directly living in it. To observe these patterns, this research examines a selected case study located in Northwest Cardamom – an upland area of western Cambodia near the Thai border.

The main research question is how space has been produced and frontier has been constructed according to different actors’ characterisations and organisation of land and resources.

To investigate the question, the following sub-research questions are explored:

i. How do state-based actors characterise and organise Northwest Cardamom?

This question will be explored through a critical examination of the maps employed by the Cambodian state and its associated actors, e.g., conservationists, economic development agencies, and political elites, to govern local socio-spatial relations. This is to examine how cartography has been involved in the state-based spatial characterisation and organisation of Northwest Cardamom.

ii. How has Northwest Cardamom been produced locally?

This question is explored through two sub-research questions:

- How has the local history of place shaped the current socio-spatial relations?

This question is to understand how historical phenomena have shaped the current socio-spatial relations of the area. It looks at how land and resources have been organised and local communities have been formed, according to the history of the place.

- How do local actors conceptualise and organise space according to their direct experiences and relationship with the landscape?

---

\textsuperscript{2} In this thesis, the notion of state-based actors refers to the institutional actors who employ state apparatus to formally introduce their rationales and territories on Northwest Cardamom. Those actors include political elites/parties, conservation organisations and development agencies.
This question is investigated by examining the perception and organisation of the landscape at a personal and household level by exploring local narratives from the different groups inhabiting the area in relation to their access to land and resources.

iii. What are the relations and tensions between the state-based and local characterisations and organisations of Northwest Cardamom that have contributed to land and resource spatial contestations?

This question will be answered by consolidating the above two questions, examining the intersection between the formal and informal conceptualisations and arrangements of space.

1.4. Key arguments

The frontier is not an absolute geographic space, but a produced space that involves the dialectical relationship between spatial idealisation, the representation of space, and direct interactions of and in space. From applying the ‘production of space’ introduced by Lefebvre (1991) to examine the spatial contestations and the construction of the resource landscape in Cambodia, this research argues that frontier – ‘an empty and unused space’ – is not an absolute space, but it is produced by different actors’ idealisations, presentations, and practices of and in space. The process of constructing and making the frontier is at the centre of the spatial contestations over the resource landscape. This research found that to have access to land and resources, different actors imposed their idealisations, representations, and direct interactions of and in space to exclude or eliminate others’ claims on the landscape.

Cartography has played an important role in allowing state-based actors to construct the frontier and exclude local actors from accessing land and resources. This research found that maps have primarily been employed by state-based actors, e.g., development agencies, conservationists and political elites to construct/represent different boundaries, e.g., conservation areas, land concessions, local administrative units, and land titling. These cartographic representations of the landscape allow those state-based actors to (de)legitimise local people’s access to land and resources. Through maps, the landscape can appear to be empty of human existence and usage. Being able to exercise maps through exploiting the state
apparatus, elite actors are able to insert their territorial claims over the landscape while the local actors, who are not able to do so, are excluded from land and resources.

Cambodian political history and the physicality of the landscape have significantly shaped the complex organisation of local land and resources. By examining local history, spatial contestation and exclusion among the local community can also be observed. Taking Northwest Cardamom as an example, this research suggests that the arrangements of land and resources at the local level are primarily based on local history and are characterised primarily by the relations between the Khmer Rouge and the landscape. These relationships are geographically contextual, established according to the interactions between national historical phenomena and the local physical characteristics of the landscape. Through their connection with the landscape over two decades of war (1980s and 1990s), the ex-KR are able to establish networks and identities that allow them to exclude other local non-KR villagers from land.

The interaction and contestation between state-based and localised frontier making can be seen where the state attempts to impose the abstraction of space on the everyday practices of land and resource access. This study found that landscapes became highly contested when elite actors imposed their territories by enforcing maps on to the everyday use of land and resources through different means. Being able to exploit the state apparatus, the conservation, economic, and political elites are able to employ armed security, environmental rangers and local government officials to actualise the boundaries and intervene on everyday local access to land and resources. The other phenomenon that has significantly shaped the state-based and locally-based construction of the frontier is the implementation of private land titling. The ironical effect of the state’s introduction of private land title to “secure” local access to land, is that local land use is fixed thus the rest of the land belongs to the state. Imposing land titling allows local villagers to legitimise their territorial claim over land, but at the same time, delegitimises their access to the areas that are not registered.
1.5. Thesis structure

The thesis is divided into eight chapters including: the introduction (Chapter 1), a conceptual literature review (Chapter 2), the contextual background (Chapter 3), the methodology and method (Chapter 4), the results and empirical evidence (Chapters 5, 6 and 7) and the conclusion (Chapter 8). The following briefly describes the content of each chapter starting from Chapter 2.

Chapter 2 elaborates on the existing literature on the relevant concepts to establish a conceptual framework for the research. This chapter explores four interrelated concepts that form the fundamental theoretical approach of this research; (1) the production of space, (2) critical cartography, (3) place-making and (4) the political ecology of frontier. The first part of this chapter provides the overall theoretical aspects of space by exploring the production of space introduced by Lefebvre (1991) who suggests that to achieve a sophisticated understanding of how space is produced in contemporary society is to examine the dialectical relation between the idealisation of space (representational space), the representation of space, and spatial practices. This leads to the second concept – critical cartography – which critically explores the relationship between the representation of space and the state-based construction of space. The third part of this section then explores the concept of localised place-making to discover the relationship between local spatial arrangements and spatial practice. Finally, this section discusses the notion of frontier within the scholarship of political ecology in Southeast Asia to contextualise the production of space within the field of land and resource governance research.

Chapter 3 introduces the local literature on the historical background and current land and resource studies in Cambodia and the Cardamom region. This chapter starts by providing the historical context of Cambodia in relation to land and resource governance, state formation and maps. This section aims to provide the background of the complex land and resource governance issues in the Cambodian context. The second part of this chapter reviews existing studies on the Cardamom region to provide an example of the intricate nature of Cambodia’s resource landscape and the notion of frontier in the Cambodian context. This section also aims
to elaborate on the geographical context of the research site which is located in a sub-section of the Cardamom region.

Chapter 4 concerns the method and methodology which briefly summarises the conceptual framework employed to answer the research questions, the tools used to collect the information, and critical reflections on the research processes and outcomes. This chapter starts by summarising the key concepts discussed in Chapter 2 to generate the conceptual framework this study employed. This is followed by an overview of the case study site. The next two sections discuss some critical reflections on the research processes and outcomes. The following section details the type of information and data collection techniques used during the fieldwork. Lastly this section discusses how the information is analysed to elaborate on the research outcomes.

Chapter 5 details the results, providing the process of state-based spatial characterisations and arrangements. The chapter critically examines cartography as the primary source of information to elaborate on the process by which the state creates administrative, conservation, development, and private land titling boundaries. This chapter is structured according to each type of boundary starting with the creation of Veal Veaeng District followed by the establishment of Phnum Samkos Wildlife Sanctuary (PSWS). The next two sections elaborate on the creation of land concession territories and the boundaries of private land titling.

Chapter 6 addresses the contextual socio-spatial arrangements in relation to land and resource organisation, and the geographical distribution of the population in Northwest Cardamom. This chapter is primarily based on narratives on the landscape in relation to the changes of Cambodia’s socio-political transitions and the physical conditions of the area. This chapter begins with the construction of Northwest Cardamom as a region and is followed by the socio-spatial organisation of the two selected villages of study (Chamkar Chrey Tbong and Samlanh).

Chapter 7 discusses local socio-spatial relations in terms of accessing land and resources by exploring people’s narratives from the two selected villages. It starts by illustrating how
individual histories have led the local villagers from two distinctive groups to settle in Northwest Cardamom, i.e., the ex-KR and non-KR villagers. The following sections of the chapter discuss people’s confrontations in the everyday life of inhabiting Northwest Cardamom, regarding access to land and resources and other everyday necessities. Lastly, this chapter discusses the interaction between access to land and resources and imposed state-based boundaries.

Chapter 8 starts by answering the research questions by discussing the empirical results in Chapters 5, 6 and 7, with reference to the conceptual and contextual literature in Chapters 2 and 3. The chapter continues with the elaboration of the research contributions to four different areas of research. These are the political ecology of the frontier in Southeast Asia, critical cartography and political ecology, Cambodian land and resource governance, and the spatiality of Cambodian history. Finally, this chapter details some limitations this research has and further research to be explored.
Chapter 2: Production of Space and Construction of Frontier

2.1. Introduction

This chapter aims to situate the research within the broader literature and to formulate the conceptual approach which is employed to elaborate on the spatial contestation of a Cambodian resource landscape established within the country’s complex socio-political history, global conservation expectations and economic transition. In order to link the study to broader conceptual discussions, I explore four interrelated bodies of literature: (1) the production of space; (2) critical cartography; (3) place-making; and (4) the political ecology of the frontier. The first body of literature explores the production of space to discuss theoretical developments in human geography; I explore the concept of space developed by Henry Lefebvre and Doreen Massey who understand space as the product of multiplicity through the interrelation between spatial idealisation, representation of space and everyday reality (Lefebvre, 1991, Massey, 2005). This literature also discusses the different processes and scales of the production of space, e.g., centralised state-based and localised place-based. This, in turn, leads to the second part of this chapter focusing on critical cartography, which is employed to examine and critique the formal construction of space imposed by the state and its affiliated actors – state-based production of space. Critical cartography allows this research to reflect on how the state and spatial technology are deeply involved in producing space, which has substantially created contestations over land and resources. Third, place-making literature examines the localised process of the production of space, where direct interaction within space is the departing point of analysis. This section discusses the process by which the resource landscape is produced at the local level, through the history of the place and contemporary direct socio-spatial interactions. Lastly, this chapter explores the notion of frontier within political ecology scholarship to link this study to the study of resource landscapes in Southeast Asia. The frontier in this research refers to space where the expression of “emptiness” (the lack of human inhabitants and influence) is imposed on a landscape. Studying the frontier through observing the production of space, this research argues that a “frontier” (an empty space) is not merely
an absolute geographical space, but rather a produced space through the dialectical relation between spatial idealisation, representation of space, and spatial practice. Therefore, this research’s empirical observations are conducted to reflect the construction of frontier by analysing both the state-based formalisation of space and localised place-making, through the processes of emptying out the landscape, so that the actors’ interests, rationale, territory, claims and usage can be imposed on the landscape.

Through exploring the literature, this chapter argues that while there has been a considerable amount of political ecology research on the construction of a range of environmental discourses, e.g., forest, land, water, and soil in Southeast Asia (see, for example, Bakker, 1999, Hall, 2011, Springate-Baginski and Blaikie, 2013), not much research has observed and critiqued that a frontier in itself is a socio-politically constructed space. This chapter intends to build upon the emerging frontier scholarship (Peluso and Lund, 2011, Gururani and Vandergeest, 2014) and link it explicitly to the practices of cartography and nuanced localised place-making; and to see how both processes can be understood through the notion of frontier making – emptying out space. There has been a considerable amount of literature using the concept of the production of space in urban geography (Leitner et al., 2007, Springer, 2011, Stanek, 2011), but this is not mirrored in sub-disciplinary approaches in geography. Additionally, while cartographical research has been a popular way to investigate geopolitical issues especially at a national level (Crampton, 2009, Winichakul, 1994, Suárez, 2013), there has been less attention paid to research in political ecology especially from the historical aspect of maps. Furthermore, most of the literature discussing the critical implications of cartography on land and resources tends to examine each practice of mapping for an explicit objective, e.g., conservation and development (Fox, 2002, Frewer and Chann, 2014, Work and Beban, 2016). However, there has not been much research seeking to discover the dynamic relations between the different maps that have been (re)produced to serve the interests of conservation, development and political projects.

The rest of the chapter is set out as follows; Section 2.2 explores the notion of the production of space, while the following sections discuss the literature on critical cartography (Section 2.3)
and place-making (Section 2.4). Section 2.5 looks at the literature on political ecology and the study of frontier, focusing particularly on the context of the Southeast Asian resource landscape.

### 2.2. The production of space

This section discusses the literature to formulate the fundamental theoretical framework that seeks to understand how space is produced and contested. Section 2.2.1 examines the theorisation of space by discussing the notion of the production of space. Section 2.2.2 explores the relationship between state and space, followed by Section 2.2.3 which reviews studies of everyday life and the production of space.

#### 2.2.1. Conceptualising the production of space

Regarding the notion of space, I explore the ideas of Lefebvre (1991) and Massey (2005, 1993) who theorise space as a dialectical product of society and environmental relations. In order to understand contemporary socio-spatial reality, Lefebvre suggested that social space and human–environment interaction should be understood as the production of three dialectical forms of space, i.e., representational space, the representation of space, and spatial practice (Lefebvre, 1991). These three forms of space are highly associated with the idealisation of space, abstract spatial representation and the everyday direct interaction in space. Lefebvre (1991) refers to representational space as an ideal space, which is theoretical and imaginative, that seeks to appropriate socio-spatial relations. The representation of space is an abstraction of space imposed in modern society mainly by spatial planners or scientists through spatial representation such as maps. Lefebvre (2008) suggests that, to better understand modern state-based spatial organisation, the representation of space should be critically examined. Spatial practice refers to everyday direct human interaction of and in space, e.g., everyday routines, the interaction with the material environment, and direct social interaction (Lefebvre, 1991). Spatial practice is where spatial imagination (idealisation) and representation are manifested. Spatial practice is also reinforced by representational space (the ideal imagination of space) and spatial representation (conceived space, e.g., planning and cartography). Through everyday practical and direct interaction in space, spatial idealisation and representation of
space are also (re)produced. To summarise, to understand contemporary socio-spatial relations, it is essential to unpack the complex dialectical relations between these three forms of space: the practice of space (direct interaction), the representation of space (e.g., planning and maps); and, representational space (imaginative and ideal).

Lefebvre’s production of space enhances this research in fleshing out the complex nature of Cambodian resource landscapes where socio-spatial relations have been constructed by geopolitical history, economic transition and global environmental concern. While Lefebvre’s production of space has primarily been applied in the urban context, this research utilises the concept to explore a rural resource frontier in western Cambodia. The production of space is employed to unpack the complex socio-spatial relations in a resource landscape of Northwest Cardamom where multiple actors are involved. Therefore, diverse rationales (economic, political and environmental), territories and direct actions have been imposed in order to have access to and control over resource landscapes. Examining rural resource frontier as a product of spatial idealisation, representation of space and direct spatial interaction allows this research to dialectically investigate the relations between spatial rationalisations, territories and direct interaction being introduced by different actors.

The following diagram demonstrates the production of space and how it is used to unpack the complexity of socio-spatial relations in the site of the case study, Northwest Cardamom. For example, from the conservationist perspective, Northwest Cardamom is an ideal space to preserve biodiversity; therefore, to represent that spatial idealisation, spatial planning is imposed by categorising the landscape with maps, e.g., creating a protected area and classifying it. To impose spatial planning and the idealisation of space, the everyday direct use of land and resources is regulated and changed. The same principles can be applied to economic development and geopolitical processes. From the local people’s perspective, Northwest Cardamom is a landscape where lives can be improved (local idealisation of space) by the direct use of land and resources (spatial practices); and, to be able to do so, they need to understand and navigate the conservationist, political, and economic territories represented by the state (representation of space).
Two important aspects of Massey’s conceptualisation of space are: (1) space is relational; and (2) space is the product of interaction between the materiality and sociality. First, space should be viewed as relational in time and space. Massey suggests that it is essential to incorporate time and scale into the understanding of space. In that sense, how a particular space is currently produced is interconnected with other times (history) and other spaces (elsewhere or on a broader scale) (Massey, 1993). Therefore, to better understand the formation of space in a particular area, it is essential to understand the socio-political history of the location as well as the broader geographical context. Second, space is the sphere of a multiplicity of existences.

Figure 2.1 Lefebvre’s (1991) dialectical production of space demonstrated by the author.
produced by socio-spatial relations that are never closed or finished (Massey, 1993, 2005). The process of the production of space is the interaction between the social and material formation developed through history. To summarise, Massey suggests that to understand how a particular locality is produced is to unpack the complexity of the history of socio-spatial relations at various scales, both local and non-local. With this conception of space, this research aims to explore how Northwest Cardamom has evolved throughout Cambodian modern history and how the materiality of the landscape has shaped its socio-spatial formation.

Massey’s idea of space as a multiscalar and temporal product stresses the importance of national, regional and global geopolitical, economic and environmental transition in determining current local socio-spatial relations. Spaces are interconnected, suggesting that relevant political, economic and environmental phenomena occurring at different locations and in the larger scales have influenced local socio-spatial relations. The Cold War, for example, has influenced localised socio-spatial relations in Indochina. Particularly in Cambodia, the current political and economic context is considerably characterised by the geopolitical history and economic transition of the region. The socio-spatial relations of the resource landscape, especially at the borderland, are inseparable from the influences of economic, political and environmental transition at the broader geographical scales.

In my research on the construction of Northwest Cardamom through the process of making a frontier, I examine the production of space in two different but interrelated forms: (1) through the abstraction and representation of space produced by state-based actors and (2) place-making at the local level by the local people. This leads to the discussion of the two approaches this research investigates – how space is produced through the cartographical process and through everyday reality. Therefore, the following parts of this section discuss the literature, first on the relationship between the representation of space and the state (Section 2.2.1), and second on localised place-making and the everyday reality of the local people (Section 2.2.2).

2.2.2. Representation of space and state

One of the main critiques Lefebvre had about space is that, in the contemporary world, the representation of space has played a critical role in socio-spatial organisation primarily led by
the nation state (Lefebvre, 2008). Representation of space refers to space that in the modern world is reinforced by, for example, scientists, planners, and technocratic sub-dividers and social engineers (Lefebvre, 1991). Lefebvre observed that in modern western society, for example, the state and space relationship are predominately shaped by a capitalist way of producing space, to generate economic capital from space, which requires space to be simplified and homogenised.

“An analysis of western countries revealed, first the demands of capitalism and neo-capitalism, of developers and investment banks. It reveals, second, that state intervention does not just occur episodically or at specific points but incessantly, by means of diverse organizations devoted to the management and production of space. This state space (espace etatique) – which we analyze below – lacks the same chaotic features as the space generated by “private interests”. On the other hand, the aim is to make it appear homogenous, the same throughout, organized according to a rationality of the identical and the repetitive that allows that state to introduce its presence, control, and surveillance in the most isolated corners” (Lefebvre, 2008, p.86).

This critique of simplistic spatial representation employed by the state to govern socio-spatial relations has been explored (Scott, 1998, Taylor, 2008, Brenner and Elden, 2009). Brenner and Elden (2009) examined the conceptualisation of space by Lefebvre to understand the association between state, space and territoriality. The article argues that the state attempts to extend its power over bounded territory. Scott (1998) suggests that, by being able to visualise space as a static entity, the state can imagine that people and resources can be spatially managed. However, the state’s simplification of space has never been able to fully represent actual socio-spatial relations, nor does it attempt to understand such complexity. It has always been a partial and selective process to control and manage socio-spatial relations (Scott, 1998). Taylor (2008) suggests that the state tends to see space as the container of power, wealth, culture and population. This form of state visualisation of space is limited in capturing complex global economic connectivity and environmental destruction (Taylor, 2008). Therefore, in order to understand spatial governance in the contemporary world, it is essential to understand how
the state conceptualises and represents space: the representation of space that is established to visualise the state’s idealisation of space in relation to population and land. A further discussion on the representation of space and its relation to the state is provided in Section 2.4 on critical cartography.

Spatial representation, maps in particular, has been adapted from the western conception of space by Southeast Asian states to govern the population and impose nation state territory (Winichakul, 1994). Winichakul argued that maps are the fundamental element creating the imagination of Thailand’s modern nation state which overlooks the existing form of relationship between the people and land. This abstraction of space was imposed by the colonial administrations to allocate their territorial power in Southeast Asia, which remains one of the main causes of Southeast Asia’s international geopolitical conflicts (Winichakul, 1994).

2.2.3. Everyday life and the local production of space

In regard to the notion of everyday life and the production of space, this section attempts to further conceptualise how a person’s experience of and in space shapes spatial imagination and the organisation of space. Lefebvre wrote, “The spatial practice of a society secretes that society’s space; it propounds and presupposes it, in a dialectical interaction; it produces it slowly and surely as it masters and appropriates it” (Lefebvre, 1991, p.38). Massey suggested that space is relational of time-space. In order to understand the socio-spatial formation of a particular place, it is essential to also observe the dialectical relation between the materiality and sociality of space. Therefore, to better understand how space is produced at the local level, it is essential to observe how the everyday practice of and in space is shaped by historical factors occurring within that locality as well as on a broader scale; and to observe how they interact with the materiality of space.

The relationship between space and everyday life has been transformed, and so has how space is locally produced. Lefebvre (2004) observed that our contemporary everyday relationship to space is heavily confined and transformed by the capitalist process of production. Massey (1993) also observed that people’s sense of place has been transformed by the development of
human ability to move across space and the way we communicate. Studies on socio-spatial relationships and their transformation have been conducted by other geography scholars (Hirsch, 2009, Mertz et al., 2009, Rigg, 2001). Hirsch (2009) suggests that the relationship between people and land in rural landscapes in Thailand has substantially changed in response to the new forms of capital production of agriculture, conservation and natural resource management. Similarly, Mertz et al. (2009) argue that the traditional practices of swidden cultivation of the highland landscapes in Southeast Asia have been rapidly transformed by macro development and conservation activities. The implications of such transitions on local lives vary in different cases and require sophisticated place-based observation. Rigg (2001) suggests that rural lives and livelihood in Southeast Asia, for example, are no longer entirely dependent on agricultural land. Rural local life is also not separate from urban reality (Rigg, 2001). From the suggestions of the above authors, the relationship between rural landscape and everyday life through rapid transition requires thorough observation (Hirsch, 2009, Mertz et al., 2009, Rigg, 2001). Further discussion of the production of space and everyday practices of space are examined in section 2.4.

2.3. **Critical cartography and space**

Maps have played a very important role in the contemporary organisation of space because they allow abstract space to be represented as static and homogenous so that non-local actors can insert their control over the landscape (Wood and Krygier, 2009, Crampton, 2011, Wood, 1992). With the assistance of modern spatial technology, e.g., Geographic Information System (GIS), Global Positioning System (GPS) and remote sensing, more and more maps have been produced and used to facilitate spatial arrangements from the centre, e.g., by state and international organisations (Black, 1997, Goodchild, 2009). Critical cartography literature proposes that careful examination of this extensive use of maps in our modern world is essential because the implications of maps can be critical to people’s lives (Wood, 2015, Crampton and Krygier, 2006). This scholarship challenges the normative idea that maps are merely technical tools allowing modern society to better understand the world, by suggesting that they are highly political; therefore, critical observation of how maps are produced and used is required (Wood, 2015, Kitchin and Dodge, 2007, Harley, 1989).
This section elaborates further on the relationship between spatial representation and centralised spatial organisation demonstrated in Section 2.2.2 by critically looking at a particular form of spatial representation (cartography). This literature is employed to investigate state-based boundary making in Northwest Cardamom discussed in Chapter 5. This section is outlined as follows. First, it reviews the relationship between space and maps, followed by discussing how critical cartographers have challenged the power and knowledge of maps. Finally, it elaborates on the applications of maps in land and natural resource governance.

2.3.1. Maps and space

As discussed earlier in this chapter, space is a relational product of time-space constructed through complex and dialectical relations between representational space, the idealisation of space and everyday reality (Massey, 2005, Lefebvre, 1991). Cartography has acted as a form of representation of space to facilitate socio-spatial relations, e.g., managing land and resources (Johnson et al., 2004, Cushman et al., 2009), planning cities (Bathrellos et al., 2012, Maantay and Ziegler, 2006), creating nation state boundaries (Callahan, 2009, Smith, 2005, Winichakul, 1994), and navigation (Tur et al., 2009, Lawrence, 2012). From a technical perspective, maps are viewed as a neutral scientific tool allowing people to represent, understand, and ultimately manage space (Cosgrove, 2005). However, Cosgrove (2006) suggests that there are artistic and political elements of maps that require critical consideration.

Regardless of their attempts to represent and control the complexity of socio-spatial relationships, maps can never fully represent nor control the spatial perception and everyday life that is situated in space and that has evolved over the complicated time-scale relation (Black, 1997, Crampton, 2011). In that sense, maps cannot represent the perception of space and everyday life in space that has been produced over a complex history. Maps are always partial, selective, and static (Black, 1997, Monmonier, 1997). In that regard, maps are spatially and temporally partial and fixed, while socio-spatial relations are dynamic, complex and evolving.
The literature suggests that two fundamental relations between maps and space should be considered when the critical examination of maps is conducted. First, maps are not only representations of space, but also spatial propositions confirming people’s rationalisation of space (Wood and Fels, 2008, Black, 1997, Pickles, 2004). They are not drawings or pictures that simply portray the earth’s surface, but the selective and partial description of landscape informing an individual or group’s knowledge of space (Black, 1997). Through that partial and selective knowledge of space or spatial discourse, maps are political (Schneider, 1987, Black, 1997). Wood and Fels (2008) further suggest that rather than neutrally representing the earth, maps make arguments about space by suggesting what exists or is important in the landscape. Therefore, the other question to be considered is what is missing in the maps. Van Schendel (2002) found that through maps some regions in Southeast Asia are hidden or considered as unimportant. Van Schendel (2002,pp.651-652) writes,

“There apparently objective visualisations present regional heartlands as well as peripheries – parts of the world that always drop off the map, disappear into the folds of two-page spreads, or end up as insets. In this way, cartographic convenience reinforces a hierarchical spatial awareness, highlighting certain areas of the globe and pushing others into the shadows. For example, anyone interested in finding fairly detailed modern maps showing the region covering Burma, Northeast India, Bangladesh, and neighbouring parts of China knows that these do not exist. This is a region that is always a victim of cartographic surgery. Maps of Southeast Asia may not even include the northern and western parts of Burma, let alone the neighbouring areas of India and Bangladesh.”

Second, maps are a static and simplistic representation of territory (Biggs, 1999, Crampton, 2010, Wood and Fels, 2008). Territorialities are formed in a more complex and dynamic manner (Sack, 1986, Wolch and Dear, 2014), while maps represent territories in a very simplistic and static way (Lumpond and Mather, 1997). Wood and Fels (2008) argue that, through being able to spatially describe and represent landscape, maps allow people to introduce bounded and
abstracted territory over space. Wood and Fels (2008, p.26) write, “we propose; first, that maps are vehicles for creating and conveying authority about, and ultimately over territory”. Therefore, without being able to fully represent space, maps can only present some territories, while many are ignored. Cramton (2010) adds that with modern maps, territory can be calculative. In that sense with maps, space is the container that has the volume to store things. Crampton (2010, p.95) writes, “‘[C]alculative studies’ asks not so much about the spaces produced, but about the relationship between calculation as a territorial strategy and the production of space.” Winichakul (1994) suggests that, only through maps, Thailand can confirm its nation state territory that is fixed in a particular part of the globe containing the people of Thailand.

To conclude, within their limitations in representing socio-spatial reality, maps have been perceived as modern solutions to the organisation of space. Arguably, despite the ubiquitous presence of the mapped form, the partial representation of maps continues to both create solutions as well as to cause problems for human society and the environment. Maps, more than representing space, suggest and confirm some existences and ignore others. They also impose territories on space from a particular technique that can only be practised by some groups of people. This cartographic spatial representation is employed to examine how state-based actors selectively exclude or include local communities and their relationship with Northwest Cardamom, in order to impose their territorial claim over land and resources.

2.3.2. Challenging the power of maps

Critical cartography has been an emerging scholarship seeking alternative approaches, challenging the typical assumption of maps and map-making as purely technical tools and processes that represent the earth’s surface, by critically examining the relation between maps and power (Harley, 1989, Wood, 1992, Crampton and Krygier, 2006, Wood, 2015). The challenge of understanding the power of maps started with Harley’s work on deconstructing maps which argues that maps should be viewed as discourses of space rather than the neutral representation of spatial reality (Harley, 1989). Wood (1992) and Pickles (2004) also discuss the power and knowledge of maps by building on Harley’s notion of maps, by suggesting that maps
attempt to present one’s ideology and hide their real intention. Wood (1992, p.7) writes, “The map doesn’t let us see anything, but it does let us know what others have seen or found out or discovered”. Wood’s understanding is that maps only confirm and represent one’s idealisation of space. They confirm the idea of space that one chooses to present while hiding many other objects and relations. Monmonier (1997) seeks to understand how maps can be used to reinforce one’s reality. Therefore, the critical question is who is able to have access to map-making so that their spatial reality can be presented.

From challenging the typical understand of maps, critical cartographers have also explored how the power of maps should be unpacked. Kitchin and Dodge (2007) and Harley (1989) claim that maps are the product of power and they produce power. Therefore, to understand how maps work is to critically investigate the actors, rationales, and processes that are involved in making and presenting maps, which means to critically examine the history of producing and implementing them. Regarding the actors in the making and presenting maps, Harley (1989) and Wood (1992) fundamentally argue that the knowledge of maps mainly represents the ideas of privileged, powerful and elite actors who are able to produce and impose maps on to reality. Studies by Winichakul (1994) and Suárez (1999) show that maps were employed by the state or colonial powers to represent their territories on the earth’s surface. Neither of the studies suggests that there was any active involvement of civilian or local people in the process of map-making and using maps. Winichakul (1994), who observes the formation of the Thai nation state through the history of maps, found that maps were the means for Thailand as a nation state to actualise and legitimise the territory that was incompatible with local people’s imagination of space. Suárez (1999) suggests in the pre-modern Southeast Asian context that the means of presenting and documenting the maps, stone, temple walls, palace and state documentation, was not what people in everyday life used to present their reality. These platforms could mainly be accessed and used by the state.

The debate around the power of maps has become more critical given that the actors and technology of making and presenting maps have rapidly changed. The initial argument of the critical cartographers, e.g., Harley and Wood, who claimed that those who exercise their power
over maps are powerful elites, has been challenged by some scholars such as Wright et al. (2009) and Brown and Fagerholm (2015). The evolution of GIS and GPS technologies in the 21st century has extensively improved the accessibility of the technology which increases the potential to engage more diverse participants in the mapping processes (Brown and Fagerholm, 2015, Ekbia and Schuurman, 2009, Ghose and Elwood, 2003). These scholars suggest that the potential to engage various actors, e.g., the local community and activists, in the processes of map-making could challenge the dominant power of the elites who have predominantly exercised their power through maps (Caquard, 2015, Brown and Fagerholm, 2015). Lynam et al. (2007), for example, suggest that, through participatory mapping and indigenous knowledge, values and preferences can be incorporated into natural resource management decision making. Caquard (2015) attempts to bridge critical cartography and modern mapping by promoting the idea of a post-representational perspective on cognitive cartography. The author suggests that with contemporary technology, maps can/should be perceived as a process rather than a fixed ultimate outcome of representing the space. With the modern equipment we currently have access to, e.g., GPS, mobile phone, the internet, and computer, people can actively and dialectically engage in (re)presenting their idea of space (Caquard, 2015). Maps are constantly and actively (re)produced by the wider society rather than the elites. Thus, the argument made by Harley as recently as 1989 may increasingly be irrelevant. Tulloch (2007) comments that there are many internet platforms, e.g., Google Earth and Google Map API and Common Census, that can incorporate the public participatory geographic information systems (PPGIS) to allow people to contribute to the development of maps within their everyday life.

Nonetheless, recent works have revisited Harley’s arguments; and contended that it is highly relevant to critique the contemporary practices of maps and map-making (Edney, 2015, Wood, 2015, Cosgrove, 2006). Wood (2015, p.16) writes,

“there are more foul, anti-human maps made now than ever, way more; and more of the ugly things done with maps in the sixteenth through nineteenth centuries are done with maps today than ever before; and this despite the rise of a whole family of (completely marginalized) counter-cartographies!”
Therefore, the complexity of the current practices of maps and the power dynamic associated with maps still needs to be critically investigated. Wood (2015) and Elwood and Leszczynski (2013) argue that there is more to know about modern maps because there are more actors and different technologies involved in making them. More actors and more advanced technology do not necessarily indicate that maps have equally distributed power to everyone being influenced by them. Fox et al. (2006) and Fox (2002) suggest that maps do not only benefit the people who made them, but also the people who can use and enforce them. Rambaldi et al. (2006), who examine the practices of PGIS (Participatory Geographic Information System) in developing countries, maintain that in the countries where local communities have limited access to technology, the process and outcome of PGIS are primarily controlled by elites and state-based agencies. McCreary and Lamb (2014), for example, found that engaging indigenous communities located near the Burmese-Thai border and Canada in producing maps did not only provide an opportunity for them to represent their space, but the maps also allowed the states to reinforce their sovereign territories. Therefore, the utilisation of the maps still greatly serves the interests of powerful agents such as the state rather than the local community. This phenomenon could reflect the practices of mapping resource governance in Cambodia where community-based resource management zones have been widely established across the country, but land conflicts and eviction are still a serious concern (also see, Sarem et al., 2005).

This research is part of a growing scholarship in which a more critical look focuses on how lines are being drawn in the world and on maps (Wood, 1992, 2010, 2015). The power of maps, each of which has their own patron, is oftentimes overlooked in land-use decision-making scholarship. Thus, another essential question this study attempts to uncover is who involved in the decision-making in mapping processes and who is privileged to exercise power over map-making in allocating land and natural resources in Northwest Cardamom.

2.3.3. Maps, natural resource and territory

There are counter bodies of literature discussing the relationship between maps and resources, i.e., the positive contribution and the critical reflection of maps in land and resource
management. For this literature, I argue that while there is a substantial amount of literature on the constructive contribution of maps in the land and resources sector, the critical cartography literature is still limited. A considerable amount of literature has shown that maps have played a very important role as a technological tool in assisting state land management institutions (Wainwright and Bryan, 2009), conservation projects (Duvail et al., 2006, Van Lynden and Mantel, 2001, Sandström et al., 2003), social movement (Temper et al., 2015, Elwood and Leszczynski, 2013), and biophysical research (Lepers et al., 2005, Achard et al., 2002, Brown, 2008). Hansen et al. (2013) show that the modern technology of mapping, such as remote sensing, has created better knowledge of global forest cover changes. Sandström et al. (2003) state that maps are effective tools to communicate spatial knowledge among the different actors who have conflicting interests over the use of land. Duvail et al. (2006) suggest that maps empower local communities by engaging them in the conservation process. Harris and Hazen (2005) claim that through participatory mapping better conservation boundaries can be made because local actors can be included in the processes. These scholars have emphasised the positive contributions of maps in creating better knowledge about space and empowering marginalised actors in the process of land and resource management. However, such literature does not critically discuss the implications of the knowledge and power of maps. Peluso (1995), for example, argues that the introduction of counter-mapping to map forest in Kalimantan, Indonesia, was not simply to include the local community in managing the forest, but also to allow the state to have control over politically sensitive areas.

Another body of literature has critically examined the applications of maps and map-making on land and resource management (Chapin et al., 2005, Fox et al., 2006, Vandergeest, 1996). While there is an optimistic view that through the upgrading of spatial technology maps have served as an effective tool to empower marginalised groups; there has been a counter argument that power is still unequally distributed (Chapin et al., 2005). Chapin et al. (2005), who examine the participatory mapping of indigenous communities in Canada, found that participatory mapping works in places where the technology is accessible. However, in less developed countries, the positive outcome, which is empowered local communities, is limited because of the restricted access to technology and financial support. Sarem et al. (2005), for example, found that local
communities in Northeast Cambodia are neither familiar with nor do they have access to appropriate technology, thus the control of the process of mapping is still with the technical experts. Fox et al. (2006) argue that while attempting to empower the local community through producing maps; the spatial knowledge of the maps is also exploited by other powerful groups. Fox et al. (2006, p.98) write, “[P]articipants also discussed the processes by which empowerment occurred – and who was empowered. Mapping enhanced tenure security in Indonesia, Thailand, Cambodia and the Philippines. Yet it also benefited local governments by providing them with free information.”

Another critical observation of maps and resource governance is the limitation of maps in representing space and boundaries (Peluso, 1995, Sletto, 2011, Gillespie, 2010). Peluso (1995) suggests that even though maps have included more actors to represent their spatial knowledge, there is a long-term potential effect of maps that should be considered. She argues that maps can only represent local land-use as spatially static, while in reality the spatiality of the local practices of land use is more complex and dynamic than maps are able to represent.

The simplification of maps in resource governance has been examined in relation to the boundary making of conservation areas (Gillespie, 2013, Sletto, 2002, 2011). In South America, Sletto’s work reflects a critical examination of map-making and the politics of the representation of space (Sletto, 2008, 2009, 2011). The author argues that through maps, the conservation agencies imposed boundaries on the landscape which make it a space suitable for conservation while excluding some local communities from accessing land and resources. Sletto (2009) claims that a participatory approach to mapping and boundary making in resource governance in the Global South requires critical observation. In Southeast Asia, Gillespie (2013) asserts that boundary-making through mapping in world heritage sites has not taken into account the actual existing practice of land-use and the expectations of local communities, such as in Cambodia. The land classification on the map of the Angkor World Heritage site in Cambodia does not reflect how local people understand space or how place evolves (Gillespie, 2010, 2013).
Enforcing state territory is another major application of maps that has considerable influence on land and resource governance in Southeast Asia (Winichakul, 1994, Vandergeest, 1996, Baird, 2009). Winichakul (1994) critically examines the relation between cartography and the construction of state territory. Winichakul (1994, p.17) writes, “[T]he geo-body of a nation is merely an effect of modern geographical discourse whose prime technology is a map”. The literature in political ecology and territoriality shows how by all means, including protected area and national park making, states in Southeast Asia have attempted to insert territorial control over frontier land (Baird, 2009, Peluso and Vandergeest, 2011, Peluso, 1995). Maps have played an essential role in creating those boundaries allowing the state to have control and access to the resource areas, e.g., forest, mountains, borderlands, and wetlands (Peluso and Vandergeest, 2011, Vandergeest and Peluso, 1995, Peluso, 1995). Vandergeest (1996) found that mapping was an effective tool employed by the state to classify forest as a protected area so that the state could assert its control over the landscape. Peluso (1995) similarly argues that mapping the forest was the Indonesian state’s mechanism to have control over the contentious landscape in Kalimantan.

However, there has not been much research exploring the historical construction of maps to better understand land and resource governance in Southeast Asia. Scholars have tended to investigate the implications of individual maps or mapping in the land and resource sector (for example, Peluso, 1995, McCreary and Lamb, 2014, Fox, 2002), but the interaction between different maps has not been well explored. Scholars usually focus on the boundaries, e.g., conservation territories or development zones individually, but overlook the interrelations between maps. There has not been much research that unpacks the complexity of land and resource issues in association with other boundaries, e.g., political administration, development land, and private land title. Therefore, this research attempts to explore the interrelations between different maps by observing how the territories coexist in a landscape, Northwest Cardamom.
2.4. Place-making and spatial practice

This section examines the dynamic notion of place-making to further explore the localised production of space discussed in Section 2.2.3. It aims to elaborate on the conceptual approach this research uses to unpack the socio-spatial formation of the research site that is discussed in Chapters 5 and 6. This section is outlined as follows; first, it elaborates on the conceptualisation of place-making; second, it investigates the relation between the formation of place and its relation to local identities. Third, the section looks at how place-making shapes the local spatial organisation of landscape.

2.4.1. Place-making and the conception of space

Place is the localised and momentous production of space that involves the dialectical relation between the biophysical and social formations (Gregory et al., 2009b, Pred, 1984, Cresswell, 2015). Gregory et al. (2009b) write “Place as becoming locale:...The introduction of the notion of the production of space has made space and place opposition difficult to sustain, however, as it seems to render place largely as a particular moment within produced space” (Gregory et al., 2009b, p.540). A particular location in space can be defined as a place where social relations and identity are constituted (Johnston, 1986, Harrison and Dourish, 1996). Place is a meaningful site constituted by the materiality of space, social relations and emotion-feeling attachment (Pred, 1984). The meaning can be individual or shared (Cresswell, 2015). In summary, place is a momentous and localised product of space being made through the dialectical relations between society and the physicality of space. The socio-spatial relations established through the making of place reinforce both the meaning and the spatial organisation of that particular space.

People’s experiences and memory of space are the key elements in the (re)making of place (Tuan and Hoelscher, 2001, Birkeland, 2005, Pred, 1984). To understand place-making, Pred (1984) suggests that place should be viewed as a historically contingent process that is continually becoming. Pred (1984) also argues that one’s spatial history has shaped how they understand space and create spatial meaning. What plays an essential role in creating personal and group spatial history is everyday experiences (Tuan, 1977, Tuan and Hoelscher, 2001, Tuan,
1979). Tuan (1977) suggests that place is space where personal experience, emotion and meaning are attached. Tuan (1979) notes “place is not only a fact to be explained in the broader frame of space, but it is also a reality to be clarified and understood from the perspectives of the people who have given it meaning” (Tuan, 1979, p.387). The everyday experiences create one’s memory and emotion of space and that is what creates their place (Gordillo, 2004, Said, 2000, Hoelscher and Alderman, 2004). Gordillo (2004) shows how the memory of the Toba community in Argentina has shaped their understanding and relation to the landscape they inhabit.

More and more place studies have engaged with the broader external influences of non-local events and discourses that contribute to the creation of place (Stewart and Strathern, 2003, Snead et al., 2006, Griffiths, 2013). Due to the complexity of modern global connections elaborated on by Massey (1993), scholars suggest that history, everyday experiences and memory constructed in and of a place are not only the results of the phenomena occurring at that local level, but are also influenced by socio-political phenomena and discourses happening elsewhere (Stewart and Strathern, 2003, Snead et al., 2006, Griffiths, 2013). Griffiths (2013) suggested that, in order to better understand the relation between local community life and space in Botswana, it is important to move beyond the formation of locality as just physically and territorially bounded space. People’s relationship to and perception of the locality are constructed through wider socio-political events on a larger geographical scale (Griffiths, 2013).

Place-making is a process that involves both the pre-existing imagination and practices of being in and of space (Snead et al., 2006). Spatial behaviour and perceptions are highly influenced by both the external environment and internal rationalities of people (Kitchin and Blades, 2002). Stewart and Strathern (2003) write, “memory and place, via landscape (including seascape), can be seen as crucial transducers whereby the local, national and global are brought into mutual alignment; or as providing sites where conflicts between these influences are played out” (Stewart and Strathern, 2003, p.2). Tsing (2011) shows how a resource area in Indonesia is the interactive production of global economic phenomena and local social-physical characteristics. Therefore, to better understand how a particular place is made, socio-political phenomena and discourse in the broader geographical context should be considered.
This conception of place-making is employed to elaborate on the socio-spatial formation of Northwest Cardamom by reviewing both Cambodian socio-political transitions and the physical-social characteristics of the landscape. Through exploring that formation of place, this research discusses how land and resources are organised, and how the perceptions (meaning of place) are constructed among local villagers.

2.4.2. Identity, territory and place

Scholars have suggested that people's history, memory and emotion of place play an important role in reinforcing different forms of identities of/in a place (Carter et al., 1993, Twigger-Ross and Uzzell, 1996, Edwards and Usher, 2007). First, place (re)enforces a territorial identity that a group of people can associate with (Carter et al., 1993, Martin, 2005, Edwards and Usher, 2007). The shared historical and territorial sense of space create people's sense of belonging and attachment which allows that group of people to share a particular form of local identity (Proshansky et al., 1983, Paasi, 2003, Martin, 2005). This form of identity allows the group within a particular territory to form collective acts to resist external or centralised forces such as the state (Martin, 2005). Moore (2005) found that the sense of territory and belonging to Kaerezi, a highland area in Zimbabwe, considerably shaped local power dynamics in relation to land and resource access. With a sense of belonging and attachment to the landscape, the Kaerezi people could act collectively to resist state-based spatial governance which attempted to evict people from land (Moore, 2005).

Second, in a place, different forms of identities are manifested, e.g., gender (Massey, 1994, Halberstam, 2005), politics (Hopkins and Dixon, 2006, Yavuz, 2003), class (Reay and Munt, 2000, MacDonald et al., 2005), and race (Hall and Du Gay, 1996, Hoelscher, 2003). These identities situate people in a particular form of a social and physical relationship with space. Massey (1994) suggests that in place women, for example, are confined to the domestic sphere that is both spatially and socially controlled. In terms of economic class, MacDonald et al. (2005), who observed the upbringing of youth from different economic statuses in a poor neighbourhood in England, suggest that variations in class or economic identity have a significant influence on the social capital that creates different opportunities for people.
Some studies have suggested that political identity plays an important role in defining social relationships especially in post-conflict areas (Colletta and Cullen, 2000, Howard, 2003, Öjendal, 2009). Richards et al. (2004) suggest that in a post-conflict society, social formation is highly associated with the traumatic effects of war. The subtlety of this political classification in a place can hardly be understood by those not living in such a society (Richards et al., 2004). Öjendal (2009) elaborates on the formation of post-conflict society in Cambodia where genocide has considerably affected the formation of social relationships. Arensen (2016) states that within the post-conflict area in Northwest Cambodia, the political identity and experience of the Khmer Rouge and non-Khmer Rouge villagers has considerably shaped the social relationships with the community. Diepart and Dupuis (2014) suggest that the identity of being ex-Khmer Rouge still shapes local power dynamics in access to land in Northwest Cambodia. Further discussion on the Cambodian context is elaborated in Chapter 3.

In summary, identities are the fundamental factor in the formation of power relationships in a place (Martin, 2005, Elden, 2016). First, the sense of territory and belonging to a place establishes a form of collective social identity allowing a particular group to act cooperatively against external influences. Second, different identities are also situated within a particular place. Those identities shape the various forms of power relations among the different groups who live in a particular place. These two aspects of relations between local identities and place-making are employed to analyse social relationships among local villagers in relation to access to land and natural resources in Northwest Cardamom – a former Khmer Rouge stronghold.

2.4.3. Knowledge and spatial arrangement of place

The physicality and sociality of space play an important role in the making of place (Pred, 1984, Stedman, 2003, Massey, 1999). Pred (1984, p.287) writes, “As place specific biographies are formed through social reproduction, and as place-specific social reproduction occurs through the formation of biographies, the physical environment is perpetually transformed. The transformation of the physical world is inseparable from the becoming of place”. In that regard, the specificity of the physical traits of space is shaping and shaped by the social formation of place. Pred (1984) also argues that the interaction between the physicality of space and its
socio-political history is what make a place different from universal phenomena and discourses. This section explores the literature on the two way interaction between the formation of spatial physicality and establishment of the social relations of place.

The literature suggests that people create knowledge of a place through the dialectical relation between everyday exposure to the physical environment and the symbolic meaning of the physicality of space (Holloway and Hubbard, 2001, Stedman, 2003, Seamon, 2000). Holloway and Hubbard (2001) suggest that people make sense of the surrounding environment through touch, smell, hearing and sight. Therefore, the physicality of the environment that provokes those senses essentially influences how the conception of space is defined. Holloway and Hubbard (2001) also argue that our existing knowledge and meaning of space also influences how humans experience the surrounding environment. Stedman (2003) and Proudley (2013) give examples of how the physicality of space creates different experiences and emotions toward a place. While Stedman (2003) argues that the depth and cleanliness of water creates a pleasant emotional attachment toward a lake, Proudley (2013) shows that the changes in the physical environment due to a disaster, such as forest fire, dramatically affect people’s negative emotional response to the landscape. Stokowski (2002) argues that the emotion and conception that people have about landscape are not purely physical experiences, but also the symbolic meanings people have constructed about space prior to their experiences. Stokowski (2002) claims that language and discourse; for example, play an important role in the meaning and feeling we have for our environment. This direct relationship between the sociality and physicality of place is employed to examine different groups’ experiences and perceptions of Northwest Cardamom in Chapter 7.

The arrangement of physical space is highly interrelated with the social organisation of place (Neumann, 2009b). Neumann (2009b) elaborates on how political ecology constructs the notion of a region using the production of space by Lefebvre. He gives the example of the construction of a region in East Africa through the transformation of an open forest area into a bounded territorial state of Tanganyika. Neumann (2009b) refers to this territorial formation as the production of nature, society and space. Faust et al. (2000), who observe the spatial
arrangements of different social and economic groups in Nang Rong District, Thailand, found that different groups’ interactions within the district are highly related to the physical characteristics of space, e.g., topography, land cover, river and road.

In short, exploring the notion of place-making is to comprehend the understanding of the localised production of space from the direct practice of space raised in Section 2.2.3. Many factors, e.g., social identity and the knowledge-emotion of space are considered to essentially contribute to the direct socio-spatial formation of place that could reflect how land and resources are used and arranged among different groups. Therefore, the observation of place-making should include historical factors that occurred at the local and broader geographical scale to capture people’s different experiences. The physical conditions of space are also interrelated with the social dimension of place. In that sense, how land and resources are organised is inseparable from how society is constructed and vice versa.

2.5. Political ecology of frontier

In order to engage this study, which observes the production of space and place-making, with contemporary research on land and resources in rural Southeast Asia, this research explores the notion of the frontier in the scholarship of political ecology. This section starts by illustrating the meaning of frontier and its relationship to the conceptualisation of space. Second, it elaborates on the relationship between the study of frontier and political ecology. The next section discusses the relationship between the resource frontier and the state; followed by exploring the study of frontier in Southeast Asia. Finally, this section examines changes to the frontier and local practices around land and resources.

2.5.1. Frontier and space

As a spatial connotation, frontier refers to a particular form of space where a sense of emptiness, lack of control and occupation is implied; therefore, control and utilisation can potentially be imposed. Gregory et al. (2009a) write, “It [the frontier] has been used in two main ways. In the first case, it refers to the limits of a state. The frontier of a state is its border with another state.....The second sense of frontier is as a line between settled and unsettled
lands, cultivated and uncultivated. This is equally contentious. It almost always, in fact, separates one society from another and yet is presented as the separation of society from emptiness (cf. terra nullius).” In either sense, the notion of frontier suggests an imaginative construction – of a lack of human habitation, utilisation and control of space – an empty space. The frontier is seen as the location at the edge of civilisation suggesting that there is more empty space to be extended and utilised by people, e.g., the forest, the mountain, the wetland. Turner (1920) suggested that through the “empty” sense of space, potential usages of the landscape can be imposed. Turner (1920) found that the process of frontier making in North America is the foundation of American society which emphasises the opportunities to be made from land.

The literature suggests that the emptiness of space is socially and politically constructed and reinforced by excluding others from living, using and claiming the landscape. Scholars suggest that in order to reinforce the emptiness of space, actors – likely non-local, e.g., colonial and state – introduced new spatial knowledge that is not confined to the local knowledge of space (Blomley, 2003, Craib, 2004, Mar and Edmonds, 2010). Mar and Edmonds (2010, p.29) write, “Throughout the nineteenth century and into the twentieth, colonial powers frequently used the rhetoric of ‘empty lands’ to justify their actions.” A form of spatial representation, such as a map, has been introduced to describe space as empty or absent of humans and their usages. Craib (2004), who explored the construction of space in the Mexican context, found that, in order to gain control over the landscape, the state started by sending out explorers searching for new land, followed by conducting surveys and ultimately mapping out the land (Craib, 2004). The other way to empty people from the landscape is to directly exclude others from using or living in the landscape (Hall et al., 2011). Hall et al. (2011) found that in many cases in Southeast Asia, direct force has been used by both local and non-local actors to exclude others from land.

This research explores the notion of frontier – an “emptiness of space” – through the production of space, the dialectical relation between spatial idealisation, the representation of space and direct interaction, to understand the socio-spatial formation of Northwest
Cardamom. I examine how the landscape has been idealised, represented, and directly used by different actors, i.e., the political elites, conservationists, economic agencies and the local community in the process of excluding each other from accessing land and resources.

2.5.2. Frontier and political ecology

Political ecologists argue that ecological issues are not merely a physical matter, but are socio-politically constructed (Escobar, 1998, Neumann, 2009a, Robbins, 2011, Watts, 2000). Escobar (1998, p.53) writes “Although ‘biodiversity’ has concrete biophysical referents, it must be seen as a discursive invention of recent origin.” Watts (2000) argues that the inequality of power and access to resources is vitally linked to the construction of environmental knowledge. Neumann (2009a) comments that even though the discursive formation of the resource is essential to understanding the environmental issues, the physicality of the environment is crucial. They both should be understood interactively. How physicality influences the discursive formation and vice versa are both important. In that regard, political ecology examines the relationships between spatial knowledge and the transformation of the physical environment. Neumann (2009a, p.229) writes,

“Political ecologists have staked out the middle ground, stressing that the idea of the social construction of nature does not mean that nature exists only in our collective imaginations. The prevailing position within political ecology accepts the existence of a material world independent of human consciousness and sensory perception, while at the same time recognizes that our knowledge of that world is always situated, contingent, and mediated.”

Political ecology scholars have also paid a great deal of attention to understanding the new dynamic transformation of frontiers (Gururani and Vandergeest, 2014, Hirsch, 2009, Hall et al., 2011, Milne and Mahanty, 2015a). One of the critical transformations is new knowledge and territories being imposed in the rural landscape to fulfil conservationist, economic and political rationales (Gururani and Vandergeest, 2014). Resource landscapes, e.g., forests, uplands, borderlands and wetlands, become the targets of conservation, development and political
projects which have caused traumatic land and resource contestations between local and external actors (MacInnes, 2015, Sullivan, 2015, Paley, 2015, Scheidel et al., 2013). New conservation and development territories, e.g., protected areas and economic land concessions, have been created through newer land-use rules imposed on pre-existing rural landscapes (Gillespie, 2014, Lestrelin et al., 2012, Baird, 2009).

While political ecology attempts to understand the environmental issues from the observation of the construction of environmental knowledge, in this research, I explore political ecology to examine land and resource contestation from the observation of the construction of spatial knowledge. I observe that knowledge of space is not only constructed by the environmental rationale but also the political and economic rationalisation of space. Additionally, I explore the construction of space with the notion of frontier “making an empty space” to observe and analyse the interaction between different actors who live in and/or have an interest in accessing and controlling land and resources. The following sections explore the research and study of frontier transition in Southeast Asia.

2.5.3. The new frontier in Southeast Asia

The study of frontier in Southeast Asia has shifted and expanded its attention from geopolitical study to research on the changing and contested resource landscape. In geopolitical terms frontier refers to the space in between states; therefore, the study of the frontier has been targeted by geopolitical researchers (Gregory et al., 2009a). That notion of the geopolitical frontier has received attention from post-colonial research especially within the notion of the (re)construction of nation state territory (Scott, 2010, Van Schendel, 2002, Grundy-Warr, 1994). Frontier is the space in between states that needs to be reached out to and controlled by the state. In the study of such frontiers, scholars observed the relationships between state and state, and between state and local people (Tagliacozzo, 2001, Horstmann and Wadley, 2006). In Southeast Asia, the mountainous areas which cover a significant proportion of land remained unclaimed by the state until the arrival of the nation state territory (Scott, 2010). The process of state making involves claiming such landscapes to get access to resources and to have control over the population (Winichakul, 1994, Scott, 2010, De Koninck, 2000). De Koninck (2000), for
example, viewed frontiers in Southeast Asia as the output of a compromise between states attempting to extend territorial control and poor farmers who needed land. In that regard, the actors involved in making the frontier are political elites, e.g., the colonial administration, the state, and the people who live in such space.

Frontier has also been viewed as a landscape where contestation and changes could be observed (Peluso and Lund, 2011, Fold and Hirsch, 2009, Gururani and Vandergeest, 2014, Hall, 2012, Milne and Mahanty, 2015b). This frontier refers to the landscape where intensive contestation over land and resources occurs due to diverse development trajectories (Fold and Hirsch, 2009). Some scholars contend that the frontier should be conceived as relational space; that it is being constructed at multiple scales, by multiple actors in various economic, demographic and agrarian terms (Tsing, 2011, Fold and Hirsch, 2009, Barney, 2009). From this perspective, Tsing (2011) views frontier as a frictional space where various rationalisations and knowledge of space at the global, regional, national and local level intersect. Barney (2009), who observed the construction of resource landscapes in Laos, perceives frontier as a relational region of which society and nature are constructed according to the interest of capital. With multiple layers and scales of spatial relations, different forms of knowledge are involved in the creation of the new frontier including science, economics, politics, and local narratives (Gururani and Vandergeest, 2014). Gururani and Vandergeest (2014) observe that areas, e.g., upland and coastland, have been contested by new actors whose interests are diverse; therefore, different values, knowledge, and interpretations of space have been applied to the new frontiers.

In some cases, the geopolitical frontier and resource frontier overlaps, which has made resource landscapes in Southeast Asia even more complex (Woods, 2011, Pangapa and Smith, 2008, Sturgeon, 2004). These frontiers are the landscapes where complex actors and rationales, e.g., social, political, economic and environmental, are interconnected (Taylor, 2016, Michaud and Turner, 2016). Hence, the processes of changes are also rapid and dynamic. Pangapa and Smith (2008) and Gorman and Beban (2016) suggest that areas along the state borderlands in Southeast Asia have become contested economic zones. Sturgeon (2004) studied the
relationship between borderland and land control at the boundaries of China, Thailand, and Burma. The author argues that state control of the borderland is not only to enforce state territory, but also to have control over land and resources. Sturgeon (2004) discovered that the relation to the authority of the border has shaped local land and resource access. Woods (2011) observed that tension has occurred between the local community, military, and private actors in the Burma–China borderlands. Woods (2011) argues that on top of the tension between military power and the local ethnic group, the neoliberal economic expansion in Burma has attracted more business actors into the area which has made contestation of Burma–China frontier land more complicated and intense.

2.5.4. Southeast Asia and the state-based frontier

Lefebvre (2008) and Scott (1998) suggest that the operation of the modern nation state depends on the systematic organisation of space—spatial planning. The state apparatus is a set of institutions that operate the centralised binding rule-making backed up by the monopoly on the means of physical force which is operated within a bounded geometrical territory (Mann, 1984). Scott (1998) proposes that the state apparatus functions within a certain form of spatial knowledge that allows the government to make plans so that socio-spatial relations can be governed from the centre. The state legitimises spatial knowledge, e.g., the cadastral surveys, population registration and land-use planning, so that rules can be introduced and enforced from the centre. And through spatial planning, complex socio-spatial relationships are simplified into a static geometrical grid (Scott, 1998). In that regard, cartography, for example, has played an important role in facilitating state formalised knowledge of space and spatial practices. That spatial knowledge is introduced and circulated through the apparatus of the state, e.g., by making laws and using physical force.

Political ecology scholars have critically examined the relationship between the state and resource frontier. Vandergeest and Peluso (2006) demonstrate how Southeast Asian states control forest through a technocratically based form of spatial knowledge. Their article adds that given that each state has its own distinctive political, economic and ecological conditions, the adoption of technocratically based forest management knowledge varies from state to
state. In Southeast Asia, the authorities who work for the state apparatus are not the only actors who are shaping the state’s construction and governance of the new frontier. Scholars suggest that, in resources frontiers, different actors, who employ the state apparatus but are not state agencies, are involved in managing land and resources in Southeast Asia, e.g., conservation and development agencies (Hall et al., 2011, McCarthy and Cramb, 2009, Peluso and Lund, 2011).

In contemporary Southeast Asia, the state apparatus plays an important role in circulating different spatial rationales, e.g., conservationist, developmental and political (see, Crone, 1988). In post-conflict and rapidly transformed nations, land and resources play an important role in the state economy, political power, international conservation, and local livelihoods (Le Billon, 2000). Hence, land and resources become the interest of diverse actors, e.g., local community, conservation organisations, development agencies, and political elites. In Cambodia, for example, studies have argued that the state apparatus is a platform through which power, among political elites, economic agents and conservation organisations, is circulated/exercised (Milne et al., 2015, MacInnes, 2015, Ngin and Verkoren, 2015). While conservation activities depend heavily on international support, the Cambodian state has also granted a significant proportion of resource land to private companies within protected areas causing land and resource conflicts (Mak, 2016). However, the complex territorial processes of granting land concessions in protected areas that are operated by state agencies is not well studied.

2.5.5. Everyday life in the Southeast Asian resource frontier

The other aspect of understanding the new Southeast Asian frontier is to observe the everyday life, transitions, and struggles of local communities in relation to access to land and resources (Li, 2014, Cramb et al., 2009, Fox et al., 2009, Mertz et al., 2009). Studies have observed changes in the shifting cultivation practices of highland people (Fox et al., 2009, Mertz et al., 2009, Rasul and Thapa, 2003, Cramb et al., 2009). Rasul and Thapa (2003) suggests that there has been an extensive transformation of highland cultivation practices across Southeast Asia. Fox et al. (2009) study the factors influencing changes in the shifting cultivation livelihood in
Southern China (Xishuangbanna), Laos, Thailand, Malaysia, and Indonesia. They argue that various factors, e.g., state classification of land, expansion of conservation land, privatisation of land and the increase of market influence, have all shaped the shifting cultivation practices of highlanders. Mertz et al. (2009) examine the consequences of agricultural transformation on shifting cultivators. The article argues that not all the changes have negative responses from the shifting cultivating farmers; however, critical observation is required to look at the impacts of large-scale development on local land ownership.

Conservation has introduced another pressure on land and resource use and people’s everyday lives in the Southeast Asian frontier (Miura, 2013, Fox et al., 2009, Baird, 2009, Dressler and Roth, 2011). Fox et al. (2009) suggest that one of the major factors that has influenced the agricultural practice of highland communities is the introduction of conservation territory in existing shifting cultivation land. Baird (2009) examines the relation between conservation, state territory, and the lives of the indigenous people in the marginal land of Northeast Cambodia. The author found that the indigenous community now has more limited access and connection to land and resources due to the predominant control of the state and international conservation donors through the implementation of national park management. Instead of recognising local rights to access land and resources, the state enforced government legislation and international conservation ideas that are not appropriate in the local context (Baird, 2009).

Dressler and Roth (2011) examined the new notion of the neoliberal conservation approach and its implications on rural livelihoods in Thailand and the Philippines. The authors claim that while this conservation approach is taking on a new form of community-based conservation to enhance the livelihoods of the local community, the poorer farmers are further marginalised (Dressler and Roth, 2011).

Land commercialisation is another major factor creating livelihood pressure for the local community (Hall, 2011, Fox and Castella, 2013, Rist et al., 2010, Colchester, 2011). Scholars have suggested that the increasing demand for agricultural production has triggered the expansion of agricultural land (Rulli et al., 2013, Franco, 2012, Hall, 2011). This expansion of large-scale land development has traumatically transformed local access to land and resources
(Hall, 2011, Fox and Castella, 2013, Rist et al., 2010). Hall (2011) suggested that while the cash-crop boom is triggering the demand for land for large-scale land grabbers, local actors also affiliated themselves with the change. Local farmers have changed their farming practices in response to the demand for the cash-crop market (Hall, 2011). Fox and Castella (2013) observed the impacts of rubber expansion on small landholders. The research found that in Cambodia, Laos and Myanmar local farmers are struggling to sustain their land and resources due to pressure from the government and investors who are imposing land concessions on their existing land use (Fox and Castella, 2013). Rist et al. (2010) looked at the operation of the palm oil agro-industry and its implications for local livelihoods in Indonesia. The authors found that on top of creating many environmental changes, the expansion of palm oil plantations has also introduced many conflicts between the local community, local authorities and the companies. Mahanty and Milne (2016) observed the effects of the cash-crop (cassava) boom on agricultural practices and local livelihoods in Northeast Cambodia near the Cambodia-Vietnam border. The authors found that engaging in intensive cash-crop production such as cassava production has jeopardised local livelihoods by potentially placing local farmers in debt and losing access to land.

Li (2014) observed land and capital relations in an indigenous frontier in Sulawesi, Indonesia. The author found that engagement in the neoliberal economy contributed to the inequality of land access among the local community. The consequence of the unequal distribution of land has substantially transformed local livelihood options. Li (2014) also suggests that the influences of neoliberal agricultural practices are shaped by local factors, e.g., drought, and local perceptions of land also shape the influences of capitalism on land and resources and people.

The literature has suggested that the responses of local communities to state and wider economic, political, and environmental forces are dynamic. Accessing land and resources is critically shaping local lives, but the causes are beyond the locality. More generally, Rigg (2006) suggested that relying on land and resources may not be sufficient in sustaining a community’s
livelihood. Li (2014) suggests that the availability of land is coming to an end in certain critical contexts.

2.6. Summary

This chapter has reviewed and discussed existing literature to establish the conceptual approach of the research. To further explore the contestation of land and resources in rural Southeast Asia, four bodies of literature were discussed: (1) the production of space; (2) critical cartography; (3) place-making; and (4) the political ecology of the frontier. The production of space offers an alternative approach to observing the complex human-environment relationship by unpacking the complex processes and forms of spatial construction and contestation. Critical cartography has been explored to examine the state-based production of space which mainly involves elite economic, conservationist and political actors. Place-making literature has provided a conceptual framework to observe the local production of space by examining the socio-spatial history of the landscape that mainly involves local actors. The political ecology of the frontier was discussed to engage the production of space approach with resource landscape studies in the Southeast Asian context. The notion of the political ecology of the frontier in this research broadly refers to the construction of an empty space in which the dialectical relations between spatial idealisation, the representation of space, and spatial practices are observed.

From exploring the literature, I argue that there have not been many studies that engage political ecology and frontier research with the production of space, which are able to incorporate the different actors, forms and processes of spatial organisation. Furthermore, limited literature has been produced within critical cartography and political ecology that has critically observed the historical construction of maps in association with the evolving landscape. Additionally, looking at the production of space, this research examines the construction of frontiers from both top-down state-based cartographic processes, and the locally-based everyday practices of space and their interactions.
Chapter 3: Cambodia and Its Resource Frontier

3.1. Introduction

This chapter draws on literature to provide a contextual understanding of the issues of resource landscape in Cambodia by considering two interrelated geographical scales: (1) the national level (Cambodia) and (2) the regional level (the Cardamom region). The chapter situates current land and resource issues within the context of Cambodia’s broader political struggles over the last five decades. At the national scale, the focus is on transformations of land and resource governance regimes and the usages of maps in the governance of space and the nature of the state. At the regional scale, this chapter examines existing studies detailing the social, political and environmental transitions and constructions of the Cardamom landscape. It is argued that while many different actors have contested land and natural resource use, there have been few studies exploring the interaction between those actors. In particular the Cardamom region is a complex landscape shaped by both the traumatic history of the Khmer Rouge and the contemporary agenda of conservation and development. However, few studies have examined these complex interactions between politics, development and conservation. Additionally, the literature has shown that since the colonial period, maps have actively been involved in (re)producing land and resource territories in accordance to different political regimes. However, very limited research has been done on the history of maps and their implications for contemporary land and resource governance in Cambodia. Furthermore, while there is already limited knowledge of the socio-political transitions within the Cardamom region, there have been no empirical studies looking at socio-political transition and the contestation of land and resources in the Northwest Cardamom region (the former Khmer Rouge stronghold of Veal Veaeng).

The first section (3.2) contextualises the current pattern of land and resource governance by considering the broader history of the people, land, cartography and the state. The next part (3.3) of this chapter explores the literature on the Cardamom region from different perspectives, e.g., geopolitical history, social dynamics, biodiversity potential and land and
resource governance. This section also flags at various points where the literature makes a connection with the concept of the frontier.

3.2. Cambodia: a spatially contested nation-state

Due to rapid social, political and economic transformations in the last four decades (Chandler, 1999, Kiernan, 2002, Hughes and Un, 2011), Cambodia has been home to severe and protracted contestations over land, resources and territory (see, Un and So, 2011, Hughes, 2008, Diepart and Dupuis, 2014). One key concern as a result of the rapid socio-political changes is the complex territorial formations in relation to land and resources that have been enforced by a range of different actors (also see, Sithirith, 2010, Baird, 2009, Diepart and Sem, 2016). This section provides the background to Cambodia’s land and resource governance issues by first providing a brief overview of Cambodian history in association with the state, people and land. Secondly, it elaborates on current land and resource issues in Cambodia. The third section discusses the literature on the nature of state formation. Fourthly, it elaborates on the relationship between state, land and resource territoriality. Finally, I provide an account of territorial transformation and mapping throughout Cambodian history with reference to the current study of maps in land and resource governance scholarship.

3.2.1. History of state, land and people

Before discussing the interrelations between politics, economics, the environment, and land use in Cambodia, this section provides an overview of contemporary socio-political history. It also gives a brief overview of Cambodia’s modern history starting from the 18th century, i.e., the era preceding French colonialism. This historical background contextualises the relationships between land and resources, state, and people. This historical background also provides the basic understanding of the political context of Cambodia, which is highly relevant to the research site, a region traumatised by the state’s social and political struggles.

18th century to the French Colonial period

Prior to French colonisation, Cambodia was not yet a geographical territory defined by cartographic boundaries. The state was rather thought of as a city surrounded by “walls”
connected by imaginary gates. These gates coincided with important geographical landmarks and usually overlapped with military frontlines (see, Chandler, 2008). Maps were hardly used nor produced. Chandler (2008, p.119) writes, “maps were rarely used, and no locally drawn map of Cambodia in the early nineteenth century appears to have survived.”

The monarchy claimed the ownership of land. However, the relationship between the monarchy, people and land was loosely structured (Chandler, 2008, Gillespie, 2010, Guillou, 2006). Most of the population lived in Prei, wilderness or forest in Khmer, in which the connection to the central state was minimal. The rest were rice farmers and Kampong people (the people who lived near the ports and depended on trade). Taxes on rice and labour were collected on an irregular basis (Chandler, 2008). Gillespie (2010) suggests that, although the relationships between the central state (the monarchy), people and land was loosely structured, the connection between state authorities, people and land was stronger at the local level.

1863 – 1953: the French Colonial Period

The French officially put Cambodia under its “protection” in 1863, formalised with the signing of the Treaty of Protectorate (Chandler, 2008). Maps were created and used to define state territory and to convey land and resource distribution within the territory of the state (Gillespie, 2010). The French regime also introduced a land administration arrangement that categorised different forms of land ownership/tenure. These groupings included “royal property”, “public property”, “inalienable public reserves for lease” and “inalienable private property” (Gillespie, 2010, p.131, Edwards, 2007). The French also attempted to introduce the cadastral program into Cambodia which was not compatible with the existing local way of conceptualising land (Hartman, 2006). For that reason, this system was not efficiently implemented, which resulted in resistance to the colonial administration (Gillespie 2010).

French colonisation placed Cambodia in political and economic struggle for almost a century. In the 1920s, the French had financed its colonial apparatus by taxing resource extraction and agricultural land, e.g., rice and other crops (Chandler, 2008). That also started to place pressure on local farmers to pay tax which poor farmers especially found difficult to fulfil. The colonial
apparatus became highly repressive in the 1940s with incidents of violence and death. While farmers were over-taxed and land was unequally distributed across the country (Chandler, 2008), the elites possessed a large proportion of land, leaving small landholders struggling to cultivate on small pieces of land (Kiernan and Boua, 1982). At the same time, in the mid-1940s, the Japanese interned the French administration and attempted to provide independence to Cambodia (Vickery, 1986).

1953 – 1970: Kingdom of Cambodia

Cambodia gained independence from French colonisation in 1953. However, achieving independence from the French colonial administration did not set Cambodian politics on a road to stability and independence from the influence of international politics. The era of the 1950s and 1960s was characterised by independence from formal colonial role but also by the oppression and exploitation of poor and rural communities. Land issues continued to be highly controversial throughout the period. Rural landlessness increased dramatically and the rural population became increasingly dissatisfied with the leadership of the ruling government (Kiernan and Boua, 1982). Between 1960 and 1970, the number of landless farmers increased from less than 10% to more than 20% (Frieson, 1993, P.33). Nim (1982) also suggests that land was accumulated among a small number of landlords, leaving a large number of poor peasants and agricultural labourers who struggled to access land. The consequences of the unequal distribution of land created a class struggle among the peasants who accounted for more than 80% of the country’s population (Nim, 1982). Nim (1982) stated that the size of land ownership also became an important indicator of a peasant’s socio-economic class.

The communist movement was started in the mid-1950s by a group of Khmer students educated in France including Pol Pot, Ieng Sary and Khieu Samphan, who were the founders of the Khmer Rouge. One of the major reasons for the revolution was also related to class struggle among the peasants (Kiernan, 1982, Frieson, 1993). A pronounced antagonism involving the ruling government began in the mid-1960s, which started in the north. In 1967, the most extensive rebellion in modern times erupted in Samlout, northwestern Cambodia. By 1968, the
uprising had expanded toward the southeastern parts of the country including Kampong Chhnang, Kampong Speu and Kampot provinces (Kiernan, 1982).

In 1956, under the Kingdom of Cambodia’s first constitution, private property rights were recognised; however, an article also allowed the state to forcibly acquire land used for public interest (Russell, 1997). Article 7 of that constitution specified:

“Property is under the protection of the law. No one can be deprived of his property except for the public use in cases established by law and by means of fair and agreed upon indemnity” (Russell, 1997, p.103).

1970 – 1975: Khmer Republic

By 1970, the country had started to move toward turmoil. In March 1970, General Lon Nol overthrew King Norodom Sihanouk in a coup and formed the Khmer Republic government (a right-wing pro-American government) (Corfield, 1994). The country was in civil war between the emerging Khmer Rouge and the Lon Nol government. The Khmer Rouge (KR) movement was expanding its territorial control into a nation-wide resistance (Corfield, 1994). By 1973, a substantial proportion of the rural areas in the north and southwest were under the control of the KR (Frieson, 1993). At the same time, the eastern part of country, especially the region close to the Vietnamese border, was heavily bombed by the United States (see Figure 3.1). Many parts of the country were unsafe, either being occupied by the KR or being bombed by the Americans. Therefore, people gravitated to the capital city of Phnom Penh (Frieson, 1993, Chandler, 1999).
Based on the new constitution of the Khmer Republic, private property rights introduced by the French colonial administration were still recognised, but within some areas which were under the control of the KR (north and southwest), the collective use of land was already underway and so these rights did not apply (Russell, 1997, Frieson, 1993).

1975 – 1979: Democratic Kampuchea, the Khmer Rouge Era

In April 1975, the KR declared victory over the Lon Nol regime and took control of the capital city, Phnom Penh. The country was transformed into a communist regime and was renamed Democratic Kampuchea of which Khieu Samphan was the Head of State and Pol Pot was the Prime Minister. People were relocated away from their land to rural areas and they were
required to work intensively on farms. The family structure was broken apart and arranged according to the regime’s communist ideology (Kiernan, 1996). Ethnic minorities, e.g., Chinese, Muslim Chams, Vietnamese, Lao, and upland groups, were brutally treated by the regime (Kiernan, 1996). The pre-existing state apparatus including schools, hospitals, currency, religious practices and land administration was eradicated (Chandler, 1999). The consequences of the KR regime were horrific, with an estimated loss of 1.5 million lives due to torture, execution, starvation, and disease (Kiernan, 1985, 2014).

Private property ownership over land was eradicated, and all land documentation created prior to the regime was destroyed (Gillespie, 2010). Based on the constitution established in 1976, no private ownership of land was allowed and land had to be used for the state’s interest. Article 2 of the new constitution stated:

“All important means of production are the collective property of the people’s state and the common property of the people’s communities. Property of everyday use remains in private hands” (Russell, 1997, p.105).

Agricultural land was used collectively and intensively to generate revenue for the state. Some new farmland was expanded toward the uninhabited forested areas (Ebihara, 1993).

1980 – 1990: the “KPR” (People’s Republic of Kampuchea) and the Coalition

In January 1979, Vietnamese troops defeated the KR and took control of Phnom Penh. The KR was pushed to the north and west closer to the Thai border. The central government was ruled by the People’s Republic of Kampuchea (KPR) under the supervision of Vietnam (Gottesman, 2003). The conflicts between the central government, backed by the Vietnamese troops, and three resistant groups (KR, KPNLF3, and FUNCINPEC4) intensified. The areas closer to the borderlands turned into battlefields. Up to 180,000 Vietnamese troops were stationed in Cambodia to support the KPR (Gottesman, 2003, p.141). The KPR also engaged civilians in battles in which up to 381,000 were recruited to assist the VN army (Gottesman, 2003, p.231).

---

3 KPNLF (Khmer People’s National Liberation Front)

4 FUNCINPEC (In French Front uni national pour un Cambodge indépendant, neutre, pacifique et cooperative)
At the border, the number of troops was: 40,000 Khmer Rouge, 14,000 KPNLF and 10,000 FUNCINPEC (Gottesman, 2003, p.277). Continual fighting involving these troops pushed 230,000 refugees over the border into Thailand. The Vietnamese troops withdrew from Cambodia in 1989 (see, Findlay, 1995, Brown and Zasloff, 1998).

During the early 1980s, land was collectively used at the village level under the ownership of the state. Each solidary group (Krom Samaki), consisting of 10-15 families, was given plot(s) of land to farm communally (Scurrah and Hirsch, 2015). However, by 1984 the solidary group had largely been dissolved because people preferred to have private use of land individually (Gottesman, 2003, Scurrah and Hirsch, 2015). Land was redistributed to the household according to the size of the family and the amount of labour they had available (Scurrah and Hirsch, 2015). In 1998, land was classified into three categories: housing, cultivation and concessional land. Ownership was applied to housing property only, while farmland and concessional land were based on user rights (Russell, 1997). Under user rights, people had the right to use and hold the land, but they did not own the land; therefore, apart from housing property, people were not allowed to sell or rent the granted land without permission from the government (Russell, 1997). Each household was allowed to have a maximum of 2000 square metres of housing land and 5 hectares of cultivation land. However, most families received much less than the maximum amount of the land stipulated by the state (Russell, 1997, p.106). Nevertheless, the KPR government had little control over the situation and corruption was widespread across the state apparatus. Therefore, managing the use, ownership and transfer of land become one of the state’s major concerns.

Along the Thai border, the three other military groups: (1) the Khmer Rouge (KR), (2) the Khmer People's National Liberation Front (KPNLF) and (3) FUNCINPEC settled. Among these groups, the KR was the dominant group. The three groups formed the Coalition Government of Democratic Kampuchea (CGDK) to resist the KPR government. The coalition received aid from China, Thailand and the West (see, Bekaert, 1997, Brown and Zasloff, 1998). The troops’ families relied heavily on support coming from military and refugee aid (see, French, 1994b). Therefore, during this period for these people gaining ownership over land did not seem to be a
major necessity because they moved constantly. However, according to Diepart and Sem (2016), in some cases, e.g., in Samlout, northwestern Cambodia, land was also being distributed among the KR military’s families during the 1980s (see Figure 3.13 for the location). Diepart and Sem (2016, p.8) write, “[A] first phase of land distribution took place in the chaos of the early 1980s that followed the escape of members of the Khmer Rouge to a resistance base in the northwest.”


On 23 October 1991, the Paris Peace Accords were signed. This was another significant turning point in recent Cambodian political history. Under the accords, the four parties (KR, KPNLF, FUNCINPEC and KPR) agreed to transition to democracy. The United Nations established the United Nations Transitional Authority in Cambodia (UNTAC) in February 1992. In 1993, the first democratic election was conducted, under the administration of UNTAC. KPR, FUNCINPEC and KPNLF joined the election process, while the KR decided to withdraw. The KR established strongholds across the western and northwestern part of the Cambodia, mainly along the Thai border (see Figure 3.2 for the stronghold map). The zones territorialised by the KR were not included in the election. FUNCINPEC won the election and the Cambodian People’s Party (CPP) came second. The refugee camps along the Thai border started to close down. In May 1993, UNTAC departed Cambodia (also see, Findlay, 1995, Kiernan, 1993).
In August 1992, the Land Law was established under the new constitution of the State of Cambodia (SOC). Based on that law, all land belonged to the state, but people were allowed to have full ownership rights to the land. The state could violate the private ownership of the land with compensation. All property rights which occurred before 1979 were not recognised. Article 3 of the Land Law stated:

“...All violation of the private property rights shall be forbidden except when the public interest requires in cases provided by law. In this case the property owner has the right to receive in advance just and proper compensation” (Russell, 1997, p.107).

1993 – 1997: Kingdom of Cambodia

The Paris Peace Accords and the 1993 election did not provide Cambodia with peace immediately. The country still politically and economically struggled due to unrest and conflicts,
both within the newly elected government and with the Khmer Rouge. Prince Norodom Ranariddh was the Prime Minister of Cambodia with Hun Sen as the second Prime Minister. The political situation within the elected government, being run by two Prime Ministers and two major parties, was not stable (Brown and Zasloff, 1998). Power was concentrated among the political elites – in particular the two Prime Ministers. The state apparatus operated in tension between the ambitions of the two political parties and their elite backers. However, the CPP maintained its domination by controlling the army, police force, judiciary, and government bureaucracy. The government depended heavily on international aid (Brown and Zasloff, 1998) and natural resource extraction (Le Billon, 2002).

By resisting the government without international support, the KR settled in their strongholds at the regions along the Thai border and became dependent on logging and mining gemstones to generate income (Brown and Zasloff, 1998, Le Billon, 2002). Figure 3.2 shows the KR military strongholds between 1990 and 1998 (Kamboly and Dearing, 2014). However, their strength diminished throughout the period leading up to 1996. In July – August 1997, a coup occurred starting in Phnom Penh on the 5th of July. The first Prime Minister, Prince Norodom Ranariddh, was exiled and formed a stronghold in O Smach near the Thai border. The Khmer Rouge forces also engaged in the battle which arose because of this coup. Some of the KR joined FUNCIPEC while others supported the CPP (Brown and Zasloff, 1998).

In 1993, the new Constitution of the Kingdom of Cambodia was established. This new constitution started to place pressure on the rural landscape. Based on the 1993 Constitution which was complemented by the 1992 Land Law and the 1994 Investment Law, the state introduced Protected Areas (PAs) and Forest Concessions (FCs) across the forested areas (including some of the regions under Khmer Rouge control) (The Atlas of Cambodia, 2006, Paley, 2015). While article 59 of the Constitution states that the environment should be protected, article 61 states that remote areas should be developed (Constitutional Assembly, 1993)⁵. The 1994 Investment Law suggests that land can be leased for up to 70 years (Russell,

---

⁵ More details on forest concessions and protected areas will be discussed in Section 3.2.5.
1997). However, Russell (1997) suggests that there are many inconsistencies among the laws and the constitution, creating many opportunities for land grabbing and land conflicts.

For the KR settling in the strongholds, Diepart and Sem (2016, p.8) write,

“In this region, which remained under KR control, the rule was to distribute 5 hectares of forested land to each family, who could later clear and convert it to agricultural land. This early land distribution remained effective on the ground; people never lost access to the land they were allocated at that stage, even if, subsequently, the rampant conflict obliged them to move to safer locations.”

**1998 – Present: Kingdom of Cambodia**

The Khmer Rouge troops and strongholds dissolved in the late 1990s. The country was in full military integration between the ruling government and the KR (Kamboly and Dearing, 2014). Therefore, all Cambodian citizens living in any part of the country including the former KR strongholds were accommodated into one government constitution including the Land Law.

In 2001, the state introduced another Land Law adding a more sophisticated legal framework for land tenure and administration (Scurrah and Hirsch, 2015). Scurrah and Hirsch (2015) suggest that at least three substantial reforms were introduced through the 2001 Land Law. First, land ownership rights were extended to agricultural land. Second, different categorisations of land were introduced, i.e., state-public land, state-private land, private individual land and indigenous/communal land (Scurrah and Hirsch, 2015). At the same time, large-scale land investment was also granted. Third, the state legalised land concessions on state-private land in order either to generate revenue for the state through granting Economic Land Concessions (ELCs) or to improve local livelihood through granting Social Land Concessions (SLCs) (Scurrah and Hirsch, 2015).

Overall, from this historical review two important points regarding this study can be made. First, this literature has suggested that complex territorial formations and the property rights regime of land and resource governance are a defining aspect of Cambodian history. The French colonial administration initiated the property rights regime which continues to influence
the current practices of land and resource governance. The Khmer Rouge eradicated the property regime and replaced it with a system of communal land use. After the fall of the KR in the late 1970s, the property rights system introduced by the French was implemented by the post-KR governments. However, going through these various changes to the Land Laws and the constitutions, the Cambodian property rights system remains inconsistent, and provides ample opportunity for land grabbing and land conflict. The other contribution of this historical review is that it emphasises the political nature of the relationship between the Khmer Rouge, state territory and land. Given that the study site of Northwest Cardamom is a former Khmer Rouge stronghold, it is crucial to understand these historical phenomena as the background to the details elaborated on in the empirical Chapters 5, 6 and 7.

3.2.2. Contemporary land issues

After the end of the civil war in the late 1990s, many more areas became accessible to the general population, including areas that were former Khmer Rouge strongholds (see, Diepart and Sem, 2016). This resulted in many new actors who became interested in accessing and managing land and resources in the “new” resource areas. International conservation agencies arrived in Cambodia to assist the government in strengthening biodiversity protection within the protected areas (in line with international biodiversity targets and obligations) (Scurrah and Hirsch, 2015, Milne and Mahanty, 2015b). At the same time, the government introduced land concessions for the purposes of economic development including; economic land concessions for agro-industrial development, special economic zones, and mining concessions inside protected areas. The territorial arrangements among commercial and conservation interests were not clearly defined by the property system. Therefore, the implementation of conservation and land concessions based on the chaotic property system have excluded the local community from accessing land and resources (Barney, 2007, Sekiguchi and Hatsukano, 2013). The following sections highlight some of the issues and “solutions” regarding land and resource conflicts.

The implementation of large-scale land concessions has brought about conflicts over land and rural livelihoods across the country (Scheidel et al., 2013, Oldenburg and Neef, 2014, Davis et
Oldenburg and Neef (2014), who discuss the implications of economic land concessions on local communities, argue that while the state has the legal and policy framework to introduce ELCs, social benefit to local communities is minimal. In this regards, there are two key issues the authors observe: (1) the poor implementation of the law and policies that were written and (2) the dismissal of local customary land rights. Davis et al. (2015) looking at the environmental impact of ELCs estimate that when comparing within and outside ELC boundaries, deforestation is up to 100% higher within the ELCs. Therefore, ELCs have also contributed to the further depletion of the natural resources which are vital to local community livelihoods. Scheidel et al. (2013) predicting the further impacts of ELCs on rural Cambodian livelihoods suggest that ELCs will accelerate rural to urban migration in the near future. This literature suggests that the negative impacts of ELCs are most severe among the poor and small landholders.

Enforcing conservation activities in Protected Areas has also exacerbated land and resource issues (also see, Milne and Mahanty, 2015a). Baird (2009) suggests that the state does not so much have the intention to conserve the environment and improve livelihood, as to control territory, land and resources. Paley (2015) found that the PA management in Cambodia has failed to address the conservation rationales due to an ineffective management system. Within the practices of PA management, corruption has been one of the main concerns. Gillespie (2013) argues that the zoning and land classifications within the Angkor Archaeological Park have not taken into account the local community practices of land use and their understanding of space. Roberts (2015) also found that local social-ecological interactions in the Tonle Sap Lake were not being taken into consideration in the management practices of the lake. Similarly, Kim (2013) found that the state demarcation of the Tonle Sap has excluded local people from accessing their land.

The state has attempted to “resolve” land and resource tensions by reinforced land registration programs. However, regardless of their attempts, the problems have not been effectively addressed. First, in 2002, with the support of international donors including the World Bank and GIZ (German Society for International Cooperation), the Land Management and
Administration Project (LMAP) was introduced to register land title and resolve land disputes; nevertheless, the program still failed to secure land for poor people (Grimsditch et al., 2012, Scurrah and Hirsch, 2015, Bugalski and Pred, 2009, Grimsditch and Henderson, 2009). Grimsditch and Henderson (2009) found that thousands of households could not receive land title because their land did not meet the criteria of land registration. For example, their land was considered to be under dispute or of unclear status (Grimsditch and Henderson, 2009). In some cases, more than 80% of the land in a village did not receive the title under the LMAP registration program (Grimsditch et al., 2012, p.iii). Bugalski and Pred (2009) suggest that instead of securing land for the poor community, the LMAP increased land insecurity. One of the major issues in the LMAP was associated with the unclear and nontransparent state land classification, e.g., state-private and state-public land. Bugalski and Pred (2009) add that being able to exclude marginalised communities from receiving official land title, the LMAP has structurally increased land inequality. Additionally, the LMAP only covered a small proportion of urban areas because it tried to avoid “controversial” land, e.g., land inside the PAs and land in critical conflicts (Dwyer, 2015). The following map (Figure 3.3) shows that by 2011 there had not been any land title registered in the Cardamom region and northeastern Cambodia. Only a small proportion of land located within the provincial centres of central and southern Cambodia was covered. Based on the map, there had not been any land title given inside the PAs (Dwyer, 2015). It can also be noted from the maps that the borderlands including the ex-KR strongholds were excluded from the LMAP.
The other attempt was in 2012 when the government introduced another land registration program known as the 01 Order Land Titling Campaign (O01LTC). Adding to the LMAP, the O01LTC covered the conflicted areas, primarily the land affected by ELCs (RGC, 2014), thus rural areas including the PAs were also included in the program (Grimsditch and Schoenberger, 2015). Within a very short time, by 2014, the state had issued 610,000 titles through the O01LTC. By the same time, 1.2 million hectares of land was reclassified, of which 32% was from ELCs, 23% from forest concessions and the other 55% from other state land and forested areas (Grimsditch and Schoenberger, 2015, 10).
Studies inspecting the implications of the Order 01 Land Titling Campaign (O01LTC) suggest that there are many issues to be considered regarding the processes and the potential consequences of the O01LTC (Work and Beban, 2016, Grimsditch and Schoenberger, 2015, Diepart and Sem, 2016). Grimsditch and Schoenberger (2015) conclude that the O01LTC was a political project rather than a solution to community land conflicts. The program was announced by the Prime Minister prior to the national election in 2013. The processes were not transparent and the timeframe allocated to conduct titling was short. The campaign was not well planned prior to the implementation (Grimsditch and Schoenberger, 2015). A considerable number of people did not receive the land title for unclear and inconsistent reasons. For example, the authors suggest that the policy of the O01LTC was to resolve land disputes, but some people were denied the option to have their land surveyed because the land was disputed. Work and Beban (2016) discuss the conceptualisation of land among the local community and the private land titling program. The authors suggested that the way the community perceives land and territory is not the same way as the state represents the land in the title. However, in order to get access to the land title that can formally secure land, local communities have to adapt to the state way of presenting it (Work and Beban, 2016). In that regard, instead of respecting the local system of land governance, the state introduces a systematic form of land and territory. Diepart and Sem (2016) observing the implications of the private land title campaign in Northwest Cambodia suggest that private land titling created the territorial fragmentation of the land owned by the farmers. This land fragmentation and formalisation of land has created a new form of land exclusion which tends to generate more negative than positive impacts on poor farmers (Diepart and Sem, 2016).

Scurrah and Hirsch (2015) suggest that post-conflict state building has shaped the characteristics of contemporary land issues in Cambodia, which would hardly be solved by systematic land titling. There are powerful people linked to the state apparatus, and the political elites are involved in land grabbing (Scurrah and Hirsch, 2015). Studies have also proposed that the control of land is still held by the political and economic elites who are able to employ the state system for their own benefit (Un and So, 2011, So, 2009).
3.2.3. Cambodian cartographical history and the classification of space

Following Cambodia’s traumatic political transitions, spatial classifications have become one of the most complex issues the country is facing (see Section 3.2.1). Throughout this history, different regimes reinforced different forms of property ownership (Gillespie, 2010). Land and resource territories have been (re)classified according to the transition of the regime. The following literature suggests that maps have played a critical and important role in (re)creating diverse forms of territory since the French colonial administration. Maps created during and since the French colonial era have been passed on to (re)create different boundaries that the state can use to insert territories to govern people, land and resources. This section thus reviews the historical (re)construction of administrative and resource boundaries by examining the history of maps. From reviewing the maps’ history, this section also attempts to demonstrate how state-based actors (re)produced spatial abstraction/representation in the Cambodian context.

3.2.3.1. Administrative boundary

One of the main legacies of the French colonisation of Cambodia is the establishment of a nation-state territory and sub-national administrative divisions – provincial boundaries (The Atlas of Cambodia, 2006, Diepart, 2015, Edwards, 2007). Chandler (2008, p.119) states that before French colonisation, geometrical maps were not yet used; the state territory was defined by an imaginary wall (also see Section 3.2.1). The first nation-state boundaries drawn on maps were created during the French colonial era. Through exploring the Archives of Forest Maps of Cambodia, I found a map made in the 1930s showing the provincial division of Cambodia which highly correlates with the provincial division maps used by different regimes after decolonisation (Figure 3.4). Figure 3.4 shows Cambodia’s nation-state map with the provincial boundaries of Cambodia drawn in the 1930s. The provincial boundaries in the 1930s map are similar to the provincial boundaries of the map used in the 1970s in Figure 3.5. However, it can be recognised that after the colonial period, more divisions were drawn based on the existing spatial divisions on the French map (compare Figure 3.4 and Figure 3.5). Pursat’s provincial boundary; for example, is distinctively similar in the two maps (see the circle). To the
northeast, the provinces of Ratanakiri and Mondolkiri are not included in the map of 1930, but they appear on the map of the 1970s. Based on the appearances of the two maps, the boundaries of the provinces of Ratanakiri and Mondolkiri were created by dividing up Stung Treng and Kratie.

Figure 3.4 A French map showing provincial boundaries of Cambodia during the 1930s from General Government of Indochina (1930)
Under the Khmer Rouge (KR) regime between 1975 and 1979, many of those administrative divisions created and crafted by the French were eradicated and new divisions were introduced. The KR divided the country into seven military regions that did not correspond to the existing administrative divisions (Chandler, 1999). However, Chandler (1999) observes that the provincial and district boundaries of the pre-KR regime were also used to assist in the making of the KR zoning. Figure 3.6 shows the administrative zone map of Cambodia during the Khmer Rouge Regime. The map shows that there were some overlapping lines between the provincial boundaries in 1970 (Figure 3.5) and the KR military zone map (Figure 3.6). Chandler
(1999) suggests that KR zone boundaries were drawn based on the district boundaries prior to the KR regime.

After the downfall of the KR regime in the late 1970s, Cambodia went through multiple reproductions of different spatial divisions (see, Chandler, 1999). Some of the maps produced prior to 1975 were reused while many other new maps were also created. Figure 3.7 shows that the provincial boundary maps made and used during French colonisation and the regimes after, were reused by the Cambodian state in the 1990s. The boundary of Pursat province, as
can be observed in all maps (Figure 3.4, 3.5, 3.6 and 3.7), remains the same throughout different regimes.

Figure 3.7 Provincial map of Cambodia in 1991 (Perry-Castañeda Library Map Collection, 2016)
3.2.3.2. Land and resources boundary

The French Colonial administration also introduced different resource governance systems and territories to Cambodia which still influence the current practices of contemporary resource governance. The French introduced fishing lots, forest concessions and resource protection systems. By the end of the colonial administration in 1954, 173 forest reserves and 6 wildlife protection areas were created, covering one-third of the country’s land (The Atlas of Cambodia, 2006). It should be acknowledged that the 173 French forest reserve areas were enclosed to sustain profits from the forest, not for conservation purposes (Diepart and Schoenberger, 2016). Maps of those areas have been stored in various state and colonial collections, for example the French Forest Reserve Archive. The following map (Figure 3.8) shows French forest reserve areas (highlighted in green) established in the 1930s.
Figure 3.8 A protected forest map created in the 1930s by the French colonial from General Government of Indochina (1930). The legend of the map was translated by Jean-Christophe Diepart.
During the KR period (1975-1979), the forest reserves and land concession systems were also eliminated. Many of the collections of maps and the information from the geo-database were unknown and ignored.

In 1993, 23 Protected Areas (PAs) were created across the country – mostly rural and forested areas – under the authority of the Ministry of Environment (MoE) (Figure 3.9). Some of those dedicated areas were not yet accessible by the central government due to the existence of the KR military (Gottesman, 2003). In 1999, MoE also created Ramsar sites covering other parts of the wetlands including the coastal areas. The MoE’s conservation territory then covered 18% of Cambodian total land (The Atlas of Cambodia, 2006, p.54). By comparing the 1930s French forest reserve map (Figure 3.8) and the protected area map created in 1993 (Figure 3.9), it can be observed that some of the boundaries were replicated or modified. The Tonle Sap protected area boundary (highlighted in the circle) created in 1993 is identical to the French flooded forest boundaries in the 1930s.
During the 1990s, the other parts of the resource landscape that were not being granted for the PAs were allocated for Forest Concessions (FCs) (see, Gray, 2002, Davis, 2005, Diepart and Schoenberger, 2016) and fishing lots, which were under the management authority of Ministry of Agriculture, Forestry and Fisheries (MAFF) (see Figure 3.10 for the forest concession maps). The FCs covered up to 39% of Cambodia’s total land (Diepart and Schoenberger, 2016, p.5). Based on the inspection of the 1993 PA map (Figure 3.9) and the Forest Concession map (Figure 3.10), it can be observed that there are clear correlations between the PA and FC boundaries.
The PAs almost seem like they were carved out of the FCs (see for example the areas highlighted in rectangles).

Figure 3.10 Forest Concessions  (The Atlas of Cambodia, 2006, p.41)
By 2004, most of the forest concessions had been cancelled (The Atlas of Cambodia, 2006, p.41). From the cancelling of the FCs, eight Protected Forests (PFs) were established under the authority of the Forestry Administration (FA), MAFF. The area of the PFs covers 7.5% of the country’s total area (The Atlas of Cambodia, 2006, p.54) (Figure 3.11).

The relations of the boundaries between PAs, FCs and PFs can also be observed on the maps (Figures 3.9, 3.10 and 3.11). Figure 3.11 shows that some of the boundaries of the PFs are modified from the FCs. By overlaying the PAs and the PFs (see Figure 3.11), the defined boundary coordination between the two can also be observed.
Since the late 1990s, resource landscapes have been further distressed because many more different types of land use have been introduced, e.g., Economic Land Concessions (ELCs), Mining Concession (MCs), Special Economic Zones (SEZ), and community-based conservation areas. The following image shows the map reflecting the complexity of the spatial distribution and overlapping territories between PAs, PFs, ELCs, MCs and community-based resource management areas (Figure 3.12). The map shows that some ELCs and MCs overlap with PAs and PFs. Additionally, by inspecting the relationship between population distribution and the
dedicated areas for conservation or development, the map also show that most of those dedicated areas are located in the rural landscape where the population is relatively low. While the highly populated areas are located in the lowlands in the southeast and northwest, most of the conservation and economic development land is located in the west (Cardamom region) and the central north, and northeast.

Figure 3.12 Spatial divisions of Cambodia’s land and resources (source: the map is made by the author and the geo-datasets are from Open Development Cambodia)

3.2.3.3. The critical study of maps

The literature suggests that in Cambodia formal geometrical boundaries represented on maps and local conceptualisations/practices of space are incompatible (Gillespie, 2010, Work and Beban, 2016, Fox, 2002). Maps allow abstract boundaries to be imposed from the central
government and usually ignore the local understanding of space. Gillespie (2010, 2013), observing the boundary of the Angkor World Heritage site and the local community’s way of understanding land, found that the applications of international world heritage spatial representation did not take into account the complex relationship between the local people and their living environment. The boundaries drawn on the maps defining different land use zones in the Angkor World Heritage site did not reflect how local people perceive and use space (Gillespie, 2010). Fox (2002) suggests that spatial abstraction reinforced by modern maps have transformed and demolished the local indigenous conceptions of space in Cambodia. Work and Beban (2016), who examine the local conception of space and private land title, found that in order to have access to the land title imposed by the state, local villagers have to change their understanding of land and boundaries. Maps have created another reality that the everyday practices of land have to fit into, rather than representing the complex reality of people and land interaction (Work and Beban, 2016, Kim, 2013). The above authors have all highlighted the issues of contradiction between the practices and the conceptualisations of space by local communities, and the abstract conceptualisation of space enforced through central geometrical territoriality by external actors, e.g., state-based agents. Gillespie (2013) suggests that thorough and nuanced participatory processes should be established to capture local practical spatial conceptualisations, to enhance both the effectiveness of conservation and resource management projects, and local community livelihoods.

Other studies suggested that maps are tools predominately employed by powerful actors to gain access to land and resources (Frewer and Chann, 2014, Dwyer, 2015, Fox et al., 2006, Adler et al., 2009, Kim, 2013). Frewer and Chann (2014) explore the relationship between different territorialities imposed by the state through cartography to gain access and control over land. The article argues that maps are not just a technical tool supporting the state’s land management, but they are the centre of creating territorial discourses that conservation agents and development actors use to gain access to land and resources. Kim (2013) suggests that cartography is a powerful tool the Cambodian elites exploit through the state apparatus to create and enforce their territory over land and resources in Tonle Sap. The local communities were excluded from the mapping process and ultimately from the land. Kim (2013) argues that
through maps, territories can be imposed by the central government without involvement from local communities. Fox et al. (2006) suggest that maps have been used to represent the indigenous land, and that maps allow them to claim customary rights to land and resources. However, the other impact of maps made by indigenous people is that they also create the spatial knowledge that can be used by other powerful actors, including state authorities, to have more control over land and resources. The article also suggests that engaging in the mapping process does not mean that local communities have control over maps and their implications. Fox et al. (2006, p.101) write, “...if villagers engage in mapping to increase the security of their land claims, they need to follow through with land titling. But the land titling process is controlled by outside authorities, and has significant implications for the villagers’ relations to the land, their neighbours, and their community.” Adler et al. (2009) find that participatory mapping did not enhance the land tenure security of Cambodian indigenous communities.

Dwyer (2015) examining maps to observe the territorial relationship between ELCs and land titling argues that maps have become the politic of land governance in Cambodia. The results of the ELCs and land titling have not been spatially revealed and understood even after more than a decade of land titling afforded from the government and donors (Dwyer, 2015). The author suggests that the spatial information of land has systematically been produced and used, but it is hardly revealed to the public. The maps produced are still under the control of the state and the donors.

However, none of the above authors has critically observed the history of maps. Additionally, apart from Dwyer (2015) who observed the relationship between ELCs and private land title, there have not been many studies exploring the relationships between different maps, e.g., protected areas, land concessions, political administration, and land titling. The authors tended to examine each map independently. Moreover, none of the authors above has explored the roles of maps in the creating the frontier as a contestation of space.
3.2.4. The apparatus of the state

Given that the state plays an important role in shaping space, it is essential to understand the characteristics of Cambodia’s contemporary state. This section elaborates on the nature of the Cambodian state and its associated actors, who have been involved in land and resource management. The literature suggests that Cambodia’s contemporary state apparatus is highly influenced by international donors, commercial agencies and political elites whose interests are not merely to fulfil the public interests, but to insert their political, economic and conservation agendas through the apparatus of the state (also see for example, Un and So, 2009, Un and So, 2011, Ngin and Verkoren, 2015, Gottesman, 2003, Roberts, 2008, Sok, 2014).

Scholars suggest that the operation of the current Cambodian state apparatus is highly influenced by the patronage system of the political elites, in particularly within the ruling party (Un, 2006, Hughes and Un, 2011, Ngin and Verkoren, 2015, Le Billon, 2002). Those authors suggest that there are two interconnected power systems operating in the Cambodian state apparatus – regulated and unregulated systems, formal and informal systems, or formal and shadow (Hughes and Un, 2011, Le Billon, 2002, Ngin and Verkoren, 2015). The regulatory system of the Cambodian state is exploited by the informal arrangements of political patrimonial networks (Hughes and Un, 2011). Hughes and Un (2011) examining the economic transition of Cambodia argue that the bureaucratisation of the state to sustain economic growth increased dependence on the ruling party – the Cambodian People’s Party (CPP). Their research suggests that despite foreign enforcement to create an autonomous state, the reliance on the ruling party administrated by the political elites is highly critical (Hughes and Un, 2011). Ngin and Verkoren (2015) examines the power structure in Cambodia in the context of land use. They maintain that the Cambodian state operates within hybrid power relations between different actors and agencies at various scales.

Other studies have pointed out that economic elites have also shaped the operation of the Cambodian state apparatus (Springer, 2013, Springer, 2009, Cock, 2011, Spiegel, 2016, Spiegel, 2014). Springer (2009) shows that the Cambodian government is situated in neoliberal processes allowing economic elites to deploy the power of the state to generate economic gain.
Cock (2011) shows that economic elites have inserted their agenda into the state apparatus to gain access to state property, e.g. economic land concessions for their private purpose. The author suggests that the power relation between political elites and business agencies in controlling Cambodian political dynamics is critical in land and resource management. Cock (2011) argues that while the power dynamic within the Cambodian state is being transformed by the influences of the regional economy, the political and economic elites in Cambodia are interconnected in exploiting the state structure to gain economic benefit and political power. Both are using the state apparatus to get access to what is classified as state property, such as land and resources (Cock, 2016). Spiegel (2016) provides a case study on the operation of the mining industry in Kratie Province and how land use planning is highly influenced by the large-scale commercial mining sector. The author suggests that the physical and political space within the state have been used by powerful commercial actors, such as the large-scale mining sector, to gain access to land and resources.

Studies have found that Cambodia has been an aid-dependent nation (Ear, 2007, Sato et al., 2011, Godfrey et al., 2002, Kent, 2016). The Cambodian state relies heavily on international aid to sustain the national economy, environmental conservation, and political stabilisation (Ear, 2007, Godfrey et al., 2002, Milne and Niesten, 2009, Hughes and Un, 2011). The literature criticises international aid, in that while not being able to strengthen Cambodia’s social and political security as specified in the aid agendas, aid still plays such a key role in sustaining the operation of the state’s apparatus (Ear, 2007). Ear (2007) indicates that there has been a failure of international aid in Cambodia to strengthen social and political security as set by the international donors. The corruption within the Cambodian state apparatus is still highly significant. Scholars suggest that instead of strengthening local community access to land and resources, international aid and intervention, to some extent, has shaped the political dynamics within the state to benefit the interests of political and economic elites (Kent, 2016). Sato et al. (2011) illustrate the nature of the emerging donors in Cambodia. The article observes the changing nature of new donors, e.g., China and Thailand, and their effects on Cambodian government institutions. The article suggests that, different from the traditional donors, the
new donors such as China and Thailand, position themselves toward building economic connections rather than sustaining peace or environmental concerns.

3.2.5. Resource landscape and the state

The relationship between Cambodian elites and the state apparatus is critical in resource governance (Le Billon, 2002, Milne and Mahanty, 2015b, De Lopez, 2002, Cock, 2016). Le Billon (2002) found that forests played an important role in shaping the political economy of Cambodia during the 1990s. The dependency on forests created tension and networks among the political elites. While exploiting forests to sustain their political influences, the political elites also used the state apparatus to receive international aid (Le Billon, 2002). Milne and Mahanty (2015b) also suggest that resource landscapes have become frontiers which the political elites rely on to sustain their political power. Milne et al. (2015) observe the formation of the state and the construction of land and resource governance by exploring the new forms of technology and actors involved. The authors suggest that regardless of more actors being involved, the ruling party – Cambodian People’s Party (CPP) – still plays a dominant role in controlling land and resources in Cambodia. Therefore, to better understand the nature of land and resource governance, it is important to understand the formation and functioning of the CPP; and to examine how they shape the operation of the state to take control of land and resources (Milne et al., 2015). Cock (2016) found that being able to exploit the state apparatus, the Cambodian elites are able to generate revenue from the forest with very minimal investment.

Research has also found that resource landscapes at the borderlands have become highly contested spaces. Baird (2009) argues that contestations over the borderland were the results of both enforcing the geo-body of the state and the control of land and resources. Territorialising landscape for protection is not only about conserving biodiversity but also enforcing the state’s control over the landscape. Baird (2009) found that the establishment of PAs in Cambodia is more political than conservation-driven. In order to understand the construction of conservation at the borderland, the history of PAs needs to be unpacked.
Territoriality has been a major tool for centralised state-based actors to have control over land and resources (Baird, 2009, Kim, 2013, Sithirith, 2010). Kim (2013) and Sithirith (2010) explore land and resource territoriality in Tonle Sap. Kim (2013) suggests that the neo-patrimonial system plays an important role in shaping the territorial formation of land and resources of Tonle Sap Lake. The elite actors associated with the state’s institutions exploit technical knowledge to construct and legitimise their territorial claims on land and resources. Sithirith (2010) employs a political geography approach to understanding the complex territorial arrangements in Tonle Sap Lake. The author examines different rationales and agencies, e.g., conservation, commercial fishing and local fishermen, in shaping the territorial formation of the lake. From Sithirith (2010)’s observation, it is not just the state that creates the rationale and territorial claims on the land and resources of Tonle Sap, but others as well, e.g., global conservation and commercial fishing.

I argue that in order to understand the abstract construction of land and resource management, it is important to understand the nature and rationales of the actors who associated themselves with the state apparatus. In this research, I examine how spatial knowledge (maps) has been (re)created within the state apparatus by its associated actors, i.e., the political elites, economic agencies and conservationists.

3.3. Cardamom Region: the frontier under construction

In order to elaborate on the complexity of Cambodia’s resource frontiers, this section observes the Cardamom region from four different aspects: (1) Geopolitical transition, (2) the contemporary post-conflict society, (3) the context of biodiversity and conservation, and (4) economic development. This section also aims to provide the geographical context of the study site – which is located in the northwest of the Cardamom region.

---

6 The term frontier here does not mean that the landscape is empty or lacks human inhabitants. This term is used here to understand the nature of the resource landscape in Cambodia. This term is used to express the nature of change and contestation of the landscape being imposed by different actors and processes.
3.3.1. Geopolitical landscape

From the late 1970s to late 1990s, similar to other areas near the Cambodian-Thai border, the Cardamom region was traumatised by war which was caused by the military conflict between the central government of Cambodia and the Khmer Rouge. After the KR regime was overthrown from the capital of Phnom Penh by the Vietnamese in 1979, the Cardamom region was the KR resistance area until the late 1990s. Shui, a Chinese diplomat, described some of his experiences in the Cardamom region in 1979 after the VN troops overthrew the KR (Shui, 2007). Shui said that many of the KR leaders and the Chinese diplomats had moved to the Cardamom region close to the Thai border in the early 1970s due to the attack of the Vietnamese troops from the east. Shui (2007, pp.12-14) writes:

“At 5 P.M on the 23 February the embassy departed its second camp and moved toward the Cardamom Mountain.... At 8 A.M on the 26 of February, Pol Pot, Noun Chea, Khieu Samphan, Ieng Sary, and other leaders came to the embassy for an official meeting with the Ambassador Sun Hao...”

Despite its significance in Cambodian post-KR history, geopolitical knowledge of the Cardamom Region is sparse. The literature about the Cardamom region is mainly written from the wider Cambodian historical context, and from refugee camp studies along the Cambodian-Thai border (see for example, Bekaaert, 1997, Gottesman, 2003, French, 1994a, Rogge, 1990, Suenobu, 1995). Based on national historical literature (see, Chandler, 1999, Kiernan, 2002), two significant periods are considered to have shaped the geopolitical dynamics of the Cardamom region: (1) the 1980s when the region was an intensive battlefield between the central government and three militaries, i.e., the Khmer Rouge, KPNLF, and FUNCINPEC and (2) the 1990s when the Khmer Rouge military took control over a considerable proportion of the region and set up military strongholds (see Figure 3.2 for KR strongholds).

During the 1980s, three military groups together with civilian refugees settled along the Cambodian-Thai border. The three military groups were the KR, KPNLF, and FUNCINPEC. Figure 3.13 shows the maps of the military camps of the KR, KPNLF, and the FUNCINPEC during the 1980s. As shown in the map, by 1984, the KR was the dominant military group within the
Cardamom region (western Cambodia). The other two groups were mostly located to the northwest and the north. It can also be observed on the maps that all the locations of the military camps were just inside Cambodian territory. Figure 3.14 shows the refugee camps supported by the United Nations Border Relief Operation which started in 1985.

Figure 3.13 Locations of the camps along the Cambodia-Thai border 1979-1984 (Rogge, 1990, p.42)
Figure 3.14 Locations of UNBR camps between 1985-1990 (Rogge, 1990, p.50)

Intensive military clashes intensified in the Cardamom region and the wider forested areas near the Cambodian-Thai border during the 1980s (Gottesman, 2003, Davies and Dunlop, 1994).
Gottesman (2003) says that under the initiative and military leadership of the Vietnamese troops, in the early 1980s, several hundred thousand civilian Cambodians were sent to build the “wall” defending Cambodian territory from the resistance soldiers, the KR, KPNLF, and FUNCINPEC (Gottesman, 2003, p.231). The plan was known as the K5 which included activities such as clearing the forest, building roads, and placing landmines. By 1985 up to 150,000 workers had been sent to join the K5 (Gottesman, 2003, p.132). The civilians were asked to build roads from clearing the forest so that the VN and central government troops could reach the Thai border and expel the rebels from the state’s interior. Malaria was one of the major dangers that the K5 workers were exposed to. Eighty percent or more of the workers were reported to have malaria and the mortality rate was up to 10% (Gottesman, 2003, p.135). The other danger was landmines. The areas under the K5 plan including the Cardamom region later become highly contaminated with landmines (Davies and Dunlop, 1994). By the mid-1980s 464,000 antipersonnel mines had been planted along the border and the areas nearby (Gottesman, 2003, p.137). The following map (Figure 3.15) shows the landmine areas resulting from the battles in the 1980s and 1990s. The map shows that the highest concentration of landmines was in the northwest especially along the Cambodian-Thai border. Northwest Cardamom was among those highly contaminated landmine areas.
Without support from China during the 1990s, the resources from the Cardamom region and Northwest Cambodia allowed the KR to sustain their rebellion against the central government. After the VN and the central government troops withdrew from the region in the late 1980s, the KR were able to set up strongholds further into the state’s interior. Parts of the Cardamom region, e.g., Veal Veaeng and the border, were controlled by the KR. Wood and gemstones were collected and sold to Thailand in an exchange for military support (Le Billon, 2002).

By exploring the literature, I found that not much empirical research has been conducted to understand the KR and their relationship with the Cardamom region during the 1980s and 1990s.
3.3.2. Post-war zone

Before demonstrating the contemporary post-war society of the Cardamom region, this research acknowledges that the upland area of the region is home to indigenous groups including Chong, Por, Sa-orch, and Sauy (ICOS, 2010, Ironside, 2005). For centuries, the region has been inhabited by highland indigenous communities, however, their numbers have dramatically declined (Ferguson and Vong, 2007, Ironside, 2005, Killeen, 2012). Ironside (2005) exploring the Pea group – a collective indigenous group including Por, Samre, Samray and Chong – found that the population of the Pea communities was distributed within different villages in Veal Veaeng and Kravanh Districts. Ironside (2005) suggests that some indigenous communities abandoned their villages because of the war. When they returned to their villages; their land had been claimed by other people. In some villages, the only remains of the group are fruit trees grown before the people left the villages.

After political compromise in the late 1990s, the ex-KR strongholds have opened up (Diepart and Dupuis, 2014, Pilgrim et al., 2012). The borderlands have become more accessible to the wider population. The potential of agricultural land has attracted a lot of in-migrants into the region. Diepart and Dupuis (2014, p.145) write, “Over the last 15 years, the Cambodia northwest has been a theatre of dramatic agrarian expansion away from the central rice plain into the peripheral uplands”. Thus, the current population of the area is a mixture of ex-KR and non-KR in-migrants.

Regardless of the rapid socio-political changes and compromises, the contemporary social dynamic of the Cardamom region and other ex-KR strongholds is still highly associated with the war (Arensen, 2016, Arensen, 2012, Zucker, 2013, Diepart and Dupuis, 2014, Ishibashi et al., 2015). Zucker (2013) argues that the political history plays an important role constructing the socio-political dynamic of the area. The author maintains that the experiences of the KR have considerably influenced the present ways of everyday life and their relation to the landscape. Ishibashi et al. (2015) looking at the relationship between local people and Cardamom Mountains found that the different experiences of war have also shaped their relationship with the forest. Arensen (2016) also suggests that people who live in the area are still traumatised by
the memory of the war and the landmines. Political identity and involvement in war played an important role in defining people’s understanding of the area (Arensen, 2016). Former political identity, e.g., ex-KR and non-KR, has formed tension between the different groups who live in the same community.

“Settlers living side by side had often fought on different sides of the war, yet divisive former allegiances were rarely discussed. Instead, a post-war sense of communal belonging was constructed through references to accounts of the resettlement period, focusing upon common elements of struggle and hardship” (Arensen, 2016, p.24).

The historical connection between the KR and the landscape is still shaping the current local land and resource arrangements. Diepart and Dupuis (2014) found that in Northwest Cambodia, the arrangements of the land during the 1980s and 1990s are still shaping local land and resource use. Local villagers who were ex-KR tend to have better access to better land because they settled in the areas earlier and have stronger social connections among the community. Diepart and Dupuis (2014) also suggest that in some places the KR warlords still have control over land. However, Diepart and Dupuis (2014) also suggest that the socio-political dynamics of the post-KR strongholds differ from one location to another.

### 3.3.3. Conservation frontier

Another aspect of the Cardamom region is its biodiversity and conservation potential. A considerable amount of literature emphasises the Cardamom region’s biodiversity potential and suggests that conservation activity should be strengthened (Coudrat et al., 2011, Killeen, 2012, Grismer et al., 2008, Daltry and Wüster, 2002, Ohler et al., 2002). Killeen (2012, p.27-28) writes,

“The Cardamom Mountains are the largest wilderness area in mainland Southeast Asia and home to some of Cambodia’s most spectacular and endangered biodiversity. However, the landscapes that surround that wilderness are home to approximately four millions of Cambodia’s 14 million inhabitants and the region is
experiencing rapid population growth due to its abundant natural resources and the strategic importance of the Cambodian Coast”.

The Cardamom region is highly endowed with global biodiversity potential. Most of the mountainous area of the region is considered to contain key biodiversity habitats (see Figure 3.16). Multiple animals and plants classified as critical species at the global scale have been found (Grismer et al., 2008, Eames et al., 2002, Coudrat et al., 2011, Daltry and Wüster, 2002, Ohler et al., 2002). More than 35 animal species classified as globally threatened have so far been found in the region (Killeen, 2012, p.43). Coudrat et al. (2011), for example, have found an abundant population of a primate species in Phnum Samkos Wildlife Sanctuary (PSWS), while Daltry and Wüster (2002) suggest that a new species of wolf snake was also found. Other new species have also been discovered. Grismer et al. (2007) and Ohler et al. (2002) discovered a new frog species in Phnum Samkos Wildlife Sanctuary and the wider Cardamom region.
The research and biological surveys suggest that the biodiversity in the region is under threat and urgent conservation action needs to be strengthened (Coudrat et al., 2011, Killeen, 2012).
Coudrat et al. (2011), for example, claim that there are significant primate species inhabiting the Cardamom region; therefore, serious conservation action should be taken place. The authors suggest, “[W]e propose Samkos Wildlife Sanctuary as a priority for primate conservation in Cambodia” (Coudrat et al., 2011, p.428). Killeen (2012) is concerned that the biodiversity of the region is being distressed by deforestation, infrastructure development, mineral extraction, industrialisation and migration. The author suggests that to be able to manage the biodiversity of the region, the state should have better spatial planning. Other solutions, such as the Payment for Ecosystem Service (PES) and Community-based resource management, should be encouraged (Killeen, 2012).

The region has been targeted for biodiversity conservation by both government and international non-government agencies. Multiple government and non-government agencies have been working in the Cardamom region to conserve natural biodiversity (Killeen, 2012). The government agencies include the Ministry of Agriculture, Forest, and Fisheries (MAFF), the Ministry of Environment (MoE), the Ministry of Tourism (MoT), and the Ministry of Water Resources and Meteorology (MOWRAM). There are 47 non-government organisations working in the Cardamom region on natural resource and environmental issues, out of which 6 mainly work in the conservation sector (Killeen, 2012, p.109).

The literature has suggested that the conservation action taking place has not addressed local issues (Reimer and Walter, 2013, Cascio and Beilin, 2011). Participatory conservation has been one of the major strategies for conserving the biodiversity of the Cardamom region; however, there have been concerns over its limitations (Cascio and Beilin, 2011, Reimer and Walter, 2013). Cascio and Beilin (2011) who observe the practices of Community-Based Natural Resource Management (CBNRM) in the Cardamom region found that the CBNRM cannot achieve their conservation purposes. The problem is that the conservation agency who introduced the CBNRM in the region tended to ignore the local social, political, and historical context (Cascio and Beilin, 2011). The authors furthermore argue that while biodiversity agencies tend to focus on a biological aspect of the area, local communities are more concerned about the social, political, cultural, and economic aspects.
### 3.3.4. A new development frontier

Political integration has not only opened the Cardamom region to local in-migrants and conservation but also development projects. Due to its potential for natural resources, e.g., land, hydrology and forest (Soussan and Sam, 2010, Arias et al., 2011), various state-based development projects have been introduced into the region. Those projects include Economic Land Concessions (ELCs), a Special Economic Zone (SEZ), Mining Concessions (MC), and hydropower schemes (Arias et al., 2011, Hean, 2014). Figure 3.17 shows the distribution of some development projects across the Cardamom region.

![Development projects in the Cardamom region](image)

*Figure 3.17 Development projects in the Cardamom region. The map was made by the author and the data source is from Open Development Cambodia (2016a)*
These development projects have exacerbated local social environmental issues (Grimsditch, 2012, Dwyer, 2015). Dwyer (2015), observing the practices of the ELC in Southwest Cardamom, suggested that the ELC development has created local land conflicts. Dwyer (2015) found that toward the southern part of the Cardamom region, the state has granted a 60,000-hectare sugar plantation on the local community’s land. The community’s land use planning was ignored by the state, which resulted in land conflicts between the local community and the company. Grimsditch (2012) who observed the implications of hydropower development projects found that local people have lost their land due to hydropower development projects. The other group of people who are mostly affected by hydropower development are the people who depend on non-timber forest products (Grimsditch, 2012). The author notes that the issues become even more complicated when the local community is also located inside a PA.

3.4. Conclusion

This chapter provides a comprehensive background to this research by discussing the literature on Cambodia and the Cardamom region. First, at the national level, the literature shows that the historical accounts of Cambodia play an important role in shaping the current land and resource organisation/conflicts. Since the French administration, Cambodian property rights systems have been developed and changed due to the change of the political regimes. Up until the present day, the Cambodian property rights system remains confusing, which has resulted in many land and resource conflicts across rural landscapes. The other important historical aspect that has shaped current issues regarding the resource landscape, is the post-1979 conflicts between the KR and the central government. After 1979, the KR was pushed toward the forested areas near the Thai border. The historical relationship between the KR and the borderlands has significantly shaped socio-spatial relationships. The literature has shown that cartography has actively been involved in (re)constructing administrative-political territory and resource boundaries since the French colonial administration. Maps have been passed from regime to regime; however, not much research has explored the relationship between maps and contemporary land and resource arrangements. The state plays an important role in formally organising abstract space; however, this literature suggests that the Cambodian state-
apparatus is highly utilised by political elites, development agencies, and conservation actors to insert their control over the land and resources. Thus to better understand how abstract/formal space is abstractly organised, it is important to explore the rationales and the interaction between those state-based actors. Secondly, observing the transition of the Cardamom region allows this research to elaborate on frontier issues in Cambodia. This literature suggests that the issues of the Cambodian resource landscape are highly complex, not only because of current development and conservation activities, but also historical aspects of the landscape. These complex intersections between contemporary conservation and development activities and local political history have created multiple layers/actors in the spatial arrangements of the resource landscape. This has introduced many conflicts over land and resource use. The state has introduced conservation and development projects along with spatial divisions on the landscape that have been affected by political turmoil and current in-migration. However, limited literature can be found on the Cardamom region regarding the conflicts/interactions between the historical formation of the landscape and the centralised state-based arrangements of space.
Chapter 4: Methodology and Methods

4.1. Introduction

This chapter elaborates on the research methodology and tools employed to conduct the research. It first briefly summarises the research conceptualisation discussed in Chapter 2 which aims to integrate political ecology with the literature on the production of space. This framework is termed the ‘political ecology of frontier’. Critical cartography and place-making have been employed to observe how space is produced from two different but dialectical forms and processes (i.e., centralised state-based and localised processes). These two approaches are discussed within the notion of frontier making – emptied out space. Multiple research data collection methods were employed to gather information for this research, including participatory observation, semi-structured interviews and secondary data collection e.g., geo-database and reports. While complementing one another, the data collection tools also generate different forms of information that respond to different research questions. This chapter starts by discussing the conceptual approach in Section 4.2 followed by demonstrating a case study in Section 4.3. In Section 4.4, the chapter discusses the research tools used to collect the information and Section 4.5 demonstrates how the field information was illustrated. The next sections 4.6 and 4.7 provide critical reflections on the research processes and outcomes including researcher positionality and ethical considerations. The chapter finishes by providing a short summary Section 4.8).

4.2. The political ecology of frontier and the production of space

Adopting the notion of space as a product by Henry Lefebvre and Doreen Massey, the research reflects on spatial conflicts over land and resources in a dialectical way. For Henry Lefebvre, space is the dialectical product of spatial idealisation, the presentation of space and the lived experience of and in space. Doreen Massey additionally emphasises that it is important to grasp space as being continuously (re)produced through time and at multiple scales. Hence, to understand how a particular location is constructed is to not only examine the relations that
happen in the particular space and at that particular time but to explore the spatial idealisation, representation and direct experiences being constructed elsewhere or in a broader geographical context through history. In short, to understand the current spatial contestation in a particular geographical context, it is essential to unpack the spatial idealisation, representation and direct interaction at various scales through history.

In this research, to understand the process of frontier-making is, first of all, to observe the representation of space introduced by the state and its associated actors, e.g., political elites, conservation organisations and development agencies. In that regard, I attempt to understand how the state and its associated actors construct empty space through spatial representation (cartography in particular), the rationalisation of space (e.g., environmental conservation, economic development and political control) and direct force (e.g., land eviction and conservation law enforcement). Critical cartography is employed to examine the state’s construction of frontier discussed in Section 3.2.2.

Another aspect of frontier-making is to investigate how different groups of local communities access land and resources through the process of excluding other local actors and navigating the state-based representation of space. In that regards, I start by observing the localised production of space from the direct spatial interactions of local actors in relation to historical phenomena and the current socio-spatial interactions within a landscape – Northwest Cardamom. To unpack the local production of space, I employ the notion of place-making discussed in Section 3.2.3.

4.2.1. Critical cartography

In this research, critical cartography was employed to examine the construction of space from state-based actors, for example, the political elites, conservationists and economic agencies. Critical cartography examines the production of space by critically analysing spatial representation, in particular the representation of territory created by the state and its associated agencies (Cidell, 2008, Galt, 2011). Beginning with an investigation of maps, critical cartography further investigates the rationales of the maps, the mapping processes, the actors
involved, the outcomes maps attempt to represent, and the consequences of the maps on local lives and territorial contestations (Pickles, 2004, Wainwright and Bryan, 2009, Walker and Peters, 2001, Caquard and Cartwright, 2014). Caquard and Cartwright (2014) suggest that to observe the narratives of maps is not only to capture the story that maps attempt to portray but to critically examine how, why and by whom the maps were made. Pickles (2004) suggests that critically examining the history of cartography allows us to understand critically how space is organised contemporarily by powerful actors, e.g., the coloniser and the state.

Critical cartography is presented in Chapter 5, exploring how a political administrative area (Veal Veaeng District), a wildlife conservation area (Phnum Samkos Wildlife Sanctuary), land concessions (a mining concession, two economic land concessions, and a special economic zone), and private land titling boundaries have been made. This critical examination of maps includes exploring the history of the maps, the rationales for making the maps, the process of boundary drawing, the actors involved, the outcomes of the maps, and the implications of the maps. The maps are overlaid to observe the characteristics of the space they portray and their relation to one another. The observation of maps also discusses the implications of those maps in everyday life in terms of, for example, getting access to the land title, using the land and resources, and people’s perception of space, which will also be discussed in Chapter 7.

4.2.2. Place-making

Place is space where relationships between space and people have formed and meanings have been given (Cresswell, 2015, Pred, 1984, Tuan, 1977). Therefore, to better understand how place is made, it is important to understand how meaning and emotions are established and how the physical environment is organised. In this research, the notion of place-making is elaborated on to understand how space is produced at the local level through direct socio-spatial interaction. It investigates the relationships between local actors and their local environment in terms of both the conceptualisations of space and the spatial arrangement of land and resources.

To investigate the making of place, the research explores two different forms of local narrative: (1) landscape narratives and (2) people’s narratives. The landscape narrative approach
investigates at two scales: (1) Regional (Northwest Cardamom) and Village (the two selected villages). The approach explores how Northwest Cardamom has evolved through local socio-political transitions and how they are associated with wider political changes, e.g., at national level. In that regard, I observe how land and resources have been spatially organised in response to the political transitions since the 1980s. This is discussed in Chapter 6. The people’s narrative approach investigates the different stories of local community members from the two selected villages. It studies different social groups who currently inhabit the villages while also investigating the social dynamics among the groups and their relation to the landscape they are living in. This is discussed in Chapter 7.

Neumann’s (2009b) conceptualisation of the region as a production of space was employed to elaborate on how Northwest Cardamom and the two selected villages were established. Neumann claimed that there has been a growing interest from political ecologists to engage in regional studies of the production of space, with the region as the co-constitution of nature, space and society. Neumann stated:

“.....regions are historically contingent processes, wherein the reproduction and transformation of society is inseparable from the transformation of nature within prevailing relations of power” (Neumann, 2009b, p.372).

Chapter 7 discusses the local narratives and their relation to the landscape. Kitchin and Blades’ (2002) work on the human cognition of geographic space offers a framework that can elaborate on Lefebvre’s broad conceptualisation of space at the personal level. Kitchin and Blades explain that people’s conceptualisation of space and their activities in and on space, is produced through their personal and social backgrounds. They argued that the spatial knowledge of an individual is reinforced by their cultural and individual history intersecting with their socio-economic status and physical environment. The perception of space is manifested through everyday activities within space. The narratives of individuals are based on how they establish a conceptualisation of Northwest Cardamom and their own living physical environment (e.g., forest, farmland, road and river). The Cardamom region is a rapidly transformed space where the population’s geographical, social and economic backgrounds are diverse. Therefore, their
conceptualisation of the region and their everyday environment are also complex (Diepart and Dupuis, 2014, Killeen, 2012, Zucker, 2013). Using Kitchin and Blades’ approach, these groups are explored in terms of their socio-political backgrounds, e.g., their political background (former KR and non-KR), migratory and economic status, gender, and age.

4.3. The case study

The research is based on an in-depth observation of Northwest Cardamom – an upland landscape located in western Cambodia. The primary observation is based on the changes within the last four decades – the post-KR regime period. The site was chosen because it allows this research to explore the complex dynamic nature of the frontier in the Cambodian and Southeast Asian context. Based on assessing the secondary information and primary observation, Northwest Cardamom was selected as a case study for two key reasons: (1) it is a landscape where land and resources are highly contested by different actors and territorialisation processes; (2) the region has been traumatised by Cambodian political history. However, there has not been any empirical research to document the region’s socio-spatial formation.
Firstly, the region is located in Northwest Cardamom where territorial contestations over land and resources can potentially be observed. The site is located in the Cardamom region where land and resources have been understood by development and conservation actors to be “abundant”, and the human population is relatively low compared to other parts of Cambodia. The Cardamom region is also a globally recognised ecological landscape (Killeen, 2012). Based on the 2008 census data, the region’s population is relatively low compared to other parts of Cambodia. Local land and resource uses of the region are pressured by the imposition of many conservation and development projects and territories (Killeen, 2012, Work and Beban, 2016). As shown in Figure 4.1, at least four land concessions have been granted inside a wildlife sanctuary – Phnum Samkos Wildlife Sanctuary (PSWS) – and they are near or overlapping with
villagers’ land use. Based on the primary field observation, I found that the government also implemented private land titling – the 01 Order Land Titling Campaign (O01LTC) in the region. Thus, combined, these circumstances have formed complex territories – local government unit division, land concessions, a wildlife sanctuary and private land titling.

Secondly, the region is known as a major battle zone and was a KR-stronghold during the 1980s and 1990s (Khamboly and Dearing, 2014). It is close to the Cambodian-Thai border where geopolitical issues have also shaped the dynamic nature of the socio-spatial arrangements (see Chapter 3 for details of the Cardamom region).

Two villages were chosen as the primary sources of field information: Samlanh and Chamkar Chrey Tbong. The two villages were selected because they were able to reflect the regional context of the area by providing nuanced socio-spatial formations and territorial contestations of land and resources at the smaller geographical scale. At the same time, by looking at the issues at the village scale, this research was able to explore whether there are differences that could potentially occur at the sub-regional level. Hypothetically, in some aspects, each village’s socio-spatial relations could have been established differently due to differences in the physical conditions of the landscape, even though they have been influenced by similar political and economic phenomena. Additionally, based on observing the map showing the locations of the villages, both villages are located inside the PSWS and near land concessions. Samlanh is located near a mining concession and Chamkar Chrey Tbong is situated close to two economic land concessions. According to information from the primary field visits, there have been conflicts over land in the two villages due to these land concessions. Additionally, conducting village study also allows this research to explore socio-spatial relations in detail by observing social dynamics among different members of the community, understanding authority and leadership, and conducting household level histories. Such detail could shed light on local perceptions of and arrangements regarding land and resources.
4.4. Data collection

This research employed a qualitative approach in order to capture the complex human-environment relationships through personal experiences in the context of rapid social-political transition (also see, Winchester, 2005). Three complementary data collection techniques were employed: (1) participant observation; (2) semi-structured interviews; and, (3) secondary data collection. The participatory observation is to capture the current social environmental relations of the local community on an everyday basis while the semi-structured interviews were employed to further investigate the socio-political history and spatial perceptions. They both complement one another (Winchester, 2005). While semi-structured interviews provide the details on personal narrative and social structure, the participatory observation enhances the depth of the information (Winchester, 2005). The secondary data collection was to gather related GIS database and documents in relation to maps. Further detail on the process and rationale for each data collection tool is provided in the following sections.

4.4.1. Fieldwork and timeline

The fieldwork was conducted in three main stages: (1) fieldwork preparation; (2) data collection at the regional and village levels; and, (3) data collection at the national and provincial levels. Between January and February 2014, I spent one month in Phnom Penh to prepare for the fieldwork (see Table 4.1 for the fieldwork timetable). I discussed with the relevant stakeholders about the possibility of conducting field research in Northwest Cardamom. That preparation also included collecting approval from the Ministry of Environment (Appendix B). I also communicated with local universities, e.g., Royal University of Phnom Penh, to seek their academic advice and collaboration.

The second part of the fieldwork was to collect the field information at the regional and village levels. In total, I spent five and a half months in the two villages and the Northwest Cardamom region between February 2014 and June 2015. The fieldwork was divided into two main stages: preliminary site visits and intensive data collection. The following table provides details of the time period I spent conducting field research, and the types of information collected. During the first two trips, I mainly conducted preliminary field visits to observe the socio-political
situation in the two villages and to gain an improved understanding of this situation within the wider Cardamom region. The trips were also to make initial contact with local authorities and community members whom I was to interview and stay with during the in-depth field study. Additionally, the trips were also to ground-check that the research questions responded to the local issues before the in-depth field trips were conducted.

The next trips were conducted between August 2014 and February 2015. After being familiar with the local context and making contact with some local villagers and authorities, the second stage of the fieldwork was to investigate in more depth. Between August and October 2014, one month was spent in each fieldwork site (village), with occasional travel and visits across the region. The research tools used during these times were participatory observation and informal semi-structured interviews or casual conversation. The last two field trips, conducted between December 2014 and February 2015, were mainly to conduct in-depth interviews with more specific checklist questions. One month was spent in each village (see table 4.1 for the fieldwork timetable, Appendix A for the details of the participants, and Appendix B for the checklist questions).

The third part of the data collection was to gather information at the national and provincial levels. This included conducting semi-structured interviews with stakeholders from the relevant institutions at national and provincial levels, e.g., the Ministry of Environment (MoE), Fauna and Flora International (FFI), and Pursat Provincial Department of Land Management Urban Planning and Construction (participants list is provided Appendix A). During that time, I also collected relevant secondary documents, such as maps, GIS data, state policy, law and NGO documents.

<table>
<thead>
<tr>
<th>Time</th>
<th>Fieldwork</th>
<th>Data collection tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2014</td>
<td>Fieldwork preparation</td>
<td>Conducting interviews and meeting with relevant stakeholders in PP to be better informed about the potential field site.</td>
</tr>
<tr>
<td>February – March 2014</td>
<td>Primary field visit</td>
<td>Participatory observation and informal interviews – less structure</td>
</tr>
</tbody>
</table>
March – April 2014  Primary field visit  Participatory observation and informal interviews – less structure
August – September 2014  Intensive field study  Participatory observation and informal interviews – less structure
September – October 2014  Intensive field study  Participatory observation and informal interviews – less structure
December 2014 – January 2015  Intensive field study  Participatory observation and informal interviews – more structure
January – February 2015  Intensive field study  Participatory observation and informal interviews – more structure
February – May 2015  Data collection at national and provincial levels  Semi-structured interviews and secondary data collection

Table 4.1 Fieldwork timetable

4.4.2. Participant observation

Participant observation is a dynamic interactive technique to understand people and their everyday life (Puri, 2011, Kitchin and Tate, 2000, Chambers, 1994). It creates the possibility for the researcher to have a deeper involvement in and understanding of the place, community and situation (Phillips and Johns, 2012, Chambers, 1994, Musante and DeWalt, 2010). Chambers (1994) suggests that the participatory approach does not only allow local people to share their experiences but also to enhance and examine their own life experiences. Participant observation also provides a nuanced understanding of a current situation through everyday events that happen while the field research is being conducted.

In this research, the participant observation was conducted throughout the whole period of study of the village and region. However, during the early stage of the fieldwork, participant observation was employed more intensively than at the later stage. The technique also allowed me to be better informed about the social dynamics and issues in each village so that further detailed questions could be obtained at the later stage of data collection.
Over the five and a half month period staying in the two villages and across the Northwest Cardamom region, I encountered various activities related to the everyday life of the local community, their relationship with land and resource use and community events. Every day, I engaged in various activities and conversations, for example, going to the farm, chatting in the late afternoon after their farm work, observing morning coffee talks in the shop, witnessing land clearing and demarcation, joining crop harvesting, seeing participants dealing with money lenders, and observing them selling agricultural products.

I also engaged in various community events, including, e.g., community meetings, a land titling collecting ceremony, a wedding reception, and meetings with conservation organisations. By participating in meetings and events, I could observe social interactions in different contexts apart from their everyday routines; interaction with government officials, the relationships with other community members, meetings with NGO workers, and the relationship with government policies e.g., land titling. At the same time, it allowed me to build a relationship with the participants and local authorities in communal situations.

Apart from participating in their daily activities and events, I also conducted multiple trips wandering and exploring the studied villages and across the region to be better informed about the locations participants mentioned during the conservations and interviews. I could establish a better sense of the organisation of village land and resources, demographic distribution and regional spatial relations. Wandering within the villages also helped to inform the villagers of my presence in the village, so when the interviews or participant observation were conducted people were already sometimes aware of my work. Travelling through the landscape helped me to establish a sense of the regional context of the area. At the same time, I witnessed other development projects happening beyond the villages that I studied. The trips included walking in different parts of the villages, the forest, farmland, land concessions, and community protected areas, and driving a motorbike to the Cambodian-Thai border, other villages, and district towns.
4.4.3. Semi-structured interviews

Interviewing is the process of searching, contacting, meeting, and interacting with participants to gain insights from their experiences and knowledge (Phillips and Johns, 2012). It is a favoured data collection technique employed by many geographers to investigate the historical, political, and economic conditions of place (Phillips and Johns, 2012). Semi-structured interviewing is a method that uses an interview guide that is prepared in advance to aid in the obtaining of information. The questions are mostly open-ended and related to the research topic (Newing et al., 2011). The technique provides sophisticated information from participants with particular knowledge in a specific field or experience. The technique allows the researcher to explore in-depth information from particular persons and to explore the views of a specific population group (Newing et al., 2011).

In this research, the semi-structured interview was conducted for three purposes: (1) to enable clarification of the information that I collected from participant observation, (2) to investigate the knowledge that has been constructed beyond the contemporary time and space (i.e. to provide some historical accounts); and (3) to explore perceptions and narratives of landscape from different groups. The semi-structured interviews complemented the participant observation by enhancing the clarity of the related information from observations, as it provided verbal information to verify what I had observed. Additionally, the semi-structured interviews were also conducted to investigate the socio-political events that had occurred beyond the time the research was conducted in Northwest Cardamom. It collected people’s perceptions about space that had been formed outside of the study locations and before the research period. Given that the land and resource issues occurring at the study site have been established through a long and complex socio-political history, it is essential to understand the historical events embedded in the local community’s memory and perceptions (also see, George and Stratford, 2010). Moreover, the people who inhabited the study site had moved from different places. Additionally, semi-structured interviews enhanced the investigation on diverse personal narratives and perceptions of space.
Two forms and stages of interviews were conducted: (1) casual interviews and conversations with loosely structured questions; and, (2) more structured interviews with listed open-ended questions. Two hundred and ninety-four interviews were conducted and written notes were taken (see Appendix A). Out of the two hundred and ninety-four interviews, seventy are more structured interviews with a list of open-ended guiding questions, of which thirty-five were conducted in each village. Some of the interviews were repeated interviews and others were conducted once with each respondent.

To ensure the diversity of participants, the interviews were conducted in different parts of the villages and at various locations within the region. Diverse population traits were considered in recruiting participants, so factors such as gender, economic status, authority status, age and occupation were taken into account. Additionally, to ensure that the interviews took place under different conditions, they were conducted at various micro-locations; for example, at the villagers’ residences, in the farmland, at the local food shop and or in the forest. Interviews were also conducted at different times of the day, including in the late afternoon after villagers returned from their farm, during the daytime when they were doing farming, or in the morning before they headed to the farm.

Apart from collecting data in the field with local community members, the semi-structured interviews were also used with key participants, including the local authorities at the district centre, the provincial town of Pursat, and the capital city of Phnom Penh. The questions for each participant were guided by field information. Participants included government and non-government organisation staff at district, provincial, and national levels, e.g., a ranger manager at the Phnum Samkos Wildlife Sanctuary, the district governor, the head of the Provincial Department of Environment, and staff working for international organisations: the full list of the informants is provided in Appendix A.

The participants were both randomly and purposely chosen. Some participants were randomly interviewed when I accidentally encountered interesting conversations relevant to the research.

7 The research interviews were mainly conducted in the two selected villages; however, there were also interviews conducted at other locations within the region that were not necessarily located inside the two villages.
topic. Some other participants were randomly selected according to geographical distribution. For example, to be able to cover people from different sections of the villages, I randomly chose at least a few participants who lived in each sub-section of the village. Other participants were purposely selected according to their in-depth knowledge of a particular topic. i.e., the village head, a commune council member and the district governor were purposely interviewed because they were able to provide general demographic and land use information for the village, commune and district. Some former KR were interviewed because they were able to provide an in-depth historical background of the region/villages. Other participants were deliberately selected because I was informed by previous participants that they had in-depth knowledge/experience of a particular issue.

4.4.4. Secondary data

This research used secondary data to unpack the production of space through cartography. I used the secondary data to investigate the rationalities, processes and representation of cartography in constructing Northwest Cardamom from political, economic and conservationist perspectives. GeoCoder data (GIS data), map archives and related official documents were collected from different sources, e.g., online databases, and related government and non-government institutions. The online sources include; for example, Open Development Cambodia (ODC) and Cambodia League for the Promotion and Defense of Human Rights (LICADHO). The government and non-government institutions include Pursat Provincial Department of Land Management, Urban Planning, Provincial Department of Mines and Energy, Provincial Department of Environment, and Construction, and Fauna and Flora International.

4.5. Information and interpretation

Three different forms of information were collected; non-verbal observation, verbal information, and secondary data (textual and virtual). The information was transformed into different textual forms, e.g., description and interpretation of participant observation, direct quotations and verbal interpretations from the interviews, textual and virtual interpretation of secondary data. The observations and interviews were written in the notebooks during the field
data collection. No data processing computer program was used. Once the fieldwork phase had finished, in order to identify the information and source of the data, Excel was used to create a data spreadsheet. Within the spreadsheet, each interview was assigned a code with a number to be able to identify it.

Chapter 5 elaborates on how formal boundaries have been constructed and how that reflects on the conceptualisation of space made by the state and its associated agents, e.g., conservation, development and political actors. The chapter is mainly based on the critical interpretation of the maps that I created from GIS dataset and existing maps. The GIS dataset was examined using geoprocessing tools in ArcGIS to demonstrate how the four types of boundaries exist in the study area and how they are related to each other. Particular geoprocessing tools in ArcGIS, e.g., Calculate Geometry and Intersect, were used to calculate the size of the geographical areas of the boundary and their intersecting areas. ArcMap in ArcGIS was used to generate maps representing boundaries over the landscape. To critically elaborate on the maps and the process of making them, other secondary data such government laws and policies, non-government organisation reports, and other existing local literature were also discussed. The chapter was also partially supplemented by primary data from key participants conducted through semi-structured interviews and participant observation. Minimal participant observation information was used in the chapter.

Chapter 6 elaborates on how the region and villages have been spatially formed by investigating the socio-political history and spatial organisation of the landscape. To investigate the historical patterns, the major source of data was based on semi-structured interviews with key participants including local administrative authorities, e.g., provincial government officials, district governors, commune chiefs and village heads. Information was also collected from other participants, e.g., former KR members and senior people who have more knowledge about the region and the two villages. To elaborate on the spatial organisation of the landscape, I also created some maps using open GIS data sources, e.g., google imageries, road maps and river maps. The created maps were discussed with the field observations and interviews.
Chapter 7 discusses the local conceptualisation of space through investigating personal narratives, everyday life and opinions related to land and resources. In the chapter, I attempt to understand people’s personal narratives from different groups and examine how individual stories are linked to the Northwest Cardamom region and its transition. The chapter also explores how people’s everyday lives are conducted within their living conditions in relation to both socio-economic and physical conditions. Through examining people’s history and everyday life, I explore how they establish their perception of the space they are locating themselves in. These personal backgrounds, everyday experiences and perceptions of space then link to how they access land and resources. Therefore, information from both participant observation and semi-structured interviews were used in the chapter. People’s personal and historical narratives were discussed based on direct quotations, emotional expressions and individual stories. The chapter was also complemented by participant observation to reflect on their current social, economic and physical conditions.

4.6. **Positionality and reflexivity**

My education and personal background provide me with sophisticated knowledge and a valuable skill-set to conduct research in Cambodia on land and resource related issues. However, I acknowledge that these same capabilities also have potentially shaped how I both conduct the research and interpret the information received from the field and literature. My positionality may have also shaped power relations with research subjects and subjectivity during the field data collection and subsequent representation of this information (also see, Mansvelt and Berg, 2005, Puri, 2011).

Being a Cambodian national and able to speak Khmer made conducting field research a relatively easy – by comparison with non-Khmer and non-Khmer speakers – experience (Scott et al., 2006, Nasif et al., 1991). First, I was very welcome and understood by the local villagers as an insider in term of my cultural and national identity. Second, it allowed me to work independently. I did not require a translator or research assistant during my fieldwork. Therefore, I was able to collect the information more independently and flexibly, which suited my research objectives and data collection methods. Being able to speak the local language also
allowed me to conduct participant observation with less intervention on participant interaction. The casual conversations occurred more naturally. However, being alone in the field also has a disadvantage.

Even though I am a Cambodian who grew up in Cambodia and can speak the local language, in many regards, I was still considered an outsider to the villagers (see, Hellawell, 2006, Silverman, 2013). I was perceived as an educated person; having received an education in the city (Phnom Penh) and overseas (Australia). I am not and have not been a farmer so I might seem to lack an appreciation or understanding of just how tough the life of a farmer and life in a rural remote community might be. I am a person who has never experienced war or the KR regime. Therefore, while encountering older participants who have been through Cambodian political trauma, I was considered to be from the post-KR generation whose experiences are different. I am a man who may not understand the female participants’ perspectives (Herod, 1993, Warren, 1988). To be truthful about my identity, and to respect the integrity of the research process, I explained my research topic, academic life and personal background to the participants throughout this study. I conducted multiple visits to some places within the villages of study. I also conducted multiple visits and conversations with key participants (see Table 4.1 for the research fieldwork timetable).

Being a Cambodian who has received an education and has work experience in Cambodia and Australia allowed me to reflect critically on Cambodian socio-political transitions and current land and resource issues. I finished my undergraduate degree in Environmental Management at the Royal University of Phnom Penh, Cambodia and my master’s degree in Geography at the University of Sydney, Australia. I conducted both my degree dissertations on Cambodian land and resource issues. From the point of view as a Cambodian scholar, I am studying about my own country and myself; therefore, I can engage with the Cambodian intellect as an insider. Additionally, before participating in the PhD program, I had also been teaching and working in land and resource related research in Cambodia (some of my publications include, Frewer and Chann, 2014, Chann, 2009, Chann et al., 2011). Being able to access the Australian educational system, I have been exposed to different forms of knowledge, literature, intellectual debates
and academic communities. This exposure also allows me to investigate land and resource issues in an alternative conceptual framework, e.g., political ecology, frontier study, the production of space.

I also acknowledge that it is challenging to engage with two different academic systems and philosophies. Considering myself as a Cambodian scholar, I cannot separate national identity from academic expression. In that sense, self-political and cultural identities cannot completely be separated from me even though I am a scholar whose knowledge and expression is supposed to be objective and universal. From the University of Sydney or the perspective of an international scholar, I should be able to neutralise my research position or be critical about the identities that are shaped by nationality and cultural identification. Additionally, I wrote my dissertation in English, applying English language literature and concepts. I am aware that using the Eurocentric intellectual framework and language to unpack Cambodian land and resource issues is just one of many approaches. The land and resources issues in Cambodia have been constructed through a complex socio-political context in which Khmer is used as a primary language.

My upbringing has also shaped my perspective on contemporary Cambodian socio-political conditions and land issues. Born in the mid-1980s, I have been through a rapid transitional period of Cambodian history. These experiences have provoked my curiosity and understanding of the socio-political journey. I attended primary school in the small provincial town of Kampot in the early 1990s when the United Nations Transitional Authority in Cambodia (UNTAC) was assisting Cambodian political reconciliation. The UNTAC military and the election in 1993 was the earliest political realisation I encountered. I was aware of those political phenomena. However, I had never been able to critically explore the political issues until I conducted my research in one of the former KR strongholds. The conversations with former KR militants brought me back to further investigate Cambodia’s past and myself. In order to better understand the current Cambodian land and resource issues, especially in a former KR stronghold, it is essential to know its past. Additionally, I have also witnessed people including my parents, friends, relatives and colleagues losing their land and occupations due to land
grabbing and other forms of development projects. All of those experiences and political consciousness have provoked my curiosity to understand Cambodia’s transitions and myself. However, I acknowledge that the experiences, knowledge and curiosity have their implications in shaping my interaction with the research participants, the information I perceived, and presenting my research results.

It is challenging to conduct research about the political struggles in a former KR stronghold from the perspective of someone from a non-KR related background. However, it allows me to see Cambodian history from a different dimension (see, Wesche et al., 2010, Szymańska-Matusiewicz, 2014). My position as the second generation of KR victims may contribute to my interaction with participants and my interpretation of the research information. Some of the people I encountered and key participants were former KR militants. I was born and grew up in non-KR controlled territory during the 1980s and 1990s. My parents never considered themselves to be associated with the KR revolution, but rather as victims of the regime and the war. I considered myself to be the second generation of the victims of the KR revolution and the postwar struggle. Staying in the village and hearing the stories from the ex-KR was challenging. It was difficult to reconcile my perspective on their stories and my parents’ stories. However, it allowed me to hear Cambodian political history from a different dimension that I would not be able to understand without doing the research. I could hear the story from the other side of that history. To better understand the ex-KR participants, I spent longer and multiples times engaging with them and focusing on their stories, not their past political identities. I considered them the same as every other person from a non-KR related background whose life has gone through political trauma.

4.7. Ethical and legal considerations

To ensure that the research was ethically and legally conducted, I implemented some procedures and a code of conduct, before conducting the fieldwork, during the field data collection and when presenting my research results. The research received ethical approval from the University of Sydney Human Ethics Committee before the comprehensive fieldwork was conducted (see Appendix C). The research also received annual approval from the ethics
committee to confirm that the progress of the research had been conducted in an ethical manner. Before conducting the field study, I also received a permission letter from the Ministry of Environment of Cambodia to conduct field research in the Phnum Samkos Wildlife Sanctuary. The letter was presented to the local authorities, e.g., village heads, commune councils, the district governor, commune police officials, and Phnom Samos Wildlife Sanctuary Officers (see Appendix D).

While conducting the field research, I ensured that the interaction with the local community was ethically and socially appropriate. In addition to complying with the ethical guidelines outlined in the formal university ethical process (see, NHMRC, 2007) I made sure that the participants felt comfortable being observed, with the questions being asked and my presence there, before and during the interviews and when the observations were conducted. I always asked for permission before being invited to engage in any activity or event. In most cases, I formed multiple communications with the participants with whom I conducted in-depth observations and interviews.

In this research, the confidentiality of the participants is preserved. I ensured that the participants’ identities are anonymous in this research. The real names and detailed positions of the participants are not presented in the research. Additionally, all the secondary data such as the maps and statistics are either publically available or permission was granted by the sources.

4.8. Summary

This chapter discussed the conceptual approaches, data collection tools and reflection on my positionality on the research processes and outcomes. Regarding the conceptual approach, this research explores the concept of the production of space to elaborate on the process of frontier-making (emptied out space). This approached is termed the political ecology of frontier. Two different processes and groups of actors were observed, i.e., maps and state-based processes vs direct interaction and localised place-making. Critical cartography was employed to critically examine how state-based actors exploit maps to construct the landscape in order to exclude other actors from accessing land and resources. The localised place-making
process was employed to understand how space is constructed and organised locally as the result of social-political phenomena and the physical conditions of the landscape. By observing the localised place-making process, this research also examines how the local community accesses land and resources by excluding other local actors from accessing them and by navigating the state-based representation of space. The research materials are based on a selected case study located in the Northwest Cardamom region, Cambodia. Three research tools were employed to collect the field material, including participatory observation, semi-structured interviews, and secondary data gathering. Each tool generates a different form of information that was used to answer the research questions. The following three Chapters (Chapters 5, 6 and 7) will elaborate on the results of the research. They are arranged according to the research themes (see Section 4.7 on how the research findings are arranged).
Chapter 5: Cartography and the Frontier in Abstraction

5.1. Introduction

The notions of frontier in abstraction and cartography examine the dialectical relations between spatial idealisation and representation of space introduced by state-based actors, namely political elites, conservationists and development agencies. This chapter investigates how state-based actors’ idealisations of space are actualised and presented on maps. Frontier in abstraction implies the idealisation of the landscape as sparsely populated or empty, so that other forms of development, conservation and political rationales can be inserted on the landscape. This abstraction of frontier also suggests that the state-based spatial arrangements are primarily based on spatial simplification so that territories can be presented as sharp lines that can be introduced into the physical landscape. These relations between the state-based actors and the landscape are not based on the complex socio-spatial interactions that have been established over a complex history, but rather they simplify the socio-spatial relations at a particular time in order to impose territories onto the landscapes.

This chapter aims to unpack the complexity of the spatial constructions of Northwest Cardamom by state-based actors, e.g., conservation organisations, the political elites and development agencies. In particular, in this chapter, the processes of cartography and formal “boundary-making” by these key actors are critiqued. I argue that the use of cartography associated with modern spatial technologies such as GIS allows political elites, conservation groups, and development agents to establish a “new” frontier by inserting their perspectives and rationalisations into apparently “empty” spaces. Maps create an abstract frontier. Once mapped for a particular purpose (e.g., conservation) these abstract spaces take on a reality, which is built upon when the next map is produced. Four types of boundaries imposed on the area are examined through their rationales, histories, processes and outcomes. They include the formation of a district, the establishment of a wildlife sanctuary, the granting of land concessions, and the implementation of private land titling. Each of the four boundaries forms one of the key sections of this chapter. This chapter, which comprises six sections, starts by
presenting the formation of a district called Veal Veaeng. The following section discusses the construction of a wildlife sanctuary called Phnum Samkos Wildlife Sanctuary (PSWS) followed by the establishment of land concessions. The next section illustrates the construction of a private land titling program known as the Order 01 Land Titling Campaign (O01LTC). A summary is provided at the end of the chapter.

5.2. Veal Veaeng - a district of political compromise

The establishment of the district called Veal Veaeng in Northwest Cardamom was a mechanism for political compromise between the central government and the Khmer Rouge (KR) military during the late 1990s. Northwest Cardamom was considered a dedicated space for ex-KR to have their own territory consisting of land and resources so that they could fulfil their livelihood needs after integrating with the central government. A total area of approximately 440,000 hectares (ha) was dedicated to forming a new district in Northwest Cardamom in the late 1990s (Department of Geography, 2008). The district was then divided into smaller sections encompassing communes and villages. At the time the district was established, administrative and political members ranging from village heads, commune heads, to the district governor were former KR military leaders. This section provides the construction of abstract space from the central government perspective, based upon their political rationales to allocate a district in Northwest Cardamom for the former KR population.

5.2.1. Two decades of political tension and compromise

Two major reasons were provided by ex-KR militants and provincial government officials as to why Veal Veaeng was formed as a district during the late 1990s: (1) because the central government could not exercise control over the ex-KR population immediately after political reconciliation; and, (2) because the location where the former KRs were settling was too remote to be reached by central and provincial governments.
A recently retired head of the Provincial Administration Office, Chhun, described why the central government decided to establish a new district in the late 1990s.

“Through the Win-Win strategy of the Prime Minister (PM), we must organise a new district for those former KR to establish their own governance body. That was the government strategy. They (the ex-KR) could go wherever they wanted to go, but they got their land there. Their coconut, bamboo, and mango trees were already there. The government had said that they should settle down wherever they were at the time. We did not take away from them. We did not understand them as much as they themselves did. Therefore, we could not control them, but they themselves could. We let Thorn be the district governor because he was the only one who could control the population. They also knew their people more than we did. So we went there just to support them. Thorn was the general of the army of the area. Everyone there listened to him. That was similar to Echean in Pailin. Thorn was the person whom they respect” (Interview 279).

Chhun also described how the district was formed:

“That started in 1996-1999. 1997 was when we started to communicate through mail not direct contact yet. We could not contact them directly up until 1999. At first, the district centre of Veal Veaeng was not located in Pramaoy yet. It was proposed to be in Toul Kros about 80km from the Pursat Province. In 2000, the district centre was formed in Pramaoy where it is currently located. We divided up into 5 communes and we helped to organise the administrative structure. We sent our government officials there including the army, police, and district officers to work with them, but let them be their own leaders.”

Some senior provincial officials who worked with the central government during the 1990s explained that the other reason the government decided to establish a new district at the

---

8 All names used in this thesis are pseudonyms to preserve confidentiality
western edge of Pursat Province was that the area was too remote from the province’s centre. Therefore, it would be hard for the provincial government, based in the centre of the province, to have control over the area. Chhun and other provincial officials said that it made more sense to establish a new district for the ex-KR in Northwest Cardamom than to locate at a sub-district level. Veal Veaeng was too far away and the area was too large to establish a local sub-district government under the district of Phnum Kravanh (Interviews 272, 278, and 279).

5.2.2. Dividing up landscape and the abstraction of geopolitical space

In the late 1990s, a sharp boundary was drawn to establish a new district covering approximately 440,000 hectares of land in Northwest Cardamom at the edge of Cambodian territory towards the border of Thailand (Department of Geography, 1998). The district was formed by splitting up a district in Pursat Province called Phnum Kravanh District. Landmarks demarcating the political history between the KR and the central government in the 1980s and 1990s played an important role in defining the division of the new district of Veal Veaeng and the old district of Phnum Kravanh. To the east, the boundary was drawn predominantly on the peaks of hills that at the same time overlapped with the zone separating the KR and the central government in the 1990s. Mr. Sokhorn, recalling his memory of living in the centre of Phnum Kravanh District, said that no one from Phnum Kravanh District would dare to pass through Rovieng (Figure 5.1). Rovieng was where the KR established their military frontline. During their negotiations to seek integration in 1996, the KR met with central government officials in Rovieng because the officials did not dare to go into KR territory (Interview 268). The same story was recounted by the former KR armies who said that they had reached and set up their frontline near Rovieng (Interviews 151, 162, and 166). As shown on the map, the eastern boundary of Veal Veaeng District is just over three kilometres west of Rovieng (Figure 5.1). Figure 5.2 also shows the overlapping boundaries between the ex-KR military stronghold and the current Veal Veaeng District.
Figure 5.1 Boundary map of Veal Veaeng District and Phnum Kravanh District (Department of Geography, 2008)
Other parts of the new district boundary overlap with existing administrative boundaries. To the west, the district boundary line is the Cambodia-Thailand national border. To the north and south, as can be observed on the map, the district boundaries were predominantly drawn based on the peaks of the mountains. The cartographers seem to have used the existing boundary of Phnum Kravanh District or the provincial boundary of Pursat drawn prior to the establishment of the district. The locations of the boundaries suggest a combination of natural physical demarcations as well as artificial political boundaries, especially in the east and west.

Five communes were formed in the dedicated area of the new district. Three to five villages were located within each commune due to the distributed clusters of their locations (see Figure 5.3). The village locations were based on the permanent settlements of those KR during the 1990s (Chapter 6 provides the details of the history of settlement). The centre of the district, where the majority of the population was located, was divided into two communes; the district centre’s commune of Pramaoy, and the Anlong Reab Commune (see Figure 5.3). There were five villages located within each of the two communes. To the other edges of the two communes, the boundaries were drawn on the tops of the peaks (see Figure 5.3). To the west, a commune of Thmar Da was formed near the Thai border. The commune’s centre is separated from others to the east by a high peak. Three villages were located on a plateau near the Thai
To the north, three villages were grouped to form another commune called Krapeu Pir. To the north, these villages within the commune are separated from other villages by the peaks of the hills and from the centre by deciduous forest. A roadway is partially used as the boundary separating the Krapeu Pir Commune and the Pramaoy Commune. To the south, a commune was formed further into the centre of the Cardamom Region. The commune’s centre, which is located on a plateau, is separated from the other communes by the peaks. The boundaries of the commune were also drawn on the peaks (see Figure 5.3).

The boundaries of the villages are not delineated in the official government administrative unit and state geo-database. A village is presented as a point in space where the centre, of a collective group of households is located. For this reason, the village boundaries could be either contested or ignored by the village heads and commune authorities. Based on observations during my field study of the two selected villages, the boundaries of the villages among the nearby villages were either verbally agreed upon or under negotiation among village head(s) with the recognition of the commune council. The negotiations of boundaries between two villages occurred when the authority over land and populations was contested among village heads. Regarding villages further away, for example, those in different communes, the village heads did not seem to know where they were actually located. However, the boundaries of the commune could also be used as village boundaries if they needed to be defined.
5.2.3. The invisible

Not all of the villages located in the areas have always appeared in the state’s geo-database or were legally recognised by the state. Two major censuses have been conducted across the country: one in 1998 and the other in 2008. In the 1998 census, the villages across Veal Veaeng did not appear in state statistics or the geo-database. The following map (Figure 5.4) shows that settlements in the Northwest Cardamom area, along with many other villages in the northwest
of the country were not yet recognised by the state in 1998. Those villages only appear in the 2008 census data (Figure 5.5). The region was presented as devoid of human population.

Figure 5.4 Villages of Cambodia and Veal Veaeng from 1998 census data
Many of the current collective settlements constantly being formed are not officially recognised by the state. Take Krapeu Pir for example; only three villages are currently recognised by the provincial and central governments and included in the state’s geo-database. From the field interviews conducted with members of the commune council, I learned that at least four other villages currently established within the commune territory have not yet been officially accepted and represented by the provincial and central governments. The commune authorities acknowledge their existence, but there is no form of formal legal recognition. The following figure shows the population status collected by the commune council of Krapeu Pir.
(Figure 5.6). Out of eight villages, only three are currently recognised as official villages. The official villages are Krapeu Pir Lour, Krapeu Pir Kroum and Samlanh – the first three villages listed in the following table (Figure 5.6). The population figures of those deemed unofficial villages are higher than those deemed official (Figure 5.6).

### Population status of Krapeu Pir commune in 2014

<table>
<thead>
<tr>
<th>Village</th>
<th>H</th>
<th>Population</th>
<th>Over 18-year-old</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T</td>
<td>F</td>
<td>T</td>
</tr>
<tr>
<td>Krapeur Pir Lour</td>
<td>152</td>
<td>654</td>
<td>304</td>
</tr>
<tr>
<td>Krapeur Pir Kroum</td>
<td>138</td>
<td>563</td>
<td>294</td>
</tr>
<tr>
<td>Samlanh</td>
<td>144</td>
<td>461</td>
<td>229</td>
</tr>
<tr>
<td>Krasang Phnov</td>
<td>269</td>
<td>1226</td>
<td>584</td>
</tr>
<tr>
<td>Kapong</td>
<td>135</td>
<td>545</td>
<td>264</td>
</tr>
<tr>
<td>Smett</td>
<td>125</td>
<td>625</td>
<td>363</td>
</tr>
<tr>
<td>Ochek</td>
<td>124</td>
<td>527</td>
<td>266</td>
</tr>
<tr>
<td>Preatit</td>
<td>No figure</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

T= Total; F= Female; H= Household number

Figure 5.6 Population status of the villages in Krapeur Pir commune (source: statistic from Krapeur Pir commune council and the photo from the author.)

In sum, the political division between the KR military and the central government in the 1990s created a district. The abstraction of space was based on the granting of 440,000 ha of land to contain ex-KR populations and military entities. The district was formed within the edge of the country. Sub-division of the district was established by dividing the district into communes where villages are contained. When drawing the boundary that contained the ex-KR population, geographical features including hills, roads, or forests as well as the geopolitical history were incorporated to demarcate the space. Regarding the representation of peoples living in the
landscape, some were missing at the particular time of the state’s visualisation; indeed some villages are still missing from the current state database.

5.3. The Phnum Samkos Wildlife Sanctuary (PSWS) and conservation territory

Along with 22 other protected areas established across the country, in 1993, the Phnum Samkos Wildlife Sanctuary (PSWS) was created. In accordance with the conservation discourse that emerged in the early 1990s, the central government dedicated over 300,000 hectares of land covering the northwest of Cardamom to form the PSWS. Based on the state’s rationalisation, creating Protected Areas was to ensure the protection of natural biodiversity, e.g., forests, wildlife and land (The Atlas of Cambodia, 2006). There were no ground observations conducted to create the PSWS because of security reasons, so different forms of geo-database were used to assist the central government in establishing the wildlife sanctuary. The PSWS significantly overlaps with Veal Veaeng District. Between 2003-2006, under the supervision of and with support from an international conservation organisation called Fauna and Flora International (FFI), the allocated wildlife sanctuary was divided into four different zones defining the restrictions on the use of land and resources. This section provides the overall processes, outcomes, and rationales that have shaped the conservation territory and its division of space. Details of the contestation of conservation and local government administrative territories are also provided in this section.

5.3.1. Phnum Samkos Wildlife Sanctuary and early 1990s conservation

There was neither access to the area nor demographic information considered during the drawing of the boundaries of the PSWS. As suggested earlier in my review of the political history of the region, because of the KR stronghold and the existence of landmines in the 1990s, it was impossible for the newly established Ministry of Environment (MoE) to conduct empirical research to establish the PSWS. One of the senior officials at the MoE confirmed that accessibility to the area was not possible until the early 2000s (Interview 270). Thus the PSWS boundaries were drawn omitting human inhabitants (see section 5.3.3).
Geo-databases were predominately employed to draw the boundaries of the PSWS. An informal discussion with one of the key international consultants who assisted the MoE in establishing the Protected Areas (PAs) in the early 1990s revealed that some geo-databases e.g., forest cover maps, soil maps, and remote sensing imageries were used to assist the designation of the PAs across the country including the PSWS (Interview 287). Those data helped to identify the potential of the biodiversity of the area. A senior MoE officer involved in the process also confirmed that some French map archives were also used to assist the designation of PAs in the early 1990s (Interview 270). It may also be observed in the reserved forest map created in the 1930s, during the colonial era, that the PSWS overlaps with the designated forest reserve (Figure 5.7).
Figure 5.7 PFs during French Colonial rule (top left), PAs (top right), Colonial Protected Forest in Northwest Cardamom (bottom left), and the PSWS (bottom right)

Source: General Government of Indochina (1930)
*The map legend was translated by Jean-Christophe Diepart*

Source: Save Cambodia’s Wildlife and ODC 2015

Legend:
- **Protected areas**
  - National Park
  - Wildlife Sanctuary
  - Protected Landscape
  - Multiple Use Area
  - Protected Forest
  - Fish sanctuary
  - Marine protected area
  - Ramsar site
  - Zoo

- Forest monitored - concession
- Protected Forest above 500 m
- Area managed
- Forest reserve
- Flooded forest

- Krong (City)
- International boundary
- Province boundary
- Water body
- Seagrass
- Wetland

- Koh Kong
- Central Ca
The central government employed maps to design PAs according to its political and economic rationales. The dependency of Cambodia’s economy on logging in the early 1990s played an important role in the process of designing the PAs (also see Le Billon, 2002). The internal consultant, who assisted the MoE to establish the PAs, stated that more than 23 PAs were proposed during the early 1990s; however, some locations were not approved by the government (Interview 287). That was because some areas were already granted forest concessions over a 20-25 year period by that time (Interview 287). An international non-government organisation officer working in the forest sector observed that if the area was accessible, it would not be granted a PA in the early 1990s. Some areas such as Prey Long, one of the Cambodian largest forests containing huge biodiversity potential, were not granted environmental protection but were granted forest concessions (Interview 268). The boundaries of the forest concessions; therefore, played an important role in shaping the boundaries of the PSWS. In order to avoid the overlap between the forest concessions and the PAs, maps were used to coordinate the boundaries between the two. The following maps show that with the exception of the granted PSWS, the surrounding areas were allocated for forest concessions (Figure 5.8). The maps also show that very precise coordination between the PSWS and the forest concession boundaries were drawn, which clearly shows that geo-databases were highly involved in the centralised abstract arrangement of space.

Source: Save Cambodia’s Wildlife and ODC 2015

Figure 5.8 FC (top) and PA (bottom)
5.3.2. The overlapping territory

Current and former district governors were concerned, regarding the key issues in Veal Veaeng District, that most of the land was located inside the conservation area (Interviews 147 and 166). The substantial amount of overlapping area between the PSWS and Veal Veaeng District located the population within the confined space of a local administrative unit and conservation territory. Based on the geometric calculation of the intersecting areas between Veal Veaeng District and the PSWS, almost 60% of the district area overlaps with the PSWS, while more than 75% of the PSWS is located in Veal Veaeng District territory (Table 5.1). According to the 2008 census, most of the villages in Veal Veaeng District were located inside the overlapping zone (Figure 5.9). This also implies that a significant amount of the land being used by the local population was inside the conservation area. The other part of the district also overlaps with other conservation areas (Protected Forest) which is beyond the scope of this research.

<table>
<thead>
<tr>
<th>Name</th>
<th>Total area (ha)</th>
<th>% of overlapping area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veal Veaeng District</td>
<td>435,971</td>
<td>59%</td>
</tr>
<tr>
<td>PSWS</td>
<td>332,561</td>
<td>77%</td>
</tr>
<tr>
<td>The overlapping area</td>
<td>255,893</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 5.1 Geographical overlap between the PSWS and Veal Veaeng District

---

9 The other part of the district also overlaps with other conservation areas (Protected Forest) which is beyond the scope of this research.
10 The total size of the PSWS differs slightly between the statistics of the MoE and the Geodataset used for the calculations. However, to make it consistent, all the calculations were based on the Geodataset. The official size of the PSWS is 333750 ha. Source: RGC 1993. Preah Reach Kret (Royal Decree) on the protection on natural resources. Phnom Penh: Royal Government of Cambodia.
5.3.3. The division of human versus biodiversity

Management of the PSWS could not be conducted until the year 2000 due to limited accessibility to the area during the 1990s, along with the lack of financial and technical capacities. While the designated PSWS existed on the central state database, the implementation could not be conducted on the ground. The MoE had neither the technical skills nor the financial capacity to implement conservation policies on the PAs. Political integration in the late 1990s opened up the region. In the early 2000s, with the funding and technical support of an international conservation organisation called Fauna and Flora
International (FFI), the PSWS was classified into different land classifications, dividing up the wildlife sanctuary into different zones of usage and interaction. This classification aimed to support the MoE’s plan of action to manage the PSWS (Interview 257). The following sections detail the processes and outcomes of the PSWS conservation zoning.

5.3.3.1. Classification, process, and outcome

Interviews with three key members of the FFI provided some history of the classification of the PSWS (Interviews 264, 267, and 285). In the early 2000s (2001-2003), FFI started assisting the MoE in organising PA management plans and implementation, and the PSWS was selected as one of the targeted areas. One of the management plans was to divide up local land use and conservation areas, given that there were local people inhabiting the area. The PSWS classification program was known as the Zoning Project. By mid-2006, the PSWS was classified into four zones including: (1) Core zone; (2) Conservation zone; (3) Sustainable use zone; and, (4) Community zone. This classification was based on the draft MoE’s Protected Area Law at the time.

Each of the zones has restrictions and regulations on land and resource uses. Based on the Protected Area Law that was released later in 2008 (RGC, 2008), the zones are defined as follows:

1. Core zone: management area(s) of high conservation value containing threatened and critically endangered species, and fragile ecosystems. Access to the zone is prohibited except for the Protection Administration’s officials, researchers who, with prior permission from the Ministry of Environment, conduct nature and scientific studies for the purpose of the preservation and protection of biological resources and the natural environment, and the exception of the national security and defense sectors.

2. Conservation zone: management area(s) of high conservation value containing natural resources, ecosystems, watershed areas, and natural landscape located adjacent to the core zone. Access to the zone is allowed only with the prior
consent of the Nature Conservation and Protection Administration in the area with the exception of the national security and defense sectors. Small-scale community use of non-timber forest products (NTFPs) to support the livelihood of local ethnic minorities may be allowed under strict control, provided that they do not present serious adverse impacts on biodiversity within the zone.

3. Sustainable use zone: management area(s) of high economic value for national economic development and management, and conservation of the protected area(s) itself, thus contributing to the local community, and the improvement of the livelihood of indigenous ethnic minorities. After consulting with relevant ministries and institutions, local authorities, and local communities in accordance with relevant laws and procedures, the Royal Government of Cambodia may permit development and investment activities in this zone in accordance with the request from the Ministry of Environment.

4. Community zone: management area(s) for the socio-economic development of the local communities and indigenous ethnic minorities and may contain existing residential lands, paddy fields and field gardens or swiddens (Chamkar). Issuing land title or permission to use land in this zone shall have prior agreement from the Ministry of Environment in accordance with the Land Law.

There were two teams, which were supervised by FFI, involved in the Zoning Project. One of the teams was the ecological team which included FFI-MoE experts responsible for conducting ecological surveys to determine the area’s biodiversity potential and its distribution (Interviews 264 and 285). Different geo-databases were employed and overlaid to define the first two zones - Zones 1 and 2. The following maps (Figure 5.10) derived from the report on the processes and outcomes of the Zoning Project by 2006 show some of the information used to define the two zones (FFI and MoE, 2006). Five different spatial data layers were combined including geology, evergreen forests, watershed areas, bird habitat areas, and significant species habitats (Figure 5.10). Taking all of the factors together, the result, featured in the last
map, shows that most of the area was classified as core and conservation zones, leaving small patches at the centre for potential allocation as Zones 3 and 4 (FFI and MoE, 2006).

Figure 5.10 The processes of defining Zones 1 and 2 (FFI and MoE, 2006)
The other team was responsible for conducting social research and consultation to define a sustainable use zone (3) and a community zone (4). This involved participatory mapping in conjunction with high-quality aerial photographs determining the land and resources being used by local communities (Interviews 264). That team included local authorities from the provincial to village level and local community members (Interview 264). The factors to be considered in the zones included the existing residential areas, agricultural land, and resource areas being used (FFI and MoE 2006). Under the definition of the Protected Area Law 2008, sustainable use zones include Community Protected Areas (CPAs). A CPA is one of many ways that the sustainable use zone (Zone 3) can be used (RGC, 2008). For this reason, the Zoning Project formed most of Zone 3 into a CPA. Therefore, in this PSWS Zoning Project, defining Zone 3 is almost equivalent to defining the CPAs.

The two teams combined their results to generate an overall map showing the PSWS divided into four zones (Figure 5.11). The following map shows the outcome of the Zoning Project by 2006. A very small proportion of land was classified as Zones 3 and 4, highlighted in red and blue. The rest was classified either as a conservation zone or core-zone (Zones 1 and 2) in which by legal definition, people’s interaction with the zones is very limited. Based on the 2006 results, 3.3% of the PSWS was classified as Zone 3 and 5.4% classified as Zone 4 (FFI and MoE, 2006).
Figure 5.11 Zoning map produced by 2006 (The map was made by MoE and FFI and the map legend was modified by the author)
After being subjected to multiple justifications, by the early 2010s, a map showing another version of the outcome of the Zoning Project was (re)produced. Based on information from the person who led this project, this map could be considered the latest version of the zoning outcome by 2014 (Interview 264). According to the geometrical calculations of the map, 6% of land has been classified for community land use (Zone 4) and another 6% for sustainable use or CPA (Zone 3). Each village was allocated one CPA located nearby the village. The remainder, which was classified as a conservation and core zone (Zone 1 and Zone 2), covered 88% of the total PSWS land (see table 5.2). Most of Zones 3 and 4 located in Veal Veaeng District are concentrated along the main valley, where the population figures are high (see Figure 5.12).
Figure 5.12 The zoning classification of the PSWS by 2013 map is made by the author data from FFI

<table>
<thead>
<tr>
<th>Zone type</th>
<th>Area (ha)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone 1: Core zone</td>
<td>233038</td>
<td>70%</td>
</tr>
<tr>
<td>Zone 2: Conservation zone</td>
<td>60292</td>
<td>18%</td>
</tr>
<tr>
<td>Zone 3: Sustainable use zone</td>
<td>19132</td>
<td>6%</td>
</tr>
<tr>
<td>Zone 4: Community use zone</td>
<td>20104</td>
<td>6%</td>
</tr>
<tr>
<td>Total</td>
<td>332566</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 5.2 The result of the Zoning Project by the early 2010s (source FFI)
5.3.3.2. The challenges of actualising local space - Zone 4

Actualising the local community’s land raised a major challenge in the Zoning Project. The controversy occurred when members of the local community and the conservation agent sought larger territory for their own purposes. The Head of the District Environment Office of Veal Veaeng summarised his understanding of the Zoning Project he had been involved in as follows: “There are two areas – the area for people to live and the area for the animals to live. The commune officials and the people want bigger land for their community. They want more land from the conservation area. For example, they want all the land along the road, but animals also need to travel not just human” (Interview 40). The local community land or the area to be used by the local community is not as big as the villagers would wish. This refers to Zone 4 where ownership is granted to the local community or individuals.

The proportion of land to be allocated for local community use (Zone 4) was only 6% of the whole PSWS area (Table 5.2). From the Zoning Project’s point of view, the population size should be controlled. In-migration is not encouraged. The summary report of the protected area zoning states that:

“It should be noted that in some areas (notably Anlong Reab in PSWS) communities have asked for much larger land allocations and may dispute this proposal. In terms of wider Cambodia this is a generous allocation, allowing room for expansion and development of community zones for existing residents. It must be stressed however that this allocation cannot allow for further in-migration and settlement in the Sanctuary; settlements and even towns such as Pramaoy cannot be allowed to grow limitlessly” (FFI and MoE, 2006).

\[\text{The total size of the PSWS differs slightly between the MoE and Geo-database statistics used for the calculations. However, to make it consistent, all calculations are based on the Geo-database. The official size of the PSWS is 333750 ha.}\]
One local community member in the Anlong Reab Commune spoke of her observations in joining the participatory mapping:

“I also participated in drawing the community land classification. I am not sure when exactly it was, villagers were asked to go and study [usually the villagers refer to attending the workshop as going to study] for a week. At one point they asked us to draw a community land classification map. They asked us to draw three zones and applying different colours into those zones. The mountainous zone – I am not sure what colour that was, the forest zone classified as green, and red zone classified as residential and land being farmed or non-forest area. I was the only one who could draw the map and other people had no idea how to do it. Therefore, I drew the red area as the land that has already been cleared not the land that was owned by the villagers; therefore, the red zone was much smaller than the actual land we owned. At that time we had not cleared all of our lands yet. When they represented the zoned map of the village it turned out that what we drew as red represents our land and the rest either belongs to community forest land or environmental land (conservation land). I think that was how we lost our land” (Interview 27).

The geometrical tool incorporating local participation in drawing the boundary of the local community’s territory is ambiguous because of the conflicting definitions of community land (use versus ownership) and the mapping tools being used. While the community members were asked to draw the boundary of the land, they expected that it would be the land being used and that had already been cleared, not the land being possessed (Interview 264). They were meant to draw the land that had already been cleared and used. From the conservation perspective, they were only allowed or allocated land being used. This also meant the land they ultimately owned. Also, based on the aerial photograph that was used for people to draw the boundary of their land, it only showed the distinctions between different land cover, not land possession. Vegetation cover could be differentiated in the aerial photos, but not ownership. Due to this reason, people have some of their land in the conservation zones.
5.3.3.3. Sustainable use Zone 3 or Community Protected Area (CPA)

Zone 3 - in this case, the Community Protected Area (CPA) - is also called the buffer zone or the greenbelt (MoE’s definition) (Interview 264). In line with the definition, the zone’s function is to keep people away from the conservation area by providing them with resources within the zone. Additionally, although the zone may be used, it has to be used in a sustainable manner. This also means that it must also be protected for conservation purposes, and the responsibility for this lies with the local community. Therefore, environmental protection and livelihood utilisation were both considered in the geographical designation of the CPA.

The CPA generally speaking should be near the village, so that it can be protected and used by the villagers. It should also be located next to Zones 4 and 2 (see Figure 5.6). From the conservation perspective, the proposed location has conservation utility. An FFI mapping and zoning program officer expressing a conservationist viewpoint explained why they needed the CPA to be near the village “The CPA is supposed to be located near the village so that the people can protect it. The CPA of Chamkar Chrey Tbong village, for example, is there because also it is where the elephants migrate through. We can’t lose that important area” (Interview 264). The opinion also suggested that while Zones 1 and 2 were proposed for elephant habitation, Zone 3 was also for animals to travel through.

The size of each village’s CPA was calculated based on a quota of population size. One family located in a village would allow the village to gain an approximate 3-5 ha of CPA land (Interviews 40 and 65). But, this does not imply that the family could own that particular piece of land. For example, for a whole village of 200 families, a CPA the size of 600 – 1000 ha of land would be established. In the CPA, no private ownership is allowed.

The proposed location, close to the village, also overlapped with local land use. Khun, who was a member of a commune council, expressed his view on why the FFI positioned the CPAs near the villages and overlapping the local villagers’ land as follows: “They did not want to go far because the forest at that time was dense. Also, they were scared of landmines. That is why they took the GPS points just nearby the villages, taking over people’s farmland or even people’s houses. A lot of people’s land is located inside the community land (CPA)” (Interviews
An FFI mapping expert acknowledged that members of the mapping team were aware of the overlap between the CPA and the local community’s land, but at that time there was not much farmland there yet. Establishing the CPA there would also stop people from expanding their farmland in those areas as well as ensuring that the biodiversity potential was preserved (Interview 264). However, according to Khun, people had already claimed the land there, but they had not yet cleared the land. The war had just finished in the late 1990s and conservation arrived in the early 2000s (Interviews 68 and 71).

The major implications of the overlapping area between the locals’ land and the CPA are private ownership of the land and the expansion of farmland (also see section 5.6). Agreeing to place the land under the CPA also means that the land is made communal property: private ownership is not allowed. When the sustainable use zone is converted into a CPA, the management of the land belongs to the community under the supervision of the MoE. Based on the CPA law, extraction of resources within that land needs to be conducted in agreement with community-based natural resource management. According to the 2008 Protected Area Law, farmlands are not allowed or encouraged in the CPA (RGC, 2008). Article 26 specifies that,

“Local communities and indigenous ethnic minorities may not have the rights to clear or work forestlands in the community protected areas allocated to it, pursuant to the agreements with the Ministry of Environment, to practice agricultural farming or to claim title over the land, or to sell, lease, pawn, donate, share, divide or transfer the areas under its own management to any person or legal entity....”

However, according to the interviews with the FFI official and village authorities, unofficially, villagers are allowed to use their land that already exists inside the CPA, but they are not allowed to expand (Interviews 65 and 264).

5.3.3.4. The dichotomy of space and zoning legitimacy

When one zone cannot be legitimised, the whole Zoning Project cannot be completed. The division, between the land to be allocated to the community and land to be conserved, is not defined. If the local community land cannot be drawn, nor can the conservation area.
challenge associated with defining Zone 4 became the key aspect of specifying the conservation zone. From the FFI point of view, there was no law to legitimise private land; therefore, the MoE never approved Zone 4 (Interviews 264 and 285).

The Zoning Project has been conducted, the map has been produced and is being used, but the zoned map has not yet been entirely approved by the central government, the MoE in particular. The PSWS rangers advised that the zoning map has been uploaded into their GPSs to facilitate their law enforcement activities. Interviews with FFI officials revealed that the maps have been submitted to the MoE. At the European Union (EU) office in Phnom Penh, I observed that the map was hanging on the wall as part of the outcomes of the project being funded by the EU. However, apart from some CPAs, the rest of the zone has yet to be approved and legalised by the MoE. A CPA is just one of many ways of defining a sustainable use zone. Therefore, that does not consider the whole Zone 3 either. Defining Zone 4 is still considered to be the major challenge of the whole process. Thus, the PSWS is still open for further construction of its sub-division.

5.4. Land concessions and economic development

Economic development accompanied by environmental justification dominates the state’s economic policies when granting different forms of land concessions in the area. The rationales are implicit in the notion of economically exploring and utilising the area. Northwest Cardamom is understood by the state to be either not yet known or developed. Four land concessions were granted between the late 2000s and early 2010s. The concessions have overlapped with conservation and district territories. This has added yet another layer of complexity to spatial contestation in the area. The process of granting the land concessions was observed to have been inconsistent and to have involved limited local consultation. The locations granted concessions provoked controversy over land usage between local villagers and the conservation agent. In this section, I provide the rationales behind the introduction of land concessions in the area. This is followed by an elaboration of the characteristics of the spatial designations. I also explain the formal processes surrounding the introduction of the concessions, and the implications of spatial contestation.
5.4.1. Economic rationales and other financial returns

Two Economic Land Concessions (ELCs), one Special Economic Zone (SEZ) and one Mining Concession (MC) were granted under the notion of state development discourse. In addition to the above mentioned development policies, the economic return from the ELCs and the SEZ exceeded that of the land for agricultural development and infrastructure development. The Mining Concession, on the other hand, is still in the process of exploration. Thus, utilisation of the land is not yet visible on the ground.

An ELC is a long-term lease (up to 99 years) of state private land for use for agricultural and industrial-agricultural exploitation (RGC, 2005). Article 13 in the sub-decree on an ELC specifies that the purposes of an ELC are to generate state revenues as well as to improve local livelihoods through agricultural intensification and industrialisation (RGC, 2005). The concession was stressed in the national strategic development plan (between 2009 and 2013) as one of the state’s major sustainable economic development strategies (Council of Ministers, 2010).

From the state’s perspective, ELCs not only facilitate economic utilisation of land, but they are also considered to complement conservation objectives. As mentioned by one of the senior MoE officials, an ELC can be called a greenbelt designed zone to discourage people from going into the forest to exploit biodiversity (Interview 264). The 2008 Protected Area Law allowed the introduction of a sustainable development zone to be legitimised into the PA. Without legitimate classification, any part of the PA can potentially be allocated to a concessionaire and be classified as a sustainable use zone - Zone 3. Based on the law, a sustainable use zone can be invested in and sustainably used with the approval of the Ministry of Environment. ELCs were granted in the Northwest Cardamom region in the early 2010s: their allocation was mainly based on the degraded forest (Interview 264). Given its “low” biodiversity potential, the land should be economically productive. This also responds to the economic discourse that advocates for utilising the degraded land. Moreover, regarding the idea of a greenbelt, the granted concessions could also help discourage the villagers from going into highly conserved areas (Interview 264).
An SEZ located near the Cambodian-Thai border attempted to take economic advantage of the new border checkpoint. An SEZ is an area dedicated to enhancing the country’s exports through industrial investment. In the practice of increasing the competitiveness of the area, import-export exemptions, tax breaks, streamlined customs, and liberal trade are compromised (Warr and Menon, 2015). Located near the Cambodian-Thai border, this SEZ was granted to exploit the high potential of the border checkpoint between the two countries. A casino was built, but to date, it is not yet functional.

The two ELCs and the SEZ were invested in by the same investor, Try Pheap, who is one of the major Cambodian tycoons reported to have engaged in logging (The NGO Forum on Cambodia, 2015). Two hundred and twenty million USD worth of rosewood was estimated to have been exported by the company by this investor from the Cardamom Region over a three year period (Pye and Titthara, 2014). The granting of the concession allowed the companies to clear the forest and utilise the timber. The wood released by the company is considered to be legal. My field observation revealed people conducting logging and selling the wood to log dealers, then ultimately to the company. Interviews with log dealers revealed that the price of the timber that the people sold to the company was cheaper than that of other buyers in the district town, in the case that the people can avoid selling to the company (Interviews 113 and 119). According to the interviews I conducted with some of the people involved in logging, they understood that the company had a license to buy wood in the region. That is why they were allowed to trade the wood. If they did not sell their wood to the company, the company would confiscate it (Interviews 25, 74, and 123).
Most of the large-scale Mining Concessions (MCs) in Cambodia are at the exploration stage. Therefore, precise geographical locations have yet to be specified (Chrea, 2013). The geological studies and mineral research undertaken by French and Chinese geologists in the second half of the 19th century show that Cambodia had great potential for minerals. However, the reserves and locations of those mineral resources have not been examined (Chrea, 2013). An exploration of the MC located in Northwest Cardamom was granted in the late 2000s with a size of 10kmx10km square (see Figure 5.14 for the map). It is specified in the granted document as a metal mining concession (Open Development Cambodia, 2015).

5.4.2. Spatial designation of the concessions

The four concessions took 5% of the PSWS land and overlapped with 4% of Veal Veaeng District. All the concessions were located in the overlapping area between Veal Veaeng District and the PSWS. Seven percent of the overlapping area is covered by the concessions (Table 5.3). The rationales, either formal or informal, for the concessions have had a substantial influence on their spatial designations.
<table>
<thead>
<tr>
<th>Conservation &amp; District Territory</th>
<th>Total area (Ha)</th>
<th>Concession area (Ha)</th>
<th>% of Overlapping area</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSWS</td>
<td>332566</td>
<td>18617</td>
<td>5%</td>
</tr>
<tr>
<td>Veal Veaeng</td>
<td>435971</td>
<td>18617</td>
<td>4%</td>
</tr>
<tr>
<td>Overlapping PSWS-Veal Veaeng</td>
<td>255893</td>
<td>18617</td>
<td>7%</td>
</tr>
</tbody>
</table>

Table 5.3 Overlapping area of concessions: PSWS and Veal Veaeng District \(^{12}\)

Two ELCs cover 6352 hectares of land located in Anlong Reab Commune at the centre of the PSWS and Veal Veaeng District (see Table 5.3 and Figure 5.14). Officially granted between late 2012 and early 2013, they are mostly located in Zone 2 directly next Zones 3 and 4. Some forms of coordination between the PSWS could be observed. Very fine facilitation of the zoning map of conservation appears to have played an important role in the ELC spatial designation. Neat lines between Zones 3 and 4 and the ELCs could clearly be seen when they were geometrically overlaid together (see Figure 5.13).

<table>
<thead>
<tr>
<th>Name</th>
<th>Area (Ha)</th>
<th>Granted date</th>
<th>Purpose</th>
<th>Investor</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDS Import Export Co. Ltd</td>
<td>4402</td>
<td>13 Dec 2012</td>
<td>Agro-industry (rubber)</td>
<td>Try Pheap</td>
</tr>
<tr>
<td>MDS Import Export Co. Ltd</td>
<td>1950</td>
<td>15 Feb 2013</td>
<td>Agro-industry (rubber)</td>
<td>Try Pheap</td>
</tr>
<tr>
<td>MDS Thmarda SEZ</td>
<td>2265</td>
<td>09 Feb 2011</td>
<td>Infrastructure</td>
<td>Try Pheap</td>
</tr>
<tr>
<td>Southern Mining Co. Ltd</td>
<td>10000</td>
<td>2008</td>
<td>Mining for metal</td>
<td>Dang Thanh Hai</td>
</tr>
</tbody>
</table>

Table 5.4 Summary of concession profiles in Veal Veaeng District: information from different sources including ODC, Global Witness, and LICADHO

Agro-industrial development, or logging, complementing environmental protection, and the dedicated location of the ELC, taken together, could reflect how the ELCs were spatially designed. Regarding the particular purpose of agro-industrial development, appropriation in terms of soil condition is one principle. The state of the forest, i.e. whether it is degraded, is another factor. And, accessibility could be another option. Where these criteria could be met may be associated with conditions that relate to the local population and the land. From my...

\(^{12}\) The sizes of the PSWS and Veal Veaeng District and their overlapping zones are derived from the Geometrical calculation of the official sizes of the PSWS and Veal Veaeng, which are slightly different. The sizes of the concessions are taken from the official granted legislation. The research acknowledges the limitations of the different sources of data for the calculation. However, I believe that they do not have a significant impact on the argument the research attempts to make.
field interviews and observations, I learned that many land conflicts occurred because the interpretation of degraded forest could be mistaken for that of seasonal farmland (see Chapter 6 for more details about local land use). One of the MoE senior officers said that the land being allocated for the ELCs is degraded forest (Interview 264). In regard to the environmental rationale, the location of the ELCs next to villages and farmland aims to prevent the people from extending out into forest land and wildlife (Interview 264). The other function it serves is controlling log transportation and trade. For villagers living in the centre of the valley, surrounded by the economic concessions, to transport the wood out of the forest and into the market, it is hardly possible to avoid the concessionaire, whose gates are guarded by armed security (see Figure 5.14). Wood being logged either inside or outside of the company territories must be sold to the company. Otherwise, the people may be accused of stealing the company’s wood. Some of the local people believed that the company received the license to log and trade the wood within the region (Interviews 17, 74, and 113).
Figure 5.14 Land concessions (source: map was made by the author and GIS data are from LICHADO, ODC, and FFI)

The Special Economic Zone (SEZ) which is located near the Cambodian-Thai border expects to gain the economic potential from the new border checkpoint. The SEZ fully overlaps with Zones 3 and 4 of the PSWS classification. Apart from the National border as the spatial line, the remainder of the boundary does not appear to line up with the conservation zoning boundary. Wide roads and a casino were constructed in the hope that the checkpoint would fulfil its economic potential. However, as of the last visit to the site in early 2015, the border checkpoint had yet to officially open.
Concomitant with the granting of the Mining Concession (MC), less coordination with the PSWS zoning map was observed. The concession was granted in 2008 to explore the potential for metal (Open Development Cambodia, 2015). Under the notion of exploration, the size could possibly be as large as 10000 hectares; and, the shape could be as simple as a square measuring 10km x 10km. That square was imposed onto the area, overlapping all four zones. The extensive square could overlap with many inhabitants who could or could not be seen in the spatial database. Based on the maps, there was no village inside the MC (see Figure 5.14). Conversely, according to the field observation, I found that many invisible inhabitants on the state database were settling inside the MC territory. Chapters 5 and 6 provide the details of the people living inside the MC.

5.4.3. **Ambiguous procedures**

The procedures involved in the ELCs are far from consistent. According to one of the land rights lawyers, it could even be said that none of the economic land concessions in Cambodia has gone through the correct legislative process (Interview 294). The complexity of the procedure exposes both the inconsistency of the legislation granting the concessions and the consultation processes.

The granting of land concessions in the PA is subject to the requirements of the 1993 constitution, land classification in the 2001 Land Law, and the protected area zoning system in
the 2008 Protected Area Law. The constitution and associated laws play an important role in granting land concessions in a PA. Based on Constitution Article 58,

“State property notably comprises land, mineral resources, mountains, sea, underwater, continental shelf, coastline, airspace, islands, rivers, canals, streams, lakes, forests, natural resources, economic and cultural centers, bases for national defense and other facilities determined as State property” (Constitutional Assembly, 1993).

By using the distribution of natural features such as forests, mountains and resources to define state property, anything within state territory could fall within the category of “state property”. The constitution was established without acknowledging that the Protected Areas were being established at the same time.

Based on the 2001 Land Law, two categories of state land were classified: state public and state private land. Only state private land can be used for commercial purposes. Article 15 of the law specified that state public land includes,

“[A]ny property that constitutes a natural reserve protected by the law, any property that has a natural origin, such as forests, courses of navigable or floatable water, natural lakes, banks of navigable and floatable rivers and seashores”.

The land law imposed natural features to demarcate the classification of state public and state private. It does not clearly suggest any specific spatial distribution of state private or state public land. So while it does not clearly specify a PA as state public land, it claims that any natural reserve protected by law is considered as state public land.

The 2008 Protected Area Law (PAL) allowed land concessions to be established in the PAs. Prior to the PAL released in 2008, no land concessions had officially been granted within the PAs. The release of the 2008 PAL confirmed that PAs can or should be classified into four zones, one of which is a sustainable use zone or Zone 3. With land classified as a sustainable use zone, investment could be granted within the PA (RGC, 2008). After 2008, the rapid growth of land concessions in PAs occurred across the country (Scurrah and Hirsch, 2015). However; the PAL
states that justification is needed to classify land into Zone 3 before investment in the land can be conducted. In the case of the PSWS, zoning classification had not yet been approved; but the concessions were already granted.

Another irregularity within the granting of the land concessions is the impact assessment of the concessionaire. It was acknowledged by one of the Environmental Impact Assessment (EIA) company managers that many ELCs in the country had been granted before the EIAs were conducted (Interview 276). This contradicts the PAL and sub-decree on ELCs, i.e. that EIAs have to be conducted before the concessions are granted. During the village study, I noted that the implementation of the two MDS concessions was conducted before the granting date. By 2014, the EIA document had still not been released.

The designation of the boundary was drawn following very limited and misleading consultation with the local authorities and the community. The sub-decree on Economic Land Concession and the Protected Area Law states that consultation with the various levels of stakeholders should be conducted before the concession is granted (RGC, 2005, RGC, 2008). When asked who granted the ELCs and how they were granted in the area, the authorities including the PSWS manager, deputy district governor, commune council, and village heads all responded that they were granted from the top. The Provincial Department of Environment has also claimed to have limited engagement with the designation of concessions (Interview 283).

5.5. “Resolving” the mess and the Order 01 Land Title Campaign

Private land title was introduced as a state mechanism to “resolve” the complexity of the state’s land allocations. In 2012, as a result of the Prime Minister’s announcement of a special land titling program known as the Order 01 Land Title Campaign (O01LTC), thousands of young volunteers were sent to rural areas to register land title for the local community. Two days training on how to use a handheld GPS was provided to volunteer land registrars before they headed to the field to survey the land (also see Grimsditch and Schoenberger, 2015). In Northwest Cardamom, some people received titles and some did not. Their eligibility to receive title was associated with the different criteria and processes involved. Those criteria also linked to the existing classification of the PSWS generated by the Zoning Project and the allocation of
land for concessions. Some criteria related to the visual characteristics of the land, e.g., as forest covered, while others related to the controversy surrounding the possession of land. In Section 5.6 of this chapter, I illustrate the rationale and the spatial conceptualisation of land in the O01LTC. This section also attempts to provide in detail the issues around land titling, and its association with the existing land classification within the PSWS zoning and the allocation of land for concessions.

5.5.1. The politics of securing private land security

The politics of providing land tenure for securing people's property has become the focus of national elections (also see, Grimsditch and Schoenberger, 2015). Due to the complicated property rights issue that has emerged during historical transformation, land ownership has become a crucial socio-political concern. The issues of land have also been exacerbated by the currently contested implementation of development and conservation actions that has imposed different forms of territories on land. As land conflicts became increasingly critical, the state attempted to rapidly resolve the issue before the 2013 national election. In June 2012, the Prime Minister introduced the O01LTC across the country. Its aim was to register land title to those whose land was located in disputed areas such as forest, protected areas, and economic land concessions (also see, Grimsditch and Schoenberger, 2015).

For those former Khmer Rouge who had settled in Veal Veaeng District, its aim, to provide land to the people, may have been seen as a strategy similar to the one the state used to resolve political tension during the late 1990s. The land was provided as a form of state compensation to the ex-KR who decided to integrate with the central government (see Chapters 6 and 7 for details). However, the territory has been narrowed from the whole semi-autonomous district covering an area of over 400,000 ha to the land within the granted land title. The notion of providing land to the local community, including former KR, became a charitable state gesture, i.e. the PM, in particular, giving land to “his population”.

156
5.5.2. Results of O01LTC

The O01LTC was implemented in the PSWS during late 2012 and early 2013 as part of the national land titling campaign. It registered land located at different locations including those overlapping with the land concessions and the conservation zoning classification. A total amount of 25046 ha of land has been titled within the PSWS and Veal Veaeng territories (GIS database from Provincial Department of Land).

The following image (Figure 5.16) shows land registered as private land under O01LTC by early 2015. From the geometric calculation, 5% of the overall Veal Veaeng District area has been registered as private land. Most of the granted land was that located near the village settlements and inside the PSWS (see Figure 5.16). In total, 6 % of the PSWS was allocated for O01LTC (FFI, 2015). Most of the land that was allocated for the O01LTC was the expansion of Zone 4 towards Zones 2 and 3 (see Figure 5.16). Some of Zone 3, which is also known as a Community Protected Area (CPA), has been partially or entirely granted title, especially land located to the west and the northeast of the PSWS (see Figure 5.16). Clear and sharp distinctions between some CPAs and the O01LTC title may be observed, especially the land located in the centre and north of the PSWS. It is clear that some of the CPA boundaries either define the boundaries of the O01LTC or that no land was granted within some CPAs. In Zone 1, for example, minimal land was granted title (Figure 5.16).

Regarding the relationship between land concessions and the O01LTC, according to the GIS calculation, 10% of the land dedicated to the concessions was allocated title. The map shows that significant amounts of titled land have been cut from the MDS Thmarda SEZ. Regarding some of the titles, very few were cut from the two ELCs at the centre of the PSWS. No title was granted inside the MC (Figure 5.16). From the field interviews, I learned that those who had land within the mining concession area did not receive the title.
Figure 5.16 The O01LTC land title and other land classifications. Map was made by the author and the O01LTC GIS data was from the Pursat Land Management, Urban Planning and Construction.

<table>
<thead>
<tr>
<th>Land classifications</th>
<th>Total area (ha)</th>
<th>Area of intersection with O01LTC (ha)</th>
<th>% Intersection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veal Veaeng</td>
<td>435971</td>
<td>22798</td>
<td>5%</td>
</tr>
<tr>
<td>PSWS</td>
<td>332566</td>
<td>19616</td>
<td>6%</td>
</tr>
<tr>
<td>Concessions</td>
<td>18617</td>
<td>2019</td>
<td>10%</td>
</tr>
<tr>
<td>01 Land title</td>
<td>25046</td>
<td>25046</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 5.5 The area of overlap between PSWS, Veal Veaeng District, Land Concessions, and the O01LTC
5.5.3. Criteria and titling processes

The titling of land was associated with at least three main criteria:

(1) The land must not appear to be located on so-called state land. Characteristics of state land would include forest, river, road, and mountain. The land needs to be clear of forest and to be seen as being farmed or inhabited so that it is not classified as state forest land. The definition of a river, a road and a mountain is also very unclear; for example, at what size and shape can a creek be classified as a river; a track be considered as a road; and a steep hill be called a mountain. During my field interviews, people said that the definitions of the criteria were very confusing and varied from case to case. Definitions of a road, river, and mountain were subjectively decided by the students during the field survey.

(2) The land must not be steeped in controversy. This second criterion posits a blurry definition to be defined. “Controversial” land could vary from land being subject to conflict among local community to conflict that local people experience vis-à-vis concessions or land located in a CPA. The boundary between those whose farms were close to each other needed to be clarified; and, tension needed to be resolved before the students could conduct the land survey. If the people were in conflict with the concessionaire and the conflict had not yet been resolved, the land could not be titled. Some land could not be granted title because it was classified as a CPA; that is, communal property. An interview with the District Environment Office and FFI officers revealed that areas dedicated for CPAs that had been approved by the MoE could not be registered as private land title due to being classified as communal property (Interviews 40 and 264).

(3) Apart from the land’s characteristics, the recipient’s identity needed to be associated with the area. People needed to have a clear identity associated with the particular village they inhabited so that the registration form could be filled. Chapter 7 details the local responses to the land titling process.

The processes of granting the O01LTC title were ambiguous and often resulted in uneven outcomes. From interviews with local villagers and authorities, I learned that in some villages,
the process of granting title to hundreds of families within a village took less than a week to ten days (Interviews 23, 123, and 131). Additionally, the land surveying process on the ground varied from case to case. For example, in some cases, diverse stakeholders such as the environmental officer, village head, and the land registrars who were known to the students and/or land recipients participated in the survey, while in other cases only the students and recipients were involved (Interviews 120, 123, and 131). The identification criteria for land, for example, to appear to be a farm or not state public property, depended on rapid assessments made in the field by the registration group. One such case occurred in Samlanh village. Lee, one of the wealthier persons in the village, managed to convince the students to register his land (which was still covered by forest) by preparing food for them and offering them other incentives (Interview 131). Within the same village, some could not get their land titled because the land had not been completely cleared of forest (Interviews 191, 193 and 194). For those whose land overlapped with the ELCs, some received the title while others did not (Interview 157) and the explanations were not very clearly explained to them (Interviews 76, 218 and 224).

Figure 5.17 People waiting to collect their land title (left) and a man inspecting his land title (right)  
(source: author)

Among those who had their land surveyed by the students, some received the title and some did not. On 8 September 2015, I participated in the titling delivering event in Pramaoy. The event was to deliver land title to those whose land was located in Krapeu Pir Commune, and
whose land had been surveyed by the students (see Figure 5.2 for a map of Krapeu Pir Commune). Hundreds of land titles were delivered at the same time with attendance of political representatives at the provincial and district levels. From my observation of and conversations with people during and after the distribution of the titles, it appeared that the reasons for not getting title were very unclear. Some said they did not fill in the form properly (Interviews 126 and 120). Others said that they were told by the officers that because their land was located on state land, they were not eligible for the title. Snar, for example, had got his land surveyed but did not receive the title. It was not very clear to him which criteria listed his land under state land (Interview 119).

5.5.4. The shape, size, and location

Sharp lines were drawn on the titles defining the plots of land, each of which was assigned a code number (see for example Figure 5.18 left). The size of the land was provided in the title. Within the title, details of the land location associated with a particular village, commune and district were also provided. The location of the land was specified in relation to land nearby or to natural features such as a creek, a mountain or a road. In the titles, areas understood to be roads, rivers, or mountains were cut from the map. No GPS coordinates were provided in the title. For some, only part of the plot was titled while other parts remained untitled. On the back of the title, the names of the couple or individual were defined as owners of the property.
Demarcations on the ground were introduced to define the boundaries of the land. They included existing physical features such as creeks or tracks, trees or additional poles. The above photo (Figure 5.18 right) shows a wooden pole intentionally driven into the ground to define the border of the land. At the other edge of the land, a tree also signifies another demarcation of the land border. The photo also shows a walking track that was part of the land demarcation.

5.5.5. The “last land to be given”

After the land was titled in accordance with the O01LTC, there was no indication that another land titling campaign would be implemented in the area. Therefore, whether the land that remained untitled should be considered state land, and, whether anyone who laid claim to the land possessed it illegally, remains uncertain.

The head of Pursat Provincial Department of Land Management, Urban Planning and Construction stated that the O01LTC should be the last one. There will be no more land titling programs implemented in the PAs or forested areas. His understanding was that the government had offered land for private ownership to the people three times already, and, that
the offer in 2012 should be the last. The first was during 1992 and 1993 when the government provided land to those who returned from the camps. The second one was during 1996 and 1997. The state provided land to the people, especially to those who had finished their military duty. The last offer was in 2012: the O01LTC that was introduced by the Prime Minister. There has been no suggestion that the government will give land to the people in the future (Interview 280).

5.6. Summary

The creation of the four types of territories has been shaped by the different state-based actors’ rationalisations of Northwest Cardamom. Geophysical features and their relationship to the people have been simplistically constructed. Regarding boundaries, their construction has been considerably linked to their spatial representation through the geo-database. The political boundary of the district was produced using topographical features of the landscape and the military frontline during a certain period of time, in collaboration with the existing administrative unit map. The boundary is characterised by the division of those who were former KR and those associated with the central government. The conservation boundary of the PSWS overlaps district territory, taking up a major part of the district’s area. The attempt by FFI and MoE to divide the conservation land into different zones was based on both the spatial distributions of biodiversity and population distribution. The overall territory of the PSWS, which was produced during the early 1990s, was used as a larger container to sub-divide land for conservation and land for the local community. The territory housing the local population and local administrative authority has been narrowed from the whole district to only a single zone covering less than 10% of the PSWS area. The introduction of land concessions associated with the development rationale added another layer to the contestation of space between conservation and the local population. Development criteria such as the good quality of the land, the availability of wood, the distribution of minerals, and the national borderland played an important role in the spatial designation/abstraction of those land concessions. Adding to abstracting the ecological features of the landscape, the spatial designation of the ELCs was also based on the PSWS zoning map; the MC was located in the area identified in the population census data as an unpopulated area. More complex issues of land occurred, culminating in the
introduction of private land title – the O01LTC. The construction of private land titling was produced as part of a national political campaign benefiting political elites. Conservation and land concession boundaries have played a significant role in shaping the private land title that the local communities use to claim land. The results of the O01LTC legitimised 5% of the Veal Veaeng District for the local community. The certainty of tenure surrounding the remaining land without title remains unclear. From the results of this chapter, it can be observed that state-based actors have always attempted to abstract/actualise at the same time as minimising area for the local community, so that land and resources can be used according to their idealisation of the landscape.
Chapter 6: The Landscape in Transition

6.1. Introduction

This chapter aims to contextualise and give an account of the spatial arrangements of the land, natural resources and people in Northwest Cardamom. It argues that the dialectical relationship between broader socio-political phenomena and the local physical characteristics of the landscape play an important role in characterising the current land and population distribution at the local level. The chapter also argues that the geometrical state-based spatial arrangements established through economic, environmental, and political rationales discussed in Chapter 5 are incompatible with the local uses of land and resources. Local history is approached from two distinct scales: the regional level (Northwestern Cardamom) and the village level (Chamkar Chrey Tbong and Samlanh). The first part of this chapter explores the influences of broader socio-political events including state politics and the economic transformations that have shaped Northwestern Cardamom as a regional landscape. The landscape, which was a battlefield during the 1980s, was transformed into a KR stronghold during the 1990s. After the political integration in the late 1990s, the region became an important agricultural area. In the next section, I discuss two village case studies in order to give a nuanced and more fine-grained account of the local spatial organisation of land, resources and people. The section shows that even though the two villages have been similarly influenced by broader socio-political factors, both the allocation of land and distribution of people could have occurred along different lines. In particular, the geophysical characteristics of the location have played an important role in shaping the differences of land and resource spatial arrangements. The demographic features of each village have fluctuated differently over the last four decades as a result of broader socio-political changes.
6.2. Regionalising Northwest Cardamom

6.2.1. Journey to and within the site

The journey from Phnom Penh (the capital city of Cambodia) to Pramaoy (the district centre of Veal Veaeng) takes approximately eight hours. It is a relatively remote area considering that the overall length of Cambodia from east to west is less than 600 km. As the regional centre, Pramaoy is over 100 kilometres (3 hours) away from the closest provincial centre of Pursat along a dirt road, the area can be considered largely cut off from the rest of the country. The trip takes an extra three hours if one takes a dirt road up the mountain peak, which is one thousand metres above sea-level. The trip takes longer in the wet season and may even be impassable during the heavy monsoon rains. From the centre to the south, the area is linked to Koh Kong province, cutting through the centre of the Cardamom Mountain Range. The journey takes approximately six hours through the sparsely populated hills. To the north, a seasonal dirt road joins Pramaoy to Battambang provincial centre and the border town of Samlout. The road is almost impossible to travel through during the wet season, which then entirely disconnects the north and south. Therefore, due to the poor connectivity to the south, west and north, regional connectivity is primary directed toward the eastern provincial centre of Pursat (See Figure 6.1).
Figure 6.1 An overview of the geographical location of the site

The two villages of Chamkar Chrey Tbong and Samlanh are located to the west and north of Pramaoy. The Chamkar Chrey Tbong village is located along the main road that connects the town of Pursat to the Thai border. It is approximately 15 kilometres from Pramaoy and 130 kilometres from Pursat. The road connecting the village to the district and provincial centres is in relatively good condition compared to other roads in the region. Accessibility is possible throughout the whole year. The major market connectivity of the village is first to Pramaoy and then the provincial town of Pursat. The connection of the village to the Thai border, Koh Kong and Battambang is minimal compared to that of Pursat. Only those who are connected with the military, and who sell non-timber forest products to Thailand make frequent trips to the Thai border. The village is located within the commune centre of Anlong Reab and within walking distance of its neighbouring villages.
Figure 6.2 The district centre of Pramaoy (top let), the road from Pursat to Pramaoy (top right), road from Samlanh to Battambang (bottom left), and a bridge connecting the road leading to the Thai border (bottom right) (source: author)

Samlanh, the second village studied, is located in the northern part of Veal Veaeng. It is more isolated than the other villages within the region: it is approximately an hour’s drive north of Pramaoy on an approximately 25 kilometre narrow dirt road. During the wet season, the village is relatively hard to access compared to Chamkar Chrey Tbong. The closest market is in Pramaoy. The village is also connected to the neighbouring province of Battambang; however, the connection is minimal due to the difficulty of the road. There is no direct transport from Samlanh to Pursat. When villagers who do not own a vehicle want to travel to the provincial centre of Pursat, they have to go via Pramaoy first, so the cost is higher than travelling from Pramaoy to Pursat.
6.2.2. **Topography, water, resources, and soil**

Natural resources and land use of the area are shaped by the dynamic topographical conditions, high level of rainfall, and relatively low human habitation (Figure 6.3). In response to the topographical conditions, e.g., surrounded by high mountains up to 1500 metres, a highly complex hydrological system with various sizes of creeks and rivers has formed, creating a valley towards the centre of the area. This system is intensified by one of the highest volumes of rainfall in mainland Southeast Asia. The annual amount of rainfall can reach as high as 4000mm. The area also experiences a short dry season compared to other parts of the country (Killeen, 2012). Wet evergreen forest still predominates in most of the area.

Land used for agricultural purposes and human settlement is concentrated mainly within the centre of a large valley. Because the major part of the area is dominated by high slopes, arable land is concentrated in one valley that has a flat surface. This valley is surrounded by mountain ranges, e.g., Phnum Samkos to the South, Phnum Tompor to the Northwest and Phnum Stoung Kngaok to the Southeast (Figure 6.3). Agricultural expansion extends from the centre of the valley, where the major road cuts from east to west, through the north and south. The land in this valley, which is covered by evergreen-forest, has the potential to become agricultural land that can be expanded (see section 6.4.6 and 6.5.7 for details on how agricultural land is being expanded in the two villages).

However, not all the land in the flat valley is fertile. Its forest cover and river systems reflect the condition of the soil. The good soil areas for agricultural purposes are those closer to the creek and river system where fertile sediment is deposited. From my field interviews, I learned that much of the first land to be cleared was near or along the creeks. The land underneath the evergreen forest is understood by the local community to be of higher fertility compared to that covered by deciduous forest (Interviews 179, 202, 208, and 212). According to my interviewees, the land under the deciduous forest is dry and sandy, and the land closer to the edge of the mountain is considered rocky and steep.
The local people’s agricultural activity is mainly cash-crop farming, depending primarily on the high amount of rainfall and new land converted from cleared forest. During my fieldwork, I noted that popular crops included cassava, sesame, soy and corn, and most people produce a wet and dry season crop each year. Most of the land within the region has been recently converted from cleared forest to cash crop farming. According to local farmers, soil fertility has declined after a few years of cultivation, and yield has subsequently dramatically decreased (Interviews 119, 120, 132, and 179).
6.2.3. History and political transition

Over the last four decades, the region has experienced major socio-political changes. Table 6.1 provides a summary of the political events that have influenced the historical accounts of the region and the villages. I discuss these events in more detail in the following sections of the chapter. The table includes events after the KR was defeated by VN troops in 1979 up to the present.

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
<th>Consequences the for site</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>VN troops defeat the KR</td>
<td>After their defeat by the VN troops, the KR were pushed toward the north and west, settling along the Thai border. Between the early and late 1980s, Northwest Cardamom was considered a battle zone between the central government backed by VN military and the KR. There was no permanent settlement of KR within the region yet. At that time, their permanent camps were located close to the Thai border.</td>
</tr>
<tr>
<td>1989</td>
<td>The withdrawal of the VN troops</td>
<td>The VN troops withdrew from the region, giving the KR more control over the area. More permanent camps were established across the key locations.</td>
</tr>
<tr>
<td>1991</td>
<td>The Paris Peace Agreement</td>
<td>Some people decided to move back to their former hometowns or to relocate to places where they could settle down without military or refugee assistance. Places in the region that became permanent settlements include Krapeu Pir and Samlanh (one of the villages studied). Some people were sent from the border to other areas, e.g., Aoral (Figure 6.4).</td>
</tr>
<tr>
<td>1993</td>
<td>The National Election</td>
<td>The KR as a party was not included in the National Election in 1993. A KR leader, Khieu Samphan, was wounded in Phnom Penh, signaling to those living inside the forest that the war had not yet finished. Some groups resettled back in the region, including the group that had resettled in Aoral. The village of Chamkar Chrey Tbong was formed as part of that resettlement. During the early 1990s, the region survived on logging by the Thai loggers.</td>
</tr>
<tr>
<td>1997</td>
<td>The Coup</td>
<td>Following the coup in Phnom Penh in 1997, some groups were evacuated and resettled in the Thai border camps. These groups included those who lived in Chamkar Chrey Tbong and Samlanh.</td>
</tr>
</tbody>
</table>
1998  The return  The resettlement at the border in 1997 lasted for only one year. In 1998, some decided to move back to the village and some decided to move elsewhere. Chamkar Chrey Tbong was still occupied by many who had settled earlier while most people in Samlanh decided to move elsewhere. Fewer than ten households had returned to the village in 1998.

2000-Present  The end of the political tension  The KR military was abolished and replaced by the central government administrative system following the establishment of Veal Veaeng District. At the time of my field study in mid-2015, those who were former KR were still part of the local government administrative system. For example, some vice-district governors, commune chiefs and village chiefs were former KR. The region has since been opened up to outsiders including migrants, conservationists, and investors. It is now an active cash-crop agricultural area.

Table 6.1 Key historical events and consequences in Northwest Cardamom

6.2.3.1. The battlefield during the 1980s

From field interviews people revealed a number of events in the 1980s that are important for understanding the regional context of the area. By early 1979, the Vietnam (VN) military had forced the KR regime to flee to the northwest along the Thai border. A few years after the demise of the regime, there was fragmented distribution of KR troops and their families across forested areas in many parts of the country. As they lived in mobile settlements to escape the pressure from the VN troops, no specific locations of the groups could be traced until the early 1980s. Smaller groups of the KR troops and their families had to survive alone, depending upon resources from the forest for their food and shelter. A story related by Pharn, the village head of Chamkar Chrey Tbong reflects his individual experience of being a KR following their defeat, and being chased by VN troops.

[From 1979 to 1981, Pharn’s family with tens of others lived in the forest in various locations. Prior to 1979, he worked as a youth in Aoral, Kampong Spue (see Figure 6.4). Defeated and chased by the VN troops, Pharn and his wife led several other youths walking from Aoral to Preylong in Kampong Thom. His group survived independently in the forest by consuming wild]
yams and wild animals. While trying to escape from being chased by the VN troops, they also tried to search for the rest of the KR and the leaders. The group reunited with other KR groups at the Thai border after over a year travelling from place to place across the country.

By the early 1980s, relying on support from China through Thailand, the KR were prepared to fight back against the VN troops as a defensive strategy. The area of Northwest Cardamom close to the Thai border became the centre for Chinese diplomats to Democratic Kampuchea who had been forced out of the central part of Cambodia (the details are also discussed in Chapter 3). Many of the KR families – females and children who were not soldiers – were settled in refugee camps with civilians who were supported by the UN.

Between the early and late 1980s, Northwest Cardamom was a battlefield between the KR (known as Democratic Kampuchea) and the self-proclaimed People’s Republic of Kampuchea (backed by the Vietnamese military). At the same time, from the KR’s point of view, Cambodia was still their territory which had to be defended from foreign aggressors. After the KR regime was defeated by the VN military, under the name of Democratic Kampuchea it was recognised by the UN as the official state of Cambodia (also see for example; Falser, 2015, Brown and Zasloff, 1998). By the early 1980s, the KR started to resist against the VN troops. The forested area across the Cardamom Region formed the site of particularly fierce battles between VN troops and the KR. However, the KR’s permanent camps were located along the Thai border.

Several interviews I had with Thorn, a former KR head of a military unit in the 1980s and 1990s, reflect the KR’s standpoint on the VN troops. From Thorn’s perspective, the battle in the 1980s was not initiated by the KR but rather the KR (Democratic Kampuchea) was defending Cambodian territory against the invasion by the VN military (Interviews 166 and 263). He justified why the region became a battlefield in the 1980s:

“We did not initiate the battle. We did not want to fight with them, but we defended ourselves against the VN invasion. Democratic Kampuchea was the official regime of the state, not the People’s Republic of Kampuchea backed by the VN troops. The UN recognised us not them; therefore, we needed territory to settle
ourselves. We could not live in Thailand because it was not our land. We could not settle in the urban area either because we lost the battle against the VN troops. Therefore, the forest was the place to go. We defended our territory against the invasion of the VN” (Interview 166).

VN troops set up military camps across the region all the way to the Thai border. With them were the Cambodian troops and civilians who had been sent to clear the forest and to establish roads for the troops. The KR troops also settled across the forested areas; but, their basecamp sites were mobile whereas the VN troops established their camps along the major roads (Interview 5). The only permanent KR camps were located along the border.

6.2.3.2. The withdrawal of the VN troops in 1989 and consequences

Immediately after the withdrawal of the VN troops in the late 1980s (also see Chandler, 1999, Gottesman, 2003), the KR assumed more control over the region. In effect, a stronger sense of territorial control emerged. However, their main camp sites were still located along the Thai border (Interviews with the former KR leaders 162, 147, and 166). The area was considered a battlefield and was still an adult male dominated space where brutality was common. A sense of home and family settlement still existed along the border, but not in the forested land. Children and married women were permanently settled in the camps along the border (Interviews 226, 229, and 239). The women also stayed in the camps taking care of the children. The military camps set up across the region were slightly more permanent compared to how they were prior to the withdrawal of the VN troops.

The battle during the 1980s had opened up the area; however, during this period, the area was heavily landmined (see Figure 3.12 in Chapter 3 for the landmine map). Occupation by the VN military required the creation of roads, opening up accessibility to the region that had been considered an unwelcoming landscape due to its wilderness and the threat of malaria. Roads, both small walking paths and large vehicle tracks, were constructed throughout the region to transport military goods and facilitate the mobility of the troops. Some of the roads are still being used today. The legacy of road building has been thousands of landmines scattered
throughout the landscape, especially in the areas along the roads and near the military camps (Interviews 5, 100, and 101).

6.2.3.3. The uncertainty from 1991 to 1993

Pharn, who was one of the former KR leaders, recalled the socio-political transition during the early 1990s due to the Paris Peace Accords signed in 1991\(^\text{13}\).

“During a meeting with KR top leaders in 1991, we were told by Pol Pot that:

Dear all friends, we now dissolved the communist regime. We are now going into a multiparty government. We are going into the capitalist society. There are going to be markets. In that regime, money is the god - the money that can buy everything. We know that we have never been through this kind of society yet. In that regime, they don’t think about each other. Those who are rich remain rich and those who are poor still remain poor. It is not like us: these days we help each other. This is a multi-party democratic government regime. They help whatever party they belong to. From now on, no one would help us anymore. You need to settle down by yourself on land and water where you can do farming. Wherever there is water and land, you won’t die. Therefore, when you integrate with the outside society, you need land and water. We were then given two cattle and 5000 Thai Baht as the capital of our new life after the meeting finished.”

The Paris Peace Accords introduced another transition for the KR, both socially and geographically. As suggested earlier by Pharn in his report of what Pol Pot announced, the KR were expected to settle down after the agreement. The KR troops and families were encouraged to either move onto state land or return to their hometowns where they lived prior

\(^{13}\) The accords were signed in Paris on 23 October 1991 by four parties: (1) People's Republic of Kampuchea, (2) FUNCINPEC, (3) KNPLF (Khmer People's National Liberation Front); and, (4) the Khmer Rouge (NADK-National Army of Democratic Kampuchea). By 1991, three parties, NADK (Khmer Rouge) FUNCIPCEC, and KPLF, were located along the Cambodian-Thai border. Among the three, the Khmer Rouge was the largest group who had the most powerful military.

to 1975. Some chose to move back to their hometowns. Others chose to live elsewhere, including in other areas of the Cardamom region where agricultural land was available. Some among them opted to live around the temporary military camps established during the 1980s, where land and natural resources could provide them with a subsistence livelihood (Interviews 218, 229, and 239).

The decision of some to live in the Cardamom region was due to two interrelated reasons: (1) to live separately from the rest of the population; and, (2) to live where land was available. Living with the rest of Cambodian population as former KR could mean they would face discrimination. For that reason, to settle collectively as former KR allowed them to strengthen their community who shared the same political history and identity. Some families said they were encouraged to move with hundreds of others to Aoral (Interviews 142, 144, and 150), a district located in the eastern part of the Cardamom region (see Figure 6.4 for the map). The area in which they were relocated was formerly an old village (before 1975). The land allowed them to establish a village encompassing rice field land (Interview 150 and 144). Other interviews said that land back in their hometowns had already been either distributed or taken during the 1980s. So they would not have access to land there if they decided to return (Interviews 150 and 151).
However, the signing of the Peace Accords did not put an end the instability surrounding the socio-political situation of the KR. In November 1991, a month after the Peace Accords were signed, Khieu Samphan who was one of the main KR leaders was publicly beaten in Phnom Penh by disgruntled Phnom Penh residents who saw him as a representative of the murderous KR regime. The event signaled to the KR that they were not welcome into the main fray of Cambodian politics. The KR withdrew from being a political party in the election organised by the UN in 1993. The KR population was not allowed to vote either.
The KR remobilised again soon after being dissatisfied with Peace Accords. The forested areas near the Thai border became KR strongholds. The Northwest Cardamom region was one of the strongholds (see Figure 3.2 for the KR stronghold map). Thorn recalled why they needed to resettle people in Northwest Cardamom:

“We moved the women and children to get a safer place to settle down. The inside here was safer because we knew that the government army would not be able to come all the way here. We could fight along the edge of the forest area. For example, we usually fought at Roveaeng area closer to the Phnum Kravanh District centre, not back here in Pramaoy.”

According to Thorn, the edge of the forested area of Cardamom was considered as a frontline and unsafe for militants’ families. The boundaries between the KR and the state were established at the forest edge. The region inside the Cardamom region closer to the Thai border e.g., Northwest Cardamom was considered a safer space for families to live in. The frontline between the KR and the central government extended closer to Phnum Kravanh District centre e.g., Rovieng east of Pramaoy (see map, Figure 6.4).

6.2.3.4. Remobilisation and the logging economy in the 1990s

After the KR’s disappointment with the Peace Agreement and National Election in 1993, the Northwest Cardamom area seemed a secure place to live. Many of the locations of the newly-established villages across Northwest Cardamom were places KR troops during the 1980s and early 1990s had already inhabited. Villages were established on top of the KR military landmarks. Some village names reflect geographical features or military codes that were used during the battle in the 1980s. Those villages included Samlanh and Chamkar Chrey Tbong which are named after the local tree species.

Track roads were built across the Cardamom region, connecting the region to the Thai border and isolating it from central Cambodia. Villages were connected by roads across the region, all the way to Thai border, cutting through forests and hills. Minimal connection was made to the
central parts of the country. Tit, who lived in Samlanh in the early 1990s, said that at the time, numerous tracks transporting logs passed through the village on their way to Thailand every day. However, travelling to the town of Pursat meant several days walking through the forest, always conscious of landmines (Interview 23).

In the 1990s, Northwest Cardamom became one of the major economic areas allowing the KR to sustain their military. Following the reduction of international military aid to the KR regime post-1991, the forest became one of the major sources of income supporting the troops (see Le Billon, 2002). The KR granted logging concessions to Thai companies; the latter extracted the primary luxury timber from the region. The KR also used this connection to Thailand to import goods. Timber was logged and exported to Thailand; some food and grocery products were imported back from Thailand (Interviews 69 and 35). The currency used was the Thai Baht instead of the Khmer Riel.

Even though the trade in luxury wood generated a substantial amount of revenue for the KR military, a very small proportion of the money was distributed among the non-military to meet their everyday needs. Some said that the money from logging went to seniors at the top rather than people at the local level (Interviews 23, 28, and 153). The regime’s support for troops’ everyday needs had been cut off since the early 1990s (Interviews 91 and 70). Daily consumption of food and income was generated individually through joint activities with Thai loggers, agriculture, and collecting forest products. Agricultural land was established mainly to provide subsistence supplemented with wildlife (Interviews 28, 69, and 190). Small incomes were sometimes generated from working and trading with the Thai loggers, and from collecting forest products e.g., Chhur Khlem (agarwood), and wildlife products. The income was used in an exchange for groceries from Thailand.

The logging economy persuaded outsiders, i.e., non-KR, to settle in the region. Some of the outsiders, who were non-KR, also gravitated towards KR territory searching for forest products especially agarwood (whom the KR called the agarwood collectors). Some of the outsiders who were non-KR people included former soldiers from the other three parties: the People’s
Republic of Kampuchea, FUNCINPEC, and KNPLF. Some were the relatives of the KR (Interviews 83, 162, and 204).

The families, however, were typically still associated with the military. The husbands and adult males still held some military responsibilities. The village structure included a security system that had females as team leaders who worked in collaboration with male soldier units (Interviews 27, 69, and 142). Children received their primary education in some villages including Chamkar Chrey Tbong, but it was not available everywhere (Interviews 134, 141, and 144).

6.2.3.5. The 1997 evacuation and the return in 1998

In 1997, a coup in Phnom Penh created another reason for relocation. The political instability among the different parties in Cambodia persisted until the last coup in Phnom Penh in 1997, led by the CPP – Cambodia People Party and FUNCINPEC (Peou, 1998). It should be noted that during the 1990s, the political negotiations conducted between the central government and the KR fragmented the political leanings among the KR. In Phnom Penh, in response to the coup in 1997, diverse political tendencies were confirmed among the KR within Northwest Cardamom. Some of the KR leaders supported the CPP, some supported the FUNCINPEC, and some simply did not trust any of the main protagonists. Thorn personally supported the CPP (Interviews 183 and 28) where he stayed in Pramaoy, while those under his supervision were evacuated to the east towards the centre of Cambodia. Those KR located in the north and west of Pramaoy, now known as Anlong Reab and Krapeu Pir communes, were sent to the Thai border. Some opted to stay where they were and not move. People who lived in the south of Pramaoy, Ou Saom for example, opted not to move (Interview 166).

Only one year was spent in the camps during the last eviction in 1997. Among the groups who were forced to the Thai border were some non-KR who had arrived in the mid-1990s. Returning to the borderland living as refugees happened over a period of one year. Non-KR also returned to the village with the KR. Others decided to move elsewhere, where they could find better livelihood options. Most of the people of Chamkar Chrey Tbong, for example, decided to return to the village (Interviews 144 and 162). Most of the people of the studied village of Samlanh
decided to move elsewhere or to their original hometowns (Interviews 182 and 183). The major reason for their movement was economic opportunity. Samlanh; for example, was a popular location during the Thai logging period in the mid-1990s. It was then not thought of as an area for agricultural expansion. Chamkar Chrey Tbong, on the other hand, was located on a wider flat terrain with better land quality suitable for agricultural expansion. The connection for Chamkar Chrey Tbong to the district centre and provincial town also provided better access to other areas.

In step with the final integration, the accessibility from the region towards central Cambodia was prioritised. Removing landmines from main roads became an urgent priority especially in the context of efforts to connect the district centre to Pursat. Thorn claimed that: “no one dared to drive along the road at first. In order to show people that it is safe to drive on the road, I had to drive on the road first” (Interview 166).

6.2.4. The old and new settlers

Long, one of the Deputy Governors of Veal Veaeng District, stated that the current population of the area can be classified into two main groups: Neak Chass and Neak Thmey. The Neak Chass include the people who settled there prior to 1998. These people typically had associations with the KR military and their families. Neak Thmey refers to new migrants who moved to the area after early 1998. Many of them have no connections with the KR military. Neak Thmey also mainly refers to the people searching for land and natural resources. Some villages have more Neak Chass than others. According to Long, approximately 60% of the population is Neak Chass (Interview 5). The other groups are the highland indigenous people who originate from the Cardamom region. According to Long, there are two indigenous groups, Chung and Pur, many of whom currently live in Ou Saom commune. The population of the two groups is very small.

The words Neak Chass (earlier arrival) and Neak Thmey (later arrival) being used to categorise people implies a sense of belonging to place and their association with the ex-KR community. The mainly ex-KR Neak Chass have settled there longer and established a sense of place
through their experiences of war and resistance. Neak Thmey, on the other hand, are considered by the Neak Chass as those coming to the area for land and resources.

The sense of belonging to the region and the association with the ex-KR community created a hierarchy among the villagers. Lee, who is a non-KR background resident, said that when he first arrived in Samlanh, he noted that the newer arrivals were very wary of the Neak Chass, especially of those who had KR backgrounds. He added that when people caught and killed wildlife, they had to give some of the meat to the village head, who was a former KR, to show their respect. Additionally, new arrivals needed to inform village authorities, who were mainly former KR residents. However, this hierarchy has dissipated over time. Some of the new arrivals I encountered said they no longer noticed the presence of the KR still in the area (Interviews 33, 39 and 140).

The other advantage of being Neak Chass was being able to understand the landscape better. First, they knew the physical conditions of the landscape. Navigating and settling in the region over two decades, from the early 1980s until the late 1990s, provided the KR with a sophisticated knowledge of the region including where to find water, good soil, wild food, the topography of the landscape, even landmines. When talking to the former KR leaders, including Pharn, Khun, Thorn and Phai, they said that there was still plenty of land available in the area, and they knew where the land was. Second, they knew the geographical distribution of land being claimed by the community members. The ex-KR were the first to distribute the land; therefore, they knew the location of land that had or had not been claimed by the local community members (Interviews 71, 93, 257 and 263).

6.2.5. The latest new arrivals

The last five years have seen a significant increase in the number of in-migrants searching for land. Regarding the land, some new migrants are attracted by the availability of timber and non-timber forest products and by the prospect of selling labour for agricultural activities. Long, the Deputy District Governor, observed that most of the newcomers had migrated into the area
over the last 5 years. They had largely come to look for land because the area is sparsely populated (Dei Touleay). Thus, land is still available (Interview 5).

The rapid arrival of people moving into the area has created an enormous administrative problem. To date, many collective settlements across the landscape have not yet been recognised by the provincial and central governments. Some have been acknowledged by commune and village heads (see Section 5.3.3, Chapter 5). The term “Phum Anathepatai” (anarchic village), is used to describe such villages. While traveling across the area during my fieldwork, I noted that many houses had been built far from the main road, where they could not be easily been seen. The number of new arrivals is still being calculated by the village and commune heads.

Figure 6.5 A new settler’s house (left) and an old resident’s home (right) (source: author)

While some migrants consider themselves to be permanently settling in the area, others see themselves as temporary settlers. When staying with the village head in Chamkar Chrey Tbong, I heard many stories about the immigrants who are yet to be identified by Pharn. At the same time, I observed many people arriving at Pharn’s house to inform him that they were moving into the village. Some migrants stated they were merely looking for seasonal work. According to Pharn, some new migrants were loggers and some were seasonal farm labourers who stayed in the village temporarily. Some migrants said they rent the land in the village to cultivate seasonal cash crops, e.g., cassava and corn. After they harvest their crops, they may move elsewhere. They do not own any land in the village (the detail on migration is provided in Chapter 8).
6.3. Chamkar Chrey Tbong – a planned village

Chamkar Chrey Tbong was initially a well-planned village. The establishment of the village also correlated with the beginning of Thai logging in the mid-1990s. The village is currently located in Anlong Reab Commune (see Figure 6.4 and 5.2 for the maps). The village was initially created based on two criteria, military security and the availability of land and resources. Currently, the village is one of the most highly populated villages in the region: it survives on cash-crop agriculture. Land has also become a major issue within the area with the arrival of Economic Land Concessions (ELCs). This section details how the village was formed and how that history is reflected in the current population distribution and land arrangements.

6.3.1. Choosing the location

Chamkar Chrey Tbong was established based on an arrangement with the Khmer Rouge troops during the early 1990s. The formation of the village was initiated by troop leaders, who considered the location suitable for settlement for troops and their families. Several justifications were given for why and how the village was established and the location was chosen. These included an appropriate location for military security, regional connectivity, and suitable land for the everyday self-dependency of the troops and their families.

Thorn claimed it was he who decided the location of the Anlong Reab Commune. Chamkar Chrey Tbong is one of the villages in the commune. He stressed that selection was based on the suitability of the soil, and, on resources that could provide food and water for the population. During interviews, he said:

“In the location that the people settled in, we need to consider both economic and security reasons. It should be the location we could survive. We could transport rice from the Thai border. There should be good land and water. With land, we could also grow crops for food. If there was any military clash, we could also go into the forest collecting wild yam for food. For the security reason, it is located inside the forest near the mountain. We could also go to the Thai border if there was any military clash” (Interview 166).
Regional connectivity was also one of the major reasons underpinning decision-making regarding the location of the village. Because there appeared to be a gap between Pramaoy and Thmar Da, Chamkar Chrey Tbong was considered as unused land and along an important road connecting the inner west to the Thai border. During interviews with former KR leaders, e.g., Khun and Thorn, it was stated that “there was a gap in that area along the road number 56 connecting Pramaoy to Thmar Da or there was no presence of human settlement in that area.” Thorn added that Pramaoy and Tompor were considered a centre connecting north (Samlout), south (Koh Kong), and west (Thmar Da). To the north, between Pramaoy and Samlout, there were Tom Paor, Krapeu Pir, for example. To the south, there was Ou Saom. However, to the west along the way to Thmar Da, there were few settlements. There was a gap where Chamkar Chrey Tbong is located today (see Figure 6.6).
Specifically, the village was located right near the edge of the mountain. Khun and Seng were among those assigned to inspect the location of the village before settling people. The village was located in a dense forest near the mountain edge along the riverbank (see Figure 6.6). Khun and Seng said the main reason for locating the village close to the edge of the mountains was in case of military evacuation. If fighting broke out, they could evacuate the people to the mountain and up to the Thai border. Additionally, at the centre of the valley (where the current village is located), the existing road was heavily mined (see Figure 6.7 for the initial location of the village).
6.3.2. Mobilising the people

After the site was selected, the construction materials were supplied. According to Pharn and Khun, the materials were supplied by the KR military with support from Thai logging companies. The latter included four backhoe loaders and one excavator that were used to clear the dense forest. Each family was provided with twenty roof metal sheets. Wood was cut from a nearby forest to build shelters. The military families, including the women and children, were housed in the village after the settlement had been formed (Interviews 68 and 141).

The village leaders, e.g., Pharn, Seng and Khun, stated that most people settled in the village in 1993 had been relocated in Aoral in 1991 (see Section 5.3.3.2). The other group was from the Thai border. Among the 160 families relocated in the area currently known as Anlong Reab Commune, 130 were from Aoral and the remainder from Samlot (Interview 144). The 160 families were allocated and divided into three villages, Chamkar Chrey Tbong was one of the three. Approximately 60 out of the 160 families were settled in Chamkar Chrey Tbong village.

The number of newcomers, who identified as non-KR, gradually increased (Interviews 229 and 245). However, up until 1997, their population had seen only a slight increase. They were mainly relatives of the Khmer Rouge and agarwood collectors drawn to logging activities in the porous border area.

Strong KR military control was enforced to manage the mixed population. Anyone found to be a spy of the central government could be executed by the military (Interview 83). These decisions were made at the village level. Horn, an agarwood collector, chose to live there because there was no other village nearby within the region. He was compelled to become part of the KR community. Otherwise, he was not welcome to conduct his business in the forest. He said that if anyone was found to be a spy, they would be executed (Interview 224).

6.3.3. The return in 1998 and the relocation in 2000

The people were once more evacuated to the Thai border in 1997 and returned in 1998 (see Section 6.2.3.4). Most of them came back to reclaim previous settlements and land (Interview
Now that the KR military had been completely eliminated, families were fully freed from military duties and obligations. The economic and administrative connection was redirected towards the central part of the country rather than to the Thai border (as it formerly used to be). Two years after the villagers returned from their last refugee camps, the road cutting across the centre of the valley was rebuilt. Some of the old roads used during the logging period were reused, and some new roads were built. The main road connected the village to Pursat via Pramaoy and Phum Kravanh District Town.

The village was relocated along the new road from its initial location near the mountain’s edge. It was moved approximately 5-10 km south (see Figure 6.7). The new location was closer to where a VN military camp was located during the 1980s and was thus in an area that had been heavily mined to protect the VN military camp and the troop movements. Establishing the locations of mines in order to avoid them and begin the process of demining became an urgent priority (see, Arensen, 2016).

Land along the new road was redistributed after the village was relocated by village heads. Each family who moved from the old village was allocated 50 x 500 metres of land along the road. This length was fixed because families were allocated one after the other. The actual amount people took, however, was negotiable given that it was based on a verbal agreement between the villagers and the village authorities. The actual length of the land away from the road depended upon the amount of labour invested in the land, and, in people’s interest in clearing dense forest and landmines from the land. Apart from residential land, each family was also verbally allowed to have 5 hectares of land wherever it suited them (Interview 144). After selecting the location of the land, they could inform their village head and he would acknowledge their possession of the land.

6.3.4. The current population

The current population of the village is a mix of different groups who arrived in the area at different stages and with diverse intentions. According to the interviews with Pharn, most of
the current inhabitants are former KR or from that generation. He estimated that at least 50% of the population in the village is former KR or (their children) (Interviews 23, 70, and 132). Others villagers include permanent migrants who are either relatives of the KR or civilians from other districts/provinces. Apart from the permanent residents, there are also seasonal migrant workers seeking seasonal labour work on farms, and economic land concession workers whose numbers have not been recorded by the local authorities.

Chamkar Chrey Tbong is a relatively large village in terms of both population and its agricultural land. According to the statistics collected by the village head, the village numbers approximately 300 households (Interview 250). Given that the village has no official bounded territory (a fact confirmed by the village head), the size of the village could in some way be defined by its extension of agricultural land surrounding the village centre, and by land used or possessed by village people.

The major livelihood opportunities are highly related to cash-crop agricultural activities, complemented by forest products and logging-related work. A survey undertaken by FFI in 2013 including 187 households showed that more than 90% were involved in farming activities as one of their major sources of income. At the same time, 42% said they also sell their labour as part of their income. The crops which are mainly seasonal included beans, cassava, and corn, sesame and rice. High labour demand is crucial during harvesting and planting seasons. Logging, which is also an important livelihood activity complements people’s agricultural activities. This survey does not reveal to what degree logging plays a part in people’s livelihood strategies. However, based on field observations, and on discussions during multiple trips to the village, many people confirmed that they have been involved in logging or logging-related activities. The latter include full-time labour by adult males or male teenagers. Some villagers also rely on collecting non-timber forest products, e.g., cardamom seed, wildflowers, and wildlife, for additional income and food.

From observations and discussions with the village head, commune council, and villagers living in various locations within the village, it became apparent that the geographic distribution of households reflects their socio-economic conditions as well as their migratory status. Figure 6.7
demonstrates how the population is distributed. The household Geo-database presented in the map are a combination of an FFI field survey conducted in 2013 and the author’s field research in 2014. The village centre, which is along the main road, is highlighted in cluster B. That area consists primarily of older former KR residents and their extended families. This group, in particular, includes the majority of those who moved from the old village (highlighted in cluster A). Members of this group received land distributed along the main road from the relocation in early 2000. They are also among the wealthier people in the village, that is, the group who have received or owned the largest plots of land. Village and commune authorities are also located in this area.

The area covered in cluster C is populated by later arrivals, relatives of the ex-KR, or by newer generation KR. From field interviews, I learned that some of the families of ex-KR moved into the area after they married. Within the area, there are also some landless people who have settled on ex-KR land. The area is also occupied by newcomers who bought the land from older residents.
Cluster D shows the area settled by new arrivals. Some have bought land from older residents. Also, some extended ex-KR families have settled in the area. Another group is located in a section of the village called Odeykhmoa (black soil creek) in cluster E. This section was named
after the relatively good black soil associated with a creek that flows through the area. That part of the village was established approximately 5-7 years after the main part of the village had been created. The people in this group include a few ex-KR families, extended families of the ex-KR, and their relatives, who moved from other districts/provinces.

Cluster F is called Okanglan (truck wheel creek) referring to a landmark during the war time. That part of the village has only been established since 2012. The people who live in that area are among the poorest villagers. According to interviews with people who live there and the village head, many of them had financial difficulties before moving to the village (Interviews 132, 246, and 247). Some ran away from debt obligations, while others tried to make money from newly cleared land to send home. They came from diverse geographical backgrounds across the country. The households are scattered within the newly cleared land closer to the edge of the mountain that is located far from the main road and the village centre. Transportation is very difficult, especially during the wet season.

6.3.5. Land

After the political compromise in 1998, a highly commercial and individual lifestyle was introduced. The terrain with vast amounts of unclaimed land became highly targeted for agricultural expansion. The availability of highly productive unused land covered by evergreen forest resulted in rapid agricultural land conversion and deforestation.

Land clearing for cash-crop agriculture begun after the relocation in the early 2000s and has become more intensive due to in-migration. Migration has significantly increased within the last five years due to land speculation and the cash-crop boom. People came from diverse geographical backgrounds across the country to search for land (the details of the migrants are provided in Chapter 7). Some migrants did not have many connections to the existing residents; while others are relatives of the ex-KR. Some people formed small collective groups to clear land, especially the people who are related to each other as extended family. Collective group land clearing allowed them to clear land faster than doing it individually (Interviews 54 and 230).
The quality of land people claim and its geographical location is highly correlated to social status, e.g., depending on relations with ex-KR and the period they arrived in the village. The most desirable land is closer to the main road, contains fertile soil, is topographically flat, and is located near a water source. This kind of land is predominantly possessed by earlier settlers such as the ex-KR and their relatives. They acquired a better chance of choosing prime locations because they settled before other people. There were the earlier groups whose land was distributed and some of them were among the land distributors. They received land along the main roads. They clear farmland closer to the village centre, and they chose the land closer to the river with a flat surface and that was less rocky. They also tended to have larger land.

According to the FFI 2013 survey, the people who are located in the village centre (cluster B Figure 6.9) tend to have more land (FFI survey 2013). Land along the main road is owned by the older residents (clusters G and H Figure 6.9). Pharn and his children; for example, were among the village authorities, the former KRs, and older residents who owned the land near the road, topographically flat, and closer to the river (clusters G and H).

The new migrants with less connection to local authorities and older residents, and people who had low financial capacity did not have many choices and were forced to settle on marginal land. Such land is often more distant from main roads and access is often difficult (especially during the wet season). Such land is also typically poor in terms of soil quality and topography. These marginal areas include Okanglan or Odey Khmoa (cluster I and J). New migrant families at the edge of Okanglan usually clear near the edge of the mountain that is both rocky and steep. One such family, when interviewed, claimed that access to water is challenging during the dry season, as is transportation to the village centre during the wet season (Interview 246).
The arrival of Economic Land Concessions (ELCs) in the early 2010s has introduced another layer of complication in terms of land. Like migration, ELCs have also spurred on large-scale forest clearing in the area. The two ELCs have taken a large proportion of land claimed by local people. Some of this concession land surrounds the village where people have claims to farmland (see cluster K in Figure 6.9). Pharn mentioned that almost everyone in the village had their land in the location which is now ELCs (Interview 71). The companies have taken land from people including the village and commune authorities, former KR, and new migrants. Pharn and Khun, for example, have also lost some of their land to the company. The land they lost was part of the land distributed to them during resettlement in the early 2000s. Some people lost the fertile farmland land near the river.

Villagers explained that a major reason why contestation over land occurred between villages and ELCs was the fact that both carefully chose the limited highly fertile land in the area (Interviews 76, 77, and 239). Other people claimed that the company prioritised land that had already been cleared so that it would not have to clear this land itself (Interviews 217, 218, and 240). It should be noted that with the large pieces of land granted by the government to the two ELCs, only some parts of them have actually been used by the companies and the rest is still covered in forest. From discussions with local authorities, such as Pharn and Khun, the company started planting on land closer to the village, which is mostly villagers’ land.
Land evictions by the ELCs have pushed villagers to clear more land elsewhere. In some cases, evictions have left people with major land shortages. After losing agricultural land and going through the long and protracted process of negotiating compensation, many villagers were desperate to find alternative land to cultivate (Interviews 150, 161, and 152). Since the arrival of the company in the early 2010s, there have been ongoing negotiations between the company and the local community over compensation, including the offering of new plots of land. Potential compensation land proposed by the company is at the back of the company’s land, 4-5 km away from the village (cluster M). The following map (Figure 6.9) shows the areas where new land is being cleared. These include areas in clusters I, L, and M. These areas are further away from the village centre. They are behind the company land in relation to the location of the village centre.

Regarding the older village location, from the government’s point of view, people had already decided to move out and settle along the new road. They abandoned their old village to receive new land. Part of it is currently located in the ELC. People are not eligible to claim that land anymore because it belongs to the state.
Figure 6.9 Chamkar Chrey Tbong’s land distribution\textsuperscript{14}
6.4. Samlanh – the passing through location

Unlike Chamkar Chrey Tbong, Samlanh was not a planned village but was spontaneously established in response to political and economic transitions. It was originally a military warehouse where the KR stored weapons and munitions during the early 1980s. It was later a passing point of the KR travelling within the northwest and southwest between the late 1980s and early 1990s. It became an active logging village during the 1990s when the village was among the most highly populated villages in the region. Since the decline of logging in the late 1990s, the number of settlers has fluctuated. The current population is mainly people from a non-KR background. It is one of the villages where small-scale land encroachment is actively occurring. Some people in the village are still yet to be officially recognised by the provincial and central government. The village is located in an area with a lower potential for agricultural productivity compared to Chamkar Chrey Tbong. This section briefly outlines the history of the village as well as discussing the village’s contemporary demographics and land and resource use.

6.4.1. The 1980s

The most important landmark in Samlanh is called Khleang Chi. It was established in the early 1980s during confrontations with VN troops. Khleang in Khmer means warehouse and Chi means fertiliser. In this context Chi, specifically, refers to potassium nitrate used as a material to generate explosive weapons. The location was used to store and hide explosive material. At that time there were no permanent residents settled there – although the area was not located far from camps where KR families were settled (Interviews 7, 51, and 93). Khleang Chi was located near the edge of the mountain as a military strategy to store and hide military material. The visibility and connectivity of the weapons warehouse were a major consideration when the location was chosen (see Figure 6.10 for the map).

---

14 The image attempts to show the location of clusters of population within the village. It does not aim to provide the precise boundary of each of those land marks. Therefore, I acknowledge some limitations regarding the boundary of each land type categorised in the above image.
During the 1980s, Samlanh was not yet a village, but rather a passing point for the KR troops travelling between the northwest and southwest. In the mid-1980s, the KR militants had typically used forest paths traversing the border to get north or south (Interviews 207 and 183). That was due to the presence of the VN and central government troops across the Cardamom region.

By the late 1980s, the location was a popular stopping point for the KR troops travelling throughout the northwest and southwest. After asserting more control over the area due to the withdrawal of the VN and central government troops, the KR began to establish a network of tracks further inside Cambodian territory. It should be noted that by the mid-1980s, in order to transport military goods and food to the troops who camped inside the forest of the Cardamom region, goods could only be transported on foot. Also due to landmines, there was not yet any specific road or track established used to travel in the area. What the KR called the defeat of the VN troops during the late 1980s facilitated the opening up of the area to a network of vehicle accessible paths. Northwest Cardamom and Khleang Chi thus became important areas where troops and goods passed through.

6.4.2. The logging town in the early and mid-1990s

By the early 1990s, the location became a logging hotspot where wood was logged and exported to Thailand passing through Khleang Chi. The other major economic activity was agarwood collection. A village was formed as a settlement where loggers, KR militants and agarwood collectors stayed or passed through. It was one of the most economically active places in the region. Some KR militants moved their families from the border to settle in the village to engage with livelihood opportunities generated by collecting agarwood or logging (Interview 183). Due to that livelihood opportunity, some KR invited their relatives who were not KR from other parts of the country to move into the village (Interview 35, 122, and 189).

Two long settled people from Samlanh – Rith and Srey - demonstrate how outsiders became part of the village with other KR in the mid-1990s. Rith and Srey are cousins whose hometown is in a rural village in Kampot Province, southern Cambodia. Srey, a former KR, moved from the
border with her husband who was also a former KR to live in Samlanh. They were sent by their leader to settle in the village in the early 1990s (Interviews 35 and 182). Rith did not have a KR militant background before moving into the village, but he was invited by Srey to visit her after many years of being apart. Tit later decided to settle there because engaging with logging activities was economically better than being a rice farmer back in Kampot. He said his job was to act as a village guide who collected money from loggers and agarwood collectors (Interview 28).

Rith and Srey described the village at that time as prosperous and one of the most highly populated villages in the region. They described it as a very happy place to live where there was ample Karaoke and TV in the village to entertain. People were satisfied earning money from logging and agarwood collection. He estimated that at least 80 families were permanently settled in the village in the early 1990s. Dozens of trucks and motorbikes transporting wood and agarwood passed through the village night and day (Interview 123). To complement income from logging and agarwood collection and provide an additional source of income, crops such as rice and vegetables were grown. Srey recalled that at the time, people also grew some crops along the river to produce rice and vegetables. Some of the food and other goods were imported from Thailand (Interview 35). Subsistence cropping, however, played an important role in determining long-term land use patterns.

6.4.3. Abandonment in 1997 and return in 1998

Similar to other places in the region, Samlanh was also impacted by the coup in 1997 which created a major population movement as the village was abandoned. Thai logging companies ceased their activities at this time. Some people moved to refugee camps along the Thai border while others decided to move elsewhere. Some villagers who did not consider themselves KR also joined the movement to the refugee camps, including agarwood collectors and relatives of the KR. Srey, for example, who did not consider herself a KR was also evacuated to the Thai border with many other villagers (Interview 117). Rith, on the other hand, moved back to his hometown in Kampot (Interview 123).
After a year of the village being abandoned very few people returned to Samlanh. Srey said that those who did come back lived in under largely subsistence conditions which she characterised as ‘remote’ and ‘frightening’ (Interview 122). Villagers had to grow their crops and hunt to survive, she added. In 1998, many people moved back into the region (Northwest Cardamom) but not many decided to live in Samlanh. Only seven families were staying in the village for the next few years (Interviews 7, 51, and 120). Among the seven families, some were former KR and the others were the people who had moved there during the early and mid-1990s. Two of the seven families I interviewed described the village as tough to live in (Interviews 35, 61 and 182). Traveling from Samlanh to Pramaoy would take a whole day to walk or to ride an oxcart over the old tracks built during the logging time.

A few reasons explain why the village remained abandoned in 1998. First was the disappearance of logging. Logging and agarwood collection had virtually stopped by this time. Without an income from logging, the village lost its former prosperity. The second reason is due to the emerging political conditions that saw the disassociation of the region with the Thai border area, and its reconnection with the interior state. The direction of trade was increasingly toward Pursat along the main road lying from east and west cutting through Pramaoy. The connection to west and north was no longer prioritised. The old Thai logging roads eventually eroded, making the village very difficult to access. Connection to the north, Samlout and Battambang became challenging under the difficult road conditions. Another reason is associated with land conditions. Samlanh was not spacious and the land quality was not as good for extensive cash-cropping as other areas such as Chamkar Chrey Tbong. Through my observations and interviews, I learned that Samlanh is not located in the middle of the valley like Chamkar Chrey Tbong is. Topographically the land is not very flat and it is covered by deciduous forest, signifying that there is dry and rocky soil underneath.

6.4.4. Recruitment for more people and land

“To form a village, more than seven families were needed,” according to a commune council member of Krapeu Pir and former KR army soldier (Interview 7). After the political reconciliation, the state formed a district consisting of communes and villages (see Chapter 5).
Within each commune, villages were also formalised. Krapeu Pir was one of the important northern parts of the area during the 1990s and a commune was created out of this section of the district. However, there were only two villages in the area. It was decided by administrators that Samlanh should be a part of Krapeu Pir and an official village should be formed there. However, only seven families had decided to move back in 1998. Therefore the authorities (commune and district levels) encouraged more people to settle in Samlanh. People from the other two villages of Krapeu Pir commune were encouraged to move to Samlanh (Interviews 7 and 35). The seven families at the same time also wanted more people to move in because the village was so isolated and quiet. The commune authorities also encouraged the existing seven families to bring more people in. Some invited their relatives and friends to settle down in the village.

The availability of land to be distributed was one of the main mechanisms to attract newcomers. By the early 2000s (2001-2003), approximately 30 households had come to live in the village (Interviews 23 and 93). Most of the newcomers were relatives and friends of the KR moving from other parts of the country. These people considered themselves to be poor and having insufficient land back in the places they had lived earlier (Interviews 93 and 123). Srey invited her siblings, mother, and cousins from Kampot province to move into the village (Interview 122). Mao, another ex-KR, also invited his distant relatives from other parts of Pursat province (Interview 134).

With 30 households, the availability of land was not yet an issue and people did not require large land plots. The location of the land, rather than size, was the key factor for people at this time. The village was predominately covered in dense forest. Growing crops far away from neighbours would expose these crops to wild animals that could destroy them. Additionally, the need for large land tracts for cash cropping was minimal due to the fact there was not yet a market, which in turn was largely due to difficult road conditions. Farmland was distributed along the major river running through the village and near the village centre. Plots of land were allocated one after another as a mechanism to defend against wild animals. Some of the patches of land used during the mid-1990s were reused and some new land was also cleared.
6.4.5. Reconnection and selling up land

The reestablishment of the road in the late 2000s (2008-2009) brought about major changes in the area. Travelling to Pramaoy then took less than an hour on a motorbike. The villagers began to invite more families and friends to move in. Others who had heard of, or directly visited the area in the 1990s during the logging and agarwood boom, came to claim land. An estimated 60 families had settled in the village by 2010 (Interview 120).

The largest group of migrants, however, is composed of people who moved into the village within the last 3 years by 2015. The population was 70 households in 2013 and by late 2014 the official population of the village had risen to 114 households (commune record from Interview 52). In addition to the official population recognised by the commune authority, there were also some families who had recently moved into or near the village without official recognition. From the knowledge of the current village head at least 145 households are located in the village (Interview 91). These newcomers mainly moved in to search for land.

Since 2010, land has turned into property that is to be sold by the village authorities. It is no longer distributed without charge as in earlier periods. Due to their experience of allocating land to newcomers since the early 2000s (2001-2003), the village heads continued to exert authority over land distribution. That tradition of allocating land by village heads has been passed on from one village head to another. From the village head’s point of view, apart from land being used or claimed by villagers, the forest land was assumed to be vacant, therefore able to be distributed to newcomers. This was also a strategy to avoid an overlap with existing land that had already been allocated or claimed. Usually, those new areas were dense forest further away from the village centre. However, land assigned to new immigrants was not given free of charge. Newcomers were asked to pay up to 2 million Riel (500 USD) through informal arrangements with the village chief. However, from the village head’s justification, the money collected from the people is not a land transaction, but money used to build up the community, such as for building roads or bridges.
Soung (37) – a newcomer to Samlanh – reflected on how immigrants gain access to land. Soung moved to Samlanh in 2014 with her family of three children and husband, expecting to get land. She is from Kampong Chhnang province – central Cambodia. Back in her hometown, Soung had no land, so selling labour had been her family’s main income for years before they moved to Samlanh. She had come to know of Samlanh from one of her friends who worked together with her on a farm at the border. Her friend claimed to be a relative of Thar who is currently the village head. Her friend told her that there was land here available to be distributed for a very cheap price. She did not technically have to buy it but instead contributed to the community development service (where such a required donation is significantly less than the market price of land). When she arrived, she was asked to pay 2 million real to Thar. She was not informed clearly what the money was for. The land that was allocated to her family was further away from the road and village centre. She was told that the land allocated was 5 hectares along a creek with a length of 500 metres. Although she could never confirm the actual size of her allocated land, she noted that families were given markedly different sizes of land (Interview 170).

6.4.6. Pattern of population distribution

With its population of 150 households, Samlanh is relatively smaller than Chamkar Chrey Tbong (Interview 91 with the village head). Most of the population come from non-KR related backgrounds and have recently migrated into the village since 2014. The bulk of most people’s income is derived from cash-cropping, especially corn, sesame, and beans. Two seasons of farming can be done within the long rainy season starting from late February to November. As a complement to farming, logging also provides a source of income. Collecting non-timber forest products such as cardamom also offers another seasonal livelihood option.

Depending on the stage at which a particular group arrived, they would occupy land in different places. By grouping population by stage of migration, three groups could be identified: (1) the first group of predominately KR who moved back in 1998; (2) the families and friends of the first group who moved in the mid and late 2000s (2005-2009); and, (3) the people who have just migrated within the last five years or less. The village started as an intersection between
the river and the main road (the intersection between clusters B and G in Figure 6.10). The current village centre (cluster B) was established in the connection of the main road and river running through the village from west to east (cluster G in Figure 6.10). Cluster E is another part of the village which was extended after cluster B. These areas (clusters B and E) are mainly inhabited by the early settler groups 1 and 2. Other groups, located off the main road, clusters C, D and F, for example, are from group 3. People who lived in cluster C arrived in the late 2000s (2009). They were located not far from the main road and near the main river. The people who lived in cluster D arrived after cluster C. Therefore, they were located further away from the river and also off the main road. The people who lived in cluster F were the last group to arrive. They arrived in 2013, so they were allocated land off the main road and also far from the water source.

People’s geographical location was also associated with their connections to local authorities and older residents. Those who lived in cluster C were mainly associated with one of the former KR families who moved from Samlout in the late 2000s. Those families are usually friends of commune council members who are also former KR. Those who settled in cluster D known as Phum Thmey (New Village in Khmer) and cluster F known as Okatin (Clay Jar Creek in Khmer) are people who are not direct relatives of the village heads or any former KR. They got to know the village through friends. The people in Phum Thmey, cluster D, mostly came from the Mong Rourkey district of Battambang province. They came to settle there because they knew earlier settlers. The earlier migrants then introduced them to the village head.
The location can also reflect their livelihood status. Those whose land is located along the main road are also among the wealthier people in the village. That group appeared to be the ones with larger tracts of land. Not many of them considered themselves to be labour sellers (Interviews 93, 102, and 109). On the other hand, many of the new migrants depend heavily on selling labour (Interview 55, 99, and 111).

6.4.7. Population growth and land

The extension of agricultural land for cash-cropping has rapidly increased due to the arrival of a large group of migrants. The expectation of the migrants is to be able to acquire land for cash-cropping. Therefore, the distribution of different qualities of land became a highly contested issue. The quality of the land for cash-crop agriculture is associated with the physical conditions
of the land such as soil quality, water source, and topography. Another important characteristic is access to the main road.

Accessing good soil is challenging in Samlanh, which is largely a result of topography. Samlanh is located closer to the mountains so finding wide flat land is difficult. The area is also cut by a mountain to the west, with the result that there are limitations to extending agricultural land either side of the village. Closer to the mountain, the land becomes more rocky and steep (Interviews 47 and 57). The major areas that can be converted into productive farmland are located along the major river, clusters G and I in Figure 6.11, and a flat open space highlighted in cluster H. The forest canopy also reflects the quality of soil underneath. Land covered by wet evergreen forest tends to be better than land covered with dry deciduous forest. Land underneath evergreen forest has a higher amount of moisture and decomposed material; while land under deciduous forest is likely to be rocky and dry. Going north and east, the area is covered predominately by deciduous forest. For example, those areas highlighted in cluster L and north of cluster G. Going south (clusters J and K), a higher proportion of evergreen forest could be observed compared to north and east. However, from my field observations and discussions with local villagers, the proportion of good land to be accessed is low (Figure 6.11).

The other consideration of the land quality is accessibility. There is only one major road cutting through the village which links it to Pramaoy. That is the only road that allows agricultural products to be exported. The further away from that road, the more difficult it is to transport and sell agricultural products. Land that is located further east and west is not highly desirable. This includes most parts of the area in clusters J, K and I in Figure 6.11 and some parts further west of cluster H and the eastern part of cluster G. The most desirable land is located along the main road (clusters B and E).
High-quality plots of land have been taken by people who arrived earlier. Later arrivals are likely to be located on lower quality land in either or both senses (soil condition and accessibility). The villagers located in cluster B owned the land in clusters B, E, G, and H. These are the areas

---

\(^{15}\) The image attempts to provide clusterised locations of each population group within the village. It does not aim to provide the precise boundaries of each of those land marks. Therefore, I acknowledge some limitations regarding the boundary of each land type categorised in the above image.
with better soil quality and accessibility. These areas are mainly owned by the KR and their relatives who arrived before the late 2000s (2007-2009). The people who live in cluster C received land in cluster I. The land quality is good, but the accessibility is challenging, especially during the wet season. The group of people located in cluster D received land further west, in cluster H, which is closer to the edge of the mountain and further away from the road. The people located in cluster F were allocated land within cluster J where the accessibility is challenging and soil quality is likely lower. The area in cluster K is a location of a mix between deciduous and evergreen forest. The accessibility to the area is also very challenging (Figure 6.11).

6.5. Summary

Over the last three decades, Northwest Cardamom has become an important region for Cambodia’s political, social, and economic development. The region shifted from the political frontier between the KR and central government of Cambodia to becoming an economic frontier of logging and cash-crop agriculture. The construction of the region has been and is continually being shaped by the state’s political and economic transition. The forest, soil conditions and the topography of the mountains have all played an important role in sustaining the war in the 1980s and the KR autonomous territory in the 1990s. The topographical condition of the valley allowed the KR to secure their territory in the 1990s. The region also had important – but fluctuating – relations with the Thai border region and interior Cambodia. At the village level, the current land and resource allocations have also been constructed through the regional history. However, each village responded to the changes in different ways, depending on the particular physical conditions of the location. Chamkar Chrey Tbong was intentionally established due to the availability of land and its topographical conditions associated with mountain and forest products. With the availability of land, the village is currently one of the most populated villages in the region. Samlanh was established spontaneously as a logging town due to its connectivity to the region of the Thai border. The contemporary division of land and population distribution is different from Chamkar Chrey Tbong. That again was associated with the physical conditions of the location as well as the administrative structure of the village. Lastly, this chapter also reveals that different groups,
namely Khmer Rouge (Neak Chass) and non-KR in-migrants (Neak Thmey) have developed distinctive experiences with Northwest Cardamom. These experiences and identities have also shaped their access to land and resources, and potentially their conceptualisation of the landscape. Understanding such experiences requires an ethnographically-based depiction of individual and community level perceptions, histories and interactions. Therefore, the following chapter is set to further illustrate the details of different groups’ experiences and perceptions, and the power dynamics among local villagers in relation to access to land and resources.
Chapter 7: Frontier in Perception and Confrontation in Space

7.1. Introduction

The notions of frontier in abstraction and cartography examine the dialectical relations between spatial idealisation and representation of space introduced by state-based actors, namely political elites, conservationists and development agencies. This chapter investigates how state-based actors’ idealisations of space are actualised and presented on maps. Frontier in abstraction implies the idealisation of the landscape as sparsely populated or empty, so that other forms of development, conservation and political rationales can be inserted on the landscape. This abstraction of frontier also suggests that the state-based spatial arrangements are primarily based on spatial simplification so that territories can be presented as sharp lines that can be introduced into the physical landscape. These relations between the state-based actors and the landscape are not based on the complex socio-spatial interactions that have been established over a complex history, but rather they simplify the socio-spatial relations at a particular time in order to impose territories onto the landscapes.

This chapter aims to elaborate on local socio-spatial relationships and their conceptualisations within Northwest Cardamom by exploring people’s narratives and everyday interaction with land and resources. The source of information is primarily based on personal stories from the in-depth field interviews in the villages under study, Chamkar Chrey Tbong and Samlanh. This chapter finds that the local conception of Northwest Cardamom is closely related to the notion of frontier, where survival and livelihood opportunities could be fulfilled by the potential of land and resources. Two distinctive groups are observed to have established different narratives and interactions with the region: the ex-KR and non-KR migrants. From the ex-KR’s perspective, Northwest Cardamom is an area where they could establish a stronghold to resist against the central government in the 1990s. After political integration in 1998, the region has become one of the only places where the ex-KR could form new lives that engaged with the capitalist economy within the rest of Cambodia. From the non-KR migrants’ perspective, Northwest Cardamom is the post-war frontier located in a forested area where land and
resources are relatively accessible compared to other parts of Cambodia. However, in obtaining access to land and resources, life in Northwest Cardamom becomes a struggle of everyday socio-spatial relations, through the local manifestation of postwar society, the physical conditions of the landscape, and the imposed state-based representations of and in space. These relations have shaped the dynamics of land and resource access among the two groups.

This chapter starts by illustrating how individual histories have led local villagers to settle in Northwest Cardamom. In that regard, the personal narratives of different groups, the ex-KR and non-KR migrants are examined. Through these narratives, the perceptions of space among the two groups are elaborated. I discovered that the assumption that land and resources in Northwest Cardamom were relatively accessible reflects extensively on how people justified their decisions on moving to and settling in the area. People’s livelihood struggles due to Cambodia’s political and economic transformation reinforced people’s needs for land and resources. The physical characteristics of the landscape and the historical account of Northwest Cardamom (post-war frontier), have responded to the imagination of a landscape where land and resources are available. The next part of the chapter illustrates people’s confrontations in their everyday life experiences of inhabiting Northwest Cardamom, in association with access to land and resources and other everyday necessities. This section will explore people’s everyday direct relationship with the physical landscape, social interaction, and formal state regulations. It shows that everyday social, political, economical, and physical interactions in the landscape challenged their existing perceptions of the region from an open frontier space where land was widely available, to the space of confrontation and struggle to survive in order to access land and resources. These confrontations imposed more challenges in access to land for some groups than others.

7.2. Background maps

From exploring people’s historical backgrounds, I found that local people in the two villages have diverse geographical backgrounds. Some people moved from nearby areas. Others are from different parts of Cambodia. Therefore, because the following sections that capture people’s narratives involve geographical references, it is useful to visualize those locations. The
following two maps demonstrate some of the locations related to the participants’ stories presented in the coming sections. Figure 7.1 shows a map of West and Northwest Cambodia, with some locations repeatedly mentioned by local participants. The second map (Figure 7.2) illustrates the provincial locations of Cambodia and some of the district centres that are part of the participants’ stories.
Figure 7.1 Northwest Cardamom and its surroundings
7.3. KR and their frontier of survival

The relationship between the ex-KR and Northwest Cardamom has been intensively shaped by political struggle since the late 1970s. Through these relationships, the ex-KRs’ experiences and perceptions of Northwest Cardamom have been established. This section elaborates on the ex-KRs’ experiences and their perceptions of Northwest Cardamom by uncovering different individual narratives. First, before using the term ex-KR to describe a particular group in the community, I will unpack the complexity of the term KR as an identity by providing the narratives of some people who had become or associated themselves with the Khmer Rouge.
The later parts of the section elaborate on individual’s personal stories and their relationship with Northwest Cardamom since the 1980s.

7.3.1. Becoming Khmer Rouge

Different generational groups related to KR differently depending on their process of engaging with the group. For the people who joined the KR prior to the mid-1970s, joining the KR was being part of the political movement, while for the people who joined between 1975 and 1979, being a KR was obligatory. Some people who were part of the KR after 1979 were either abducted or enforced by other socio-economic reasons.

Pharn and Khun, who are in their 50s and 60s, shared similar experiences and perceptions of becoming a member of the KR prior to 1975. They had been assigned as team or group leaders in different units within the KR regime and military. The following are Khun and Pharn’s stories of becoming a KR cadre during the early 1970s.

In 1970, Khun was his early 20s and living in a rural and remote village in the northwest of Kampong Speu Province (see Figure 7.2); the revolutionary cadres came to his village to recruit people to join the movement. Khun explained that his village was one of the active villages in the revolution. He volunteered to participate in the movement, wanting to be part of the bigger national revolution. He said he wanted to support the King to regain power from General Lon Nol’s coup in 1970 (Interviews 68, 71, and 229). Khun recalled,

“It was a novelty to join the revolution at the time. In a remote village, hearing the elders talking about the General Lon Nol’s coup and listening to the radio about the revolution, we knew that the revolution was happening across the country. The Khmer Rouge, which was at the time a new revolutionary group, sent a few people to come to the village to recruit more villagers to join them. They dressed up elegantly and were equipped with modern weapons. They looked very convincing to me. My uncle was a policeman but I did not let him know. My mother arranged for me to marry to a woman in the village that I liked, but I chose not to get married because I had an obligation with the revolution. It was to support the King. General
Lon Nol stripped off the power from the King who was the father of the state. We joined the revolution to get him back into power” (Interview 229).

Pharn shared a similar experience and ideology of becoming a part of the KR. He joined the revolution in the 1970s when he was 18 years old. He said that he was chosen by the KR revolution because they needed people to fight General Lon Nol. Pharn added that the revolution was also to eradicate American ideology from influencing Cambodia (Interview 23, 70 and 72).

In Sokhorn and Var’s cases, joining the KR between 1975 and 1979 was not their choice. Being KR to them was not much about political ideology either, but a means to survive. Sokhorn and Var are currently in their early 50s. The following are Sokhorn and Var’s stories.

In 1975, Sokhorn was recruited when he was 14 years old. He was engaged in a team of children, known as Krong Korma in Khmer, whose job was to assist older cadres and to conduct light work. He was located in Phnom Penh between 1975 and 1976. His main job then was to collect organic waste from the city to generate fertiliser. Between 1977 and 1979, he was assigned to Bokor Mountain, in the southern part of the greater Cardamom region and in the western part of Kampot province to assist a radio communication team based in the coastal region bordering Vietnam (see the map in Figure 7.2). In the late 1970s when the regime was defeated by the VN troops, he was pushed from the south to the north. Sokhorn left Kampot for Phnom Penh and made his journey to the Thai border. He explained that while travelling to the Thai border as a teenager, he desperately needed support and guidance from senior people. He did not have any family members with him. Therefore, he decided to make the journey with other KR. Following this, Sokhorn worked in a radio communication unit for the KR military until the 1990s.

Var shared a similar story to Sokhorn. She also joined the KR in a team of children while she was a young teenager in the mid-1970s. Var said because she came from Svay Rieng province, in the southern part of Cambodia bordering Vietnam (see Figure 7.2), she was accused of being Vietnamese. Therefore, her whole family was threatened by the KR cadres. To ensure her
family’s safety, she decided to join the KR. After the regime was defeated in 1979, similar to Sokhorn without parental support, she was pushed to the border with many other teenagers. She married a KR militant and stayed with the KR until the integration in the late 1990s. Var claimed that since she joined the KR, she has never seen any of her family members (Interview 109 and 126). She said,

“I heard they knocked down many people from the boats into the Mekong River just near Phnom Penh. My mother asked me to join them. Otherwise, we would all be killed. I decided to leave my family and joined them. Since then I have never seen them again” (Interview 109).

Some people were abducted by the KR in the 1980s. The abduction was also complemented by the socio-economic struggles of the people after the collapse of KR regime. As a consequence of over a decade of war, in the 1980s, many people struggled to access basic needs including education, food, and medical care. Some people suffered from the breakdown of the family during 1975-1979. Srey and Sarath who are both in their 40s were abducted by the KR in the 1980s. Their stories revealed that joining the KR was an abduction which was reinforced by their socio-economic conditions.

In the early 1980s, Srey was abducted in a rural village in Kampong Speu Province (see Figure 7.2). She was then 14 years old. There was no education provided in the village; therefore, being a young teenager, she said she did not have much to do. After being abducted, Srey spent her teenage and adult life with the KR military until the late 1990s. She also married a member of the KR army and became the village head of Samlanh (Interview 35, 122, and 182). Srey recalled,

“I was cheated by the KR cadres with many other teenagers. My mother told me that I lost two brothers to the KR regime. I heard they (KR cadres) came to the village to recruit more people to join them. I was about 14 at the time. They told me that my brothers were living with them, so if I followed them, I could reunite with my lost brothers. I did not tell my mother when I followed them. I walked with them
for almost 2 months to arrive at the border. When I arrived I did not see my brothers. I would have gone back to my mother if I could after realising that I was cheated” (Interview 122).

For some people joining the KR army was an adaptive strategy to survive in the KR stronghold during the 1990s. In the cases of Thy and Hourn, who were then agarwood collectors, being part of the KR military was a means of survival in the stronghold. Thy explained,

“During the 1990s, I was an agarwood collector in this area. In 1997, the clash between Hun Sen and FUNCINPEC or Khmer Rouge armies erupted in the place where I collected agarwood. While we were walking, there were two groups of armies on both sides of the path. They were just about 50 meters away from each side. They asked us to join either of them. We said whoever dares to come and take us we would go with them. The KR side came to take us with them. So we became part of the troop during the clash in 1997” (Interview 192).

For the people who were born to KR military during the 1980s and 1990s, the stories are different. Pouern (Pharn’s daughter) and Njeb were born in the early 1980s. For them, being with the KR was neither politically defined nor an abduction. They grew up in many different places where her parents were assigned. Njeb said that what she can remember was running away from the explosions and gunshots with her mother. Pouern added that what she remembers was living inside the camp where rice and other food were provided. She said that her parents used to work in the military (Interviews 226 and 229).

7.3.2. Lives in the battles

Similar to any other people who were in Cambodia during the mid-1970s, the family structure was restructured and traumatically broken. For the people who were not obligated in any military duty, they began to reunite with their families in the 1980s. However; for the KR troops, military obligation continued to shape their family structure and everyday life until the late 1990s. In particular, during the intensive battles in the 1980s, family life was extensively organised according to military arrangements. Male-female, husband-wife, children-parent,
single-married relationships were predominantly arranged according to military structure and obligation. While husbands and other adult males were obligated to join the military missions, wives and other adult females were organised to take care of the children and to transport military goods. Marriages for new couples were also arranged by the troop leaders. All of these intensive war experiences reflected their need to settle down with land where they could establish more stable and secure lives after the integration in the late 1990s.

Seng and many former KR male cadres used words such as ‘to carry’ or ‘transport’ their wives and children, in Khmer Deurk Chun Chuoan Prapon Kon, during the 1980s and 1990s, to protect them and to able to serve their military duty. These words also reflect on the geographically impermanent lives they had during the time. Women and children were considered to be protected and kept in safe places and so that the men could perform their duties. The borderland camps were safer than the forested land of Cardamom. Children were kept in the border camps and were looked after by women (Interviews 144, 225, and 240). Some women were also obligated to support the military duties but needed to be guided by men (Interviews 1661, 221, and 223).

Pharn and Sary married in 1977. They gave birth to two of their three children during the early 1980s while they both were obligated to serve the military during active war. Pharn was assigned as a team leader looking after a transportation group of women, in Khmer Korng Neary Dek Chun Choon. Most of the time, Pharn was in the battlefields while Sary occasionally had a responsibility to ship military goods for the armies inside the state’s interior. She explained that the truck would drop her team off at some point and for the rest, they needed to walk. The group consisted of tens to hundreds of women led and guided by men. Children were left at the border camps with other women while they both were doing their military work.

Sarin, currently 50 years old, was an active militant who also had a family. In the 1980s, he spent most of his time in the battlefields while his children and wife were living in the border camps. Nheb, Sarin’s daughter, recalled as a child of the KR militants, that by the time she was

16 Pharn and Sary said that their military duties were mainly within the Cardamom region.
10 years old, she had spent most of her time with her mother in various locations near the Thai border. She said that the KR military camps near the border were not completely safe either. Whenever there was a sign of explosion or fight occurring in the place where they lived, her mother with many other people gathered the children to hide in the forest for weeks, or sometimes they had to change the location of their settlement. She rarely saw Sarin and even could not recognise him when he visited the family (Interviews 214 and 229).

Reourn, 52 years old, described her story as a single woman in a transport team. Reourn recalled,

“I was assigned to transport food and weapons from the border to the forest. As a single woman, I was expected to serve more military duty. Each trip would take about half a month. I walked all the way through the forest. We stopped a lot along the way because we were so scared of the Vietnamese soldiers and the landmines. Also, we carried a lot of things on our backs. We had team leaders but I had no idea how the teams were organised. There were tens of people in each team, mostly single females. The males had a gun each to protect the team while the women did not carry any guns. We slept in the hammocks without a blanket. Therefore, to warm ourselves, we built fires when we slept. Sometimes we were attacked by the Vietnamese troops and sometimes we saw them while they were placing the landmines. When we confronted them, sometimes we just had to run” (Interview 165).

Young and old people were kept in the camps near the border. Phet mentioned that during that time, the very young and very old people did not have a many military obligations. Only adult males and females who were over 17 or 18 were recruited into the army (Interview 223). Pouern confirmed that being a young child at the border, she was kept isolated from military impacts. What she remembers was that everything was supplied by the military. She did not know what unprocessed rice look liked and where it came from. She thought the rice came from a sack and fish came from a can. She spent her childhood in the camps while her parents had obligations in the battlefields. She could not remember very well where and why she
needed to move to many different places near the Thai border – “What I can remember was that I just followed my parents wherever they took me to” (Interviews 58 and 226).

Marriages were organised by the leaders of the troop. Phet said that for the single adults, they were encouraged by the army to work hard so that a marriage could be arranged. The troop leaders acted as parents or elders during the ceremony (Interview 223). Seng said that his marriage in 1984 was organised by his leader. More than one couple were married in one wedding reception. Srey’s marriage to her husband was also arranged by the troop leaders. That was also because she did not have any parents with her at the time (Interview 151).

7.3.3. Stronghold and home

In the 1990s, the family structure changed from highly collective to more independent household units. Parents had more time with their children because the military obligations had been reduced. The more control the KR had over Northwest Cardamom, due to the withdrawal of VN troops, the lower the intensity of fighting in the region. The adult males had fewer military obligations while women did not have to transport military goods. Independent family structures were eventually reconstructed and livelihoods started to depend more on logging activities and subsistent farming, while the military supplies to the families were reduced.

The story of Pharn and Sary’s family reflects on how the KR family life started in Northwest Cardamom in the early 1990s. Pharn said that the Paris Peace Accords created an assumption that the war had finished. Thereafter, they were ready to rebuild their family, spend more time with the children and farm the land. At first, their family was relocated to Aoral where they could re-establish individual households with rice paddy fields and residential land (see Figure 7.2 for the map). However, within one year of settling in Aoral, they were relocated to Chamkar Chrey Tbong because of the KR disagreement with the Paris Peace Accords (also see 6.2.3).

Sarin was settling in Samlout before moving to Chamkar Chrey Tbong in the early 1990s (see Figure 7.2 for the location of Samlout). He said he decided to move to Chamkar Chrey Tbong because of the availability of land. He recalled,
“At that time they said we were supposed to settle down wherever we were at. As long as there is land there is life. At that time we did not talk about markets yet. We did not decide to move back to our hometown because we did not have any land back there. We had already left our hometown, so we were not going back. We were then started to establish villages here for us to live together” (Interview 218).

After the last military clash in the late 1990s, villages such as Chamkar Chrey Tbong and Samlanh become permanent settlements for the ex-KR who chose to stay in the region. The family became fully independent from military duty. The land became an important aspect of the new era. That is reflected in many of the ex-KR narratives and their association with the landscape, which had previously been considered an active war-zone and later a military stronghold.

Var chose to settle down permanently in Samlanh because for her, Northwest Cardamom is the only place she and her family are familiar. She has never been back to her hometown in Svay Rieng, or ever seen her family since joining the KR in late 1975. She does not know if any of her family is still alive or even what her hometown is currently called. Since she moved to Samlanh in the early 2000s, her life has mainly been within Samlanh and the surrounding villages. Her livelihood has depended essentially on the farm she has in the village. She has her children and grandchildren who are currently living in the village and another village nearby (Interview 129).

Srey, instead of moving back to her hometown, invited her relatives to move to Samlanh because she could offer them land. Srey said that it was easier for her to get land here for her relatives, than for them to find her land back in her hometown in Kampong Speu. Srey could easily allocate her relatives land in Samlanh because she was a village chief and her family was among the few former KR families who lived in the village. Currently, many of her family members are living in Samlanh, including her mother and cousins (Interviews 35, 69, and 122).

Mao, who currently lives in Samlanh, said he could not stand living in the village in Kampot which he left in the 1980s. He is used to living in a remote area where there is less traffic and noise. He said he had been back a few times since he left. His impression was that there were
so many people in his old village and it is too hot there. Mao also explained that he was not able to move back because he did not know what to do there. He had been in the army since he was young, so he did not know how to farm a rice paddy. In Samlanh, he is from one of the few ex-KR families, so it is easier for him to claim land there. Currently, his family is one of the families who have more land in the village (Interview 190).

7.4. Migrants and the new frontier

This section illustrates the relationships between in-migrants and Northwest Cardamom by examining people’s historical narratives, spatial perceptions and everyday socio-spatial interactions. It shows that the “abundance” of land and resources is at the centre of the region’s contemporary in-migrants’ narratives. For the migrants, Northwest Cardamom is the post-war frontier where land and resources are relatively accessible compared to other parts of the country. The accessibility of land and resources are viewed as the key solutions to livelihood by the poor migrants who have experienced Cambodian post-war trauma and rapid economic transformation. The section starts by detailing the narratives of these migrants in association with Cambodian political history and land, followed by a discussion of the factors forcing them to move. Finally, it elaborates on why they move to Northwest Cardamom, Chamkar Chrey Tbong and Samlanh in particular, but not to other places.

7.4.1. Postwar struggle and land

Many migrants have experienced Cambodian post-war trauma, and that is essentially related to the desire to own land. Some migrants who were not part of the KR troops were also involved in the war during the 1980s (Interviews 31, 63, and 145). Others said their families have been affected by the war, such as by landmines and psychological issues (Interviews 102, 112, and 198). All of these experiences are related to their landlessness.

Bunthorn, Siep, and Chantha, said they had actively served into the military until the 1990s which considerably contributed to their narratives of landlessness or lacking access to land. When I asked why they did not move back to their hometowns after serving their military duties, some responses were; “The land back there was already distributed”, “The place was
very crowded there already”, or “We were late for the land distribution” (Interviews 130, 159, and 107).

Bunthorn, a 50 year old man living in Samlanh, was recruited into the army with the central government in the mid-1980s and his duty ended in the late 1990s. By the time he finished his military obligations, the land had already been distributed in his hometown, so he could not move back (Interviews 31, 90, and 106). Bunthorn recalled,

“My hometown is in Kamchay Meas District, Prey Veng Province (see Figure 7.2 for the location). At that time, the government mobilised young men to serve in the military; therefore, I was obligated to join. Since then I have left my hometown living in mobile life from camp to camp depending on the military assignments. I served in places along the border where I got married. I chose to give up the army myself, so I received neither military retirement fund nor land. After serving in the army, I decided to settle with my wife’s brother in Bannan District, Battambang Province because he had some paddy rice fields we could farm. I think it is easier being a farmer than being a militant. I never thought of going back and settling in the hometown because I know that land was very crowded back there. I went to visit my hometown after I had left for 20 years. Many people who know me had already passed away. Younger people did not know me” (Interview 106).

Some people associate their landlessness with the 1980s and 1990s land distribution (Interviews 92, 99, and 110). Samnag and Yat, a couple who recently moved to Samlanh, received a limited amount of land from the state in the 1990s. Both lost their parents during the mid-1970s, so they lived in a refugee camp until the mid-1990s. They were resettled in Samkie District, Battambang Province, where they were allocated a small plot of rice paddy land which was less than 1 ha. Samnang said, from that land, they could not support their family with an increasing number of children. Having not enough land to cultivate, the family left the village in Battambang to seek work along the Thai border (Interviews 99 and 110).
The stories of Thea and Theurm reflected a similar narrative on how they lost their distributed land in relation to the consequences of war (Interviews 102, 112, and 198). Thea lost her land because one of her sons was injured by a landmine while visiting his brother near the Thai border in the late 1990s. The family sold the land in Kampong Cham Province for her son’s treatment and decided to move out of the village searching for labour jobs in agriculture along the Thai border. Since then, selling labour has become the family’s main livelihood option (Interview 112). In the early 2000s, Theurm lost her husband, who was a former militant, and since then she has been a single mother of four. She said her husband suffered from a psychological disorder after finishing his military duty. All the land was sold to treat him, but it was not successful. Theurm has spent years after her husband passed away being landless and selling labour in the village (Interviews 102 and 198).

7.4.2. Pressure to move and land

Land was the centre of people’s migratory narratives about moving, which included not having land to cultivate, losing land due to debt, being evicted from land, and having unproductive farmland (Interviews 102, 254, and 255). As a result, being landless is described as not only economically challenging but also emotionally exhausting. Therefore, searching for land has become the hope of livelihood transformation.

The story of Mar and Dy, a couple in their early 50s, demonstrates how land is linked to their migration. After losing her father during the KR regime, Mar’s mother was single, so the family was given a small plot of land during the 1980s. Mar married Dy after the land was distributed, thus they did not receive any. To offer her new family some land, Mar’s mother allocated her a small plot of residential land (10x20 meters) after her wedding. Dy did not receive any land from his parents, hence Mar’s land from her mother became the only plot of land they had. Without any farmland, the couple’s livelihood depended on Mar selling food in the village and Dy doing seasonal fishing. During the non-fishing season, they rented other villagers’ land to grow vegetables. Ma explained that their lives became tougher when they had more children. Dy started going to the Thai border selling labour in the farms. After a few years of working near the Thai border, Dy observed that the new land at the Thai border was productive, so it
could be a good chance for them to earn a better income from farming rather than selling labour. They started renting other people’s land to farm and moved the whole family to the borderland. After a few years of cultivation, the yield from the rented farm had dropped. Instead of making a profit, the family ended up in debt. To explain why they did not make any profit from the farm, they said it was due to the cost of renting the land. They claimed that if they had had their own farm, they would not have lost the money on farming. Since then they were looking to buy cheap land that they did not have to rent (Interview 62).

Morm and Kok, a couple in their 50s, had lived in a few different places before moving to Samlanh. Their journey started when they lost their land due to a conflict with their neighbor in Sihanouk Province. Before living in Samlanh, they lived in Rathanak Mondul District, Battambang Province, where they owned a small plot of residential land near a market where they ran a small grocery shop (see Figures 7.1 and 7.2 for the map). Morm said that the shop allowed her family to earn the money to support their daily needs. After years of living on that land, they could not save much money. She wanted more land to do cash-crop, farming hoping to save money (Interviews 59 and 188).

Before moving to Chamkar Chrey Tbong, Von had a rice paddy field in Bakan District, Pursat Province, but the field was damaged by drought which led his family in to debt. Ultimately he decided to leave the village (Interview 156). Von explained,

“It was tough back there. We did dry season rice, but there was not enough water in the irrigation. The rice was damaged by droughts 3-4 years one after another. To do dry season rice, we borrowed the money from a local bank. When we did not have enough money to pay back the loan, they sold our land. We took a few million Riels from them and what we did for the first year of drought was to pay the interest of the loan. After a few years of droughts, we could not afford to pay the interest anymore. We decided to sell the rice field; unfortunately, during the drought period, we could not receive the normal price for the land. The bank put our land on sale. More than one hectare of land was sold only for 3-4 million Riels; while the actual price of the land was about 8-12 million Riels per hectare. After losing the land, we
decided to come here to farm (cash-crop) hoping that we could earn money to buy the land back. I heard that they could do up to two seasons of farming per year here” (Interview 156).

Suern, from Chhuk District, Kampot Province, lost land to a private company which forced her to move out of her old village and search for labouring work (Interview 193). Suern explained how her land was taken by the company,

“The land we had back there was close to the forest and mountain. It was inherited from my grandparents. We did not use that land right after the KR regime in 1979 because there were still KR troops in the area. A few years after returning to the land when it is was peaceful, the company arrived and said our land was located on the company’s land. We did not receive any compensation at all from the land they took from us. I felt very upset, so I decided to move out of the village with my children and husband. We had worked in cassava plantations for 3-4 years before we decided to search for a place where we can have some land. Because of the land and travelling to search for a job, none of my children has been to school” (Interview 193).

Samnang and Ry said that their journey of being poor without land is not only economically challenging, but also emotionally exhausting and hopeless (Interviews 110, 181, and 219). Samnang mentioned,

“I remember working at the Thai- Cambodia border checkpoint where we were paid to carry vegetables between Cambodian and Thai sides. For 10 kg of vegetables, we were paid 5 Thai Baht (0.15 USD). Everyone in the family had to work including my small children. We just survived on a day to day basis and not saving any money” (Interviews 99 and 110).

Rem exclaimed,
“I am tired of moving and selling labour. I have had enough of a mobile life moving from place to place. After spending years of working for others, we have got nothing left. We don't even have land on our own to live on. It is exhausting” (Interview 181).

7.4.3. Northwest Cardamom - a spacious frontier

This section elaborates on the relationships between people’s narratives and perceptions of Northwest Cardamom. The interviews show that, for the migrants, Northwest Cardamom is a new land and resource frontier; hence, settling in the area could potentially improve their livelihoods. Some migrants said they moved to Samlanh and Chamkar Chrey Tbong because the villages are still spacious, which meant there was still land available and unused. They moved to the area hoping to clear the forest for land or buy very cheap land (Interviews 155, 193, and 199). Some stated that they also moved to the villages because of the availability of resources, e.g., timber and non-timber forest products (Interviews 31, 57, and 234). Others mentioned that engaging with the active cash-crop labour work could provide them a basic livelihood (Interviews 78, 159, and 233).

Le’s story shows that land and resources in Samlanh have improved his livelihood. Le had lost his land and been in debt in his hometown in the mid-2000s before moving to Samlanh. When he arrived in Samlanh, the village head allocated him some land. A few years later, the road’s condition was improved and cash-crop and forest product markets started to emerge. From the emerging cash-crop and forest product market, Le was able to pay off the debt and have a more stable livelihood. He invited more relatives who struggled economically in his hometown to move to Samlanh because there was more land the village head could offer. The people he invited include Thuerm, a single mother who had lost her land due to the expense of her late husband’s medication; and, Touch, who had lost land due to unproductive rice farming (Interviews 102, 120, and 176).

Ra and Et moved to Samlanh expecting to own big plots of land because the land in Samlanh is cheaper compared to other places. Ra said, “While the land over there (his previous place) is
tight and expensive, we sold it in order to buy bigger land here. We sold a small plot of land there for 4000 USD to buy 3-4 ha of land here” (Interview 228). A similar story is told by Et, who was in the military until the late 1990s. He settled down in Pailin after the war finished in the late 1990s. He owned some land back in Samlout, also an ex-KR stronghold, before moving to Samlanh, but he wanted more land (see Figure 7.1 for the map). He sold a few hectares of land in Samlout and bought more than 15 ha of land in Samlanh (Interviews 107 and 195).

Rim shows that moving to Samlanh allowed her to own the land which she could not afford elsewhere. Rim said that owning the land is economically and emotionally better compared to using someone else’s land. To get access to land back in Samlout, Rim agreed to clear the land that was owned by someone else. The agreement was that she could use the land for three years, then she had to return the land back to the owner. After that, she either had to pay rent or she needed to move out. Additionally, her family had to work for the landlord if they needed them. After three years of harvesting, the land was degraded and she also had to pay rent. At the same time, the landlord accused her of not spending enough time working on their farm when they needed. That was because she was also busy working on her own farm. Farming on someone else’s land became economically and emotionally wearisome. In Samlanh, Rim paid 2 million Riels to the village head for 5 ha of land. She said that with that amount of money she could not buy land anywhere else (Interview 181).

Sam (30) married a woman who is a daughter of an ex-KR and currently a village authority in Samlanh, expecting his father-in-law to allocate them land after their wedding. Sam added that in his hometown, he could not find a job and his parents also did not have much land to distribute to him.

Tong and Mom, both in their early 20s, moved to Chamkar Chrey Tbong to try their fortune in the new frontier land with cash-crop farming. They both came from Kampong Thom province. Before moving into the village they worked in construction, a garment factory in the city, and rubber plantations in Kampong Cham province. They do not have their own land in the village, so to farm they have to rent the land from an older villager. The cost of the rent per year is 100USD/ha. It is relatively cheaper than land in other areas. Tong said, “Working for others, we
could not save much money, but doing farming here we can also earn the money working on others’ farms while doing our own farming for everyday food. In a few months when we harvest our own farm we save a few million Riels if the farm is productive. To start up farming here we had about 6 million Riels from our own savings and some granted by parents” (Interview 155).

Im moved to Samlanh to get land so that she could distribute some land to her children. She was introduced to the village by her brother, who arrived there earlier and bought very cheap land in Samlanh from the village head (2 million Riels/5 hectares). She has 6 children, but only owned a 5x100 metre rice paddy field back in her hometown in Kampong Thom Province. To be able to have land that she could pass on to her children, she decided to sell the land in her hometown in Kampong Thom province and buy more land here. Im currently has 5 hectares of land which she bought from the village chief and is hoping that she can distribute the land to her children (Interview 92).

Sokhar and Sart are landless single mothers who moved to Northwest Cardamom to look for labour jobs in cash-crop farming (Interviews 123 and 158). Sokhar (37), a single mother of three, currently lives in Chamkar Chrey Tbong village where her main job is selling labour in seasonal cash-crop farming. Sokhar recalled,

“Life has been tough since my husband passed away a few years ago. When my husband and children got sick, I sold all the land we had back in our hometown. To support my children, I decided to move out of the village looking for job. At the same time, I was told by some friends of mine that they were allocated land for people in Kravanh (a district next to Veal Veaeng), but it was not true. When I arrived I realised that there is not land being distributed, so I did not know where else to go. There was not any job to do there as well. My friend told me that there are jobs available here so I decided to come with my children. I have been here for a year now living on someone else’s land. I had thought of going back to my hometown, but I did not have land left there. Life is tough here, but as long as there is work, I can earn 20000 Riels (5USD)/day, it is enough for me” (Interview 123).
The above narratives of the migrants show that land is the main reason that attracted people to move to Northwest Cardamom. While lives have been constrained elsewhere, Northwest Cardamom is understood to be a frontier where livelihood opportunities can be realised because of the land and resources. However, the following section shows that everyday life in the frontier is not only an opportunity but also a struggle, particularly in relation to accessing land and resources.

7.5. Everyday life in a confronting space

Living and accessing land in Northwest Cardamom has been confrontational; the challenges of which include confronting the physical environmental conditions, financial difficulty and social relations. I found that having to confront these conditions, people are paying more than they expected for land. The cost is more than the financial cost, but also the social and cultural cost that people have to invest to be able to live and access land in the village they are living in. In that regard, some groups are investing and losing more on their land than others. This section elaborates on the everyday challenges faced by people, both KR and new migrants, living in Samlanh and Chamkar Chrey Tbong.

7.5.1. The inhospitable landscape

One of the major difficulties inhabiting in the landscape is associated with the physical conditions of the area, e.g., diseases and landmines. The following stories elaborate on the challenges of everyday life living in the villages in terms of the landscape’s physical conditions.

Ra, Marn, Thy and Hun explained that this area was filled with landmines. Ra, an ex-KR militant, recalled a landmine story during the 1980s: “I remember during the battles, there were landmines everywhere in this area. Many of my friends were injured and killed by the landmines here. For example, one time, when some of my friends went to take some water in the river after lunch, we heard a landmine explosion. Since then we never saw them again” (Interview 251). Marn also shared her experiences being a K5 worker in this area during the mid-1980s: “I remember during the K5, I was assigned to this area to clear the forest for the

17 See section 3.3.1 for the meaning of K5
army. Many people stepped on landmines” (Interview 79). Thy lost one of his legs near Samlout while he was serving in the military in the 1990s (Interview 192). Hun talked about her first settlement in Chamkar Chrey Tbong in early 2000s (2001-2003), “I remember while my husband was burning the forest at the back of our house here, I heard an explosion. I thought he was killed by the mine. Fortunately, he was not affected” (Interview 160). Khun informed me that some of the land in Chamkar Chrey Tbong has still not been used because it is still suspected to have some landmines (Interview 144).

Figure 7.3 Debris of a bomb found in a farm (source: author)

Diseases such as malaria and dysentery have intensified the hardship of everyday lives of the villagers, especially the people who live in the marginal locations of the village (Interviews 57, 172, and 176). People explained that the area is still covered with forest which exposed them to a high risk of malaria, and that there is a lack of access to safe drinking water, which increases
their chance of dysentery infection (Interviews 153, 201, 232). Here are some of the ways people described the challenges living in the area: Touch exclaimed,

“When you talk about diseases, I have no words to describe. Everyone in the family got sick from malaria and dysentery. The land here has malaria, so it is so easy to get malaria here” (Interview 172).

Chheng said that due to the diseases, his family life in Samlanh is more costly than what he expected. All of his family has experienced malaria and dysentery, which has been taking a substantial amount of money from his family income that he earns from farming and logging. He claimed to have spent more than 3000 USD on the medical treatment of his family, since they arrived here less than 3 years ago. For this amount of money, his family has sold a scooter, which is their major vehicle, and other farming machinery they had owned before moving to Samlanh. Additionally, his family is currently in debt. Chheng explained,

“While malaria has slowly been reduced because the forest has been cleared, dysentery is still very serious. You can come and see the water in the creek during the dry season. It is very unclean. Everyone in this family has had malaria or dysentery” (Interview 57).

It is harder to get access to clean drinking water during the dry season, especially for the new migrants who live at the edges of the village further away from the main water sources. That is one of the major challenges with new migrants who have settled in the marginalised locations such as Okartin and Phum Thmey and Okanglan (Interviews 157, 167, and 168).

7.5.2. Isolation

Many locations within the region are considerably isolated and the consequences of which are the lack of access to food, health care, education, and religious practices. In some villages, such as Samlanh, food is more expensive compared to other places that are closer and more accessible to the district or provincial centres. In Samlanh most of the food, including rice, is
imported from elsewhere. Kun said that the food in Samlanh is two to three times more expensive than her hometown (Interview 174).

Pork said, “There is no public health centre here in the village and the road condition is also bad. So it is hard to move in and out of the village when someone is sick” (Interview 172). The closest public health centre is in Pramoay and to travel there when someone has medical trouble, the cost of transport is high, especially for those, such as Chheng, who do not have their own vehicle.

Sorn, a 33 year old woman living in Samlanh, complained about not being able to have access to a pagoda where she can practice her Buddhist rituals. Sorn explained, “Because I want to have land, I moved here. However, since I have been living here a few years now, I have not seen a monk. I miss going to the pagoda back home” (Interview 53). Mey, 65, moved to Samlanh with her children because her children want bigger and more fertile land. She lived in her children’s farm located near the mountain further away from the village centre. She explained, “In this village here, I don’t feel good about myself when I am not able to go to the pagoda during the festive seasons such as Pchum Ben or New Year. I have to ask my children to take me back home. I only went back to the old village twice a year. While I was living there, I went to the pagoda twice a week, after I moved here I can only go back there twice a year” (Interview 56).
Education is inaccessible to many villagers. Samlanh has a primary school up to grade 6 with three teachers. Therefore, some of the classes are combined. The following photo shows a classroom occupied by three classes (grade 4-5-6) with one teacher at the same time. Out of more than 100 families living in the village, only 6 children made it to grade 6 in the year 2014. Some of the families could not send their children to school because their houses were far away from the village centre, where the schools are located (Interviews 57, 245, and 255). Lav is living in Odey Khmao, a subsection of Chamkar Chrey Tbong village, from which his house is about 5-6 kilometres away from the school. The road is very difficult, particularly during the rainy season. He has 8 children and none of them has been to school. Chheng has a 14 year old son who is still in grade 3 at a primary school in Samlanh (Interview 57). Tha is living in Okanglan, Chamkar Chrey Tbong, which is 4km from the main road and more than 7 km to the closest school. His family does not have a vehicle to travel; therefore, his only child, who is 11 years old, has never been to school (Interview 255).
7.5.3. Social connection and fragmentation

Social connections are critically related to access to land and everyday necessities, e.g., food, medication and agricultural practices. I observed that the formation of social connections within the villages was different between the ex-KR and the new migrants. The ex-KR have been connected among their community since the 1980s through their shared experiences with the wars and living in the stronghold. The new migrants, who are not relatives of the former KR, are more fragmented among each other compared to the ex-KR. This lack of connection limited their capacity to have access to land and everyday needs. The following stories elaborate on social connections among the different groups in relation to land access and everyday life.

Pharn, Khun, Seng have known each other since the 1980s while serving the in KR military. This connection was also reinforced by their disconnection with their own family and relatives prior to the late 1990s. Seng, for example, said that he did not re-engage with his family until the early 2000s; therefore, most of the people he engaged with until then were his KR friends. Khun and Pharn have been through war and military work that has given them similar shared experiences and a network of friends. The three moved to Chamkar Chrey Tbong at the same time and currently they are among the most influential people in the village. Khun is currently a commune council member, Pharn is a village head, and Seng is one of the wealthy and active community members. They live close to each other in the village centre and their land is located
along the main road. Pouern and Njeb, the second generation of the KR, are close friends because they have shared similar experiences growing up in the refugee camps. They got to know each other before they moved to Chamkar Chrey Tbong and their parents are friends. They currently live close by each other in the same part of the village. They both received land distributed by their parents.

Le invited his relatives from Bueng Khnar commune, Bankan District, Pursat to move to Samlanh. In the mid-2000s, Le was invited by a relative who was a former KR to move to Samlanh because the village head was distributing land to newcomers. After receiving the land, Le invited Thuerm, Laiy, his relative and friend from Bueng Khnar, to move to the village because the land was still being distributed without charge. I observed that the connection among this group, the relatives of the ex-KR, is vital to their agricultural practices and support in their everyday needs. Le, Thuerm and Laiy were allocated land close to each other; in the main part of the village. Their agricultural land is next to each other; therefore, during crop cultivation they reciprocally exchange labour, in Khmer York Daiy Khnear. Le said when they arrived in Samlanh in the mid-2000s, the village was mainly covered by forest. Therefore, in order to clear the forest to get land, they helped each other. Thuerm explained that as a single mother with small children, she would not have been able to clear the forest to get land if she did not have support from her friends such as Le and Laiy. Le said that usually when they need money from time to time, they borrow money from each other without charging interest (Interviews 86, 176, and 198).
The new migrants tend to have fewer connections to the village authorities and senior residents. Many newcomers arrived at the villages with minimal relations with the ex-KR or village head (Interviews 167, 168 and 169). They were mostly introduced to the village and the village authorities by their friends or relatives who had moved there earlier. Im, for example, moved from Kampong Thom province to Samlanh with her brother who was introduced by his friend to the village chief. To settle in the village and have access to land, Im and her brother each had to pay 2 million Riels for the 5 hectares of land. Apart from her brother, Im said she does not know many other people in Samlanh. Im said most people she knew were those who live and have land on the same block. The people who live in Phum Thmey were from the same village in Moung Ruessei District, Battamabang Province. They were introduced to the village by Kheurn who is also from the same village in Moung Ruessei District. Kheurn is a good friend of one of the village authorities, Rith, Srey’s cousin. Apart from Kheurn, the people in Phum Thmey did not have many connections with other more senior residents, and in order to
engage with the village head, they have to go through Kheurn. In order to settle down in the village and receive land, they had to pay 2 million Riels to Srey and her cousin Rith through Kheurn (Interviews 194 and 179).

Moving into the villages searching for land and growing cash-crops with low financial capital and few social connections, the lives of the new migrants are more challenging compared to the people who have lived there longer. Financially, new migrants have already struggled before moving into the village (see Section 7.4, which shows that some people were already in debt before moving into the village). Clearing land and cultivating cash-crops are financially consuming; therefore, to be able to farm, people need to borrow money from local moneylenders, their friends or local banks (Interviews 103, 110, and 81). For the poor migrants, the interest on the money they borrow is higher than that of other residents. The only source of money they could borrow is from the richer people in the village. Some said that when they need money urgently, the interest is up to 10% per month (Interviews 64, 104, and 110). In order to have access to food, especially during the active cultivating season, some people borrowed rice from the local shops, which costs much more than what they pay if they have money to buy it. A sack of rice (50Kg) is 80000 Riels (20 USD) to buy from the market, but to advance the rice for a few months, the cost is 120000 Riels (30 USD) (Interview 39, 53 and 54). A similar arrangement is applied if they want to borrow pesticide or fertiliser from the local shops. The new people who live in Okartin and Phum Thmey said they were not allowed to borrow money from the local bank at a lower interest rate (3% per month) either because the bank did not trust them. Some people said the bank asked for the land title for as security, which they did not have (Interviews 169, 170, and 179).  

### 7.5.4. Access to ('good') land

Accessing (good) land is more difficult for some groups than others. The marginalised groups, who have less access to land, or particularly good land, are poor migrants who do not have strong connections with the local authorities and/or older residents. To get access to land, lat

---

18 Sections 7.6.2 and 7.6.3 show that the people who live in Okartin did not receive land title because their land area is located in the Mining Concession.
arrivals have to get acknowledgement or approval from the authorities and older residents; if not they might clear land that has already been claimed. As a result, the risk of getting into conflicts, wasting labour on clearing forest, or losing land that has been cleared, is high. To be able to use or possess land, various means were taken including claiming, buying, having it distributed, paying for a “development service,”\(^{19}\) and encroaching on forest land that appears to be not yet claimed.

The ex-KR are among the people who own the largest and highest quality land. In Samlanh, Srey and Rith were among the people who have the largest land in a good location compared to other residents, because they are the senior residents and village authorities. To access land during the late 1990s and early 2000s, they just claimed and cleared land wherever they preferred, which was mainly land in a good location with good soil quality, including the land near the river, the road, or the village centre. Each of them owns more than 20 hectares (Interviews 182 and 189). Srey said she still owned other plots of forested areas that she has not cleared yet. In Chamkar Chrey Tbong, Pharn, Seng, and Khun are among the families who owned larger proportion of land compared to many newcomers. They were among the people who distributed the land to other people and to themselves. They claimed various locations of land in the forest that are yet to be cleared. Pharn’s family own about 15 hectares of farmland located along the main road and near the river, while each of his children was also distributed a plot of residential land in the village centre (Interviews 70, 246, and 257). Seng similarly owned a plot of land of more than 20 hectares near the major road while claiming a few more plots that he had not yet cleared or used (Interview 151).

Rorn and Thuerm, the earlier migrants, got their land distributed to them when they first arrived in Samlanh in the mid-2000s. Their land was allocated by Srey and Rith. They were not allowed to choose the location of the land; however, during the early stage of land distribution in Samlanh, land was abundant. So the land distribution started with the land that had good soil quality and was closer to the village centre. They owned the residential land along the main

\(^{19}\) This is the arrangement in Samlanh, where newcomers pay 2 million Riels to be able to live and have land distributed to them in the village.
road of Samlanh, and farmland near the creek that was less than half an hour’s walk from their house (Interviews 176, 198, and 202).

Lee is one of the well-off people in Samlanh who has recently moved from Battambang. He bought most of his land from Srey, who claimed many parts of the forest. Lee said he owned more than 20 ha of land, the locations of which he was able to choose. The price he paid for the land is higher than 2 million Riels/5 hectares. He owns land that is near the creek, close to the road, and topographically flat (Interviews 119 and 199).

New and poor migrants are among the less advantaged in terms of accessing good land. In Samlanh the main way for the newcomers to have access to land is to pay 2 million Riels to the village head in exchange for 5 hectares of forest land, of which the location is chosen by the village head (also see Section 5.5.5). Normally, they were assigned land further away from village centre and good land, to avoid overlapping with other people’s land. Tourn, who is currently living in Phum Thmey, complained that the village head allocated her forest land near the mountain, which was very rocky and hilly. In order to get to the farm from where she lives, she has to walk for more than an hour every day each way. Moreover, the challenge of that land is when they have to transport yield out of the farms during the harvest season. Tourn said that to pay someone to transport the corn out of her farm usually cost more than the cost that people whose farms are near the main road would pay (Interviews 47 and 179). Rem said last season she could not sell her corn after harvesting because she could not ship it to the main road. As a result, she was in debt because could not pay back the loan she took to cultivate the crop (Interview 181).

The other means to access land is to clear land that is assumed to be not yet claimed or used; however, this approach can be risky especially for new and poor migrants whose geographical knowledge of the villages and social connections is limited. In Chamkar Chrey Tbong after land was distributed in the early 2000s, there was not any more land to be allocated. Additionally, much of the forest land has already been claimed by the ex-KR or the people who arrived earlier, but it has not been cleared or/and demarcated. Therefore, clearing forest land is risky, especially for the new migrants who do not understand the territorial context of the villages or
have a strong connection to senior residents. One way to avoid or minimise the potential conflict with more senior residents is to go further away from the village centre and main roads, e.g., the land in Okanglan, Chamkar Chrey Tbong, where the land is not very fertile and transportation is difficult. Di, one of the local residents living and clearing land in Okanglan said, “Because of all the land is taken here (the village centre), I just chose the land there” (Interview 138).

7.6. Living in the abstract space

Navigating through the state’s abstract space is another everyday challenge because there were not clear boundary demarcations on the ground. People associated with boundaries differently depending on how these boundaries are enforced on the ground. This section elaborates on how people interact with state-based boundaries in their everyday use of land and resources. First, I elaborate on people’s interaction with conservation; followed by their relation to land concessions. Finally, I provide some examples of the implications of private land titling on their understanding of abstract space.

7.6.1. Living in the wildlife sanctuary

I observed that the people I interviewed were not clearly aware of the PSWS and its conservation zoning classification boundaries. The only PSWS classification people can engage with is the Community Protected Area (CPA, Zone 3).20 However, many people did not know the exact boundaries of the CPAs. Hem, a 37 year old woman in Chamkar Chrey Tbong said, “It (CPA) is far way, but I do not know where it is exactly. I heard that we are not allowed to touch that land” (Interview 227). Thai, a 35 year old man in Smlanh, said, “I heard that there is a CPA here, but I do not know where the boundary is. They said my land is inside the community protected area” (Interview 173). Bonthorn also explained, “there is a community forest (CPA) here. It is just over there but I do not know now. They kept changing it” (Interview 185).

However, some people understood that they are living in the conservation area, and hence that living in the forest, clearing land and cutting wood, and hunting wild animals without approval

---

20 See Section 5.3.3.1 in Chapter 5
from the local environmental authorities is illegal (Interviews 128, 145 and 175). Therefore, to access land and resources is risky and confrontational towards the environmental authorities. Many people I interviewed understood the risk of confrontation, but hoped that they would be able to own land in the end. Mess said that it is basically illegal to clear forest for land, but she took the risk because she needed land. She said, “I know it is illegal to clear the forest but my grandchildren are crying for food. I can disobey the law but I can’t disobey my grandchildren. If I don’t give food, they started to cry immediately. Do you know what I mean?” (Interview 33). Vit is hoping that after she clears all the forest, she could own the land. Before moving to Samlanh, Vit had lived in Samlout which was also a conservation area. From her experiences of living in Samlout she learnt that after the land had already been cleared, people could claim ownership of it. That observation is what brought her to Samlanh hoping to have some land after clearing the forest (Interview 32). That would include the risk of not being able to own it after clearing it and being arrested by the conservation authorities while clearing the land.

Therefore, to be able to use and claim land in the conservation area, the first step is to have the land cleared and make it look like it is being cultivated. The process of clearing land is confronting the PSWS authorities. Therefore, people have to navigate through law enforcement by the PSWS rangers. First people need to be invisible to the environmental authorities if they do not have official recognition from the village and commune chief as local residents of the village. Different forms of settlements were adapted, e.g., living further away from the village centre or building houses that look like temporary settlements. These groups of people include the people who live in Okartin, Samlanh and Okanglan, Chamkar Chrey Tbong. To clear the land, people need to ensure that they are not seen by the rangers. Phon, one of the new migrants living in Okartin said, “if you come here during the daytime, you would not hear any chainsaws. But if you wait until it gets dark, you can hear the chainsaws everywhere” (Interview 33). Some people in Chamkar Chrey Tbong said that they used the telephone to inform their friends and families who were cutting the forest when they saw the rangers on their way to patrol. If the rangers catch them, they have to pay a fine. One day while staying at home with Pharn and Khun, I observed that they were making a telephone call to someone clearing land in the forest to tell them to stop because they saw the rangers driving motorbikes to patrol the forest.
Buntheuen explained, “When we clearing for land in the forest, there are people who stay at home to see if there are rangers on their way to patrol. When they see them on their motorbikes to patrol, they call us to stop. If we are caught, they confiscate the chainsaw and ask us to pay the fine” (Interview 227).

7.6.2. Land concessions and their territories

The concession boundaries are not clearly defined, and people found out about the boundaries when they were told by the company’s security guards or private land titling registrars, or not until they were evicted from the land. As shown in Section 6.4.5, ELCs in Chamkar Chrey Tbong were not yet fully used. Thus, there is forest land not yet cleared by the company. People did not know where the concession land was until the concession guide told them that their land was inside the concessions and the forest land they were clearing was company land. When I asked if they knew the boundaries of the ELCs, Khoung, Chea and Long responded they didn’t know until the company started to clear the land (Interviews 216, 220, and 225). Chea recalled,

“It is not really clear where the company land is. I think it is the place where land is already cleared. The people who lost the land to the companies did not have any idea that their land is inside the company area until their land was taken by the company” (Interview 216).

Hieng recalled how she lost her land to the company because she did not know that the land she cleared was located inside the Economic Land Concession. Hieng said,

“After living for a few years, we started clearing for land. We were given land by the people here who had arrived earlier. When we were about to clear the land there, the company arrived. They said our land belonged to the company, so we lost that first land. After a few years of not having land, we decided to clear another piece of land because we needed rice. We already tried to go as far as we could from the company. We found a place that we assumed the land there was not inside the company area anymore because it is already far away. But now they (the land concession security) said we are farming on their land. My husband already signed
the agreement with the company that we have to give them the land back after harvesting the rice. If we did not sign, they would take the land and would not allow us to harvest the rice” (Interview 152).

Similarly, the Mining Concession (MC) in Samlanh was not yet activated and the boundaries were yet to be demarcated on the ground. Apart from the land already cleared by the villagers, most parts of the MC are still covered by forest. Some people in Samlanh are living and have farmlands inside the MC (Figure 7.7). When asked if they know that there is a land concession where they are living, people are mindful that there is a Mining Concession inside or near the village, but they do not know exactly where. Been, Et and Pheak who are currently located outside of the MC said they heard that the Mining Concession is in Okartin where the new people are living (new migrants) (Interviews 191 and 1995; see Figure 7.7 for the map). Pheak said,

“I heard they said that it was in the Okartin area, but I am not exactly sure from where to where or how big that is. I heard about that when the students (volunteer land registrars) came to measure the land. They said the land in Okartin is located inside the mining land, so they can’t give them title” (Interview 194).
Vantha and Koung who lived in Okartin, inside the MC, knew that their land was inside the concession when they were told by the military who worked for the company, but they also did not know the exact boundary.
Rem recalled, “They said our land is inside the mining land. I heard the size of the mining concession is 10x10 kilometres, but I don’t know from where to where exactly. I don’t know what that is used for. I don’t know who owns the land, but military came to visit here sometimes. They asked me, “did I buy the land here?” and I said no. They said the land here can’t be sold by anyone because it is mining land” (Interview 181).

7.6.3. Land and official recognition

Land titling introduced in the 2012 O01LTC is the only means local people have to represent their ownership of the land with the state. However, to have their land registered, involved at least three challenging steps (also see Section 5.6.3). First, people have to officially live or belong to a village. Second, they have to show that their land is being cultivated to be recognised by the land registrars. And third, they have to ensure that the land is not located in a “controversial zone”.

The first step, that people have to be a member of a village or part of a village, is also more challenging for those who have recently arrived in the village than for the earlier arrivals. For people who have just arrived, they need a transfer document which recognises that they are moving from previous places to the new place. In addition to that, they have to be accepted by the village head. Therefore, they have to know the village head or be introduced by an earlier arrival. The people who were located in Phum Thmey, Okartin and Okanglan were among those who have to confirm their existence in the village so that they can be registered as part of the administrative unit. As new migrants in Samlanh, for example, to be recognised by the village head was to buy the land from them. Chantha, currently living in Phum Thmey, who failed to prove that he was officially living in the village, did not have his land registered (Interview 187). Chantha recalled,

“We got one ha of land cleared, but we did not have any document with us. From what the students (land registrars) said, we have to get the letter from the village

---

21 Buying the land from the village head here also refers to the 2 million Riels/5 hectares of land.
head at least, so that they can do it for us. There were so many people waiting, so I could not make it on time. They said I have to wait for the second round” (Interview 187).

The second step is to have the land cleared so that it looks like it is being used by the time the registrars arrive. Clearing land in a short time involves intensive labour and financial capital. Thus, for the families who lack labour, the poor or/and recently arrived, this requirement can be challenging. Suern moved into the village with her family less than a year before the registration processes were undertaken. Her family did not manage to have the land completely cleared of the forest; therefore, they did not have her land measured by the land registrars (Interview 193). Similarly, Yorn also did not receive the title because he could not manage to completely clear his land during the titling period. Yorn recalled what he was told, “They said that our land is still covered by forest so that they could not measure the land for us” (Interview 179). Var did not get all of her land titled because it was yet to be completely cleared; as a result, she only has half of her land registered. Var recalled, “Half of my land did not receive the title because it was still covered by forest” (Interview 129).

Third, the land has to not be located in a controversial zone, e.g., a Community Protected Area (CPA), a Mining Concession (MC), and land in conflict with an Economic Land Concession (ELC). Knowledge of controversial areas is vague and having land located inside such zones is beyond people’s choice. Many people had their land inside those areas before the boundaries were imposed. The demarcations of those areas did not really exist on the ground until the registrars arrived and told them that their land was in a restricted area, so they were not allowed to register their land (Interviews 169, 177, and 181). Siep mentioned, “I heard that the Community Protected Area is in the Western part of the road, but I am not sure exactly where” (Interview 169). Khoung, living in Chamkar Chrey Tbong, did not receive land title because his land is located inside the CPA. Khoung recalled, “They said my land was inside the conservation area. By that time I had cleared and used that land for many years” (Interview 220). Yorn also said that “when the students come to measure the land, they said from Pork’s house to the east is located in the mining land, so anyone who has land located in that area does not receive the
title. Pork did not know the actual boundary of the MC until half of his land did not receive the title” (Interview 172). Pin also recalled how she did not receive land title because it was located inside the MC, “The students (volunteer land registrars) came here to measure the land, but they did not register the land for us. The students looked at their GPS and told us that our land is located in the mining concession. My land, my sister’s land and other people whose land is closer to my land also did not receive title” (Interview 167).

7.7. Dare or not

Sart exclaimed, “Living here if you dare, you have land. If you don’t dare, you have nothing” (Interview 78). Living in a landscape where complex territories are being imposed, but are not clearly presented on the ground, challenges the imagination of Northwest Cardamom not as a frontier where land and resources are widely available, but where living in and making use of the landscape carries a high risk of dispossession. This risks and consequences are higher for the poor and less connected migrants than others.

To start clearing a new plot of land or processing land, people have to make sure that the land in that particular location has not been claimed, or they are able to exclude the existing assertions. Hourn, an ex-KR, having lost his land to the ELC, decided to clear a new plot of land. To ensure the security of the land he attempted to claim, Hourn mobilised his friends to do it with him (Interview 224). Hourn explained how he and his friends together cleared and claimed land,

“We have 5 of us (all males and former KR) cut the forest and demarcated our names at the edges of the land we claimed. People in this village here would know who we are when they saw the names. If any strangers want to clear the land, we ask them to go further away” (Interview 224).

For Sart, a single mother who recently migrated to Chamkar Chrey Tbong, not knowing the territorial context of the landscape, not having a strong local connection and with limited financial capacity, the risk of not being able to own the land and the consequences of being in trouble are high. Sart said her family is still landless because they do not dare to take the risk.
She said her family is poor and she does not have any strong connections with the village heads or ex-KR people. The following story explains how Sart’s family tried once and gave up:

In August 2014 Chhon, Sart’s son, once tried to clear forest land in a location further away called Olahong, southwest of Chamkar Chrey Tbong. By that time, Chhon and Sart said that they were sure that the area was not inside the ELC’s land. Sart explained,

“There are also many others who go there and clear for land. My son saw other people went there to clear the land, so he, his brother-in-law and other friends (they were all new migrants) nearby wanted to give themselves a chance to get some land. Living here if you dare, you have land. If you do not dare, you have nothing” (Interview 78).

In October I went to visit her family again and I found that they had already stopped because they did not expect that they were going to own the land. They had heard that the land was already owned by some powerful people whom they did not know (Interview 67). Sart said,

“We heard that some rich or powerful people have already claimed that land, so we might not be able to own the land even though we cleared it. I don’t think we will own the land. I just told my son not to waste time and labour doing that. Selling labour in the farm should be enough for us to survive. That is enough for us” (Interview 145).

Examples have already been given showing that clearing land that has already been possessed by more powerful people could lead to trouble and wasting time and labour (Interviews 152 and 120). Hieng and her family, for example, gave themselves a chance to clear land, but they could not secure the land they cleared (see Hieng’s land conflict with the ELC in Section 7.6.2). Hieng explained how she felt after losing the land to the company,

“It was very hard to clear that land. We did not have time to work for others to earn money. We allocated at least one person in the family to clear that land. When we
did not have work in other people’s farms, we all went to clear that land. We cleared the forest by our hands without machinery” (Interview 152).

7.8. Summary
This chapter explores the local socio-spatial relations in terms of people’s perception of the landscape and their access to land and resources by illustrating the historical narratives and everyday lives of different groups, primarily the ex-KR and new migrants. I found that the notion of frontier (empty and unused land) has been at the centre of the conceptualisation of Northwest Cardamom among the local community. That perception of Northwest Cardamom as a frontier was reinforced by people’s struggles in relation to access to land and resources due to the war and economic transition. For ex-KR, Northwest Cardamom is the frontier of survival from the prolonged post-KR regime war. For those migrants, Northwest Cardamom is the last frontier for better livelihood opportunities after being exposed to Cambodian political and economic struggles over the last three decades. Beyond the opportunities people could realise, access to land and resources in Northwest Cardamom is an everyday struggle due to the inhospitable physical landscape, the confronting post-war society and the imposed state territorial regulations on land and resources. The ex-KR tend to have more access to land and resources compared to the group who arrived in the villages later. Through the experiences of war, the relationship between the ex-KR and Northwest Cardamom was established. Their knowledge of the landscape and their social connections within the landscape has allowed the ex-KR to be a dominant group in charge of allocating land. In addition to the dynamic local social relationships among the community, the imposed state-based boundaries have added another critical challenge to local access to land and resources. The formal state-based boundaries are not clearly presented on the ground, but the enforcement was introduced through the force of land and resources exclusion in everyday practices. The other means through which the state-based representation of space is being enforced is the private land title, which is the only local representation of space for local communities to visualise their land against/with the state. Not being able to have the land registered is failing to represent their relationship with the land, exposing them to a higher risk of being excluded from land and resources.
Chapter 8: The Production of Space and the Construction of Northwest Cardamom

8.1. Introduction

This study has employed the production of space in relation to the construction of frontier to research and unpack the complex spatial contestations of Northwest Cardamom by examining different actors’ spatial rationales in relation to territorial processes. Two sets of processes and groups of actors involved in constructing Northwest Cardamom were observed, i.e., (1) formal spatial organisation and state-based actors (political elites, conservation organisations and development agencies) and (2) informal spatial arrangements and local communities. I argue that the notion of frontier (unused and empty space) has been at the centre of spatial contestation in Northwest Cardamom because it has provoked diverse spatial discourses and the exclusion of access to land and resources. This research also suggests that to understand the complex spatial contestations of the resource landscape, the frontier should not be viewed as an absolute geographical entity but as a produced space. This produced space is the result of the dialectical relations of spatial idealisation, the representation of space and direct spatial interaction among different actors whose interests are to access and control the landscape. Therefore, I propose that imposing the expression of frontier (in Khmer, Dei Tomne ‘wasteland’ or Dei Prei ‘woodland’) on a landscape, particularly by development agencies, conservationists and political elites, has the potential to contribute to the contestation of space. Critical use of the term frontier is required when the Southeast Asian resource landscape is examined. Through exploring the construction and contestations of Northwest Cardamom, I discuss research implications within four areas of scholarship: (1) political ecology and the study of frontier in Southeast Asia, (2) critical cartography and political ecology, (3) the study of Cambodian land conflicts, and (4) the spatiality of Cambodian history.

This chapter proceeds as follows. First I elaborate on how Northwest Cardamom is constructed and contested. Second, I explain the implications of the research. Finally, I discuss the limitations of the research and further research issues to be considered.
8.2. Construction and contestation of Northwest Cardamom

This section first discusses the relationship between the state-based construction of frontier and cartography by elaborating on the formal conceptualisation of space and boundary making by conservationists, economic agencies and political elites. I argue that, through the state apparatus, cartography allowed state-based actors to insert their spatial rationales and territories into Northwest Cardamom by making it appear to be unclaimed and empty of human inhabitants. Second, I discuss how Northwest Cardamom is locally produced by elaborating on the process of place-making, a nuanced and dialectical product of socio-spatial relations at the local level. I suggest that the local construction of frontier, to empty out space, is a direct and everyday process of land and resource exclusion. In order to assert territorial claims and access to land and resources, local villagers either searched for an area that appeared to be unclaimed, or they excluded others from claiming. Finally, the section discusses the tensions between the state-based cartographic construction of frontier and the localised making of frontier (lives in the frontier) by observing the relationship between the formal boundaries imposed on space and local land and resource access. I argue that spatial contestation, between the state-based representation of space and the local practices of space, could be perceived through two fundamental interactions: (1) the direct forces of everyday access to land and resources, e.g., the patrolling of conservation land by rangers or the guarding of economic land concessions by armed security guards; and (2) the enforcement of private land title.

8.2.1. Cartography and state-based construction of frontier

This section reviews how state-based actors, e.g., conservation organisations, development agencies and political elites construct Northwest Cardamom by critically examining how cartography works in relation to space and power. First, I discuss the relationship between maps and the representation of space in the process of constructing the frontier (emptying out the landscape). In that regard, I argue that through the selective and partial representation of space, maps allow state-based actors to (de)legitimise local inhabitants and their utilisation of land and resources. Therefore, the landscape appears to be unused or unclaimed. Second, I discuss the relation between maps and power/knowledge. I argue that the processes of
producing maps and the spatial knowledge produced by maps are predominately exercised by powerful actors who are connected to the state apparatus. Third, I maintain that local actors are still excluded from benefiting from the maps to secure their land. This section will proceed following the above three arguments.

First, through their static and selective processes, maps created a fixed and partial representation of space that allowed state-based actors to (de)legitimise the existence of the local population and their land and resource use in space, so that political, economic and conservation rationales and territories could be imposed. This discussion follows the argument made by critical cartographers such as Black (1997), Crampton (2011) and Wood and Fels (2008) who suggested that maps can never represent complex socio-spatial relations. Thus, the processes of making maps and the outcomes of the maps have always been selective and partial. Wood and Fels (2008) additionally argued that rather than presenting space, maps make arguments about space regarding what exists in space. Through maps, space can be classified, and ultimately territories are introduced into absolute geographical space – landscape (Wood and Fels, 2008).

Maps have played a critical role in creating various spatial representations enforcing political, conservation, and development rationales and territorialities in Northwest Cardamom by (de)legitimising the local inhabitants and their use of land and resources. Those representations of space created the boundaries of Veal Veaeng’s district and communes, Phnum Samkos Wildlife Sanctuary (PSWS) and its conservation zone classification, land concessions and private land titling, to justify conservation, economic and political rationales. Chapter 5 shows that each of the maps was created in association with the spatial characterisations of the local inhabitants and their usages of land and resources within a bounded landscape. Veal Veaeng’s district and commune boundaries were established in the late 1990s to resolve political tension (see Section 5.2.2). The political rationale was to include the ex-KR in the central government political system, which also meant that the ex-KR were legitimised to have existed in the Northwest Cardamom. The region was classified by turning a stronghold into sub-provincial administrative units, i.e., district, commune and village. In that regard, Veal Veaeng District was
a political space, the legitimacy of which was based on acknowledging the people’s existence and their relationship with the landscape. The boundaries were defined by political administrative factors, e.g., the distribution of the ex-KR forces and their stronghold frontline.

In 1993, PSWS was introduced as a conservation space where biodiversity distribution was the prioritised factor for Northwest Cardamom’s spatial designation, the spatial characterisations of which were based on the biodiversity of the area, without acknowledging the KR who inhabited it (see Section 5.2.3). Approximately 60% of Veal Veaeng District, covering most of its populated area, overlaps with the PSWS and over 75% of the PSWS is located in Veal Veaeng District (see Section 5.3.2). The tension between the political and conservation spaces was intensified when FFI assisted MoE to enforce the conservation rationale by introducing zoning classification in the mid-2000s (2004-2005). The classification was fundamental in separating the human and biodiversity territories, which was to define and ultimately minimise the land and resource area to be allocated for the local community, so that biodiversity conservation could be executed. The ex-KR’s former stronghold, overlapping with the PSWS, was minimised to one conservation zone accounting for less than 10% of the total area of the PSWS.

The rationale of the land concessions was to utilise space ‘yet to be used’, so that economic profit could be generated for the state. The two Economic Land Concessions (ELCs), a Mining Concession (MC), and a Special Economic Zone (SEZ) were established to actualise the economic logic which was to maximise the economic output of the space. The factors included in the land concessions’ spatial designation were good soil condition for agroindustry, the international borderland for trade and an extensive area for potential mineral exploration. From the perspective of land concessions, in order to introduce the economic spatial rationalisation and territories, space should be seen as empty of the existing population and their usage of land and resources. The two ELCs navigated to avoid overlapping with the community land by negotiating their territories with the PSWS conservation classification map. The ELCs were introduced into the areas suggested by the PSWS classification map as unused land and degraded forest. In Section 5.4.2 it is suggested that there was a fine boundary negotiation between the ELC boundaries and local community land use defined by the PSWS.
zoning classification. The MC similarly was established in the area shown on the map as unpopulated. However, what was suggested on the maps as unused land and unpopulated areas was not always accurate. There were people living, using and claiming the land in the areas where land concessions were granted. There are people living in the MC who are not yet recognised by the central government and there were people using land that was granted for the ELCs (see Section 5.2.3).

Therefore, resolving the messy spatial representation of land classification was another political project of the Cambodian government to regain political support for the 2013 national election. The state introduced the Order 01 Land Titling Campaign (O01LTC) to register villagers’ private land, which was also another means of recognising local villagers’ existence and their usage of land. Certain criteria of the O01LTC excluded some land from being registered. Land titling registration was based on land being used, but not land being claimed. Hence, certain physical characteristics of land, e.g., being cleared of forest cover or farmed were expected in order to have the land registered (see Section 5.5.3). Therefore, some people who did not have their land cleared or in use did not receive the title. Additionally, the land was not to be located in particular zones, defined on the maps, which also excluded some people from receiving the land title. Maps have so far been part of the problem in creating that partial representation of land and resource usage by the PSWS and the land concessions. However, maps were also part of the new ‘solution’- the private land title which attempts to include people to officially own the land. However, the land titling maps also excluded people from officially owning the land. As shown in Section 5.5, the maps excluded land located in the MC and the Community Protected Area (CPA) was not registered. Only about 5% of Veal Veaeng District and 6% of PSWS land has been registered.

Moving to the next observation, examining the relationship between maps and power/knowledge (spatial discourse), this research shows that maps serve the interest of the elites who are able to use maps to reinforce their rationales and territories in the landscape. This follows the debate on maps in relation to power by Harley (1989) and Wood (1992) who suggested that maps both produce power and are the product of power. First of all, I discuss the
relationship between maps and how they allow certain boundaries to be (re)created. I observe that maps have been (re)produced by diverse actors, through different processes, at various times, and for different purposes, and it is challenging to clearly understand the details of who was involved, what the processes were, or what the maps were actually made for. However, the spatial divisions made by the maps can be used to enforce territories of the actors who are able to legitimise the maps. Section 3.2.3 shows that the contemporary maps classifying politic and environmental territories are also the product of older maps that were made for different purposes by different actors. In the case of Northwest Cardamom, the Veal Veaeng boundary was based on the existing provincial maps that were drawn in the French colonial era and the PSWS was drawn partially based on the French colonial forest reserve maps. Maps have been passed on from one actor to another regardless of their initial objective. Therefore, it is important to not only ask who made maps at the time and for what particular purpose, but also to examine who is able to use maps to impose their spatial rationalities and how previous maps allow them to do so.

This leads to the second argument, which is based on understanding what allows the elites to use maps in order to impose their boundaries within the state’s abstract space. In that regard, I found that the state apparatus is a critical platform where maps are (re)produced, activated and circulated. Lefebvre (2008) suggested that in the contemporary state, spatial representation plays a critical role arranging space. Scott (1998) further argued that the modern state attempts to organise space by static geometric spatial classification, which maps are fully capable of. This research found that the apparatus of the state is also an agent where geometric spatial knowledge (maps) is manifested by the interests of actors, especially in a state like Cambodia whose apparatus is highly influenced by political elites, economic agencies and international aid. Maps in Cambodia are (re)produced, activated, and circulated to serve the interests of elite actors who are associated with the apparatus of the state. Chapters 3 and 5 show that maps creating the contemporary spatial divisions of Cambodia and Northwest Cardamom were made not only to respond to the state’s policy but also justify the interests of the actors who are connected with the state apparatus. Veal Veaeng was established to achieve political compromise, the classification of PSWS was initiated by FFI to respond to international
environmental conservation, ELCs were introduced to benefit economic elites and, private land titling maps were made to serve the political interests of the ruling party before the national election. All of those maps were made and formalised in association with the state apparatus. Maps created in different regimes and organisations have been circulated through the state agencies to (re)create new maps. Through the MoE, the French forest reserve maps were reused to create Protected Areas in the early 1990s. FFI employed the PSWS map made in 1993 to create the PSWS conservation zoning maps. The MoE introduced ELCs by consulting the PSWS conservation zoning maps. The Private land titling program was not independent of the land concessions and PSWS classification. Section 5.5.2 shows that land registrars used the concession maps to facilitate the registration process. These maps are circulated within the state apparatus for those who have an interest in reinforcing their spatial rationale into space.

Finally, I argue that the local community who are not able to employ the state apparatus to legitimise their claim to land and resources are still excluded from benefiting from the maps; thus they are excluded from land and resources. Fox et al. (2006) suggest that maps do not necessarily serve the interests of the people who made them, but the spatial discourse presented by maps serves the interests of whoever can enforce them. In Northwest Cardamom, local people participated in the PSWS zoning maps (see Section 5.3.3). However, instead of serving their interests in securing land, they were excluded from receiving land titles. By participating in the PSWS zoning project, people assisted FFI and the MoE to visualise their land. Therefore, whatever remained from their community’s land could be invested in by the state. From the assistance of the PSWS zoning maps, the MoE was able to grant two ELCs. Additionally, by assisting FFI and the MoE to draw the boundary of a Community Protected Area (CPA), the local community in Chamkar Chrey Tbong who had land classified as a CPA were not eligible to receive the title. Additionally, not all maps that had a high impact on local everyday lives involved local participation either, e.g., land concessions and the designation of the whole PSWS.
8.2.2. Spatial practice and locally-based construction of frontier

This section unpacks the local production of space (place-making) by elaborating on the localised process of spatial organisation, local perception of space and the spatial contestations among local actors, e.g., the KR and non-KR migrants. I start by arguing that the socio-spatial organisation of Northwest Cardamom is the creation of both national socio-political transformations and local environmental characteristics. The second point elaborates on the conceptualisation of Northwest Cardamom among the local actors. I argue that the notion of frontier has been the centre of the local conceptualisation of Northwest Cardamom throughout its socio-political transitions. That understanding is constructed within the expression of the availability of land and resources, and it is reinforced by directly excluding others. Finally, I show how space is contested among local community members regarding access to land and resources. I found that among the local community, socio-political identities and localised spatial knowledge of the landscape have played a critical role in access to land and resources. The section follows three key arguments.

First, I suggest that both national political phenomena and local physical environmental conditions have played important roles in shaping local the socio-spatial dynamics of Northwest Cardamom. In that regard, I discuss the notion of place-making with Pred (1984) who suggests that interaction between the physicality and the socio-political history of space is what makes the place different from universal phenomena; and, Massey (2005, 1993) who argues that spaces are interconnected. Therefore, to understand the socio-spatial formation of a particular space, the social-political phenomena occurring at broader geographical scales should be taken into account. To understand the socio-spatial relation of place, the historical account is critical (Massey, 2005, 1993).

Chapter 6 shows that the spatial organisation of Northwest Cardamom is the product of Cambodia’s political and economic transitions since the late 1970s. The tension between the KR and the central government forces during the 1980s and 1990s fundamentally established the arrangement of settlements across the region. The connection between the KR and Northwest Cardamom was initially formed through the military tension in the 1980s (see Section 6.2.3).
Based on the knowledge they had of the landscape and their dissatisfaction with the 1991 Paris Peace Accords, the KR set up a military stronghold in Northwest Cardamom. The stronghold was established to isolate themselves from the central government and to sustain their connection to the Thai border. By the early 1990s, villages had been formed across the landscape based on military arrangements and logging transportation logistics. The location of Chamkar Chrey Tbong, for example, was strategically established as a regional connecting point for the military stronghold (see Section 6.3.1). Military security was one of the major factors considered in choosing the location of the village and distributing people within the village. The village was deliberately located near the edge of the mountain, preparing for evacuation to the Thai border in case of a military clash. Samlanh was established as one of the main logging villages, for which the connection to the Thai border to export logs was critical in its location. The location was also a KR military landmark during the 1980s. Due to its logging activities, it then was a popular village which attracted many people because of its vibrant logging economy (see Section 6.4.2).

The political integration in the late 1990s transformed the region's socio-political conditions, which also changed the spatial arrangement of land and population. The integration opened the area to politically and economically engage with the interior of the Cambodian territory. The stronghold was converted into a district sub-divided with communes and villages. The socio-political environment shifted from the military and logging-based economy, to a full capitalist economy depending primarily on cash-crop agriculture. The economic orientation also changed from pointing toward the Thai border to the Cambodian state interior. The spatial organisation of land and residential settlements within each village were also rearranged in response to the new economic and political conditions (see Sections 6.3 and 6.4). A military based village such as Chamkar Chrey Tbong moved from the mountain edge to the centre of the valley to have better access to land. Households were allocated along the new main road connecting to Pramaoy and the provincial town of Pursat. Agricultural and residential lands were distributed among the ex-KR militants and their families (see Section 6.4). Agricultural land has since rapidly expanded toward the productive soil areas. Samlanh, on the other hand, was abandoned in the late 1990s and the early 2000s (2000-2003) because of the
disappearance of logging and its disconnection to the district and provincial centres (see Section 6.4). The distribution of land was uneven at the time due to the abundance of land for the village’s small population. People were locating closer to each other for safety purposes. Since the mid-2000s (2005-2007), the population has rapidly increased because a new road has been built to connect the village to the provincial town. Landless migrants have moved into the village expecting to have better access to land because the population in the village was still low compared to other villages in the region.

Regarding the materiality of space, the topography of the area, soil conditions, hydrological features and the forest have also played important roles in producing the socio-spatial organisation of Northwest Cardamom. Fundamentally, the forest and the mountainous landscape provided a refuge for the KR after the regime was overthrown in 1979. The landscape allowed the KR to fight against the VN backed central government. The war continued for another decade (the 1990s) due to the availability of timber and access to land, while the mountainous conditions of the area offered the KR economic options, sustained the everyday need for food, and gave a military advantage to establish a stronghold. During the 1980s and 1990s, regional connections and the village settlements were also based on the characteristics of the land, hydrological conditions and logging opportunities. Chamkar Chrey Tbong and Samlanh were both located along permanent rivers which secured the water supply. The villages were also located on the areas that contained land suitable for subsistence agriculture.

Since the political integration in the late 1990s, the region has been transformed by agricultural expansion. The distribution of good quality land for cash-crop farming has become one of the major factors in the village spatial organisation. The population size and migratory patterns of each village are closely related to the availability of cash-crop agricultural land. Chamkar Chrey Tbong has a higher population compared to Samlanh because it is located in a flat open valley where a higher potential for agricultural land can be found (see Sections 6.3 and 6.4). The organisation of the village population was based primarily on the intensive cash-crop agricultural practices.
Second, I explore the local conceptualisation of Northwest Cardamom according to collective and personal narratives. In that regard, I argue that the perception of Northwest Cardamom among the settlers is constructed within the notion of frontier (*Dei Tomne* ‘wasteland’) where land and resources are available. The notion of frontier has been expressed and enforced on Northwest Cardamom since the late 1970s. The frontier was expressed with the availability of land and reinforced by excluding others’ territorial claims on the land. Section 3.3.1 indicates that from the KR point of view, Northwest Cardamom was an uninhabited landscape where they could escape from being chased by the VN forces in 1979. Chapter 6 shows that during the 1980s, in order to impose territorial claims over the region for geopolitical purposes, the KR attempted to exclude VN and central government troops from the area. In the 1990s, the KR was able to establish a stronghold in the area because the central government (People’s Republic of Kampuchea) and VN troops were removed from the area.

At an individual level, among the ex-KR, Northwest Cardamom was an area where the availability of land and natural resources could offer a secure livelihood after being exhausted with military life for more than three decades. Sections 6.3 and 6.4, detailing the establishment of Chamkar Chrey Tbong and Samlanh, show that after the political integration in the late 1990s, Northwest Cardamom is one of the last areas where the ex-KR could settle down and establish new lives within the capitalist society. The availability of ‘unclaimed’ land was a major factor attracting the ex-KR to settle down in the area. Instead of moving back to their hometowns, some KR invited their families and relatives to move into the region to claim land and have access to forest resources.

A similar expression of Northwest Cardamom as a frontier or wasteland was also articulated by the new migrants who have economically struggled because of a lack of access to land. Section 7.5 shows that among the migrants who are not ex-KR, Northwest Cardamom is a frontier where a better life and livelihood options could be fulfilled with the availability of land and forest products. That expression of frontier was also intensified by the understanding that the region was a post-war zone where the population was low and the land was not yet intensively

---

22 This research acknowledges there were potential claims and human inhabitants over the area prior to the late 1970s. However, due to its scope and limitations, this research only observes the post-KR phenomena.
utilised compared to other parts of the country (see Section 7.4.3). However, upon their arrival and settling down in the villages, the land was not entirely free of possession, and getting access to land involved either making sure the land was not yet claimed or eliminating other claims to the land. Hence, getting access to land and resources was a competition against and/or negotiation with other residents, especially the ex-KR. Additionally, to get access to land and to be able to live in the frontier land as new migrants, lives were also challenged by the geophysical conditions of space. These conditions also contributed to their recreation of the spatial conceptualisation of the frontier they were attempting to reinforce. Section 7.5.1 shows that living in a tropical forested area means exposure to multiple diseases such as malaria and dysentery. The village such as Samlanh, for example, is a remote area where access to schools and public health is very limited (see Section 7.5.2).

The final point examines the contemporary competition and negotiation for land among local actors, particularly between the ex-KR and non-KR migrants. I suggest that getting access to land is part of daily interaction that is vitally associated with local socio-political identities and knowledge of the landscape. Northwest Cardamom has played an important role in (re)producing socio-political identities, e.g., KR vs non-KR or senior people vs newcomers, which have critically shaped local power dynamics in getting access to land. Place is the product of a history in which people’s identities are (re)produced. The formation of place allows people to have a shared collective memory and sense of belonging, which is constructed territoriality (Said, 2000, Stewart and Strathern, 2003). Martin (2005) suggests that this shared territorial identity allows the local people to resist against external forces. Chapter 7 shows that the sense of seniority or belonging to Northwest Cardamom or the wildness of the Cardamom region is substantially connected to the shared narratives among the ex-KR, which also allows them to be the dominant group in allocating land. Section 7.3.1 shows that being KR has different meanings to different people; however, the people who had the shared experience of being part of the KR military during the 1980s and living in the stronghold during the 1990s claimed themselves to be the senior residents (Neak Chass). Through these experiences and identities, some ex-KR (senior residents) became local authorities, e.g., district governor, commune head and the village chief. By means of the combination of being in authority and being the seniors
of the area, the ex-KR was the group who distributed land among themselves and to the newcomers. In the case of Samlanh, for example, the newcomers have to respect the seniority among the residents. The village head and their associates who were former KR or senior residents were the people who distributed the land to the new migrants. Clearing land without acknowledgement or approval from the senior residents and village head potentially led to conflict or eviction.

Spatial knowledge is another critical factor in forming local access to land and resources. That knowledge is intertwined with socio-political identities and the experiences of the place. To claim land is either to make sure that the land has not been claimed by others or to be able to exclude previous claims on it. Experiencing and controlling the region over three decades has allowed the ex-KR or senior residents to claim legitimacy over the territorial knowledge of the area. Section 6.4 shows that, in Samlanh, by holding the knowledge of land use during the 1990s, some of the ex-KR who have been assigned as the village heads, were able to distribute and sell the land to other newcomers. These new migrants who are not familiar with the place need to engage with more senior residents to avoid conflict over land that has been claimed by more senior people, or they take a high risk of conflict or losing the land. Section 7.5.4 shows that poor and powerless migrants in Chamkar Chrey Tbong did not even dare to clear the forest for land because they were concerned about overlapping with other claims, especially with the ex-KR. They suggested that there is still land available that is not being used, the forested area, but the concern was the existing claims imposed over the land by senior villagers. If they cleared the land that had already been claimed by more powerful people, they could be in trouble and it would also be a waste of their labour.

8.2.3. State-based vs localised contested frontier

This section discusses spatial contestations between formal boundary making and the informal everyday practice of spatial organisation by examining the interconnection between state-based and localised making of place. Two different forms of interaction could be observed; (1) direct exclusion and negotiation in the everyday practices of accessing land and resources and (2) the representation of space through private land titling.
First, I examine how the state representations of space are imposed on the everyday practices of space in terms of accessing land and resources and I suggest that different state-based actors employ different means to actualise their boundaries, by excluding local actors who are directly accessing land and resources. These means include employing conservation rangers, hiring security guards and registering people’s residences as residential. Lefebvre (1991) proposed that spatial practice is where spatial imagination and representation are manifested. In the case of Northwest Cardamom, from the state-based actors whose interests are to fulfil conservation, economic development, or political rationales, Northwest Cardamom is an empty, uncontrolled and unused landscape where spatial governance can/should be imposed. However, in reality, the area has never been absolutely empty, uncontrolled and unused. Therefore, in order to enforce their spatial idealisation, boundaries have been drawn and placed to govern socio-spatial relations and to exclude people from accessing land and resources. To do so, territories presented on the maps have been enforced into spatial practices according to each actor’s means, which are often associated with the state apparatus. Section 7.6 on the community’s lives in the state’s abstract space shows the interactions between the villagers and the boundaries imposed by conservation, economic and political elites. The PSWS employed rangers to guard the conservation territory (see Section 7.6.1). The rangers are armed and equipped with GPSs that could identify different forms of spatial classifications on the ground. Land concessionaires enforced their boundaries with armed security guards, who are often associated with the military, to ensure that people do not clear the land or cut forest in their granted territories, and to evict people from the land inside the concession territories (see Section 7.6.2). Section 7.6.3 shows that the political elites employed local administrative registration to make sure people are living in the area officially.

On the other hand, to live and to access land and resources in Northwest Cardamom, local villagers have to navigate through the reinforcements of the state’s representation of space in their everyday access to land and resources. From the perspective of the local community, Northwest Cardamom is a post-war and forested frontier where land and resources can fulfil the necessities of their everyday lives and potentially provide a more secure future. However, to get access to land and living everyday life in the “frontier”, local villagers are challenged not
only by conflicted interests over land among other local community members but also by the imposed artificial state boundaries (see Section 7.6). Sections 5.5.3 and 7.6.3 show that to be able to settle in the area, people need recognition from the village authorities (village head and commune council). To clear land and get access to natural resources, they have to navigate through rangers’ conservation patrols, e.g., by clearing land at night, having someone to observe if the rangers are on their patrol mission, or paying the fine (see Section 7.6.1). To avoid the overlapping of land with that of the land concessions, local villagers have to understand the concessions’ boundaries by inspecting the ground demarcations, which are usually unclear or told by the company’s armed security guards (see Section 7.6.2). Failing to navigate and negotiate with these territorial enforcements means facing legal implications with state authorities, the results of which include losing access to land and resources.

Second, registering private land title is another critical phenomenon when examining the intersections between state-based and local-based frontier making, and it was the only representation of space that the local villagers have to represent their access to land. Work and Beban (2016) also found that private land titling is where the local community’s imagination of land intersects with the state’s formal representation of space (maps). I suggest that, in Northwest Cardamom, land titling is currently the only representation of space local villagers have to represent their access to land against many other forms of state-based spatial representation. However, that representation is still imposed and controlled by state-based actors. To be able to represent land, local villagers had to fulfil the criteria proposed by the state (see Sections 5.5.3 and 7.6.3). Many people could not satisfy the state requirements; hence, their land was not registered. Therefore, their usages of land are not yet visible within the state apparatus. As a result, land titling did not only allow people to legitimise their land but also to delegitimise their access to unregistered land. The unregistered land could still be considered as state land in which decisions on how it should be used are under state control.

Additionally, empirical observation shows that the newcomers (Neak Thmey) are more likely to be marginalised by the maps than senior people (Neak Chass). Neak Thmey tend to be located in the controversial areas. By observing the geographical distribution of the villagers, Neak
Thmey mostly are located further away from the village centre in locations where the land has a higher tendency to be overlapped with conservation and land concession territories (see Sections 6.3.5 and 6.4.7). Section 7.6.2 indicates that the newcomers of Okartin were allocated land inside the Mining Concession by the village head who was an ex-KR. As a consequence, the people of Okartin did not receive land title.

8.3. Research contributions

Four key areas have been explored in the research: (1) political ecology and frontier study in Southeast Asia, (2) critical cartography and political ecology, (3) Cambodian land and resource governance and contestation of space, and, (4) an area study of the Cardamom Region and spatiality of Cambodian history. This section summarises the main contributions of this study in each area.

8.3.1. The political ecology of frontier and the production of space

This research attempts to challenge the notion of frontier within the study of the resource landscape in Southeast Asia by exploring the holistic nature of space introduced by Lefebvre (1991) and Massey (1993). I suggest that to better understand the contested nature of the resource landscape in Southeast Asia is to challenge the idea that frontier is an absolute geographical entity and view frontier in itself as a form of space being constructed by different actors with diverse interests. In that regard, I propose that frontier is a produced space which involves the dialectical relation of spatial imagination, the representation of space and direct spatial practice (Lefebvre, 1991). To understand that relationship, it is necessary to explore the related historical phenomena at various scales (Massey, 1993). There have been scholars, e.g., Barney (2009) and Tsing (2011), who argue that frontier is a relationally constructed space in association with geographical scale and economic intensity. Nevertheless, the authors did not thoroughly elaborate on the history of space in their analysis. Moreover, the authors did not include the dialectical relationship between spatial representations and practices in their discussions. Exploring the spatial construction and contestation of Northwest Cardamom, I found that the frontier has not always been there but is rather a process of spatial
constructions imposed on a landscape by different groups of actors whose interests are to govern space.

I also suggest that the production of space is a useful conceptual framework to unpack the complex spatial contestations in the resource landscape elsewhere in Cambodia and Southeast Asia. Gururani and Vandergeest (2014) and Peluso and Lund (2011) suggest that resource landscapes in Southeast Asia have become highly contested areas created by different actors whose interests, knowledge and territories are diverse. The complexity of the land and resource issues on those landscapes requires sophisticated observation (Peluso and Lund, 2011, Gururani and Vandergeest, 2014). To add to that proposal, I found that examining the complex socio-spatial relations by observing the production of space is useful because I was able to examine the contestations and interaction among diverse actors (conservationists, politicians, economic elites, and local people), discourses (biodiversity conservation, geopolitical control, economic development and livelihood improvement), and tools (representation of space and spatial practices). Northwest Cardamom, for example, is constructed by multiple/interacting actors and interests. Their interactions could be thoroughly revealed by observing phenomena within space over time.

8.3.2. Critical cartography and the political ecology of Southeast Asia

The scholarship of political ecology has paid a great deal of attention to territoriality, spatial discourses, and maps in the study of rural Southeast Asia (see for example, Vandergeest and Peluso, 1995, Sithirith, 2010, Vandergeest, 1996). However, the interaction between different maps and the history of maps has not been well studied. Fox (2002) and Fox et al. (2006) have critically examined the practices of cartography in Southeast Asia and Cambodia. However, the authors did not explore the dialectical relationships between different maps – the maps produced at different times and by different actors. The application of critical cartography on land and resource issues has primarily examined maps individually for a specific objective (Work and Beban, 2016, Peluso, 1995, Vandergeest, 1996).
There have been maps produced and introduced since the colonial era in Southeast Asia and Cambodia in particular which are considerably relevant to the understanding of the region’s contemporary land and resource governance. Vandergeest and Peluso (2006), for example, mentioned that the colonial forest management systems are being (re)enforced by contemporary resource governance organisations. With this research, I critically brought the understanding of the implications of maps produced at various times into current Cambodian land and resource management practices. Exploring the interactions among maps allowed this research to observe the interaction between different spatial discourses and actors. This research has found that environmental discourses are inseparable from geopolitical and economic discourses. Critically examining the history of maps in Cambodia helps this research to better explore the construction of contemporary Cambodian environmental discourse.

8.3.3. Production of space and Cambodian land conflict

By employing the production of space, incorporating state-based spatial organisation and localised place-making, this research was able to geographically contextualise Cambodian land issues. Land issues in Cambodia have been a critical concern over the last four decades due to the implications of the civil war, rapid economic development and global environmental concerns. By observing the production of space, this research found that the specific local context has significantly shaped the socio-spatial dynamic, which is critically linked to conflict over land. Therefore, I suggested that Cambodian land conflicts should be understood in a smaller geographical context, e.g., sub-national or sub-provincial. It is also suggested by Diepart and Sem (2016), that land issues in Cambodia are geographically contextual. The national legal framework may not be able to reflect Cambodian land issues (Gillespie, 2014). Gillespie (2014) also suggests that local context should be incorporated into the land and resource tenure system.

Northwest Cardamom is a historically and spatially complex space that requires an interactive approach to observe these complex social-spatial-temporal relations. Therefore, I found that exploring the production of space allows this research to investigate time, space and society relationships. In that regard, this research was able, at one level, to examine the relationship
among the state-base actors, and at another level, to discuss the contestation within the local communities by observing the relationships between actors and space throughout history. Lastly, this research was also able to examine the spatial contestations between state-based and local actors.

8.3.4. Northwest Cardamom and the spatiality of Cambodian history

This research empirically explores the socio-political context of Northwest Cardamom, a significant place within Cambodian history that has had limited research conducted on it. Elaborating on the spatial construction and contestation of Northwest Cardamom has contributed to a better understanding of Cambodian socio-political struggles from a spatial perspective. Cambodian historical narratives have mainly been constructed through the central state narrative and the spatial dynamics of the history have not been explored. This research shows that geographical context has played an important role in the relationships between different political parties in the process of state formation after the KR regime. Therefore, uncovering the history of a particular place from a different group, in this case the ex-KR located in a particular place, is to convey another perspective of Cambodian history. Massey (1999) suggests that to better understand the complex time-space relation, is to observe time-space as a dialectical product, which means bringing geography into history and vice versa.

8.4. Limitations and further research

It is impossible to capture the entire socio-spatial dynamic within a landscape, regardless of the number of actors and processes being included in the analysis. At the local level, this research primarily focused on the analysis of the local dynamic between the ex-KR and migrants; however, I acknowledge that within the two groups there are diverse economic and gender differences that need to be understood. Additionally, in the greater Cardamom region, there are upland indigenous groups whose relationship with the landscape is not well understood. Moreover, the research put all the land concessions into one category of spatial classification; therefore, I also suggest that the diverse implications of Economic Land Concessions, Special Economic Zones and Mining Concessions need to be explored. Finally, further research should
also explore the long-term implications of private land titling in the area. While this research partially touches on the immediate effect of the Order 01 Land Titling Campaign (O01LTC), the long-term impacts on the land security of the people who did not receive land title are uncertain.

This research has focused in only one of the ex-KR strongholds. Therefore, to bring a holistic understanding of Cambodian history from the spatial perspective, the localised study of other stronghold sites is essential. There has not been much research about the spatiality of the Khmer Rouge apart from Diepart and Dupuis (2014), and Diepart and Sem (2016) and Khamboly and Dearing (2014). Diepart and Dupuis (2014) suggest that the dynamics of land issues in each of the ex-KR areas are very diverse.

This study is limited to examining the post KR history of the area, thus I propose that further research should explore the socio-spatial relations of Northwest Cardamom and the wider Cardamom region prior to the KR regime. There has not been much literature exploring indigenous communities and their relationship with the region prior to the KR. Additionally, the relationship between the state and the region prior to the KR regime has had limited examination.

There are growing applications of modern mapping technology (GIS) in the land and resource governance sector. However, limited critical research has been conducted in this area. This research has found that in Cambodia, for example, maps have been critically involved in constructing environment, economic and development discourses. Therefore, more research should critically examine the relationship between maps and spatial arrangement in Cambodia. Given that there is a considerable amount of publically available access to geo-databases in the Cambodian development repository, e.g. Open Development Cambodia and LICADHO, critical cartography analysis is very accessible. In particular, further research should also critically examine the implications of maps on the lives of the community.
8.5. Final remarks

I propose that the critical study of frontier is needed in Southeast Asia where land and resources are vital to local lives. The critical study of frontier starts with examining the notion of frontier in itself as a spatial discourse that could provoke land and resource conflicts, because there is no such space that is absolutely empty of human relations. Therefore, I advocate that the frontier should be viewed as a form of space, the connotation of which triggers spatial exclusion. Any use of the term or expression should be critically considered. Maps are useful in describing and creating boundaries which have critical links to people’s lives. Hence, I propose that any map user or producer should be critical of and responsible for the implications of maps on people’s everyday lives, and not only serve the interests of conservation, development and political projects. The implications of maps can go much further than the immediate instrumental purposes of those maps.
References:


ARENSEN, L. 2016. ‘All newcomers now’: narrating social and material aspects of post-war resettlement in northwest Cambodia. *Journal of Southeast Asian Studies*, 47, 24-41.


CHANN, S., WALES, N. & FREWER, T. 2011. An investigation of land cover and land use change in Stung Chrey Bak catchment, Cambodia. Phnom Penh: CDRI.


CONSTITUTIONAL ASSEMBLY 1993. The constitution of the Kingdom of Cambodia. Phnom Penh, Cambodia.


HALBERSTAM, J. 2005. In a queer time and place: transgender bodies, subcultural lives, NYU Press.


HEAN, S. 2014. Cardamom landscape management to sustain biodiversity and economic returns in Cambodia. UNIVERSITY OF MINNESOTA.


PERRY-CASTAÑEDA LIBRARY MAP COLLECTION 2016. Cambodia maps. Texas: University of Texas Library.


RGC 2014. Order 01BB on the measures strengthening and increasing the effectiveness of the management of Economic Land Concession (ELC). Phnom Penh: Council of Ministers.


ROGGE, J. R. 1990. Return to Cambodia: the significance and implications of past, present and future spontaneous repatriations. Dallas, Texas: Disaster Research Unit, the University of Manitoba.


SCOTT, J. C. 1998. Seeing like a state: how certain schemes to improve the human condition have failed, New York, Yale University.

SCOTT, J. C. 2010. The art of not being governed: an anarchist history of upland Southeast Asia, Yale University Press.


SCURRAH, N. & HIRSCH, P. 2015. The political economy of land governance in Cambodia. University of Sydney: MRLG.


SITHIRITH, M. 2010. Political geography of the Tonle Sap: power, space, and resources. PhD, National University of Singapore.


SUÁREZ, T. 2013. *Early mapping of Southeast Asia: the epic story of seafarers, adventurers, and cartographers who first mapped the regions between China and India*, Tuttle Publishing.


SZYMAŃSKA-MATUSIEWICZ, G. 2014. The researcher as ‘older sister’, ‘younger sister’ and ‘niece’: playing the roles defined by the Vietnamese pronominal reference system. *Qualitative Research*, 14, 95-111.


WOOD, D. 2015. This is not about old maps. *Cartographica: The International Journal for Geographic Information and Geovisualization*, 50, 14-17.


ZUCKER, E. M. 2013. Forest of Struggle: Moralities of Remembrance in Upland Cambodia, Honolulu, University of Hawai.
Appendix

Appendix A: List of participants

<table>
<thead>
<tr>
<th>Code</th>
<th>Date</th>
<th>Participant background</th>
<th>Sex</th>
<th>Age</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>26/2/14</td>
<td>In-migrants moving from Kampong Chhnag Province</td>
<td>F/M</td>
<td>60s</td>
<td>Deykraham</td>
</tr>
<tr>
<td>2</td>
<td>26/2/14</td>
<td>In-migrants moving from Ta Kao Province</td>
<td>M</td>
<td>40s</td>
<td>Pramaoy</td>
</tr>
<tr>
<td>3</td>
<td>27/2/14</td>
<td>Labor seller and landless migrant from Kampong Spue and Ratanakiri provinces</td>
<td>M/F</td>
<td>40-50s</td>
<td>Pramaoy</td>
</tr>
<tr>
<td>4</td>
<td>27/2/14</td>
<td>Village head of Pramaoy Village</td>
<td>M</td>
<td>50s</td>
<td>Pramaoy</td>
</tr>
<tr>
<td>5</td>
<td>27/2/14</td>
<td>District Governor of Veal Veaeng</td>
<td>M</td>
<td>50s</td>
<td>Pramaoy</td>
</tr>
<tr>
<td>6</td>
<td>28/2/14</td>
<td>The wife of Krapeu Pir the commune assistant (ex-KR)</td>
<td>F</td>
<td>40s</td>
<td>Krapeu Pir</td>
</tr>
<tr>
<td>7</td>
<td>28/2/14</td>
<td>Krapeu Pir Commune assistant (ex-KR)</td>
<td>M</td>
<td>50s</td>
<td>Krapeu Pir</td>
</tr>
<tr>
<td>8</td>
<td>1/3/14</td>
<td>Krapeu Pir CPA head</td>
<td>M</td>
<td>40s</td>
<td>Krapeu Pir</td>
</tr>
<tr>
<td>9</td>
<td>1/3/14</td>
<td>An in-migrant living in Krapeu Pir</td>
<td>M</td>
<td>21</td>
<td>Krapeu Pir</td>
</tr>
<tr>
<td>10</td>
<td>1/3/14</td>
<td>An ex-KR living in Krapeu Pir</td>
<td>F</td>
<td>50s</td>
<td>Krapeu Pir</td>
</tr>
<tr>
<td>11</td>
<td>1/3/14</td>
<td>Old couple in Krapeu Pir (ex-KR)</td>
<td>M/F</td>
<td>50s</td>
<td>Krapeu Pir</td>
</tr>
<tr>
<td>12</td>
<td>2/3/14</td>
<td>Former who is also an army</td>
<td>M</td>
<td>50s</td>
<td>Krapeu Pir</td>
</tr>
<tr>
<td>13</td>
<td>2/3/14</td>
<td>An indigenous man who lived in Ousom Commune</td>
<td>M</td>
<td>24</td>
<td>Ousom</td>
</tr>
<tr>
<td>14</td>
<td>3/3/14</td>
<td>An indigenous man who lived in Ousom Commune</td>
<td>M</td>
<td>30s</td>
<td>Ousom</td>
</tr>
<tr>
<td>15</td>
<td>3/3/14</td>
<td>A fisherman at Ousom reservoir</td>
<td>M</td>
<td>40s</td>
<td>Ousom</td>
</tr>
<tr>
<td>16</td>
<td>3/3/14</td>
<td>A logger and farmer working for ELC</td>
<td>M</td>
<td>70s</td>
<td>CTC 23</td>
</tr>
<tr>
<td>17</td>
<td>3/3/14</td>
<td>Logger working for ELC</td>
<td>M</td>
<td>45s</td>
<td>CTC</td>
</tr>
<tr>
<td>18</td>
<td>3/3/14</td>
<td>A couple who lived in CTC</td>
<td>M/F</td>
<td>30s</td>
<td>CTC</td>
</tr>
<tr>
<td>19</td>
<td>3/3/14</td>
<td>A man married to an ex-KR woman</td>
<td>M/F</td>
<td>28</td>
<td>CTC</td>
</tr>
<tr>
<td>20</td>
<td>4/3/14</td>
<td>The commune chief of Anlong Reap Commune (ex-KR)</td>
<td>F</td>
<td>60</td>
<td>CKCT</td>
</tr>
<tr>
<td>21</td>
<td>4/3/14</td>
<td>A farmer and single mother who has 7 children</td>
<td>F</td>
<td>50s</td>
<td>Deykraham</td>
</tr>
<tr>
<td>22</td>
<td>5/3/14</td>
<td>A group of villagers living in Deykraham</td>
<td>M/F</td>
<td>30s-40s</td>
<td>Deykraham</td>
</tr>
<tr>
<td>23</td>
<td>5/3/14</td>
<td>CKCT village head</td>
<td>M</td>
<td>57</td>
<td>CKCT 24</td>
</tr>
<tr>
<td>24</td>
<td>5/3/14</td>
<td>CKCT village head (primary) currently working for ELC</td>
<td>F</td>
<td>50s</td>
<td>CKC</td>
</tr>
<tr>
<td>25</td>
<td>5/3/14</td>
<td>Logger and farmer who moved to the village in 1999</td>
<td>M</td>
<td>40s</td>
<td>CKC</td>
</tr>
<tr>
<td>26</td>
<td>7/3/14</td>
<td>CKCT CPA head who currently also works for the ELC</td>
<td>M</td>
<td>40s</td>
<td>CKC</td>
</tr>
<tr>
<td>27</td>
<td>7/3/14</td>
<td>The mother of CPA’s head who joined PSWS mapping (ex-KR)</td>
<td>F</td>
<td>65</td>
<td>CKC</td>
</tr>
</tbody>
</table>

23 CTC: Chhour Teal Chhrom Village
24 CKCT: Chamkar Chrey Tbong
<table>
<thead>
<tr>
<th>ID</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>7/3/14</td>
<td>The second village head</td>
</tr>
<tr>
<td>29</td>
<td>7/3/14</td>
<td>Farmers and seller in the villages</td>
</tr>
<tr>
<td>30</td>
<td>8/3/14</td>
<td>An in-migrant and a farmer</td>
</tr>
<tr>
<td>31</td>
<td>8/3/14</td>
<td>Landless and poor farmer</td>
</tr>
<tr>
<td>32</td>
<td>8/3/14</td>
<td>A farmer who lives in Okartin</td>
</tr>
<tr>
<td>33</td>
<td>10/3/14</td>
<td>An old woman who recently cleared land in Odey Khmao</td>
</tr>
<tr>
<td>34</td>
<td>10/3/14</td>
<td>One of the richest farmers in Samlanh</td>
</tr>
<tr>
<td>35</td>
<td>10/3/14</td>
<td>Former village head of Samanhn</td>
</tr>
<tr>
<td>36</td>
<td>10/3/14</td>
<td>Villager in SL</td>
</tr>
<tr>
<td>37</td>
<td>11/3/14</td>
<td>Villager and farmer living in SL</td>
</tr>
<tr>
<td>38</td>
<td>11/3/14</td>
<td>In-migrant who lived in Odey Khmao</td>
</tr>
<tr>
<td>39</td>
<td>11/3/14</td>
<td>A in-migrant who just moved and lived in Odey Khmao</td>
</tr>
<tr>
<td>40</td>
<td>12/3/14</td>
<td>Head of District Environment Office (DEO)</td>
</tr>
<tr>
<td>41</td>
<td>12/3/14</td>
<td>A group of migrants living in SL</td>
</tr>
<tr>
<td>42</td>
<td>12/3/14</td>
<td>The Krapeu Pir commune assistant’s wife (ex-KR)</td>
</tr>
<tr>
<td>43</td>
<td>12/3/14</td>
<td>A relative of the commune assistant</td>
</tr>
<tr>
<td>44</td>
<td>12/3/14</td>
<td>In-migrants from Barnan District, Battambang</td>
</tr>
<tr>
<td>45</td>
<td>17/3/14</td>
<td>An MoE senior officer</td>
</tr>
<tr>
<td>46</td>
<td>19/3/14</td>
<td>A free-land consultant working on Cambodia indigenous land issue</td>
</tr>
<tr>
<td>47</td>
<td>22/3/14</td>
<td>An in-migrant living in Phum Thmey</td>
</tr>
<tr>
<td>48</td>
<td>22/3/14</td>
<td>One of the landless families in SL</td>
</tr>
<tr>
<td>49</td>
<td>23/3/14</td>
<td>An in-migrant who live in SL</td>
</tr>
<tr>
<td>50</td>
<td>23/3/14</td>
<td>Two men from Mong District living inside the CPA</td>
</tr>
<tr>
<td>51</td>
<td>24/3/14</td>
<td>Commune assistant (repeated with 7)</td>
</tr>
<tr>
<td>52</td>
<td>24/3/14</td>
<td>A policeman in Krapeu Pir</td>
</tr>
<tr>
<td>53</td>
<td>24/3/14</td>
<td>Poor farmer living in Phum Thmey</td>
</tr>
<tr>
<td>54</td>
<td>24/3/14</td>
<td>A couple who run a grocery shop in the village</td>
</tr>
<tr>
<td>55</td>
<td>25/3/14</td>
<td>A group of women in SL</td>
</tr>
<tr>
<td>56</td>
<td>25/4/14</td>
<td>An in-migrant from Mong District living in Phum Thmey</td>
</tr>
<tr>
<td>57</td>
<td>25/3/14</td>
<td>Farmers and loggers who live in Phum Thmey</td>
</tr>
<tr>
<td>58</td>
<td>26/3/14</td>
<td>A man working for a local bank called ANK</td>
</tr>
<tr>
<td>59</td>
<td>26/3/14</td>
<td>A couple living in SL</td>
</tr>
</tbody>
</table>

---

25 SL: Samlanh  
26 Phnom Penh
<table>
<thead>
<tr>
<th></th>
<th>Date</th>
<th>Description</th>
<th>Gender</th>
<th>Age</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>26/3/14</td>
<td>A business woman from Pramaoy</td>
<td>F</td>
<td>49</td>
<td>SL</td>
</tr>
<tr>
<td>61</td>
<td>28/3/14</td>
<td>A woman married to an ex-KR man</td>
<td>F</td>
<td>35</td>
<td>SL</td>
</tr>
<tr>
<td>62</td>
<td>28/3/14</td>
<td>A new migrant living in Okartin</td>
<td>F</td>
<td>50</td>
<td>SL</td>
</tr>
<tr>
<td>63</td>
<td>28/3/14</td>
<td>A man living in Okartin (repeated with 169)</td>
<td>M</td>
<td>40s</td>
<td>SL</td>
</tr>
<tr>
<td>64</td>
<td>29/3/14</td>
<td>The farmers and migrants living in Okartin</td>
<td>M/F</td>
<td>30s</td>
<td>SL</td>
</tr>
<tr>
<td>65</td>
<td>29/3/14</td>
<td>The current SL CPA head</td>
<td>M</td>
<td>38</td>
<td>SL</td>
</tr>
<tr>
<td>66</td>
<td>29/3/14</td>
<td>A in-migrant couple from the Thai border looking for work SL</td>
<td>M/F</td>
<td>30s</td>
<td>SL</td>
</tr>
<tr>
<td>67</td>
<td>31/3/14</td>
<td>The PSWS head</td>
<td>M</td>
<td>50s</td>
<td>Pramaoy</td>
</tr>
<tr>
<td>68</td>
<td>1/4/14</td>
<td>The CKCT commune council member</td>
<td>M</td>
<td>65</td>
<td>CKCT</td>
</tr>
<tr>
<td>69</td>
<td>1/4/14</td>
<td>Wife of the CKCT village head</td>
<td>F</td>
<td>55</td>
<td>CKCT</td>
</tr>
<tr>
<td>70</td>
<td>1/4/14</td>
<td>Village head of CKCT who is also an ex-KR (repeated with 23)</td>
<td>M</td>
<td>59</td>
<td>CKCT</td>
</tr>
<tr>
<td>71</td>
<td>2/4/14</td>
<td>A commune council member of CKCT (ex-KR)</td>
<td>M</td>
<td>65</td>
<td>CKCT</td>
</tr>
<tr>
<td>72</td>
<td>2/4/14</td>
<td>Village head of CKCT (repeated with 23 &amp; 70)</td>
<td>M</td>
<td>59</td>
<td>CKCT</td>
</tr>
<tr>
<td>73</td>
<td>2/4/14</td>
<td>The village head’s daughter who is ex-KR second generation</td>
<td>F</td>
<td>32</td>
<td>CKCT</td>
</tr>
<tr>
<td>74</td>
<td>3/4/14</td>
<td>The loggers working for the ELC</td>
<td>M/F</td>
<td>40s</td>
<td>CKCT</td>
</tr>
<tr>
<td>75</td>
<td>3/4/14</td>
<td>The loggers working for the ELC</td>
<td>M</td>
<td>40s</td>
<td>CKCT</td>
</tr>
<tr>
<td>76</td>
<td>3/4/14</td>
<td>In-migrant recently moving from Battambang</td>
<td>F</td>
<td>25</td>
<td>CKCT</td>
</tr>
<tr>
<td>77</td>
<td>3/4/14</td>
<td>A lady running a grocery shop in CKCT</td>
<td>F</td>
<td>55</td>
<td>CKCT</td>
</tr>
<tr>
<td>78</td>
<td>3/4/14</td>
<td>A poor and landless household</td>
<td>F</td>
<td>55</td>
<td>CKCT</td>
</tr>
<tr>
<td>79</td>
<td>3/4/14</td>
<td>A poor and landless household</td>
<td>F</td>
<td>55</td>
<td>CKCT</td>
</tr>
<tr>
<td>80</td>
<td>4/4/14</td>
<td>Village head of CKCT (repeated with 23, 70, and 72)</td>
<td>M</td>
<td>59</td>
<td>CKCT</td>
</tr>
<tr>
<td>81</td>
<td>4/4/14</td>
<td>A poor lady in the village who is also ex-KR</td>
<td>F</td>
<td>48</td>
<td>CKCT</td>
</tr>
<tr>
<td>82</td>
<td>4/4/14</td>
<td>An in-migrant living in CKCT</td>
<td>M</td>
<td>54</td>
<td>CKCT</td>
</tr>
<tr>
<td>83</td>
<td>4/4/14</td>
<td>A group of three guys living in CKCT</td>
<td>M</td>
<td>50s</td>
<td>CKCT</td>
</tr>
<tr>
<td>84</td>
<td>4/4/14</td>
<td>An in-migrant woman</td>
<td>F</td>
<td>38</td>
<td>CKCT</td>
</tr>
<tr>
<td>85</td>
<td>5/4/14</td>
<td>The head of the cattle team in CKCT</td>
<td>M</td>
<td>50</td>
<td>CKCT</td>
</tr>
<tr>
<td>86</td>
<td>5/4/14</td>
<td>A temporary in-migrant coming to SL to log</td>
<td>M</td>
<td>23</td>
<td>CKCT</td>
</tr>
<tr>
<td>87</td>
<td>6/4/14</td>
<td>The team member of HEFER, a Christian organisation</td>
<td>M</td>
<td>50s</td>
<td>CKCT</td>
</tr>
<tr>
<td>88</td>
<td>6/4/14</td>
<td>The head of CKCT self-help group</td>
<td>M</td>
<td>52</td>
<td>CKCT</td>
</tr>
<tr>
<td>89</td>
<td>7/4/14</td>
<td>The PSWS head (repeated with 67)</td>
<td>M</td>
<td>50s</td>
<td>Pramaoy</td>
</tr>
<tr>
<td>90</td>
<td>16/8/14</td>
<td>A landless farmer (repeated with 31)</td>
<td>M</td>
<td>49</td>
<td>SL</td>
</tr>
<tr>
<td>91</td>
<td>17/8/14</td>
<td>The new village head SL (ex-KR)</td>
<td>M</td>
<td>40s</td>
<td>SL</td>
</tr>
<tr>
<td>92</td>
<td>17/8/14</td>
<td>An in-migrant living in Okanglan</td>
<td>F</td>
<td>40s</td>
<td>SL</td>
</tr>
<tr>
<td>93</td>
<td>19/8/14</td>
<td>The former village head of SL (ex-KR)</td>
<td>M</td>
<td>40s</td>
<td>SL</td>
</tr>
<tr>
<td>94</td>
<td>19/8/14</td>
<td>A temporary in-migrant from Battambang</td>
<td>M</td>
<td>40s</td>
<td>SL</td>
</tr>
<tr>
<td>Date</td>
<td>M/F</td>
<td>Occupation/Description</td>
<td>Age</td>
<td>Location</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>-----</td>
<td>----------------------------------------------------------------------------------------</td>
<td>-----</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>20/8/14</td>
<td></td>
<td>Krapeu Pir Commune assistant</td>
<td>M</td>
<td>50s</td>
<td>Krapeu Pir</td>
</tr>
<tr>
<td>20/8/14</td>
<td>M/F</td>
<td>Poor migrants living in Phum Thmey</td>
<td>M/F</td>
<td>30s</td>
<td>SL</td>
</tr>
<tr>
<td>20/8/14</td>
<td></td>
<td>A group people looking for job in SL</td>
<td>M/F</td>
<td>50s</td>
<td>SL</td>
</tr>
<tr>
<td>21/8/14</td>
<td>F</td>
<td>A woman who run a small grocery shop in SL</td>
<td>F</td>
<td>40s</td>
<td>SL</td>
</tr>
<tr>
<td>21/8/14</td>
<td>M/F</td>
<td>A poor family living in SL</td>
<td>M/F</td>
<td>50s</td>
<td>SL</td>
</tr>
<tr>
<td>22/8/14</td>
<td></td>
<td>An ex-KR guy whose uncle was an ex-KR general</td>
<td>M</td>
<td>40s</td>
<td>Pramao</td>
</tr>
<tr>
<td>22/8/14</td>
<td>M</td>
<td>A group of commune council members from Thmar Da</td>
<td>M</td>
<td>50s</td>
<td>Pramao</td>
</tr>
<tr>
<td>23/8/14</td>
<td>F</td>
<td>An in-migrant living in Phum Thmey who is also a logger</td>
<td>F</td>
<td>30s</td>
<td>SL</td>
</tr>
<tr>
<td>29/8/14</td>
<td>F</td>
<td>A woman living in Phum Themy – SL</td>
<td>F</td>
<td>30s</td>
<td>SL</td>
</tr>
<tr>
<td>29/8/14</td>
<td>F/M</td>
<td>A family living in Phum Thmey (repeated with 96)</td>
<td>F/M</td>
<td>30s</td>
<td>SL</td>
</tr>
<tr>
<td>29/8/14</td>
<td>F</td>
<td>A poor family in SL (repeated with 31)</td>
<td>F</td>
<td>50s</td>
<td>SL</td>
</tr>
<tr>
<td>30/8/14</td>
<td>M</td>
<td>One of the men who used to be in the army</td>
<td>M</td>
<td>50s</td>
<td>SL</td>
</tr>
<tr>
<td>30/8/14</td>
<td>F</td>
<td>A mother and daughter living inside CPA</td>
<td>F</td>
<td>40s-60s</td>
<td>SL</td>
</tr>
<tr>
<td>30/8/14</td>
<td>F</td>
<td>An ex-KR family decided to move back to SL in the late 1990s</td>
<td>F</td>
<td>55</td>
<td>SL</td>
</tr>
<tr>
<td>31/8/14</td>
<td>M/F</td>
<td>One of the poor families in Okartin – SL</td>
<td>M/F</td>
<td>50s</td>
<td>SL</td>
</tr>
<tr>
<td>31/8/14</td>
<td>F</td>
<td>A young woman in her early 20s – SL</td>
<td>F</td>
<td>20s</td>
<td>SL</td>
</tr>
<tr>
<td>31/8/14</td>
<td>M/F</td>
<td>Old couple living in Okdey Khmao – SL</td>
<td>M/F</td>
<td>50s</td>
<td>SL</td>
</tr>
<tr>
<td>1/9/14</td>
<td>M</td>
<td>A group of farmers</td>
<td>M</td>
<td>40s</td>
<td>SL</td>
</tr>
<tr>
<td>1/9/14</td>
<td></td>
<td>Two farmers in Krasang Phnov</td>
<td>M</td>
<td>50s</td>
<td>SL</td>
</tr>
<tr>
<td>2/9/14</td>
<td>F</td>
<td>An ex-KR woman who have never been back to her hometown joining the revolution</td>
<td>F</td>
<td>55</td>
<td>SL</td>
</tr>
<tr>
<td>3/9/14</td>
<td>M</td>
<td>A soldier who come to the area seasonally to help his wife to buy corn during the harvest season</td>
<td>M</td>
<td>30s</td>
<td>CKCT</td>
</tr>
<tr>
<td>3/9/14</td>
<td>F</td>
<td>A woman living further away from others in SL</td>
<td>F</td>
<td>40</td>
<td>SL</td>
</tr>
<tr>
<td>4/9/14</td>
<td>M</td>
<td>A land clearer/labourer</td>
<td>M</td>
<td>40s</td>
<td>SL</td>
</tr>
<tr>
<td>4/9/14</td>
<td>M</td>
<td>One of the wealthy farmers in the village</td>
<td>M</td>
<td>50s</td>
<td>SL</td>
</tr>
<tr>
<td>5/9/14</td>
<td>M/F</td>
<td>A group of farmers</td>
<td>M/F</td>
<td>-</td>
<td>SL</td>
</tr>
<tr>
<td>5/9/14</td>
<td>M/F</td>
<td>A group farmers living in SL</td>
<td>M/F</td>
<td>-</td>
<td>SL</td>
</tr>
<tr>
<td>5/9/14</td>
<td>F</td>
<td>Former village head of SL (repeated with 35)</td>
<td>F</td>
<td>40s</td>
<td>SL</td>
</tr>
<tr>
<td>6/9/14</td>
<td>F</td>
<td>Former village head of SL</td>
<td>F</td>
<td>40s</td>
<td>SL</td>
</tr>
<tr>
<td>6/9/14</td>
<td>F</td>
<td>A group of loggers moving to SL to log</td>
<td>F</td>
<td>30s</td>
<td>SL</td>
</tr>
<tr>
<td>7/9/14</td>
<td>M</td>
<td>Commune assistant (repeated with 7)</td>
<td>M</td>
<td>50s</td>
<td>Krapeu Pir</td>
</tr>
<tr>
<td>9/9/14</td>
<td>M</td>
<td>A logger and farmer (repeated with 109)</td>
<td>M</td>
<td>30s</td>
<td>SL</td>
</tr>
<tr>
<td>9/9/14</td>
<td>F</td>
<td>The wife of a former village head assistant who also used to be a microfinance team leader at the time</td>
<td>F</td>
<td>30s</td>
<td>SL</td>
</tr>
<tr>
<td>Date</td>
<td>128</td>
<td>A farmer in Phum Thmey</td>
<td>F</td>
<td>30s</td>
<td>SL</td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
<td>------------------------</td>
<td>---</td>
<td>-----</td>
<td>----</td>
</tr>
<tr>
<td>129</td>
<td>10/9/14</td>
<td>One of the 7 families who decided to move back to SL in the late 1990s (repeated with 109 &amp; 115.)</td>
<td>F</td>
<td>55</td>
<td>SL</td>
</tr>
<tr>
<td>130</td>
<td>10/9/14</td>
<td>A farmer working for a richer man in the village</td>
<td>M</td>
<td>50s</td>
<td>SL</td>
</tr>
<tr>
<td>131</td>
<td>12/9/14</td>
<td>One of the wealthy farmers in SL</td>
<td>M</td>
<td>50s</td>
<td>SL</td>
</tr>
<tr>
<td>132</td>
<td>27/9/14</td>
<td>Village head of CKS (repeated with 23, 70, 72 and 80)</td>
<td>M</td>
<td>59</td>
<td>CKCT</td>
</tr>
<tr>
<td>133</td>
<td>27/9/14</td>
<td>The man who sells ice-cream</td>
<td>M</td>
<td>30</td>
<td>CKCT</td>
</tr>
<tr>
<td>134</td>
<td>27/9/14</td>
<td>A guesthouse owner in Pramaoy town</td>
<td>M</td>
<td>60</td>
<td>Pramaoy</td>
</tr>
<tr>
<td>135</td>
<td>28/9/14</td>
<td>The farmer living in Odey Khmao – CKCT</td>
<td>F</td>
<td>41</td>
<td>CKCT</td>
</tr>
<tr>
<td>136</td>
<td>28/9/14</td>
<td>The first person to live in Odey Khmao – CKCT</td>
<td>F</td>
<td>32</td>
<td>CKCT</td>
</tr>
<tr>
<td>137</td>
<td>28/9/14</td>
<td>A group of men living in Odey Khmao</td>
<td>M</td>
<td>40s</td>
<td>CKCT</td>
</tr>
<tr>
<td>138</td>
<td>29/9/14</td>
<td>The head of the Okanglan group</td>
<td>M</td>
<td>40s</td>
<td>CKCT</td>
</tr>
<tr>
<td>139</td>
<td>29/9/14</td>
<td>A man who has small grocery shop and who also trades wood with the ELC company</td>
<td>M</td>
<td>50s</td>
<td>CKCT</td>
</tr>
<tr>
<td>140</td>
<td>30/9/14</td>
<td>The lady living in Okanglan and one of the poor families</td>
<td>F</td>
<td>30s</td>
<td>CKCT</td>
</tr>
<tr>
<td>141</td>
<td>30/9/14</td>
<td>An ex-KR man who own a lot of land in the village</td>
<td>M</td>
<td>50s</td>
<td>CKCT</td>
</tr>
<tr>
<td>142</td>
<td>30/9/14</td>
<td>Village head’s wife (repeated with 69)</td>
<td>F</td>
<td>55</td>
<td>CKCT</td>
</tr>
<tr>
<td>143</td>
<td>1/10/14</td>
<td>CKCT village head (repeated with 23, 70, 72 &amp; 80)</td>
<td>M</td>
<td>59</td>
<td>CKCT</td>
</tr>
<tr>
<td>144</td>
<td>3/10/14</td>
<td>A CKCT commune council member</td>
<td>M</td>
<td>65</td>
<td>CKCT</td>
</tr>
<tr>
<td>145</td>
<td>3/10/14</td>
<td>A poor single mother (repeated with 78)</td>
<td>F</td>
<td>55</td>
<td>CKCT</td>
</tr>
<tr>
<td>146</td>
<td>3/10/14</td>
<td>A poor and landless woman who also is a single mother of 3</td>
<td>F</td>
<td>37</td>
<td>CKCT</td>
</tr>
<tr>
<td>147</td>
<td>6/10/14</td>
<td>An ex-KR man who own a lot of land in the village (repeated with 141)</td>
<td>M</td>
<td>50s</td>
<td>CKCT</td>
</tr>
<tr>
<td>148</td>
<td>6/10/14</td>
<td>The woman running a food-stall in the village</td>
<td>F</td>
<td>45</td>
<td>CKCT</td>
</tr>
<tr>
<td>149</td>
<td>7/10/14</td>
<td>Grocery seller and farmer from Kampong Cham</td>
<td>F</td>
<td>55</td>
<td>CKCT</td>
</tr>
<tr>
<td>150</td>
<td>7/10/14</td>
<td>A CPA member (ex-KR)</td>
<td>F</td>
<td>41</td>
<td>CKCT</td>
</tr>
<tr>
<td>151</td>
<td>8/10/14</td>
<td>An in-migrant and labourer (repeated with 78 &amp; 145)</td>
<td>F</td>
<td>50s</td>
<td>CKCT</td>
</tr>
<tr>
<td>152</td>
<td>13/10/14</td>
<td>Couple who are among the landless people</td>
<td>M/F</td>
<td>40s</td>
<td>CKCT</td>
</tr>
<tr>
<td>153</td>
<td>13/10/14</td>
<td>The son of the couple in the interview 151</td>
<td>M</td>
<td>22</td>
<td>CKCT</td>
</tr>
<tr>
<td>154</td>
<td>13/10/14</td>
<td>CKC CPA head and currently he works for the company too (repeated with 26)</td>
<td>M</td>
<td>40s</td>
<td>CKCT</td>
</tr>
<tr>
<td>155</td>
<td>14/10/14</td>
<td>The new migrant and couple who just moved to CKCT looking for land to rent</td>
<td>M/F</td>
<td>20s</td>
<td>CKCT</td>
</tr>
<tr>
<td>156</td>
<td>14/10/14</td>
<td>In-migrants living in Odey Khmao</td>
<td>M/F</td>
<td>30s</td>
<td>CKCT</td>
</tr>
<tr>
<td>157</td>
<td>15/10/14</td>
<td>An in-Migrant</td>
<td>F</td>
<td>59</td>
<td>CKCT</td>
</tr>
<tr>
<td>158</td>
<td>15/10/14</td>
<td>(Repeated with 78 &amp; 145)</td>
<td>F</td>
<td>50s</td>
<td>CKCT</td>
</tr>
<tr>
<td>159</td>
<td>15/10/14</td>
<td>A in-migrant and labourer</td>
<td>F</td>
<td>50s</td>
<td>CKCT</td>
</tr>
<tr>
<td>Date</td>
<td>Description</td>
<td>Gender</td>
<td>Age</td>
<td>Location</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
<td>--------</td>
<td>------</td>
<td>-----------</td>
<td></td>
</tr>
<tr>
<td>15/10/14</td>
<td>A woman married to an ex-KR man</td>
<td>F</td>
<td>40</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>15/10/14</td>
<td>A CPA member and an ex-KR (repeated with 150)</td>
<td>F</td>
<td>40</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>17/10/14</td>
<td>A group of village and commune authorities (ex-KR)</td>
<td>M</td>
<td>50s–60s</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>18/10/14</td>
<td>A man in Thmar Da who used to be in the army</td>
<td>M</td>
<td>60s</td>
<td>Thmar Da</td>
<td></td>
</tr>
<tr>
<td>18/10/14</td>
<td>A seasonal in-migrant in CKCT</td>
<td>F</td>
<td>20s</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>18/10/14</td>
<td>An ex-KR woman living in CKCT</td>
<td>F</td>
<td>52</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>20/10/14</td>
<td>The former district governor (ex-KR)</td>
<td>M</td>
<td>62</td>
<td>Pramaoy</td>
<td></td>
</tr>
<tr>
<td>16/12/14</td>
<td>A new in-migrant who lives in Okartin</td>
<td>F</td>
<td>37</td>
<td>SL – Okartin</td>
<td></td>
</tr>
<tr>
<td>18/12/14</td>
<td>One of the poorest couple in Phum Thmey</td>
<td>M</td>
<td>34</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>26/12/14</td>
<td>A woman from Battambang currently living in SL</td>
<td>F</td>
<td>26</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>30/12/14</td>
<td>One of the ex-KR leaders of SL</td>
<td>M</td>
<td>49</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>28/12/14</td>
<td>A young man married to a daughter of an ex-KR</td>
<td>M</td>
<td>30</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>28/12/14</td>
<td>A poor and landless family in SL</td>
<td>M</td>
<td>49</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>28/12/14</td>
<td>A relative of an earlier in-migrant</td>
<td>M</td>
<td>57</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>29/12/14</td>
<td>A family living in Okartin</td>
<td>F</td>
<td>44</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>01/01/15</td>
<td>An ex-KR moving to the village in 1990s (repeated with 28)</td>
<td>M</td>
<td>35</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>05/01/15</td>
<td>One of the 7 families moving back to SL in late 1990s (ex-KR)</td>
<td>M</td>
<td>35</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>05/01/15</td>
<td>A woman living in SL</td>
<td>F</td>
<td>41</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Description</td>
<td>Gender</td>
<td>Age</td>
<td>Location</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------</td>
<td>-----</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>06/01/15</td>
<td>An ex-KR man living in SL</td>
<td>M</td>
<td>50</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>07/01/14</td>
<td>A poor family attempting to clear new land in SL</td>
<td>M/F</td>
<td>51</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>07/01/15</td>
<td>A in-migrant and the SL CPA head’s relative</td>
<td>M</td>
<td>32</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>07/01/15</td>
<td>A family in Olangit – a sub-section of SL</td>
<td>M</td>
<td>50s</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>08/01/15</td>
<td>SL village assistant</td>
<td>M</td>
<td>34</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>09/01/15</td>
<td>A family arriving in Samlanh in mid-2000s</td>
<td>F</td>
<td>42</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>09/01/15</td>
<td>A family from Bueng Khnar living in SL</td>
<td>F</td>
<td>52</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>10/01/15</td>
<td>One of the rich families in Samlanh</td>
<td>M</td>
<td>50</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>01/04/15</td>
<td>An ex-KR relative</td>
<td>M</td>
<td>40s</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>1/04/15</td>
<td>A second generation of an ex-KR</td>
<td>M</td>
<td>30s</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>15/12/14</td>
<td>A villager who move to SL in mid-2000s (repeated with 120)</td>
<td>M</td>
<td>50s</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>15/12/14</td>
<td>One of the wealthy villagers living in SL</td>
<td>M</td>
<td>50s</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>15/12/14</td>
<td>An in-migrant who recently moved to SL</td>
<td>M</td>
<td>40s</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>16/12/14</td>
<td>(Repeated interview/discussion with 120 &amp;202)</td>
<td>M/F</td>
<td>50s</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>17/12/14</td>
<td>Corn buyer in SL</td>
<td>M</td>
<td>50s</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>19/14/12</td>
<td>(Repeated with 7&amp;51)</td>
<td>M</td>
<td>50s</td>
<td>Krapeu Pir</td>
<td></td>
</tr>
<tr>
<td>25/14/12</td>
<td>Two men living in SL clearing for new land</td>
<td>M</td>
<td>50s</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>28/12/14</td>
<td>An ex-KR man</td>
<td>F</td>
<td>40s</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>06/01/15</td>
<td>An in-migrant who recently moved to SL</td>
<td>M</td>
<td>40s</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>01/08/15</td>
<td>One of the ex-KR who also involved in selling the land in SL. He was a relative of the former village head.</td>
<td>M</td>
<td>40s</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>10/01/15</td>
<td>(Repeated with 208)</td>
<td>M</td>
<td>50s</td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>11/01/15</td>
<td>A villager in SL recently moved back to the village after living away many years</td>
<td></td>
<td></td>
<td>SL</td>
<td></td>
</tr>
<tr>
<td>1/19/15</td>
<td>An in-migrant living in CKCT</td>
<td>M</td>
<td></td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>1/19/15</td>
<td>Poor and landless migrants living in CKCT</td>
<td>M/F</td>
<td></td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>1/20/15</td>
<td>A random interview with an in-migrant</td>
<td>M</td>
<td></td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>1/20/15</td>
<td>A random interview with an in-migrant</td>
<td>F</td>
<td>38</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>1/21/15</td>
<td>An ex-KR militant living in CKCT</td>
<td>M</td>
<td></td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>1/21/15</td>
<td>An in-migrant moving to CKCT looking for new land</td>
<td>M</td>
<td>55</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>1/21/15</td>
<td>A man moving to CKCT to marry a woman who is a second generation of an ex-KR</td>
<td>M</td>
<td>32</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>1/22/15</td>
<td>A random interview with an in-migrant</td>
<td>M</td>
<td>32</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>1/23/15</td>
<td>One of the landless who have just arrived in the village</td>
<td>F</td>
<td>40</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>1/23/15</td>
<td>An ex-KR woman who was abducted by the KR in the 1980s</td>
<td>F</td>
<td>48</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>1/23/15</td>
<td>A man who was converted to become KR in the 1990s</td>
<td>M</td>
<td>41</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Description</td>
<td>Gender</td>
<td>Age</td>
<td>Location</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>--------</td>
<td>------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>1/24/15</td>
<td>A man who was converted to become KR in the 1990s</td>
<td>M</td>
<td>51</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>25/01/15</td>
<td>A woman who married to an ex-KR man</td>
<td>F</td>
<td>36</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>25/01/15</td>
<td>An in-migrant family</td>
<td>M</td>
<td>54</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>25/01/15</td>
<td>A young woman from Kampong Cham</td>
<td>F</td>
<td>30s</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>25/01/15</td>
<td>A second generation of the ex-KR</td>
<td>F</td>
<td>30</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>26/01/15</td>
<td>A relative of an ex-KR</td>
<td>F</td>
<td>44</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>27/01/15</td>
<td>A man moving to CKCT in the early 1990s</td>
<td>F</td>
<td>35</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>27/01/15</td>
<td>An in-migrant living in CKCT</td>
<td>F</td>
<td>59</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>28/01/15</td>
<td>An in-migrant woman whose main job is selling labour</td>
<td>F</td>
<td>47</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>28/01/15</td>
<td>An in-migrant woman whose main job is selling labour</td>
<td>F</td>
<td>40s</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>01/02/15</td>
<td>A random interview with a villager</td>
<td>M</td>
<td>30s</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>01/02/15</td>
<td>A woman whose father is an ex-KR, the village head’s daughter</td>
<td>F</td>
<td>32</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>01/02/15</td>
<td>A in-migrant</td>
<td>M</td>
<td>50</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>02/02/15</td>
<td>An in-migrant</td>
<td>M</td>
<td>35</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>03/02/15</td>
<td>(Repeated with 61&amp;144)</td>
<td>M</td>
<td>63</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>03/02/15</td>
<td>A leader and active member of the KR</td>
<td>M</td>
<td>50</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>04/02/15</td>
<td>An ex-KR militant</td>
<td>M</td>
<td>60</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>04/02/15</td>
<td>A woman living near Odey Khmao</td>
<td>F</td>
<td>63</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>04/02/15</td>
<td>One of the poor families living in Odey Khmao</td>
<td>F</td>
<td>59</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>04/02/15</td>
<td>A man living at the edge of Odey Khmao whose children did not received education</td>
<td>M</td>
<td>45</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>05/02/15</td>
<td>A main group leader who lives in Okanglan</td>
<td>M</td>
<td>45</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>05/02/15</td>
<td>An in-migrant man living in Okanglan</td>
<td>M</td>
<td>23</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>05/02/15</td>
<td>(Repeated with 69)</td>
<td>M</td>
<td>45</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>05/02/15</td>
<td>An in-migrant woman living in Okanglan</td>
<td>F</td>
<td>47</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>06/02/15</td>
<td>An in-migrant</td>
<td>M</td>
<td>50s</td>
<td>Pramaoy</td>
<td></td>
</tr>
<tr>
<td>17/10/14</td>
<td>Information conversation with the village head</td>
<td>M</td>
<td>50s</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>17/10/14</td>
<td>An ex-KR militant</td>
<td>M</td>
<td>50s</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>22/10/14</td>
<td>An in-migrant farmer</td>
<td>M</td>
<td>50s</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>22/10/14</td>
<td>A young in-migrant couple living near ELC</td>
<td>M/F</td>
<td>20s</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>22/10/14</td>
<td>A migrant family in CKCT</td>
<td>M</td>
<td>40s</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>22/10/14</td>
<td>A poor in-migrant man having trouble with a money lender</td>
<td>M</td>
<td>40s</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>23/10/14</td>
<td>Commune authority of CKC (ex-KR)</td>
<td>M</td>
<td>50s</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>23/10/14</td>
<td>Village head of CKC (ex-KR)</td>
<td>M</td>
<td>50s</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>24/10/17</td>
<td>An ELC worker</td>
<td>M</td>
<td>30s</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Description</td>
<td>Gender</td>
<td>Age</td>
<td>Department</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------------------------------------------------------</td>
<td>--------</td>
<td>-----</td>
<td>------------</td>
<td></td>
</tr>
<tr>
<td>24/10/17</td>
<td>The workers of the ELC</td>
<td>M/F</td>
<td>30s</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>24/10/17</td>
<td>In-migrants whose husband is an ex-KR</td>
<td>M/F</td>
<td>40s</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>24/10/17</td>
<td>A man living at the end of CKC (ex-KR)</td>
<td>M</td>
<td>40s</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>24/10/17</td>
<td>An old ex-KR leader who has lost his power (ex-KR)</td>
<td>M</td>
<td>60s</td>
<td>CKCT</td>
<td></td>
</tr>
<tr>
<td>06/02/15</td>
<td>The former KR general</td>
<td>M</td>
<td>50s</td>
<td>Pramaoy</td>
<td></td>
</tr>
<tr>
<td>16/03/15</td>
<td>An FFI GIS expert who involved in the PSWS zoning project</td>
<td>M</td>
<td>30s</td>
<td>PP</td>
<td></td>
</tr>
<tr>
<td>18/03/15</td>
<td>An NGO Forum staff working on land issues</td>
<td>M</td>
<td>30s</td>
<td>PP</td>
<td></td>
</tr>
<tr>
<td>18/03/15</td>
<td>An NGO Forum staff working on land issues</td>
<td>F</td>
<td>30s</td>
<td>PP</td>
<td></td>
</tr>
<tr>
<td>19/03/15</td>
<td>An FFI staff</td>
<td>M</td>
<td>30s</td>
<td>PP</td>
<td></td>
</tr>
<tr>
<td>20/03/15</td>
<td>A conservation NGO officer</td>
<td>M</td>
<td>30s</td>
<td>PP</td>
<td></td>
</tr>
<tr>
<td>19/03/15</td>
<td>An NGO Forum staff</td>
<td>F</td>
<td>33</td>
<td>PP</td>
<td></td>
</tr>
<tr>
<td>20/03/15</td>
<td>MoE official</td>
<td>M</td>
<td>40</td>
<td>PP</td>
<td></td>
</tr>
<tr>
<td>19/03/15</td>
<td>NGO Forum staff</td>
<td>M</td>
<td>28</td>
<td>PP</td>
<td></td>
</tr>
<tr>
<td>19/03/15</td>
<td>A member of Provincial Supervisory Board – Pursat</td>
<td>M</td>
<td>50s</td>
<td>PP</td>
<td></td>
</tr>
<tr>
<td>21/03/15</td>
<td>GIZ staff working with land registration program</td>
<td>M</td>
<td>40s</td>
<td>PP</td>
<td></td>
</tr>
<tr>
<td>22/03/15</td>
<td>MoE official working on community evaluation and EIA</td>
<td>M</td>
<td>40s</td>
<td>PP</td>
<td></td>
</tr>
<tr>
<td>22/03/15</td>
<td>MoE official</td>
<td>M</td>
<td>30s</td>
<td>PP</td>
<td></td>
</tr>
<tr>
<td>07/04/15</td>
<td>CEO of an EIA company</td>
<td>M</td>
<td>40s</td>
<td>PP</td>
<td></td>
</tr>
<tr>
<td>25/04/15</td>
<td>ODC mapping expert</td>
<td>M</td>
<td>30s</td>
<td>PT</td>
<td></td>
</tr>
<tr>
<td>07/04/15</td>
<td>Former head Tourist Department – Pursat</td>
<td>M</td>
<td>50s</td>
<td>PT</td>
<td></td>
</tr>
<tr>
<td>08/04/15</td>
<td>Former head of Khotakalai Khet - Pursat</td>
<td>M</td>
<td>50s</td>
<td>PT</td>
<td></td>
</tr>
<tr>
<td>08/04/15</td>
<td>Head of the Provincial Department of Land – Pursat</td>
<td>M</td>
<td>50s</td>
<td>PT</td>
<td></td>
</tr>
<tr>
<td>08/04/15</td>
<td>Head of Department of Planning – Pursat</td>
<td>M</td>
<td>30s</td>
<td>PT</td>
<td></td>
</tr>
<tr>
<td>09/04/15</td>
<td>Head of Mining Office – Pursay</td>
<td>M</td>
<td>40s</td>
<td>PT</td>
<td></td>
</tr>
<tr>
<td>09/04/15</td>
<td>Head of Department of Environment – Pursat</td>
<td>M</td>
<td>30s</td>
<td>PT</td>
<td></td>
</tr>
<tr>
<td>13/04/15</td>
<td>Two EU officials Phnom Penh</td>
<td>F</td>
<td>30s</td>
<td>PP</td>
<td></td>
</tr>
<tr>
<td>15/04/15</td>
<td>FFI staff, the program manager of the zoning project</td>
<td>M</td>
<td>30s</td>
<td>PP</td>
<td></td>
</tr>
<tr>
<td>16/04/15</td>
<td>IUCN official, the program country coordinator</td>
<td>M</td>
<td>40s</td>
<td>PP</td>
<td></td>
</tr>
<tr>
<td>21/04/15</td>
<td>FFI and protected area consultant</td>
<td>M</td>
<td>50s</td>
<td>PP</td>
<td></td>
</tr>
<tr>
<td>21/04/15</td>
<td>FFI staff working on the zoning project and community</td>
<td>F</td>
<td>20s</td>
<td>PP</td>
<td></td>
</tr>
<tr>
<td>22/04/15</td>
<td>LICADHO staff working on land conflict</td>
<td>M</td>
<td>40s</td>
<td>PP</td>
<td></td>
</tr>
<tr>
<td>22/04/15</td>
<td>FAO consultant</td>
<td>M</td>
<td>30s</td>
<td>PP</td>
<td></td>
</tr>
<tr>
<td>23/04/15</td>
<td>Royal University of Phnom Penh academic</td>
<td>M</td>
<td>50s</td>
<td>PP</td>
<td></td>
</tr>
</tbody>
</table>

27 PT: Pursat Town
<table>
<thead>
<tr>
<th></th>
<th>Date</th>
<th>Name</th>
<th>Gender</th>
<th>Age</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>292</td>
<td>24/04/15</td>
<td>Free-land consultant</td>
<td>M</td>
<td>30s</td>
<td>PP</td>
</tr>
<tr>
<td>293</td>
<td>25/04/15</td>
<td>WCS staff</td>
<td>M</td>
<td>30s</td>
<td>PP</td>
</tr>
<tr>
<td>294</td>
<td>27/04/15</td>
<td>A lawyer from a law firm</td>
<td>M</td>
<td>50s</td>
<td>PP</td>
</tr>
</tbody>
</table>
Appendix B: Semi-structure interview checklist

I. Personal Background

1.1. Name:
1.2. Age:
1.3. Gender:
1.4. Marital status:
1.5. Number of Children and their occupations:
1.6. Former Khmer Rouge?
1.7. Location:

II. Personal Narratives

2.1. Where are you from?
2.2. How long have you been living here?
2.3. Why did you decide to move here?
   - Can you give an example of the reason you moved here?
   - What struggles had you experienced before moving here?
   - Why here and not other places?
2.4. How do you earn a living here/ what is your main occupation here?
   - Can you give an example of the challenges of living in this area?
2.5. Do you have any other sources of income?
   - Can you give an example?
   - Logging, selling labor etc.?
2.6. How would you describe your relationship with the older residents – KR or migrants?
   - Do you like them? Why?
   - Do they like you? Why?
   - Has there been any confrontation among the new and old residents?
2.7. For those who are not KR: What are the key challenges of living here?
   - Similar to what you expected before moving?
- Different to what you expected before moving?

2.8. **For those who are not KR**: How would you describe the condition in your previous place?
- How many times have you moved location already?

III. **Land**

3.1. How much land do you have?
3.2. Where is your land?
3.3. Can you describe the history of the land you processes?
    - How did you clear that the land?
    - How did you buy it?
    - Who allocated that land to you?
    - Since when?
3.4. Have you ever had any land issues or concerns about land security?
    - With ELCs?
    - With mining concessions?
    - With other land holders?
    - With conservation land?
3.5. How did the issues/concern arise?
    - Can you give an example?
3.6. What has been the solution?
3.7. Is your land titled? Why?
    - Give some example of what authorities said
    - Give an example why you think you are unable to get land title
3.8. How would you describe the boundary of your land before and after it was cleared?

IV. **Farming and livelihood struggle?**

4.1. Can you describe your farming activities here?
    - What crops do you grow?
- How many times a year?
- From when to when?

4.2. Where do you get capital from?
- Logging
- Selling labour
- Remittances
- Loan? How? From whom? Interest rate?

4.3. Where does labour used come from?
- Inside the family mainly
- Outside the family mainly

4.4. How do you use this capital in relation to your land?
- For what purpose?
- For what activities?

4.5. Have you lost any land from debt?
- How did it happen?
- Owe the debt to whom?

4.6. How would you describe your farming situation?
- Beneficial? If so how and why?
- Not beneficial? If so how and why?

4.7. What would be the most difficult experiences you have inexperienced doing farming?
- Expensive
- Market
- Shrub and forest

V. KR and personal history

5.1. Can you tell me where you were born?

5.2. What was the major livelihood activity of your family at that time?

5.3. How did you join the KR?
- When?
- Where?
- Why?
- With whom?

5.4. What was your role and where? Give an example of each specific period Please:
- Before 1975
- From 1975-1979
- From 1979 – 1980s
- From 1991-1997
- From 1997-1998
- From 1999s to present

5.5. Can you explain about your family’s role and obligation before the integration 1998 and after?

5.6. Can you give any interesting accounts of life experiences during the war?

5.7. Can you give any interesting accounts of life experiences after the war?

5.8. Can you given an example of the difference between men, women and children during and after the war?
   - Has there been any change?
   - How has that changed?

5.9. Apart from the KR who else are living in this village?

5.10. How would you describe the relationship between you and those groups of people?

**VI. The artificial boundary**

6.1. Do you know where the boundary of the ELC is? How?

6.2. Do you know the CPA boundary? How?

6.3. Do you know the village, commune, and district boundaries? How?

6.4. What does the concept of village mean to you?

6.5. Do you think the 01 land title given represents all the land you have? Why?
Appendix C: University of Sydney ethics approval letter

Research Integrity
Human Research Ethics Committee

Monday, 24 February 2014

Prof Philip Hirsch
Geosciences; Faculty of Science
Email: philip.hirsch@sydney.edu.au

Dear Philip,

I am pleased to inform you that the University of Sydney Human Research Ethics Committee (HREC) has approved your project entitled “Land and Natural Resource Territorial Demarcation - A Case Study in Cambodia Protected Area”.

Details of the approval are as follows:

Project No.: 2013/959
Approval Date: 24 February 2014
First Annual Report Due: 24 February 2015
Authorised Personnel: Hirsch Philip; Chann Sopheak;

Documents Approved:

<table>
<thead>
<tr>
<th>Date Uploaded</th>
<th>Type</th>
<th>Document Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/11/2013</td>
<td>Interview Questions</td>
<td>checklist questions</td>
</tr>
<tr>
<td>15/02/2014</td>
<td>Participant Info Statement</td>
<td>PIS_English</td>
</tr>
<tr>
<td>15/02/2014</td>
<td>Participant Info Statement</td>
<td>PIS_Khmer</td>
</tr>
<tr>
<td>15/02/2014</td>
<td>Participant Consent Form</td>
<td>Participant consent form English</td>
</tr>
<tr>
<td>15/02/2014</td>
<td>Participant Consent Form</td>
<td>Participant consent form Khmer</td>
</tr>
<tr>
<td>15/02/2014</td>
<td>Other Type</td>
<td>Invitation letter for interview English</td>
</tr>
<tr>
<td>15/02/2014</td>
<td>Other Type</td>
<td>Invitation letter for interview Khmer</td>
</tr>
</tbody>
</table>

HREC approval is valid for four (4) years from the approval date stated in this letter and is granted pending the following conditions being met:

Special Condition(s) of Approval

- It will be a condition of approval that all necessary permissions are obtained from participating organisations and kept on file.

Condition(s) of Approval

- Continuing compliance with the National Statement on Ethical Conduct in Research Involving Humans.
• Provision of an annual report on this research to the Human Research Ethics Committee from the approval date and at the completion of the study. Failure to submit reports will result in withdrawal of ethics approval for the project.

• All serious and unexpected adverse events should be reported to the HREC within 72 hours.

• All unforeseen events that might affect continued ethical acceptability of the project should be reported to the HREC as soon as possible.

• Any changes to the project including changes to research personnel must be approved by the HREC before the research project can proceed.

• Note that for student research projects, a copy of this letter must be included in the candidate’s thesis.

Chief Investigator / Supervisor’s responsibilities:

1. You must retain copies of all signed Consent Forms (if applicable) and provide these to the HREC on request.

2. It is your responsibility to provide a copy of this letter to any internal/external granting agencies if requested.

Please do not hesitate to contact Research Integrity (Human Ethics) should you require further information or clarification.

Yours sincerely

[Signature]

Professor Glen Davis
Chair
Human Research Ethics Committee

This HREC is constituted and operates in accordance with the National Health and Medical Research Council’s (NHMRC) National Statement on Ethical Conduct in Human Research (2007), NHMRC and Universities Australia Australian Code for the Responsible Conduct of Research (2007) and the CPMP/ICH Note for Guidance on Good Clinical Practice.
Appendix D: Permission letter to conduct fieldwork from Ministry of Environment
Appendix E: The University of Sydney ethics consent form

School of Geosciences
Faculty of Science

PHILIP HIRSCH
PROFESSOR OF HUMAN GEOGRAPHY

PARTICIPANT CONSENT FORM

I, ..............................................................................................................[PRINT NAME], give consent to my participation in the research project

TITLE: Land and Natural Resource Territorial Demarcation: A Case Study in Cambodia Protected Area Context

In giving my consent I acknowledge that:

1. The procedures required for the project and the time involved have been explained to me and any questions I have about the project have been answered to my satisfaction.

2. I have read the Participant Information Statement and have been given the opportunity to discuss the information and my involvement in the project with the researcher/s.

3. I understand that being in this study is completely voluntary – I am not under any obligation to consent.

4. I understand that my involvement is strictly confidential. I understand that any research data gathered from the results of the study may be published however no information about me will be used in any way that is identifiable.

5. I understand that I can withdraw from the study at any time, without affecting my relationship with the researcher(s) or the University of Sydney now or in the future.

Land and Natural Resource Territorial Demarcation: A Case Study in Cambodia Protected Area Context
Version 1.0, 21/10/2013

Page 1 of 2
6. I understand that I can stop the interview at any time if I do not wish to continue, the information provided will not be included in the study.

I understand that I can stop my participation in the focus group at any time if I do not wish to continue; however as it is a group discussion it will not be possible to exclude individual data to that point.

7. I consent to:

- Receiving Feedback  YES ☐  NO ☐

If you answered YES to the “Receiving Feedback” question, please provide your details i.e. mailing address, email address.

**Feedback Option**

**Address:**

________________________________________________________________________

________________________________________________________________________

**Email:**

________________________________________________________________________

........................................................................................................

Signature

........................................................................................................

Please PRINT name

........................................................................................................

Data


Land and Natural Resource Territorial Demarcation: A Case Study in Cambodia Protected Area Context
Version 1.0, 21/10/2013

Page 2 of 2
Appendix F: Participant information statement

Land and Natural Resource Territorial Demarcation:
A Case Study in Cambodia Protected Area Context

PARTICIPANT INFORMATION STATEMENT

(1) What is the study about?

This research attempts to investigate natural resources and land allocation in contemporary rural Cambodia through demarcation and mapping processes and local spatial arrangements within the protected area context of Cambodia. The current land administration processes of the Cambodian government will be explored. Those include investigation of the nature of demarcation and zoning within the protected areas such as the establishment of community-based natural resource management zoning, individual land titling, land concession and other forms of territorial practices within the local communities.

(2) Who is carrying out the study?

The study is being conducted by Sopheak Chann, a Geography PhD student at the University of Sydney. It will form the basis for the degree of Doctor of Philosophy in Science at The University of Sydney under the supervision of Professor Philip Hirsch.

(3) What does the study involve?

The study involves interviews and participatory mapping with people and organisations who are involved in natural resource demarcation and allocation within a protected area context in Cambodia. The interviews and mapping processes will be conducted in three rural villages located in a protected area of Cambodia. The interview and participatory mapping will only be conducted only if the permission is granted by participant.

(4) How much time will the study take?

The study is being conducted over a 4 years period from March 2013 to January 2017. Interviews are being conducted in January – May 2014 and August – December 2014. The expected duration of each interview is 1 hour (or as otherwise arranged).

(5) Can I withdraw from the study?

Being in this study is completely voluntary - you are not under any obligation to consent and - if you do consent - you can withdraw at any time without affecting your relationship with The University of Sydney.
You may stop the interview at any time if you do not wish to continue, the information from the interview provided will be erased and will not be included in the study.

If you take part in a focus group and wish to withdraw, as this is a group discussion it will not be possible to exclude individual data once the session has commenced.

(6) Will anyone else know the results?

All aspects of the study, including results, will be strictly confidential and only the researchers will have access to information on participants. A report of the study may be submitted for publication in academic journal or presented at a conference, but individual participants will not be quoted without prior written consent.

(7) Will the study benefit me?

The study offers no direct incentive to participants, financial or otherwise. Nevertheless, it is hoped that the findings will contribute to a better understanding of resource allocation in Cambodia.

(8) Can I tell other people about the study?

You are welcome to discuss the study with any interested colleagues, friends and associates.

(9) What if I require further information about the study or my involvement in it?

When you have read this information, Sophakea Chann will discuss it with you further and answer any questions you may have. Professor Philip Hirsch (phone: +61 2 9351 3355).

(10) What if I have a complaint or any concerns?

Any person with concerns or complaints about the conduct of a research study can contact The Manager, Human Ethics Administration, University of Sydney on +61 2 8627 8176 (Telephone); +61 2 8627 8177 (Facsimile) or ro.humanethics@sydney.edu.au (Email).

This information sheet is for you to keep

Land and Natural Resource Territorial Demarcation: A Case Study in Cambodia Protected Area Context
Version 1.0, 21/10/2013

Page 2 of 2