

Analysis Of (Un)Invited Participation
Using Environmental Justice
In Permanent Reserved Forest In Peninsular Malaysia

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ABSTRACT

With current concern over climate change, forests are acknowledged as a vital component of climate change initiatives, translating to an economic subsidy worth billions of dollars. However, continuous deforestation and land development threatens protection and conservation of forests as well as the sustainability of this natural resource. Public participation then becomes important, as it is not only a key requirement of sustainable development, but also an important aspect of a democratic society. However, the overall neglect of the social aspect of sustainability in previous initiatives as well as examples of failed public participation processes highlights the question: How do we understand the process of public participation? What determines the success or failure of a public participation process? One of the ways to explore this issue is by considering the different dimensions of environmental justice and how they can be incorporated in a public participation process. The use of environmental justice provided an alternative perspective to study public participation. Using Malaysia as a case study, four cases of forestry management conflict were examined in peninsular Malaysia. These cases illustrated the interaction between different actors and how invited and uninvited public participations were constructed within permanent reserved forest governance. Application of environmental justice principles to both invited and uninvited participation processes highlight both social subordination of the public and unjust public participation mechanisms in a governance system that was supposedly built on the ideologies of sustainability. Interviews with multiple actors showed not only a disconnected perception amongst the actors regarding permanent reserved forests, but also a flawed forestry system that allowed domination by elite actors, rendering it unsustainable and ensuring public participation remained meaningless. However, the use of uninvited participation as a community based response to meaningless participatory mechanisms highlights the need for social capital, a resource that is available only to the affluent. Environmental justice has proven useful as an analytical lens, and the discovery of unjust and economic-centric forestry governance is indicative of a failed sustainable forestry management system, one that must be rectified.

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LIST OF ACRONYMS

AZRB	Ahmad Zaki Resources Berhad
BN	Barisan Nasional
DEIA	Detailed Environmental Impact Assessment
DOE	Department of Environment
DOS	Department of Statistics
EIA	Environmental Impact Assessment
EKVE	East Klang Valley Expressway
EKVESB	East Klang Valley Expressway Sendirian Berhad
FAO	Food and Agriculture Organization
FDPM/JPSM	Forestry Department Peninsular Malaysia/ <i>Jabatan Perhutanan Semenanjung Malaysia</i>
FoKD	Friends of Kota Damansara
FRIM	Forest Research Institute Malaysia
FYMP	Five-Year Malaysia Plan
GDP	Gross Domestic Product
IAPP	International Association of Public Participation
KLORR	Kuala Lumpur Outer Ring Road
LCC	Land Capability Classification
MCA	Malaysian Chinese Association
MC&I	Malaysian Criteria, Indicators, Activities & Standards of Performance
MIC	Malaysian Indian Congress
MNS	Malaysian Nature Society
MNRE	Ministry of Natural Resources and Environment
MTCC	Malaysian Timber Certification Council
MTIB	Malaysian Timber Industry Board
MPAJ	Majlis Perbandaran Ampang Jaya
MPPJ	Majlis Perbandaran Petaling Jaya
NEP	New Economic Policy
NFA 1984	National Forestry Act 1984

NFP 1993	National Forestry Policy 1993
NIMBY	Not-In-My-Backyard
NGO	Non Government Organization
NLC	National Land Council
NLC 1965	National Land Code 1965
NPA 1980	National Parks Act 1980
PEKA	Protection of Natural Heritage Malaysia
PFE	Permanent Forest Estate
PH	Pakatan Harapan
PKNP	Perbadanan Kemajuan Negeri Pahang
PRF	Permanent Reserved Forest
SAM	Sahabat Alam Malaysia
SDG	Sustainable Development Goals
SDP	State Development Plans
SFD	State Forestry Department
SFM	Sustainable Forest Management
SMS	Sustainable Management System
SPC	State Planning Committees
SSDC	Selangor State Development Corporation
TCPA 1976	Town and Country Planning Act 1976
TrEES	Treat Every Environment Special
UMNO	United Malays National Organization
UN	United Nations
UNDP	United Nations Development Programme
YDPA	Yang DiPertuan Agong

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CHAPTER 1 INTRODUCTION

1.1 Forests and People

Forests are gold: if we know to protect and develop them well, they will be very precious.

The quote above, which can be found at the entrance to a protected forest in Lam Dong province in Vietnam, supposedly came from Vietnam's revolutionary leader, Ho Chi Minh in 1962. By equating forests with gold, the quote shows the high value of forest, as it provides a vast collection of services, both to the environment, but also to the people: either as a source of food, source of income, a site for social activity, or to some, home. In terms of value, the political, economic, cultural and social significance of forests and the resources they provide is priceless. Currently, most of the world's forest cover is located along the tropical regions of America, Africa and Asia; with temperate forests distributed across Canada, Europe and parts of Russia and China (Figure 1.1). As a highly valuable commodity, forest has long been mired in conflicts revolving around forestry management and exploitation of its commodities, dating back to the 18th century colonization of forest-rich countries for control of supply (Boomgaard, 1992) through to the present day, where issues of climate change and sustainable use have taken over as the dominant narrative.

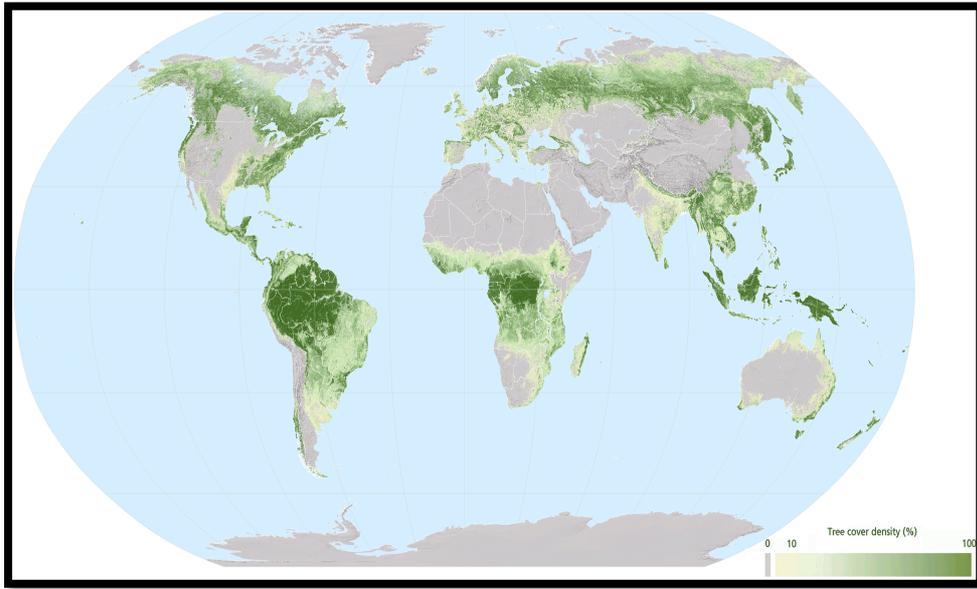


Figure 1.1: World Forest Map 2010 (FAO, 2012)

The main threat to forestry is deforestation, which is an unfortunate consequence of a nation's development, and although the rate of global deforestation has reduced over the years, tropical forests are still experiencing a significant amount of deforestation (FAO, 2012). In 2017, it is estimated that 24.9 million hectares of tree cover were lost, with at least 15.8 million hectares located in the tropical regions; which was caused by both natural disasters and clearing of forests for alternative land uses (Weisse & Goldman, 2018). In June 2018, Imazon¹ reported that the Amazon experienced the highest level of deforestation since they first began tracking deforestation in the world's largest rainforest in 2007 (Mongabay, 2018). In Southeast Asia, a recent study showed evidence of a substantial part of formerly forested land that were developed into cultivated land (Zeng et al., 2018). The study highlighted cropland development as one of the main drivers of deforestation in Southeast Asia, where countries like Malaysia, Thailand, Indonesia and Vietnam are continuously carrying out land expansion to support their economic development.

¹ Independent NGO that provides monthly data on Brazil's forest trends.

Apart from sustaining the lives of more than 1.6 billion people across the world, forests are home to more than 80% of all terrestrial species of animals, plants and insect (UN, 2015a), which means continuous deforestation will not only affect the human population, but also endangered and threatened species of animals and plants. With current concern over climate change, forests are also acknowledged as a vital component of the global carbon cycle, able to absorb billion tons of CO₂ globally every year despite covering only 30% of Earth's land mass. In fact, the importance of forests in mitigating the effect of climate change translates to '*an economic subsidy worth hundreds of billions of dollars*' (Canadell & Raupach, 2008) and the importance of forests to the global sustainable development is endorsed in the Sustainable Development Goals 2030, where the forestry element is embedded in one of the 17 sustainable goals. As stated in the UN agenda, goal 15 (SDG15) indicates that by 2030 the management of global forest and land will aim to '*protect, restore and promote sustainable use of terrestrial ecosystems, sustainably managed forests, combat desertification, halt and reverse land degradation and halt biodiversity loss*' (UN, 2015b). Not only that, forests have also been linked to other goals such as elimination of poverty (SDG1), ending hunger and achieving food security (SDG2), and achieving gender equality and female empowerment (SDG5), among others (FAO, 2018).

1.1.1 Public Participation in Sustainable Development

With the growing awareness of climate change and the importance of sustainable development, participation and multistakeholder partnership is considered the key to managing forestry resources sustainably and responsibly. The need for active participation to achieve sustainable development has been recognized since the first United Nations Conference on Environment and Development (UNCED) in 1992. Commonly known as Earth Summit, this conference adopted Agenda 21 by drawing upon the concept of participation in development (UNCED, 1992). Later, the need for a multi-stakeholder engagement and participation was reaffirmed in Rio+ (UNCSD, 2012) where it was specifically stated that '*broad public participation and access to information and judicial and administrative proceedings are essential to the promotion of sustainable development*'. With implementation of Sustainable Development Goals 2030, the

importance of participation is yet again reiterated, this time with the acknowledgement of participation for ‘*all countries, all stakeholders and all people*’ (UN, 2015b).

Bierle’s (2010) analysis of several public participation case studies shows that participation is important in resolving conflict, building trust, as well as in environmental education for the public. For the governance of forestry resources, this is especially important, as World Bank research indicates that countries that depend heavily on natural resources are the ones most likely to be affected by conflict (Bannon & Collier, 2003). Apart from that, effective governance has been associated with citizen participation, (Callahan, 2006) and this translates to better environmental outputs and outcomes of decision-making processes (Newig & Fritsch, 2009). Recent studies have also reached similar conclusions, where participation is a critical element for other issues such as water planning (Ballester & Mott Lacroix, 2016), infrastructure development (Rojanamon, Chaisomphob, & Bureekul, 2012) and sustainability transition (Lyytimäki, Vikström, & Furman, 2018).

The use of public participation in forestry management and governance is important as it allows the incorporation of values and opinions of different stakeholders regarding forests. Not only because there are a variety of social and cultural values attached to forests and their resources (see Blicharska and Mikusiński (2014), and Ntiamoa-Baidu (1987) for examples), natural resource and forestry policies are also increasingly emphasizing multi stakeholder collaboration (Johansson, 2018) as a means to address sustainability issues in resource management. International forestry initiatives such as REDD+ and community/participatory forestry all promote participation and multi-stakeholder partnerships with the aim of ensuring sustainability of resources and reduction of deforestation and carbon emissions. However, despite these efforts, there is still much uncertainty regarding how best to incorporate participation in forestry. While popular, initiatives like REDD+ and community forestry have limitations, with issues like elite control and unequal distributions of benefits between the stakeholders (Chaudhary et al., 2018; García-López, 2018) resulting in criticism that these initiatives are useless and unjust. Not only that, forestry resources are highly valuable (Basu, 2018; Nelson & Agrawal, 2008) especially to developing countries, such that it is difficult for powerful actors to surrender control. Furthermore, the diversity of cultural and social values attached

to forests highlights the different perceptions of forests' economic and environmental significance, and indicates that there is no single authority that can truly determine the overall value of forest, in every single aspect. This can only be carried out via inclusive participation, and if done correctly, can only add to the quality of environmental decision-making.

Inclusive and meaningful participation, which will be explored further in Chapter 2, is a concept that emphasises empowerment and equity (Reed, 2008) and is important to ensure social and environmental justice in natural resource governance. However, what happens when participation processes fail to address critical environmental and social issues? Participation mechanisms that fail to provide power and equal opportunities in decision-making go against democratic values, and thus rely on other forms of grassroots participation such as activism and protests to ensure these values are being met. These forms of participation that starts at community level are critical in protecting the rights of the public (Zhang, 2017) and are an important component in any governance system. For forestry and natural resource governance, it means the utilization of different forms of participation mechanisms in order to ensure that the people have adequate access to information as well as the power to influence decision-making. It indicates that in the event that formal participation fails, other mechanisms of participation must be able to provide means for the public to overcome the barriers, thus allowing social and environmental goals to be met.

Therefore, in forestry governance, the combination of formal and grassroots participatory mechanisms is important to ensure collaborative efforts and partnerships are carried out in a just and fair manner, without marginalizing certain groups of actors in forestry initiatives, or as mentioned earlier, to prevent issues such as elite control and unjust distribution of resources. This is why, for a research project that is carried out within the premise of sustainably managed forestry resources, participation, in all forms, is a critical factor that needs to be explored and understood.

1.2 Aim of Research

In light of both the Sustainable Development Goals and the importance of good forestry governance, this study aims to explore the utilization of various forms of participatory mechanisms in sustainably managed forests using a rights based evaluative lens – environmental justice. The fundamental issue that drives this research is the need to explore and understand how participation processes occurs in a forest setting. Because participation processes can take many forms, be it organized invited participation, or co-produced grassroots action, the key point is to look at both forms within the same contextual setting as these different forms of participation have rarely been analysed together in past research. This research is important not only to understand how participation processes are shaped within a sustainably managed forest, but also to explore the whether forestry governance is conducted fairly, thus necessitating the use of an environmental justice lens to explore whether or not the basic democratic rights of the citizen are upheld.

The contextual setting of the cases studies is located in Malaysia (Figure 1.2), a biodiversity hotspot that is threatened by the rapid expansion of economic activity and population. The choice of Malaysia rather than another developed country is as much due to its reliance on forestry resource as the fact that Malaysia represents other developing countries, or those more commonly known as the Global South. Environmental justice, which will be explored in further detail in Chapter 2, first emerged as an environmental movement in United States, and has since been applied to various global situations. Even so, outside of academia, it receives minimal attention in developing countries and it is rare that research using environmental justice in the Global South goes further than using it to simply explain social processes.

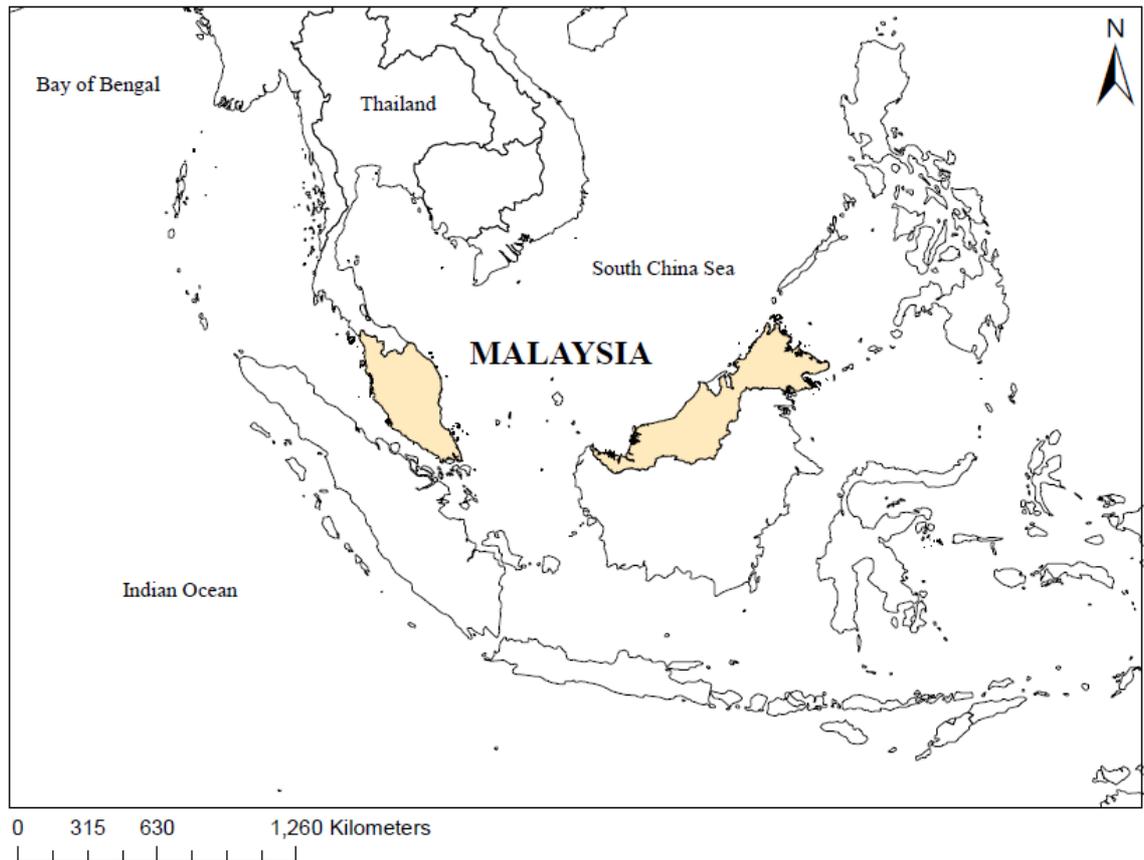


Figure 1.2: Map of Malaysia

As of now, the Malaysian Forestry Department is responsible for the management of the forest under the system of Permanent Reserved Forests (PRF), which are managed based on the Sustainable Forests Management (SFM) system. Despite the use of SFM, conflict still persist in Malaysia, and so far there has not been any research carried out on public participation in PRFs in the country. On a wider scale, Malaysia provides a setting in which to analyse different participatory mechanisms in a sustainable forest management setting, two key aspects of SDG15 of the Sustainable Development Goals 2030. For a research project that is driven by principles of justice and participation, the variety of ethnicities and social groups within Malaysian communities will provide an interesting illustration of how the interaction between different groups of people is interrelated with natural resource governance. As a developing country, Malaysia is slowly reducing dependence on natural resources, but these are still a major contributor of Malaysia's Gross Domestic Product, mainly from the palm oil and forest plantation industry. This puts Malaysia in a constant state of balancing economic development with environmental/social

goals, providing an excellent context to explore how sustainability goals are being interpreted, carried out and achieved from the perspective of environmental justice. In view of this, the research requires the understanding of the roles and power relations between the multiple formal and informal actors involved in PRFs and the depth to which the system actually allow the involvement of the public. Using environmental justice as the main analytical framework, relevant issues arising from public participation processes will be analysed. The appraisal of the public participation process via the lens of environmental justice not only provides a human rights perspective regarding public participation in forestry governance, but is also indicative of the social sustainability of the management system currently utilised.

To achieve this, the specific research questions that will be addressed in this research are;

- i. Who are the key actors in the governance of permanent reserve forests and to what extent do power relations influence the development of these forests?
- ii. How is public participation perceived and how does it affect public's action in permanent reserved forest governance?
- iii. What insights emerge from the application of environmental justice concepts to the process of public participation in permanent reserved forest management?
- iv. What are the conditions that promote meaningful public participation in permanent reserved forests and how does this relate to sustainability goals?

1.3 Outline of Thesis

This section presents an overview of the thesis structure to highlight the overall content of each chapter and how each contributes towards addressing the research questions presented in the previous section.

Chapter 2: Literature Review

In this chapter, a review of existing sustainable development, public participation and environmental justice literature is presented to further refine the research questions listed in

Chapter 1. Arguments are made to justify the need for participatory research in natural resource governance, as it affects the sustainable management of said resources. Focusing on the issue of social sustainability and the need for an inclusive public participation approaches, the chapter highlights the different forms of participation, at the same time making a distinction between invited and uninvited participations. The final part of this chapter then argues for the use of interrelated concepts of environmental justice to appraise public participation processes. This chapter also discusses the ‘fourth’ dimension of justice as capabilities, which is highlighted as an alternative perspective to explore participation.

Chapter 3: Forestry Governance in Malaysia

Following the literature review, this chapter introduces Malaysia’s forestry governance as a contextual setting for the case studies. It tracks the evolution of Malaysia’s forestry industry from the colonial era, where commercialisation of forestry resources initiated the implementation of forest management system. Following the colonial era, the chapter shows the growth of the forestry industry after Malaysia reached independence. It highlights the continuous focus on economic development up until the introduction of sustainable development initiatives and the diversification of Malaysia’s economy. Also included is a discussion on Malaysia’s social and political climate, which evolved in tandem with the growth of the forestry industry. This chapter concludes with a brief summary of current forestry policy and legislation and the various issues surrounding current forestry practices.

Chapter 4: Methodology

Methodology chapter outlines the steps involved in achieving the research objectives. Research was carried out using qualitative methods, and is driven by the concept of critical realism. Since this research uses the concept of environmental justice as an evaluative lens, a set of statements and questions derived from various sources were used as a broad standard to guide analysis. Ethical approval was obtained from the General Research Ethics Committee of the University of East Anglia and research was designed based on the case study method. Four case studies were selected based on the selection criteria highlighted in Section 4.3.1 and fieldwork was divided into two stages, with the overall duration of 6 months. This chapter concludes with a reflexive exercise that highlights issues encountered during fieldwork and the potential bias that might occur.

Chapter 5: Four Case Studies of Permanent Reserve Forest Development

Following the brief introduction of the four case studies in Chapter 4, this chapter first introduces Pahang and Selangor, and discusses the differences and similarities between these two states that can affect forestry practices. This is then followed by a descriptive analysis of the timeline of the PRF development and the conflict surrounding each case. This is carried out by a separate discussion of each case study and an illustration of the sequence of events that led to active public participation, the strategies employed by the community throughout the whole event and concludes with an overview of the outcomes. The final part of this chapter then analyses the different participatory methods used in the cases, by making a distinction between invited and uninvited forms of participation.

Chapter 6: Forestry Governance: Actors And Conflict

The events that occurred in the development of permanent forest reserves described in Chapter 5 provides the basis for the analysis in this chapter. Focusing on the actors involved in the governance of the PRFs, the roles and functions of these actors are

analysed; first by exploring the actor network and power relations that influenced the development and management of PRF, and second by how these actors shaped the implementation of public participation processes in the case studies. Further analysis is carried out on how the implementation of public participation in forestry governance affects public action and their relationship with the government. This chapter addresses the first two research question presented earlier in Section 1.2 that focus on issues of power relations in forestry governance.

Chapter 7: Public Participation: Insights from Environmental Justice

As a final analytical chapter, Chapter 7 follows the conclusions made in Chapter 6 by focusing on the public participation process that took place in all four cases. Using a rights based approach that focuses on the meaningful participation and empowerment of the public in decision-making process, the environmental justice concept, introduced in Chapter 2, is operationalised as an analytical lens to appraise the public participation process. How this was carried out has been detailed in Chapter 4, and the different justice issues are discussed in detail. The latter part of this chapter then looks at how uninvited participation is utilised as part of the community response to inadequacies in invited participation and the conditions in which public empowerment can occur. Corresponding directly to research question 3 and 4, this final analysis looks at the justice issues that emerged from public participation processes in Peninsular Malaysia as well as the community based response that leads to community empowerment. Finally, this chapter concludes with the implications the study findings have for public participation and sustainable development. This part of the chapter argues for the importance of analysing both invited and uninvited participation processes and in understanding conditions that lead to public empowerment, providing strategies for civil society to be involved in changing the fundamental structure of the state and sustainable development.

Chapter 8: Conclusion

This final chapter provides the overall summary of this research. Starting with an overview of the research findings, Section 8.2 highlights the four main points that corresponds to the research questions in Chapter 1. Results show that PRF management in Malaysia is plagued by elite control, and is underpinned by the principle of resource use rather than for conservation and protection as assumed by the public. This chapter also highlights the issue of social subordination, and the need for social capital, which is understood based on the use of environmental justice as an evaluative lens. By drawing parallel to other recent works, Chapter 8 also highlights insights gained from the case studies, that are useful for future environmental justice research as well as global forestry initiatives. The use of environmental justice in looking at both invited and uninvited participation stresses not only the expansion of recognition as justice but also the need to emphasis on recognition within forestry initiatives. This chapter concludes by stressing the need for a just and meaningful public participation in future forestry programmes as well as the importance of uninvited participation in decision-making processes.

CHAPTER 2 LITERATURE REVIEW

This chapter presents a review of literature that further refines the research questions presented in Chapter 1. The three main concepts used in this research are explored and the link between sustainable development, public participation and environmental justice is made. Starting with the issue of social sustainability, the chapter then argues for the importance of public participation in sustainability. This is followed by the justification of using environmental justice in participation as well as the gaps in current participation and environmental justice research.

2.1 Sustainable Development and Agenda 2030

Post World War II development strategies focused on poverty alleviation through economic growth (Basiago, 1999). Development efforts concentrated on programs that improved the quality of life, economic conditions and access to resources. As a result, this economic pursuit had major social and environmental consequences, which can be observed from the current environmental dilemma and inequalities that we are experiencing today. This then led to the realisation of the need to protect the planet for future generations, while at the same time allowing the economic market room to grow. The need for a sustained economy, one which also takes into consideration the environmental well-being of the planet and the people in it, paved way for the emergence of the sustainable development concept. First formally introduced to the international community in 1987, the term sustainable development featured prominently in the report *Our Common Future* (1987), published by the World Commission on Environment and Development (WCED). Known also as the Brundtland Report, the document stated that

'Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of the future generations to meet their own needs' (Our Common Future, 1987:16)

This statement has since been used widely as a basis on which sustainable development is expanded on. The publication of the report provided a 'political opening' for the evolution

of the sustainable development concept (Daly, 1990) as it promoted the integration of economic growth with environmental protection. At the time it was first introduced, sustainable development was lauded as a perfect solution to the growing environmental crisis as governments need no longer sacrifice economic growth to ensure environmental protection.

Conceptually, sustainable development allows a bridging of the gap between *'environmental concerns about the increasingly evident ecological consequences of human activities and socio-political concerns about human development issues'* (Robinson, 2004). Since the popularisation of the term 'sustainable development', many attempts have been made to not only define it but also to critique and analyse the various definitions of the term (Daly, 1990; Lele, 1991; Mebratu, 1998; Robinson, 2004). However, sustainable development is 'a shifting discourse' (Blowers, Boersema, & Martin, 2012) and the concept itself has evolved into something more than when it first emerged. Today, the concept of sustainable development has been extended into an inclusive and extensive set of goals that also takes into account the environmental, social and economic inequalities across the globe. It has since been refined and reaffirmed by the United Nation via the adoption of The 2030 Agenda for Sustainable Development that now consist of 17 sustainable goals that plan to stimulate action in five critical areas: people, planet, prosperity, peace and partnership (Figure 2.1). Now, sustainable development no longer serves solely as an ideology that injects environmental and social values into economic goals. With these goals, the concept of sustainable development goes beyond to also include the protection of human rights, gender inequality, justice and empowerment in a bid to ensure that 'no one will be left behind'(UN, 2015b).



SUSTAINABLE DEVELOPMENT GOALS



Figure 2.1: 17 Sustainable Development Goals (UN, 2015b)

2.1.1 Pillars and Dimensions: Unsustainable Development of Natural Resources

The concept of sustainable development is typically viewed as encompassing three elements; social, economic and environment. Although some studies used the word political to replace the ‘social’ dimension (Blowers et al., 2012), these three elements nevertheless reflect the general consensus that development needs to be considered from a social, environmental and economic perspective. This idea was first introduced during the 2002 World Summit on Sustainable Development, to address the narrow framework of sustainable development that neglected the human or ‘social’ concerns such as equity and social justice (Kates, Parris, & Leiserowitz, 2005). An example of a commonly used image that describes the dimensions is the image of three pillars supporting ‘sustainable development’ (Figure 2.2). Another image is that of three interlocking circles that represent the three dimensions but with added interlinkages; bearable, equitable and viable (Figure 2.3).

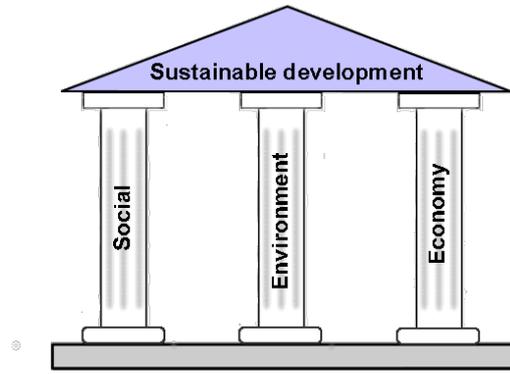


Figure 2.2: Pillar of Sustainability (CIEC, 2005)

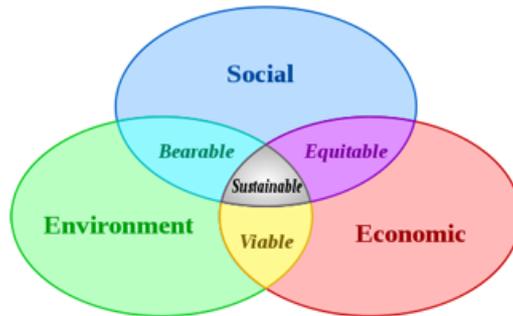


Figure 2.3: Dimensions of Sustainable Development [Represented by Johann Dréo as cited by Winterton (2011)]

Of the two images, the interlocking image is more widely used as it represents the interconnection between environment, social and economic dimensions. There are multiple approaches in how they are interpreted, one policy perspective is that where development is bearable (socially and environmentally), equitable (socially and economically) and viable (environmentally and economically) it becomes sustainable/durable (Brebbia, 2009). Slocum (2015) further suggests that the concepts of viable, equitable and bearable represent different ways a policy can be unsustainable. For instance, a viable policy has strong economic and environmental merits, but neglects the social aspect of development. Often though, the terms equitable, viable and bearable are not explicitly defined so their

usage in the context of sustainable development is somewhat vague. Another perspective that utilized the three dimensions of sustainable development is the ‘triple bottom line’ (TBL) (Elkington, 1998) concept. This corporate sustainability philosophy argues that market success is dependent on company’s meeting of the profit, environmental quality and social justice goals. As a measure of corporate performance, TBL requires the ‘*public disclosure of social, economic and environmental indicators of organizational performance*’ (Stoddard, Pollard, & Evans, 2012:5) and necessitates the inclusion of all stakeholders, including the local community.

Regardless of the interpretations, the general consensus regarding the pillars or dimensions is that in order to achieve true sustainability, the three elements have to be equally represented, which requires the collective effort of all parties. However, as ideal as it is to imagine an equal representation of the three dimensions, the ambiguity over the whole idea of sustainable development makes practical application of sustainable development tricky. Therefore, despite the rapid adoption of the dimensions in policies, the concept is too broad and ambiguous to allow the acceptance of a universal consensus regarding what exactly that needs to be developed, and what needs to be sustained.

Of the three dimensions, the ‘social’ dimension, or social sustainability, frequently needs to be called to attention, as the remaining two are considered to be more widely accepted (Otsuki, 2014). Previous reviews of the social dimension show that there are variances in how it is characterized. Just like sustainable development, social sustainability has been linked to other fields of study, such as built environment, where social cohesion and sustainable community is presented as the core notion of social sustainability (Dempsey, Bramley, Power, & Brown, 2011). Other examples include social sustainability of the tourism industry, where it focuses on protection and proper use of resources and its benefits to communities (Zhang & Zhang, 2018); or the connection to corporate social responsibility in supply chain decision-making (Hutchins & Sutherland, 2008). All these articles highlight the variety of ways social sustainability can be interpreted, ranging from social development and social progress, to social justice and equity (Dempsey et al., 2011; Lele, 1991).

Neglect of social sustainability has led to the misuse of multiple and incompatible social objectives in sustainability frameworks. It highlights one of the basic failings of sustainable development policies that arise from subjective ideas about goals and means (Lele, 1991) leading to flaws in sustainable development policies. In fact, the different interpretation of social objectives reflects a social process that could just as well be influenced by political agendas as moral or scientific ones (Murphy, 2012). For natural resource governance, this results in development policies that neglect the social aspect of resource management and distribution, causing harm to marginalized communities who are unable to present their perspectives within an elite dominated environment. While attempts have been made to address these issues, for instance Hicks et al. (2016) proposal for the use of four social measures such as well-being, value, agency and inequality², it only serves to highlight the critical need for participation and stakeholder involvement. It signifies that not only is participation needed, but a meaningful participation is imperative in order to achieve social sustainability; thus highlighting the importance of public participation in any decision-making process.

² Well-being, according to Hicks et.al can be understood both from an objective and subjective perspective. It includes the need for appreciating the notion of material well-being, quality of life and relational well-being, all of which requires the understanding of people's *values*. Agency, is explained as the ability to act, on the basis of a particular value. Those with agency may be more able to act on issues that affect their values or well-being. This is then related to inequality, where it not only affects sustainability, but shapes the very idea of 'who has agency and who lacks it' (Hicks et. al, 2016 : 39)

2.1.2 Public Participation and Decision-Making

Local knowledge provided by the public allows sustainable development initiatives to be more effective (Bell, Morse, & Shah, 2012), and the complex nature of sustainable development makes it even more necessary for the public to participate. Public participation has been defined by various scholars, including Cvetkovich and Earle (1994:163), who define public participation as ‘*direct involvement of individual citizen and citizen groups*’ in decision making. Reed (2008:2418), however defines participation as a process where ‘*individuals, groups and organisations choose to take an active role*’ in decision-making. Drawing from Wandersman (1981) and Rowe and Frewer (2004), Reed’s definition focus on stakeholder participation, making a distinct separation from public participation, which he argues as too broad to ensure efficiency in decision-making. Stakeholders, as defined by Freeman (1984), are those who are affected by or can affect a decision. This description though, may potentially narrow the scope of participation to only those who are affected by the process, especially if its meaning is taken literally. It is therefore important that the idea of public participation draws from both definition, because while it is certainly efficient to look at participation processes as involving only those who hold a stake in the initiative, it is just as vital that the concept of participation is understood as a process that involves all members of the civil society.

As a concept, participation is critical in promoting environmental equity (Hampton, 1999), realising environmental democracy and solving complex environmental issues (Hurlbert & Gupta, 2015). Greater participation is viewed as providing a better chance to improve governance (Arnstein, 1969) and various studies have been devoted to providing empirical and conceptual evidence that participation leads to better outcomes in environment and natural resources development (see Fung & Wright, 2003; Holligan, 2017; Keulartz & Leistra, 2007; Schenk, Hunziker, & Kienast, 2007). Poor implementation of public participation, on the other hand, has been shown to cause disproportionate environmental burdens (Karner & Marcantonio, 2018). Participation also argues against solely relying on external expert views, as well as promoting policy trends that emphasise sustainable development and partnership working (Reed, 2008).

Within the sustainable development framework, the importance of citizen participation is enshrined in Principle 10 of the 1992 Rio Declaration:

‘Environmental issues are best handled with participation of all concerned citizens, at the relevant level. At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided’.

The call for public participation in natural resources governance is also embedded within the Aarhus Convention (1998) where Parties to the Convention are required to make necessary provisions to ensure that the rights of the public in environmental decision-making are provided for by local, regional and national level authorities. These ‘rights’ include; rights of access to information, public participation in decision-making, and access to justice in environmental matters. The rising interest in public participation, according to Rowe and Frewer (2000), is derived from a recognition of basic human rights as well as practical recognition that unpopular decisions result in conflict and lack of trust in the state. Fiorino (1990) stated that apart from being a critical element of democracy, participation also provides greater legitimacy, increases trust as well as reducing conflicts. It ensures that decision-making becomes less technocratic than what has been practiced in the past (Renn, 2006).

2.1.2.1 Meaningful participation

However, not every participation process provides equal opportunity to affect decision-making. Successful public participation requires the public to be provided opportunities to participate as well as to shape the decisions (Lauer et al., 2018) and effective public

participation depends on how the participatory process is constructed (Ballester & Mott Lacroix, 2016). Public meetings and discussion mechanisms for example, have been identified as limited, as they provide only '*an opportunity for people to be heard officially*' (Creighton, 2005:139). Another example is public hearings, which are also considered as inadequate and frequently fail to incorporate the input from the public in final decision-making (Checkoway, 1981; Lovrić, Lovrić, & Konold, 2018). There are others, however, that are considered more powerful participatory tools, where exercises such as citizen juries and delegated decisions (IAPP, 2016) are said to provide a more meaningful participation to the public.

What is meant then, by meaningful participation? The term meaningful participation is frequently used to describe an 'ideal' participation process. In one study, meaningful participation is used to refer to organizational processes that are '*inclusive, accessible and supportive of citizens*' (De Weger et al., 2018:15). Another article considered meaningful participation as '*active engagement of participants*' who are involved in both '*information sharing and shared decision making*' (Giambra et al., 2018:48). Arnstein (1969) also provides an appropriate explanation that can be applied to the term '*meaningful participation*', although the word '*meaningful*' was never used in her paper. Arnstein equates citizen participation with citizen power and highlights the '*critical difference between going through the empty ritual of participation and having the real power*' (1969: 217) that is essential in understanding the nuances in public participation. She used the term ladder of citizen participation that describes the different levels of participation (Figure 2.4) that range from manipulation to citizen control. Although Arnstein's ladder has been criticised as obsolete as it didn't take into account the different context in which participation may occur (Fung, 2006), its simple categorization of the participatory levels, in my opinion, is still highly relevant and easily understood. Using this ladder, Arnstein illustrated different stages of participation that corresponds to the extent of citizen's power in the outcome. At the top, characterized by higher levels of power in decision-making, are participatory processes that allow partnership and citizen control. The ladder also introduced the concept of tokenism, where it describes participation processes that only provides an opportunity to be heard. This level is considered a common form of participation, whereby participation is interpreted by the government in terms of providing information to citizens (Paloniemi et al., 2015). The lowest rung, described as 'non-

participation’, highlights participation processes that are the opposite of meaningful participation. At this level, participation processes involves manipulation by the organizers, where the public is ‘educated’ to ensure compliance with decisions made.

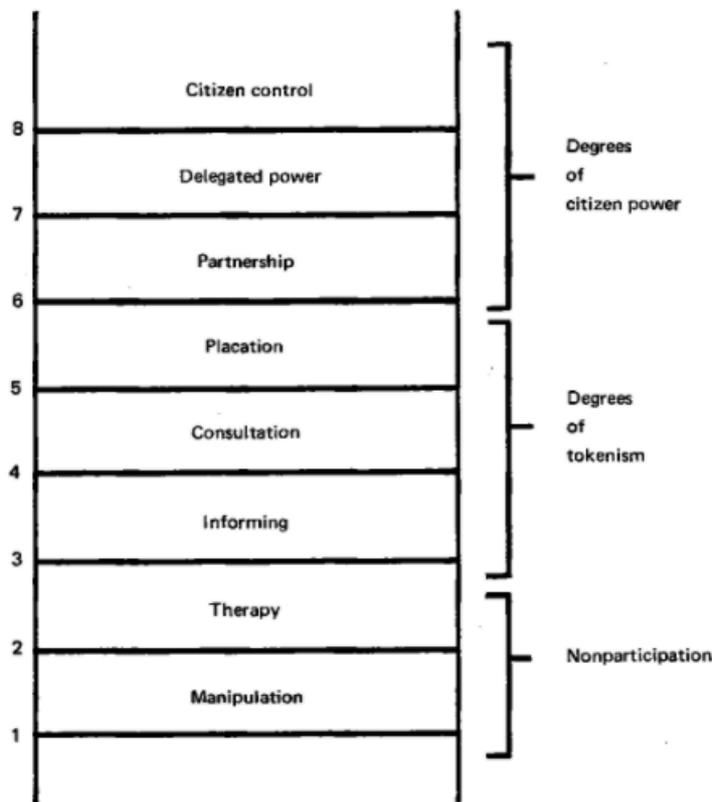


Figure 2.4: Eight Rungs on a Ladder of Citizen Participation (Arnstein, 1969)

Apart from Arnstein, other sources have published typologies of participation. One example is Rowe and Frewer (2005), who uses instead the concept of public engagement and information flow to explore the different forms of state-public interactions (see Figure 2.5). Their paper highlights three forms of public engagement based on the flow of information between the sponsor (of the public participation exercise) and the public. Based on this typology, public participation occurs only when information is exchanged between these two groups. It represents presence of dialogue between the public and sponsor, as well as negotiation, which serves to transform opinions.

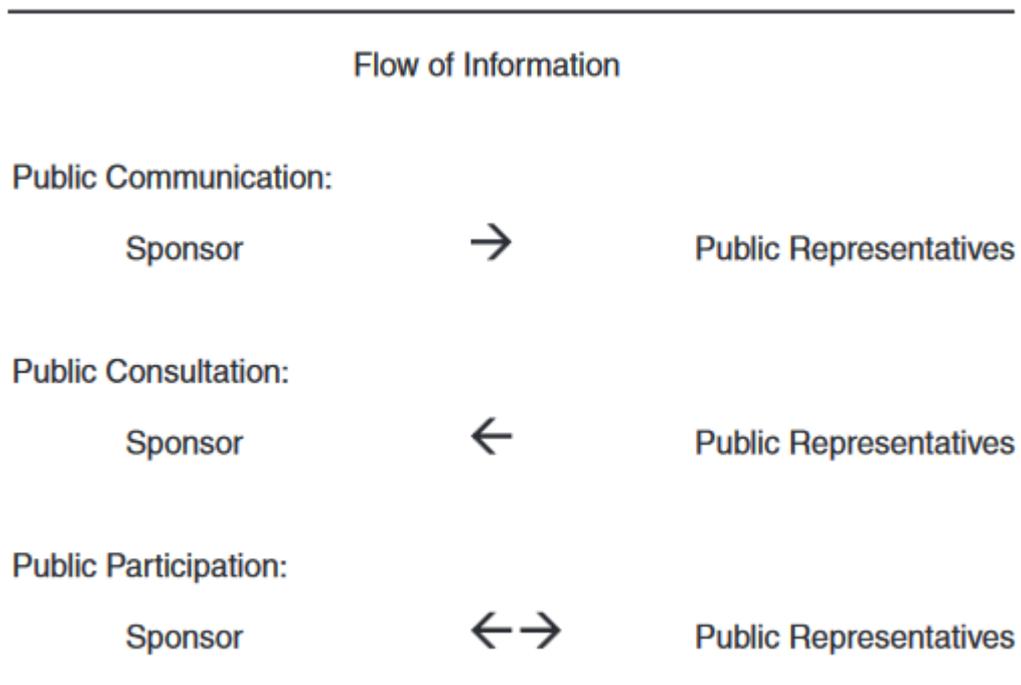


Figure 2.5: Three types of public engagement (Rowe & Frewer, 2005)

Apart from these two examples, other typologies include those that are based on the objectives of the mechanism (Tippett, Handley, & Ravetz, 2007) as well as normative or pragmatic notions of participation (Beierle, 2002). A more recent example is provided by the International Association of Public Participation (IAPP) (2016), that provides a matrix of participatory techniques and goals based on a scale of the level of public impact (Figure 2.6). All of these different typologies not only highlights the various forms of participation mechanisms, but also the depth to which each mechanism allows the public to affect decision-making. Public participation can take various forms, and is affected by how the process is constructed and developed.



	Inform	Consult	Involve	Collaborate	Empower
Public Participation goal	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	To obtain public feedback on analysis, alternatives and/or decisions	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered	To partner with the public in each aspect of decision including the development of alternatives and the identification of the preferred solution	To place final decision making in the hands of the public
Promise to the public	We will keep you informed	We will keep you informed, listen to and acknowledge concerns and aspirations and provide feedback on how public input influence the decision	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decisions	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible	We will implement what you decide
Example techniques	<ul style="list-style-type: none"> • Fact sheets • Websites • Open house 	<ul style="list-style-type: none"> • Public comment • Focus groups • Surveys • Public meetings 	<ul style="list-style-type: none"> • Workshops • Deliberative polling 	<ul style="list-style-type: none"> • Citizen advisory committees • Consensus-building • Participatory decision making 	<ul style="list-style-type: none"> • Citizen juries • Ballots • Delegated decisions

Figure 2.6: Typologies of participation and the level of public impact (IAPP, 2016)

Drawing from all these typologies, meaningful participation is one which allows the public or citizen both the opportunity to participate and the power to make decisions, which contribute to the outcomes of the process. This term does not refer to specific outcomes of decision-making, but rather the ability of the participants to be able to contribute and influence the final outcome of participation process. Meaningful participation emphasises on the concept of power, and how it leads to influence in decision-making

2.1.3 Forms of participation: invited and uninvited

In discussing the different typologies of participation described above, it is important to note that these typologies imply that participation is an organized form of social process. Rowe and Frewer (2005), in their paper, highlights the different forms of participatory mechanisms, which includes techniques listed by authors such as Rosener (1975), Vivian Lowndes, Pratchett, and Stoker (1998) and even Rowe and Frewer (2000) themselves, that range from ‘task force’ and ‘workshops’ to ‘public hearing and ‘public referendum’. These different forms of public participation mechanisms highlight the variety of ways public participation can take place, as well as the different outcomes each will produce and the degree of power or influence afforded to the public. However, these different forms of participation are also formalised participation that is usually organized by a sponsor or organizer. Recent works on participation such as Baker and Chapin III (2018) and Bryson, Quick, Slotterback, and Crosby (2013) have also stayed firmly away from informal participations such as citizen activism and engagement. Even the IAPP (2016) provide examples of participation techniques such as public comment, focus group and citizen advisory committees, that indicate a structured or planned forms of participation organized by an agency, authority or a ‘sponsor’, a term used particularly by Rowe and Frewer (2005).

Regardless, the distinction between participation processes that are planned by a sponsor and those organized by the public or civil society has been made in previous publications. Culley and Hughey (2008) used the term official and unofficial, defining the former as ‘*planned opportunities designed with agency oversight or government approval*’ (2008:102), while the latter is defined as opportunities devised by the citizens. Rowe and Frewer (2000), on the other hand, used the term ‘formal’ to describe particular methods of participation that involves ‘*standardized procedures*’ (2000:7). The examples of the formalized methods of participation, such as focus group, public surveys and public hearings discussed in their paper all require organization from a sponsor. However, the term which will be used in this thesis comes from Wehling (2012) and Wynne (2007), both of whom used the expressions invited and uninvited. Invited occurs when the participation

process involves citizen or civil society actors that are invited by the sponsor (Wehling, 2012). This term distinctly separates the organizers from the ‘invited’ public, which further implies a participatory mechanism that is controlled, in terms of the methods used, who are allowed to participate, as well as the objective of the process, by the organizers. Uninvited participation, which has been referred to also as ‘spontaneous’ (Bucchi & Neresini, 2008) or ‘bottom-up (Powell & Colin, 2009), are participation processes where citizens ‘*do not wait for an invitation to participate*’ (Wehling, 2012:50). Wehling further listed three other uninvited participation criteria, namely; conscious organization by the citizens; proactive effort by the citizens to gather information and information; and no neutralization of interests as a precondition to participation. Based on these criteria, uninvited participation is a form of citizen-led mechanism that involves citizens who participate due to personal interest in subject matter, not as a disinterested participants that are invited simply because they fulfil certain conditions imposed by a sponsor. Uninvited participation, in this vein, is a set of actions that emerge from within civil society.

Recent study presents the process of participation as ‘*co-produced, relational and emergent*’ (Chilvers & Longhurst, 2016). Without making specific distinction between invited/uninvited or formal/ informal, Chilvers and Longhurst discuss participation from a constructivist and co-productionist approach that view the process as ‘*shaped by and actively construct human subjectivities, objects of concern and models of participation*’ (Chilvers & Longhurst, 2016: 590). Although this goes beyond the binary categorization of formal/informal participation, it highlights that participation is not *just* a process that adopts a pre-defined set of rules and goals, but is also diverse and co-produced (Chilvers, Pallett, & Hargreaves, 2018), therefore situating the different forms of community based action, such as advocacy and protests, also as forms of participation.

Despite the different terms used to describe informal/uninvited participation, the fundamental nature of uninvited participation is that it develops without a formal set of rules, and initial mobilisation occurs within the public sphere. It is a form of community based action and the utilization of uninvited participation is critical as invited public participation is rife with issues that renders the formal process counter-productive. As emphasized in the earlier section, different forms of participation allows varying levels of

public impact. In practice, participation generally focuses on transferring responsibility to the local level at the expense of power (Begg, 2018), while some invited exercises, such as public meetings and other discussion mechanisms have been identified as limited, as they provide an official mechanism for the people to be heard (Chess & Purcell, 1999; Creighton, 2005). Public hearings, on the other hand, are also flawed, and does little to incorporate the input from the public in final decision-making (Almer & Koontz, 2004; Checkoway, 1981; Lovrić et al., 2018). Overall, the process involved in the development of invited participation relies entirely on the sponsor or organizer. This effectively situates the dominant power to the organizer, thus leading to issues in participation such as different conceptualization of issues (Rowe & Frewer, 2000), selective participation (Marzuki, 2009), limited role of the public in final decision-making (Wathern, 2013), as well as technocratic decision-making characterized by one way flow of information (Abelson et al., 2003; Rowe & Frewer, 2005) among others.

In the absence of adequate and meaningful public participation policies, uninvited participation is important in protecting the rights of the public, especially in terms of access to information and involvement in decision-making (Zhang, 2017). The organization of grassroots participation has been used by the public to overcome institutionalized barriers in invited participation (Culley & Hughey, 2008). A case study in Singapore showed how informal participation contributed to the evolution of environmental governance, allowing it to be more dynamic, cooperating and inclusive (Zhang, 2017). Wehling (2012) also adds that apart from being more democratically legitimate, uninvited participation also have more significant impact despite the fact that its outcome does not always leads to desired results.

2.1.4 Evaluation of Public Participation: Justice Based Approach

The various public participation mechanisms highlight the need for an evaluative criteria that can assess a participatory process. In order to do so, it is important to understand what constitute as 'good' or effective outcome and what are the processes that contribute to it (O'Faircheallaigh, 2010; Rowe & Frewer, 2000). Evaluation criteria are formulated based

on the actual purpose of the participation (Beierle, 2010; Rosener, 1978), which then determines whether public participation is evaluated from a procedural perspective, or based solely on the specific outcomes. Evaluation of participatory processes is favoured by those who view participation as a means to achieve greater democratic power (Fiorino, 1990), and focus on issues such as justice, fairness and inclusivity in participation processes; while analysis of outcomes means that participation is viewed as a means of achieving specific goals. These goals can either be a set of generic social goals (Beierle, 1998) or a specific policy outcomes, that is unique to the context in which participation occurs. For natural resources governance, the evaluation of process may look at how the participation mechanism is developed, for example, whether it allows every stakeholder equal opportunity in decision-making. For an outcome based evaluation, this can mean evaluating how a public participation mechanism distributes resources.

In the public participation literature, evaluation of outcomes is complicated as it is difficult to establish an empirical link between participation and outcome (Beierle & Konisky, 2000; Chess, 2000; Coenen, 2008). Outcomes of policies or participation exercises depend on the institutional and societal responses to the participation mechanism that may take months or years to manifest (Rowe & Frewer, 2004). Furthermore, the impracticality of evaluating the outcome of public participation exercises is also due to the presence of 'external variables' or factors that will make it harder to evaluate whether the outcome is the direct result of participation, or due to the cumulative effects of other variables (Coenen, 2008), such as a hazardous event, or even elections. Therefore, although assessing outcome may be more preferable, as it will correspond more directly to the desired goals of the participation exercise, the ambiguity of what is a 'good' or 'effective' outcome makes it impractical.

The second method for evaluation looks at the process that takes place in the development of the public participation exercise. This more ideological approach is a favoured method and has led to various generic evaluative frameworks that can be (theoretically) applied to various contexts. Popular examples include Renn, Webler, and Wiedemann (1995); Fiorino (1990); and Rowe and Frewer (2000) among others. Successful participation emphasises on how participation is constructed, rather than how it ends, and frequently uses terms such

as transparency (Bickerstaff & Walker, 2001; Rowe & Frewer, 2000), fairness (Renn et al., 1995) and inclusivity (Bickerstaff & Walker, 2001) as criteria for an effective participation. These terms, which also appear in outcome based evaluations (Beierle, 1998; Carr & Halvorsen, 2001), highlights the importance of a just public participation.

Following this vein, contemporary thinking in participation has now evolved into one that is focused on participatory citizenship and a rights based approach to participation (Coolsaet, 2015) – the basis on which this research is developed. For natural resource governance, the formerly top-down participation process has evolved to be more democratic, allowing the public more opportunities within the system. The evolution of public participation then argues for a participatory process that is underpinned by a ‘philosophy that emphasises empowerment, equity, trust and learning’ (Reed, 2008). This puts emphasis on how public participation in natural resource management is developed, with a focus on the ‘people’ factor (Coolsaet, 2015), in order to ensure a process that allows meaningful participation. This democratization of public participation, which emphasize issues of justice (Fung, 2006), suggests an alternative way of evaluating public participation in natural resource governance – via the use of environmental justice theory that embodies the concept of justice and democracy.

2.2 Environmental justice

The emergence of the American-led environmental movement of the early 1970s made it clear that ethnic minorities were not part of the environmental crusade. The rise of the environmental justice movement addressed that issue, by shifting the traditional environmental movement away from the primarily white middle class environmental issues (Blewitt, 2014). This new movement, comprised mainly of ethnic minorities such as Latinos, Native Americans, Asians and African Americans, acted upon a guiding principle of ‘justice’, where it addressed and linked issues of class, ethnicity, gender, socio-economic inequality and the distribution of environmental impacts and costs. Unlike sustainable development, where the concept was introduced as a ‘solution’ to development, environmental justice initially started as a movement in the US that began from various

cases of civil rights and environmental activism, such as the campaign of Chavez and Huerta against the use of pesticides in 1960s and the dumping of toxic chemicals in the lower-middle-class neighbourhood of Love Canal, New York (Gregory et al., 2011). However, the most notable event that is commonly associated with the beginning of the environmental justice movement is the civil rights action concerning the dumping of toxic waste in Warren County, North Carolina. The civil society protest gained widespread media attention and provided the impetus for a US General Accounting Office study, which revealed siting of hazardous waste landfills in predominantly African American areas, despite the community making up only 20% of the population (Bullard & Johnson, 2000). As a result of that report, the issue of civil rights expanded into environmental racism and later shifted into a '*broader, more elaborative and resonant environmental justice master frame*' (McGurty, 2000:375). By early 1990s, the issue of environmental racism and injustice became a federal agenda in the US (Bullard & Johnson, 2000).

The development of environmental justice has been said to 'redefine environmentalism' (Pellow & Brulle, 2005) by not only challenging a society that reinforces social inequality but one that also exceeds the capacity of natural resources. In terms of sustainable development, the mobilisation of environmental justice provides a political motivation in which to explore the 'socio-environmental aspects of sustainability' (Walker & Bulkeley, 2006). In North America especially, it formed around the narrative of distributional injustice and environmental racism (Schroeder, Martin, Wilson, & Sen, 2008). However, until now, there is no single, broadly accepted definition of justice, particularly since the concept can be applied to multiple context (Holifield, Chakraborty, & Walker, 2017) and environmental justice is no longer associated only with the distribution of wastes and pollution. Now, the environmental justice concept can also be applied as a normative and political term, encompassing a wide variety of issues depending very much on the objectives of those who try to define it (Walker, 2012).

As the meaning of environmental justice and the issues it encompass have become more developed, so does the understanding that environmental research needs to also focus on context (Agyeman, Cole, Haluza-DeLay, & O'Riley, 2010; Walker, 2009; Walker, 2012). Appreciating context is important, as it leads to understanding the notions of justice based

on the perspective of the people who are affected by injustice. G. Williams and Mawdsley (2006), for instance, highlight the differences between western scholarship on environmental justice and post-colonial environmental justice narrative in India. Martin et al (2014), presented data on various conceptions of justice in Rwanda, thus challenging forest conservation efforts that fails to address local claims of [in]justice. As Walker stated, environmental justice is both ‘*situated and contextual, grounded in circumstances of time and place*’ (2012:11), thus challenging the need for a universally accepted definition.

2.2.1 Environmental Justice and Natural Resource Governance

Distributive justice was the key focus of academic research in environmental justice, since the movement started with the narrative of environmental racism and its effect on distribution of environmental goods and bads. As the field expanded, the evolution of the environmental justice study among scholars became more multidimensional, usually branching out into three – *distribution, procedure/participation* and *recognition* (Schlosberg, 2009; Walker, 2012) – and sometimes four – *capabilities* (Sen, 2011) – dimensions, that also involves understanding the interrelations between the components (Holifield et al., 2017). Despite the shift of focus from the predominantly distributive research, most empirical studies in current literature still focus primarily on the distributive aspects of justice (Holifield, 2009; Reed & George, 2011), looking predominantly at distribution of amenities and strategies to combat distributive injustice. Regardless of arguments from environmental justice scholars regarding the importance of fairness in decision-making, research more frequently focuses on outcomes and effects of injustice (Pearsall & Pierce, 2017) rather than the processes that lead to injustice. Schlosberg (2009) in particular argues that the theories of justice – see Rawls (1971), Young (1990) and (Fraser, 1998, 2009) in particular – were not fully applied to the environmental justice movement. Therefore the processes that cause distributive injustice, as highlighted by theorists like Young and Fraser, failed to be understood fully.

While an understanding of the distribution of environmental outcomes and effects is an essential part of environmental justice, a purely distributional focus does not provide the

full picture. Especially for the governance of natural resources, such as forestry, it is crucial that emphasis is also put upon procedural and recognition aspects in governance. For the subsequent section, much of the literature review draws on Walker's (2012) environmental justice concepts; distributive justice, procedural justice and justice as recognition. The three dimensions also draws on several justice theorists such as Shrader-Frechette (2002), Schlosberg (2009), Young (1990) and Fraser (1998) and highlight the relationship between the three dimensions as well as how these elements are associated to participation in and governance of natural resources.

2.2.1.1 Justice as recognition

Schlosberg in particular puts emphasis in the recognition aspect of environmental justice, drawing largely from Fraser (1998) and Young (1990) who argue that processes that construct maldistribution are important prior to identifying instances of distributive justice. Lack of recognition, is said to be '*demonstrated by various forms of insults, degradation and devaluation at both the individual and cultural level, inflicts damage to oppressed individuals and communities in the political and the cultural realms*' (Schlosberg, 2007:14). However, Fraser (2000) also explained recognition as a matter of status, where it is not simply the act of being looked down upon, or devalued, but rather the denial of an individual's status as a '*full partner in social interaction*' (2000:113). Recognition not only refers to the recognition of an individual (Honneth, 2001) but also to the recognition of '*collective identities and their particular needs, concerns and livelihoods*' (Urkidi & Walter, 2011:685). Misrecognition, in this vein, is equated to social subordination, a term used by Fraser, where it prevents an individual/ collective groups from interacting and participating as a peer in a social setting

In highlighting recognition, the domination of the distributive element of justice then becomes inadequate, as it tends to ignore to '*social structures and institutional contexts*' (Davoudi & Brooks, 2014) that cause distributive justice in the first place. However, Schlosberg notes that between these elements of environmental justice – recognition,

distribution, and procedural – neither is superior nor inferior to another. This puts the elements of recognition as connected to but not necessarily preceding, the other elements.

Walker (2012), like Schlosberg, discussed recognition issues by emphasising on social identity, such as race, ethnicity, gender, and disability. The latter part of Walker's book gives various examples of claims of misrecognition such as waste siting patterns that are unfairly allocated, or a remote community that is affected by the climate change, much more so than the average population. Both authors make it explicit that recognition goes beyond an individualistic concept, but rather expands the issue of recognition to collective groups. This notion of recognition can also be found in other studies, where claims of misrecognition focused largely on social characteristics, such as communities of colour (Bullard & Lewis, 1996), indigenous groups (Martin et al., 2016; Schlosberg & Carruthers, 2010), and on traditional lifestyles of a particular community (Holifield, 2012) among others.

Recently though, studies have extended the concept of recognition beyond social identity of individual or groups and into the concept of recognition of collective political identity or knowledge systems (Bustos, Folchi, & Fragkou, 2017; Coolsaet, 2015; Velicu & Kaika, 2017) that is not particularly associated with any social identity or social characteristics. Velicu and Kaika (2017) emphasized the concept of visibility in governance. Visibility, or lack of, indicates the need to articulate a post-foundational framework for discussing environmental justice. This concept of 'visibility' argues that the current concepts of recognition and distribution are inadequate to affect fundamental change in politics or governance. Invisibility is equated with misrecognition that is more than just misrecognition of social identity or status, but injury to status as political being that has no power in society. It argues that to be visible is to be recognized as intelligent and able to be allocated justice. As in the case of the Rosieni movement, Velicu and Kaika identified that the communities were deemed unreasonable in their demands, unknowledgeable, and therefore to be 'recognized' they must first be acknowledged as a *'political subject who can reason, pass judgement and decide for [them]selves what kind of life [they] want'* (2012: 311). Coolsaet (2015) and Bustos et al. (2017) also extended the conceptualization of recognition and focused on how dominant knowledge systems and ideas can also

influence how misrecognition occurs, and injustice may occur if there is a dependence on a dominant knowledge system, regardless of equal participation or social identity. Rather than visibility, this perspective stresses the '*ontological and epistemological recognition*' that can allow non-dominant ideas and values to be accepted (Coolsaet 2015:1094). Fundamentally, these recent works build upon Walker and Schlosberg's conception of recognition, but both provided an alternative way of understanding recognition, by going beyond the traditional route of looking at social identities.

Drawing from Benford (2005), emphasizing on issues of misrecognition or absence of recognition in environmental justice cases is important to correct fundamental issues in governance. In fact, Benford also stated that by seeking justice through '*legislative, judicial and regulatory system, the status quo will continue to be reproduced*' (2005:51) indicating that demanding justice from a social system that is not 'just' to begin with, will not bring about fundamental change. For participation, misrecognition of worldviews and different knowledge system not only leads to inadequate solutions, but also ineffective outcomes. Furthermore, being invisible means that even by participating, invisible communities will never be able to meaningfully contribute, and despite active inclusion of marginalized groups or communities in public participation by sponsors who failed to socially identify them as 'intelligent, knowledgeable beings', their status within governance will remain the same.

2.2.1.2 Procedural Justice

The procedural element in environmental justice looks at the '*fair and equitable institutional processes of a state*' (Schlosberg, 2007:25). In environmental decision-making, procedural justice is linked directly to participation – and it may in fact refers to the same thing – and focuses on how decision making processes are '*transparent, just and participative*' (Cooke, Nordensvard, Saat, Urban, & Siciliano, 2017:439). Carrick and Bell (2017) in particular, argue for an equally shared power, which is critical for a fair process. This notion of power links back to the concept of meaningful participation discussed in Section 2.1.2.1, and this argument is particularly important for instances where political,

economic, and cultural imperialism deny marginalized citizens the opportunity to shape environmental policies that directly affect their lives (Schroeder et al., 2008)

Schlosberg and Walker both developed the concepts similarly, in that procedural justice is about participation in decision-making and how it highlights issues related to the underlying processes that produce inequality (Paloniemi et al., 2015). In this vein, procedural justice in participation focuses on the process, and therefore can be considered as a condition that precedes distribution of resources. However, as stated earlier, the procedural element is not superior or inferior to the distributive/recognition element, and Schlosberg (2009) noted that this interrelation is not a unilateral connection, but rather the elements are mutually substantive.

Given that procedural justice is concerned with decision-making process, it focuses on issues such as availability of information, inclusion in decision-making, access to legal processes and inclusion in participatory research (Walker, 2012). For example, Paloniemi et al. (2018) looked at how environmental amenities are distributed and identified a flaw in the process involved in determining the distribution of amenities. Walker and Baxter (2017) argue for fairness of participation processes in a development plan while Pirk (2002) highlights a public participation process that is in effect only a public relations scheme. The importance of examining procedural justice, as stated by Pearsall and Pierce (2017:389), is that *'neither the stated nor actual intentions of empowered actors to conduct an inclusive process give it any guarantee that it will be so'*.

2.2.1.3 Distributive Justice

Distributive justice always starts with questioning ‘what is to be distributed’ and in natural resources governance, the distribution of resources is the central theme when discussing governance from an environmental justice perspective. Aside from the ‘what’, Bell (2004) highlights two other questions to answer in claiming distributive injustice:

1. Who are the recipients of environmental justice?
2. What is the principle of distribution?

As mentioned earlier, the question of ‘who’ in justice has now broadened and is no longer limited to race and ethnicity. How outcomes should be distributed, is based predominantly on a Rawlsian view of ‘justice as fairness’ (Rawls, 1971) where distribution is based on the principle of equity. Drawing from that, Bell (2004) identifies three principles for distribution; 1] principle of equality; 2] principle of equality plus a guaranteed standard; and 3] a guaranteed minimum with variation above that minimum according to personal income and spending choices. These concepts, like Walker and various other early environmental justice authors, situate the distributive dimension of environmental justice as the *result* of a social process. Examples include Walker’s own analysis that highlights issues of waste, air pollutions, flooding, greenspace and climate change. Other authors such as Paloniemi et al. (2015) for instance, highlights distribution of conservation costs and benefits, while Curran (2018) looks at distribution of environmental risk. For public participation, this means looking at the distribution of participatory outcomes, situating the distributive element as the end result of participation and governance.

However, it has been argued that the use of distributive justice can also be applied as part of the process evaluation, one which looks at distribution as pre-condition to participation (Coolsaet, 2015). Drawing from Fraser’s (2000) work on parity of participation, Coolsaet applies this concept to two cases of participation in agrobiodiversity initiatives. Parity of participation emphasis on social arrangements that allow every individual to be on equal position to interact with each other. It involves three main elements; economic support,

political representation and cultural recognition. These three elements, according to Fraser (2000), condition parity of participation, which argues that participation is inhibited when actor; 1] do not possess the necessary material resources to play their role in society; 2] are not recognized socially and culturally and 3] are not equally represented in decision-making. By applying parity of participation, Coolsaet identifies that economic support, political representation and cultural recognition affects the achievement of the objectives. Distribution, based on this concept, is the distribution of resources that allow the public to participate. It veers from the traditional conception of distributive justice in participation as purely outcome based, and argues for its application as a precondition to participation.

2.2.2 Interrelation of Environmental Justice Elements

As the main reference for this research, Walker (2012) draws largely on Schlosberg's (2004) pluralistic view of environmental justice dimensions that stated

'These notions and experiences of injustice are not competing notions, nor are they contradictory or antithetical. Inequitable distribution, a lack of recognition and limited participation all work to produce injustice and claims for injustice'. (Schlosberg, 2004: 529)

Walker then uses several case studies to show that distributive injustice issues makes more sense when discussed with the integration of procedural and recognition justice. As Schlosberg stated in his earlier work, discussion of one element will lead to another as they interact and are mutually constitutive, stating further that *'both injustices and their remedies are integrally linked'* (2009:16). Similarly, Carrick and Bell (2017) write that the recognition of others as 'equals' requires a procedurally just institutions and distributively just outcomes. They further clarify that a group that suffers misrecognition is more like to be marginalized in decision-making, leading to distributive disadvantage. Additionally, those with distributive disadvantage may not have the resources to participate effectively, thus not being recognized as equals. As Figure 2.7 indicates, the links between the three

elements – distribution, participation/procedural, and recognition – all lead to other forms of injustice or inequalities. In addition, it further implies that the solution for injustice lies within the problem itself and that addressing one element of injustice will subsequently affect other elements.

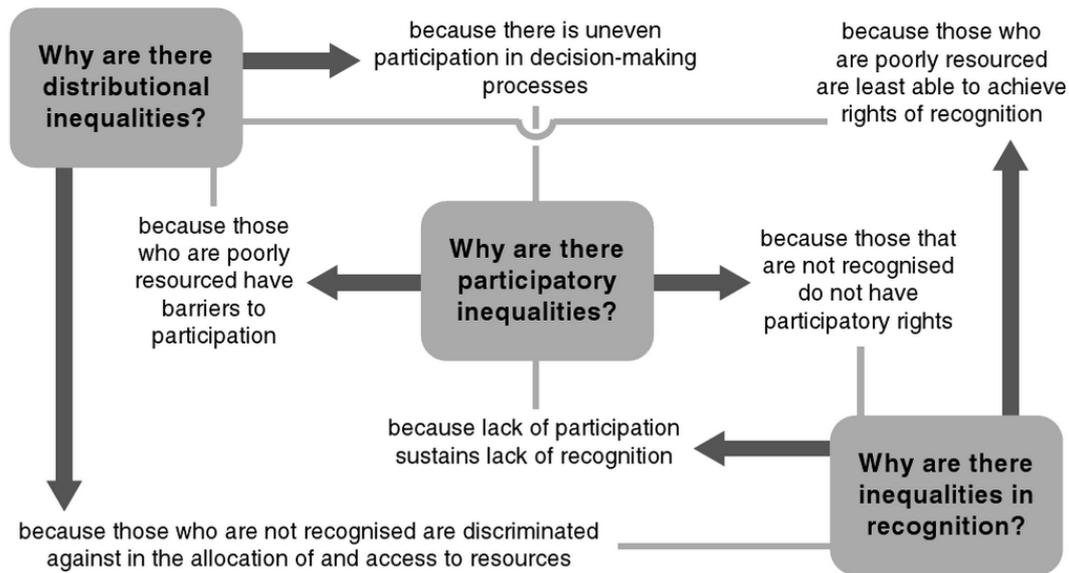


Figure 2.7: Explanatory interrelations between distribution, participation and recognition (from Walker (2012:65))

As mentioned earlier in this chapter, despite the general acceptance of the interaction of distribution, procedural and recognition justice, research still tends to focus largely on distributive issues (Reed & George, 2011). Apart from that, evidence and arguments largely comes from the United States and the global North, and environmental justice research also tends to focus on the implications of justice (Bustos et al., 2017) on resource allocations or distributions of environmental goods or bads. The reason for this is due to the ‘*desire to affect policy outcomes*’ where a ‘*quantitatively supported explanation*’ is preferred (Pearsall & Pierce, 2017: 389). However, single-dimensional analysis of justice theory is inadequate to address the problem of justice. Bohman (2007), for example, argues for incorporation of recognition, distributive justice theory as well as Fraser’s participatory parity theory to allow for a comprehensive basis in conceptualizing social justice. This

further supports the importance of a plural focus of environmental justice and on the relationship between the three elements of environmental justice.

2.2.3 Capabilities and Social Capital

Aside from the three dimensions of environmental justice, the possibility of a fourth dimension; ‘capabilities’, has also been presented (Schlosberg, 2009; Schlosberg, 2018). The capabilities approach, taken primarily from the works of Nussbaum (2001) and Sen (1999, 2001), expands on the distributive justice dimensions as they focus not just on the distribution of goods, but on the functions that we depend on in order to achieve a certain standard of life. Based on this approach, *‘injustice comes not with a good being denied, but with a capability that is limited’* (Schlosberg 2009:33). Capabilities refers to human capabilities, a *‘principle of each person’s capability’* (Nussbaum 2001:5) that enables a person to have a fully functioning life. It was first introduced for development economics by Amartya Sen, whose approach to capabilities is similar to Nussbaum. Sen (1999) refers to capabilities as a set of ‘functionings’ that is essential to achieve a certain standard of life. Functionings, refers to *‘parts of the state of a person’* (Nussbaum & Sen, 1993), things that a person do in order to lead a life. Functionings can be something as simple as good health and having proper nourishment, but it can also be as complex as achieving social integration and self-respect. In this sense, capabilities refers to the ability of a person *‘to do and be what they choose in the context of a given society’* (Schlosberg, 2009: 30) and can also be viewed as a form of power that provides capacity for action and choice (Ballet, Bazin, Koffi, & Koména, 2015). The capability approach has also been expanded to involve the notion of collective capability (Ballet, Dubois, & Mahieu, 2007; Ibrahim, 2006), which differs from Sen’s individual capabilities theory in how capabilities are generated and the potential benefit to a group of individuals (Ibrahim, 2006). It expands the individualistic capabilities approach to the idea of collectivity, by explaining capabilities as being generated by virtue of engagement in collective action or a social network.

Schlosberg highlights the capabilities approach as both a fourth dimension of justice, as well as a philosophical approach that simultaneously address distribution and recognition.

Using the capabilities approach, the focus of justice should not stop at the distribution of goods, but how it is then utilised into *'the capacity for individuals to flourish'* (Schlosberg & Carruthers, 2010). Additionally, Schlosberg (2009) argues for the need to not only address distributive, recognition and procedural justice as connected issues, but to also address issues of environmental justice as a combination of factors that are necessary for our lives to function. When applied to environmental justice, capabilities simultaneously address issues such as *'inequality, cultural disrespect, and participatory and democratic rights'* (Schlosberg & Carruthers, 2010:17). Examples include the use of a capabilities approach to highlight stakeholder's ability to participate (Simpson & Basta, 2018) as well as to address well-being in environmental justice (Edwards, Reid, & Hunter, 2016).

Interestingly, the use of capabilities has also been associated with social sustainability (Lehtonen, 2004), which has been identified earlier in this chapter as a neglected dimension of sustainable development. Lehtonen also used capabilities and social capital together to explain the relationship between nature, state and individuals, a synergy which can be used as a framework to address the social-environment interface of sustainable development. This means focusing on the outcomes of social capital that allows the implementation of social goals and how this influences individual capabilities to exercise choices. In this context, social capital is viewed as *'features of social life – networks, norms and trust – that enable participants to act together more effectively to pursue shared objectives'* (Putnam, 1995). Putnam later expanded social capital by referring to it as *'connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them'* (Putnam, 2001). He also clarified that the shared objectives are not the focus of social capital, but instead how norms, networks and trust links everyone within the community. He further relates this to political participation, in which it addresses relations with political institution. Social capital, however, encompasses more than just political participation. This theory presumes that social trust and civic engagement are strongly correlated. Coleman (2000) describes social capital as a variety of entities, that consist of some aspect of social structures and which facilitate certain actions of actors within structures. He further explained that social capital is valuable in identifying how social structure functions as resources that can be utilized to achieve specific interest.

Social capital is positively associated with benefits to the community, larger society and politics (Dekker & Uslaner, 2003). It reflects the value of social networks, making connections to people either similar or diverse, with norms of reciprocity. Furthermore, social networks have been shown to affect the ability to manage environmental challenges in natural resource governance (Bodin & Crona, 2009) and can manifest in three different ways; 1] bonding social capital; 2] bridging social capital and 3] linking social capital. Bonding social capital refers to the social ties that link similar people, based on some key dimensions such as community, race or religion. Bridging social capital, are social ties that link people together and which cross social divides or between social groups (Scott & Carrington, 2011). Linking social capital, on the other hand, is defined as '*norms of respect and networks of trusting relationships*' between people who interacts with powerful or institutionalized organization, or across the authority gradient (Szreter & Woolcock, 2004:655). Similar to bridging, linking social capital is characterized by exposure to and development of new ideas, values and perspectives.

The inclusion of capabilities and social capital in this chapter is to highlight the possibility of going beyond the standard environmental justice framework of distribution, recognition and procedural issues. Capabilities, in environmental justice, can potentially address issues that encourage or constrain participation while social capital can offer an alternative perspective to explain how exactly that participation takes place.

2.3 On issues of Participation, Justice and Development

Neglect of the social sustainability dimension in natural resource governance has caused not only unsustainable growth, but highlights the failure to address the social goals of every actor. This signifies that not only is participation needed, but a meaningful participation is imperative in order to prevent marginalization of certain communities and their social objectives. However, despite the general acceptance of the importance of public participation in decision-making, not all participation processes actually allow meaningful participation of the civil society. As Arnstein, Rowe and Frewer, and other

authors have shown, there are different ways a ‘participation’ process can manifest, and to participate does not necessarily translate to the ability to contribute to or influence decision-making. This is why, while there are various reports that provide evidence of a successful outcome of a participation process, there are also those that found public participation to be unable to contribute successfully in decision-making. Additionally, participation itself is co-produced (Chilvers & Longhurst, 2016) and is the product of various interacting factors. This, as mentioned earlier in this chapter, means that uninvited participation must also be taken into account, and that it differs greatly from formalised invited participation. Participation is understood as a very contextual concept, and that actor interactions play a very critical role in how participation is established. This problem corresponds to my first two research questions; 1] Who are the key actors in the governance of permanent reserve forests (PRF) and to what extent do power relations influence the development of these forests?; and 2] How is public participation perceived and how does it affect public’s action in PRF governance? Answering these questions enables the initial exploration of the social sustainability issue in PRF governance, as well as understanding the extent to which public participation is accepted within government.

Another important point highlighted in this chapter is that public participation is a human right’s issue (Rowe & Frewer, 2000; Zillman & Lucas, 2002). Participation, or control over one’s political environment is one of the capabilities that is needed to support individual ability to function, and yet, it is also a function in its own right (Nussbaum, 2001). To be denied participation, or meaningful participation, is to violate basic human rights which also affects the fulfilment of a sustainable development agenda. This not only highlights the importance of exploring and understanding the participation process, but also the need for this analysis to be carried out from a rights-based perspective. Initially started as an environmental movement that embedded issues of human rights and inequality, environmental justice provides a highly valuable perspective on the participation process, that not only looks at how public participation takes place, but also at who controls participation, and who is allowed to participate. However, despite the growing conceptual understanding of environmental justice, research is still bias towards a predominantly distributive approach (Reed & George, 2011) because it is particularly useful in providing quantitative evidence of injustice. While more recent research has tried to address this issue, this nevertheless argues for the importance of justice research on the

process, instead of just the distribution of *outcomes*. This corresponds to the third research question that argues for the use of environmental justice theory to appraise the process of public participation. Not only that, the third research question also opens up the notion of recognition justice as one that goes beyond recognition of social identity. Recent papers by Coolsaet (2015), Bustos et al. (2017) and Velicu and Kaika (2017) argue for the acknowledgement of the recognition dimension that covers issues of values, knowledge systems and even visibility.

To attend the final research question, this chapter also highlights a gap in environmental justice studies that tend to focus only on highlighting the implications to justice (Bustos et al., 2017), with little attention given to exploring the possible solutions to ‘counteract’ the predominant injustices. Apart from a bias towards distributive research, environmental justice research have also focused on traditional forms of environmental justice notion, and is predominantly situated within the global ‘North’ (Reed & George, 2011). As highlighted by Agyeman et al. (2010) and Walker (2009), environmental justice needs to be sensitive to context, which suggests the exploration of issues outside a western-based structure. This stresses the need for not only understanding how injustice occur (Research Question 3) in the context of PRFs but also how that injustice can be countered (Research Question 4). This is why the final research question in this study aims at identifying conditions that promote meaningful participation in PRFs and how these responses affect the overall sustainability of PRFs.

CHAPTER 3 FORESTRY GOVERNANCE IN MALAYSIA

This chapter introduces Malaysian forestry governance as a contextual setting for the case studies. The main purpose of this chapter is to highlight the conflicts that have arisen from forestry governance and practices as well as how these relates to the main concepts of public participation and environmental justice. As a developing country that relies heavily on its natural resources, Malaysia provides the perfect setting for a research that looks at public participation in natural resource governance. Managed based on a Sustainable Forest Management (SFM) framework, the forestry industry has been under constant scrutiny, due to various environmental destruction that occurred over the years. To better explain the issues and conflicts surrounding the forestry governance in Malaysia, this chapter will provide an overview of Malaysia's current social, economic and political climate. Included is a summary of land and forestry development planning system, as well as current forestry management practices. This chapter also discuss Malaysia's history and how current practices are shaped by the forest service system introduced in the colonial era and highlights the incorporation of sustainable development in forestry management. This chapter will conclude by highlighting the issues and conflicts that surrounds the forestry governance today.

3.1 The Federation of Malaysia

Malaysia consists of two separate mainlands divided by the South China Sea; peninsular Malaysia, and Sabah and Sarawak, commonly known as Borneo. The division of these two parts of Malaysia is not merely physical, but includes a division of economic development as well as cultural and social structures. Due to the vast difference between these two parts of Malaysia, the discussion in this chapter with respect to Malaya (pre-independence) or Malaysia (post-independence) refers mainly to the peninsular unless otherwise specified.

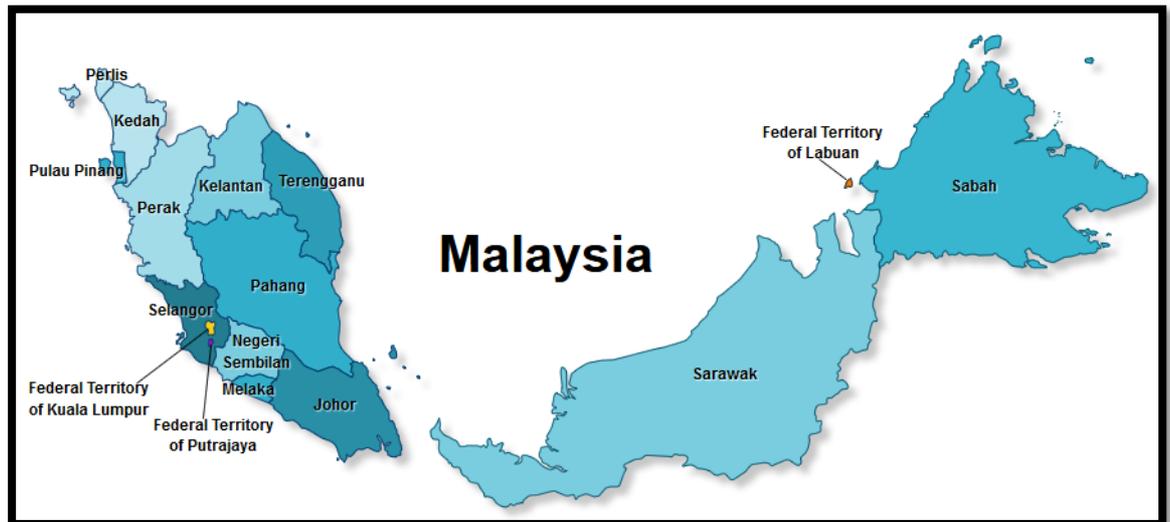


Figure 3.1: Map of Malaysia (DOSM, 2015)

Approximately 330 million hectare in terms of size, Malaysia's current population is 28.7 million people, with 1.5 million alone living in and around the capital city of Kuala Lumpur (Figure 3.1). Malaysia consist of three main ethnicities; the *Bumiputera* (translated as sons of the soil), Chinese and Indian. As a dominant group, *Bumiputera* consist of several other ethnic groups, mainly Malay and other native or indigenous groups such as the Kadazan, Bajau and Murut. The term Malay (*Melayu*) is sometimes used interchangeably with *Bumiputera*, and in itself is the biggest ethnic group in the country.

As the country's supreme law, the Federal Constitution establishes Malaysia as a constitutional monarchy with the *Yang di-Pertuan Agong* (Head of Government) as a ceremonial and religious (Islam) leader ("Federal Constitution," 1957). The Constitution also provided the basis for the organization of the government; 1] the bicameral legislative branch (Parliament) that consists of the House of Representatives (*Dewan Rakyat*) and the Senate (*Dewan Negara*); 2] the executive branch led by the Prime Minister and Cabinet Ministers; 3] and the judicial branch. Any other laws in Malaysia must be within the ambit of the Federal Constitution and the document also assigned the division of powers between Federal and State governments, which can be found in three legislative lists; Federal list, State list and Concurrent list. The government structure in Malaysia is separated into three

tiers with federal government at the top, followed by state government and finally local government, which handles matters pertaining to local authorities in each district. Based on the constitution, - with the exception of federal territories - local government is the responsibility of the state government in which it is situated. While the federal government may formally exercise considerable power and influence over local government (Phang, 2008), officers in local government are chosen by the state governments, which means local authorities are actually subordinated to the state (Meng, 2013). Each state is recognized as an independent tier of government, and has its own legislative and executive powers within constitutional limits. In matters of land and forestry, state governments have complete authority, however, federal laws takes precedence in special cases. This means that in some instances, the federal government can intervene, especially in financial and political matters (Phang, 1997).

The economic hub of Malaysia is located in Kuala Lumpur (Figure 3.1), Malaysia's capital city with an area just over 24 thousand hectare. Based on latest data from the Department of Statistic Malaysia (DOSM), Kuala Lumpur recorded the second highest contribution to the country at 15.1% of Gross Domestic Product (GDP), with Selangor contributing the highest at approximately 22.4%. Together with Kuala Lumpur and Putrajaya – a federal territory also located within Selangor – these three areas act as the locus of development in the country, making them the centre of urbanization. Other highly developed states include; Johor, which contributes approximately 9% of Malaysia's GDP; and Penang, contributing to approximately 6.5%. On the Borneo side of Malaysia, Sarawak also contributes a significant amount of GDP - about 10.1% - mainly due to oil and timber production. Initially relying on predominantly natural resource exploitation, Malaysia's current main economic contributor is the services industry, which includes wholesale and retail trade, finance and insurance, as well as communication (DOSM, 2018). However, more than 15% of Malaysia's GDP is still attributed to sectors that depends on land and natural resources development, such as agriculture and mining/quarrying. Malaysia is also one of the world's top contributor of palm oil, second only to Indonesia in terms of production and export. Due to this, Malaysia has been under continuous scrutiny, due to critical deforestation as a result of palm oil plantation expansion. Regardless, Malaysia has made commitments towards sustainable development, and as part of Malaysia's plan towards fulfilling UN's Sustainable Development Goals, Malaysia has pledged to keep

approximately 50% of the total land mass under forest cover, in spite of continuous development taking place on the country. All these forests are classified into several types based on uses and purpose, one of which is Permanent Reserved Forests (PRF), which is the key topic covered in this research.

3.1.1 Malaysian Government

Currently, Malaysia is under the political control of the *Pakatan Harapan* (PH) a newly formed government that came into power after the General Election on May 2018. Prior to PH's win, Malaysia was under the control of *Barisan Nasional* (BN), a race-based, right wing political party, that consists of the United Malays National Organisation (UMNO) as a dominant partner, followed by the Malaysian Chinese Association (MCA), the Malaysian Indian Congress (MIC) and various other small political parties in West and East Malaysia³. The success of BN is in the explicit segregation of different ethnic groups into different parties. When observed at a superficial level, it brought to mind the very image Malaysia wanted to convey, a multi-ethnic group of people who came together to find a common cause. However, this political practice contributed to a divisive culture among Malaysians, with each component of Malaysia's main ethnicities driven by its own internal issues of either economic security (Chinese), caste and religion (Indians) or class (Malay) (Fee & Appudurai, 2011). Highlighting this is important, as these variances in ethnicity and class among civil society could be expected to influence the relationships between the actors in forestry governance. Apart from that, the domination of BN – or more correctly UMNO – at the Federal level assisted in the centralization of the government, where power is said to be concentrated primarily within the inner core of the Prime Minister's Department (Ostwald, 2017).

Elections in Malaysia follow the British system, where the party with the most seats in Parliament can form the government, choosing a Prime Minister from within its ranks. For the last 60 years since independence, BN retained monopoly over the government, initially due to the its popularity, but later due to the inability of opposition parties to form lasting

³ BN formed coalitions with various minor political parties, some which dropped out over the years since the conception of the coalition, but the three major political parties in control of the coalition is UMNO, MCA and MIC.

alliances⁴ like those of the BN as well as the malapportionment of districts (Case, 1994; Jomo & Sundaram, 2004) within Malaysia. Corruption scandals, disagreements between factions within the party, and an increasing dissatisfaction of the minor ethnic communities with the ‘reverse discrimination’ of policies that created more economic opportunities to the *Bumiputeras* (Case, 2013; Mokhtar, Reen, & Singh, 2014), led to a near defeat of the BN during the 2008 general election with only a 63% share of the seats in the Parliament. In the following 2013 general election, BN’s popularity continues to drop, with BN only receiving 59.9% of the seats in Parliament. Largely due to the loss of Chinese voters in MCA (Noh, 2014), the loss of the popular votes can also be attributed to the discontent of the Malays with BN, citing racial and ethnic inequality and corruption as the main reason for the defection of voters. This gradual loss of support culminated in total defeat of BN in May 2018 General Election, where PH won with a simple majority. The change in government for the first time since independence marked an interesting time for Malaysian politics and although much can be said about this particular topic, fieldwork for this research was carried out before the May 2018 General Election, and therefore had little bearing on the data collected for this research. Throughout the rest of this thesis, subsequent references to the federal government will refer to the BN, and exploration of dynamics between state and federal government refers to the political climate during data collection process.

3.2 Formation of Federation of Malaysia

Before the formation of Malaysia, the Malayan Peninsula comprised of various independent regions known as the Malay Sultanate, once ruled by *Raja* (Kings) and *Sultan*. Located in southernmost tip of Asia, Malaya – as well as other parts of Asia – was once colonized by several dominant powers (see Figure 3.2) due to Asia’s convenient position along the Java spice route (Ptak, 1992). Prior to colonization by the British in the late 18th century, the west peninsular consisted of mostly Malays, most of whom were fishermen and rice farmers who lived predominantly in the lowlands near rivers or coasts (Drake, 1979). Due to the central location of the peninsular to the spice and trade route, there were

⁴ Opposition parties usually appeals to the issue of ethnicity and ethnic betrayal, making it difficult to work with other racial based parties.

also foreign traders, who lived mainly in the ports such as Penang, Malacca and Singapore (see Figure 3.2). The generally low population, the lack of economic enterprise of the Malays and the geographical position of Malaya within the spice route made for an attractive location for British colonization (Caine, 1958). Starting from Penang, the British created or conquered important trading ports in Malaya that enabled them to form links with other spice traders from the Dutch islands, Siam⁵ and China. This growth in trade and economic partnership occurred steadily, contributing to the influx of Chinese and Indian immigrants to the peninsular.

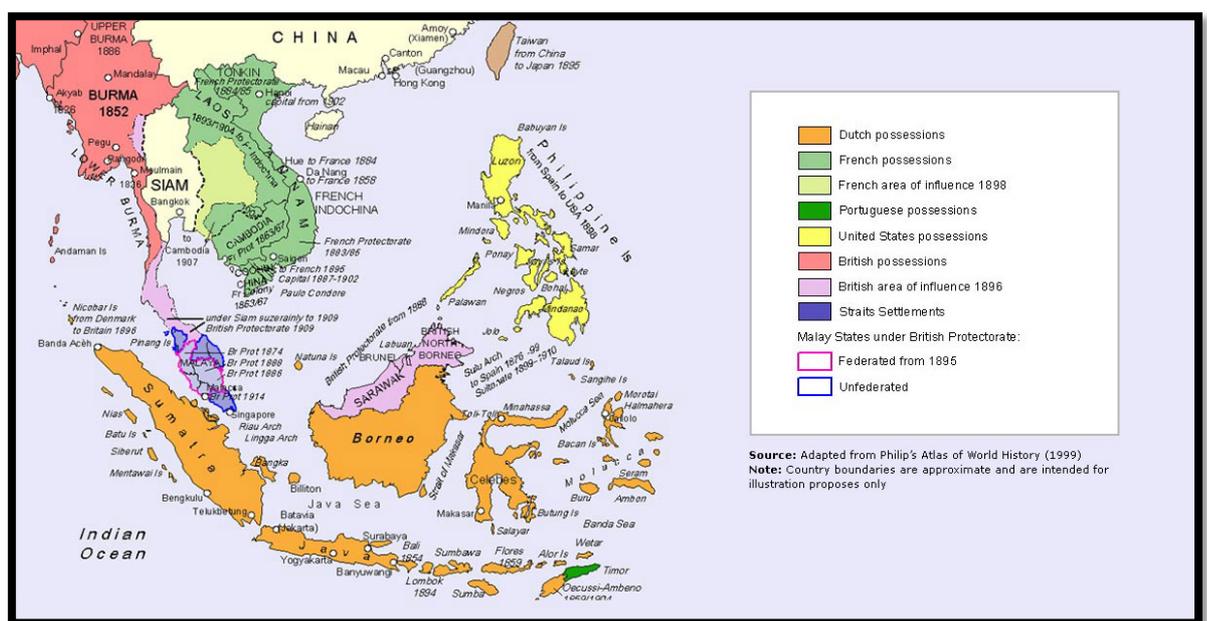


Figure 3.2: South East Asia during the colonization period, 1870 - 1914 [Source: Asia-Europe Institute (2018)]

At the start of the colonial era, there was little interference by the British in the lives of the Malays, as well as in the governance of the Malay Sultanate. However, as a consequence of the change in the population of Malaya, various conflicts started to arise, particularly between the Chinese and the Malays, which threatened the trading industry. This prompted more active intervention by the British, which led to the formation of the Federated Malay States (see Figure 3.3) in 1895, a combination of four states in the peninsular. Later in

⁵ Now known as Thailand

1909, similar treaties were made with the northern states of Kedah, Perlis, Kelantan and Terengganu, as well as Johor state in the south, but with less direct administrative intervention. These states collectively became known as the Unfederated Malay States.

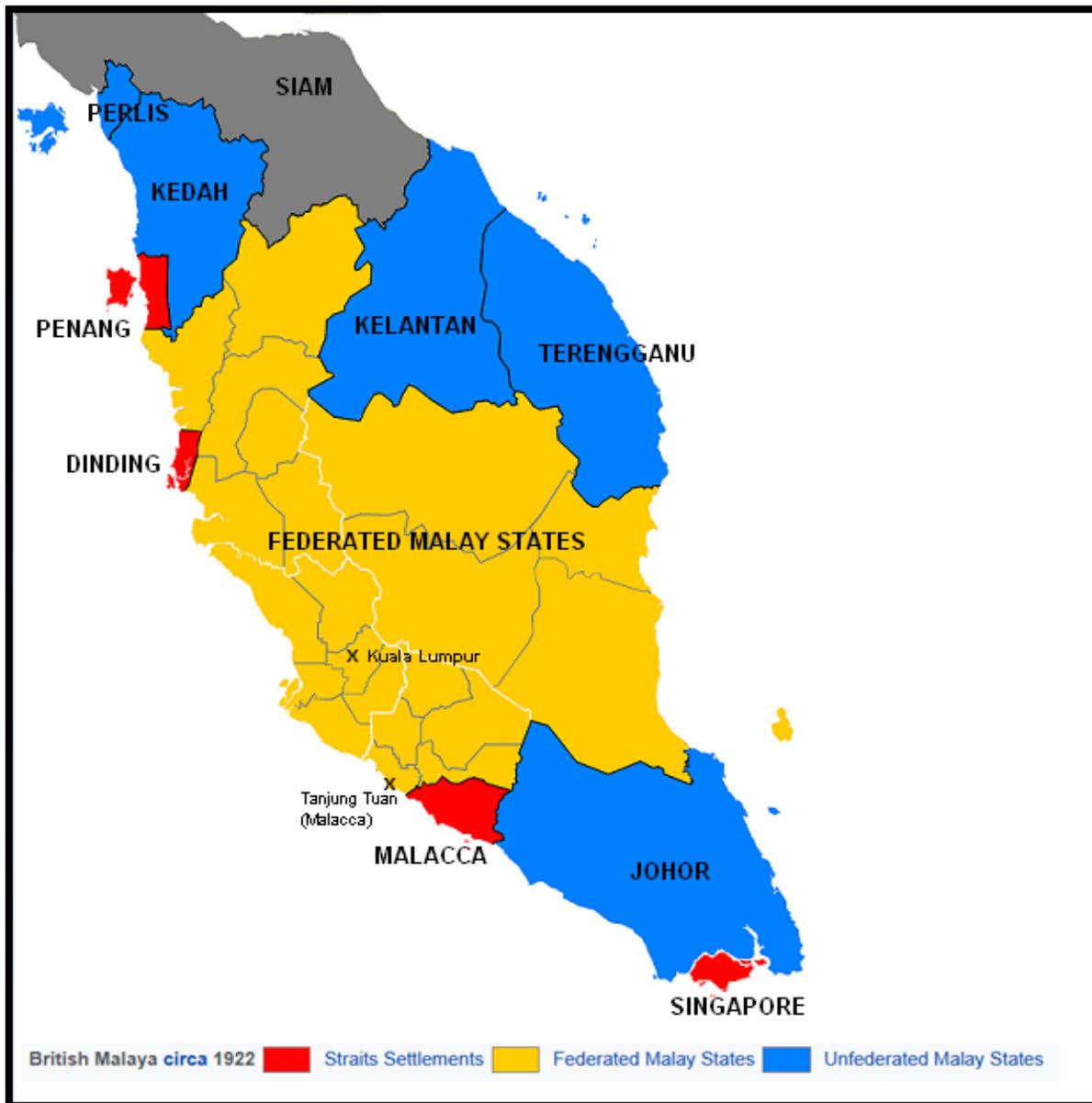


Figure 3.3: British Malaya: Division of Strait Settlements, Federated and Unfederated Malay States

The establishment of the Federated Malay States- and later the Unfederated Malay States – increased British control over Malaya, leading to major changes in the administrative

system of the peninsular. The supervision of the administrative system was carried out by a Governor, with the help of Residents (Federated Malay States) and British Advisers (Unfederated Malay States) (Caine, 1958). This meant that Malaya had a *de facto* unity over several vital fields, such as transportation and currency. As a result of this administrative control, rapid economic change occurred and Malaya's economy shifted to commercialised mining, rubber, and timber (Ken, 1979).

Typical for a British colony, Malaya's economic structure involved a classic export system of raw materials (Kumar, 1986), and was divided mainly into a Principal and Secondary Economy (Ratnasingam, Ioras, Neelakandan, Mariapan, & Swan, 2011). This system divided economic processes into two; 1] Principal Economy, which focused on rubber, tin and timber, and 2] Secondary Economy, which focused on traditional economy for local consumption. Rubber was introduced circa 1870, but was not commercially expanded until the early 1900s (Drabble, 1972). For two decades following commercialisation, rubber expanded rapidly, covering approximately 4.25 million hectares by 1922. This rapid expansion was beneficial for Malaya's economy, but as a result, forests were rapidly cleared to make room for rubber plantations. Tin mining also became a contributory factor to the rapid forest clearance where expansion and trade occurred after the creation of the Federated and Unfederated Malay states. Although tin mining had been practiced long before the British control over the economy, the industry was small, dominated by Malay chieftains who employed imported Chinese workers (Hennart, 1986) using basic methods. With the consolidation of the states under British rule, mining thrived, benefitting particularly the Chinese miners and the British corporations who were able to use more advanced technologies

Apart from rubber and tin, commercialisation of Malayan forest products such as timber was also carried out at a rapid rate. In fact, the forestry industry flourished throughout the entire British Empire⁶, leading to the establishment of the forest service. Forest service is a system that was initially designed to ensure British control over the resources in their colonies as well as to regulate the flow of forestry products. As this system branched out throughout the entire British Empire, a local forest service was established in Malaya, with

⁶ The British Empire at the time covers large part of Asia and Africa

the sole purpose of ensuring the economic stability of the forestry industry in the region. The establishment of Malaya's forest service system resulted in the restructuring of the taxation system, as well as the introduction of a scientific approach to forest administration, termed 'sustainable timber management' (Ratnasingam et al., 2011). Practiced to ensure a continuous supply of timber and other forest products, the establishment of forest service and the implementation of the sustainable timber management by the British marked the beginning of the economically-inclined forestry management in Malaya, a factor which later shaped how Malaysia governed its forestry resources. Just like other colonized tropical countries, the practices and norms established during colonial times persist, and have been found to significantly influence modern forestry initiatives (Vandergeest & Peluso, 2006; Garcia-Lopez, 2018)

3.2.1 Path to *Merdeka* and the Start of Racial Conflict

Parallel to the changes in economic structure, changes also occurred in the social structure of Malaya. Commercialization of Malaya's natural resources led to an increase in immigrants and foreign workers, particularly the Chinese and Indians. This not only increased the population of foreigners, making their numbers almost equal to those of the Malays, but the practice of race-based economy meant that different ethnicities dominated certain industries. The Chinese mainly worked in the mines, which were mostly owned by British corporations, while Indians were brought in to work on the estates and rubber plantations. This meant that Indian settlements were primarily situated in the rural estate areas while the Chinese concentrated more in the urban areas, especially Penang and Singapore. Contrary to the rapid development of Malaya's economy, Malays initially played very little role in the structure. With the exception of those who worked for the British as domestic workers or elite families who worked in the government, most of the Malay communities remained in rural lowland areas, as fishermen and rice farmers.

This pattern of economic and social structure initially yielded minimal conflict amongst the different ethnicities. Over time though, racial conflicts emerged, leading to concerns that the structure would have to be changed, due to the different administrative organisation of

the Federated and Unfederated Malay States (Caine, 1958). However, these were put on hold at the outbreak of the Second World War, when Malaya was occupied by the Japanese between 1942 and 1945. Although the period of occupation was short, the opposition against the Japanese regime developed into a narrative of anti-colonization and patriotism, which affected British power after Japan's surrender.

The turning point for Malaysia's path to independence or *Merdeka*, as Malaysians call it, occurred during the formation of the Malayan Union by the British government in 1946 (Lau, 1989 & Stenson, 1969) that threatened the relationship between the British and the indigenous Malays. The Malayan Union was proposed to bring together the Federated and Unfederated Malay States after British came back to Malaya. However, the Malayan Union was considered disadvantageous to the political standing and prestige of the Malay sovereigns and community (NLBS, 2014) as it threatened the power of the Sultans. Further exacerbating the problem was the initial proposal to grant equal citizenship rights to the Chinese and Indians, hence resulting in strong opposition towards the British Government. This period of nationalism, particularly among the Malays, awakened massive political activity within the states and led to the birth of various political organizations, chief among them the United Malays National Organisation (UMNO) (Cheah, 2007).

Strong opposition towards the formation of the Malayan Union led to negotiations between the multi-ethnic Malaya and the British in 1948, which concluded with the Federation of Malaya Agreement. With this agreement, the power of the Sultans and the identity and significance of the Malay community and sovereignty within Malaya were safeguarded, in return for granting automatic citizenship to the non-Malays based on the principles of *jus soli* (Zaid Ahmad, 2007). Various reasons can be given for this; for the Malays, concession on the matter of citizenship was to show the British Government that the communities within Malaya could work together peacefully; for the British, it was made to protect the British interests in tin, rubber and timber; and to stop the spread of communist ideology among the Chinese (Muzaffar, 1996) that emerged during the Japanese occupation.

3.2.2 Post *Merdeka* and Rising Ethnic Tensions

The Federation of Malaya Agreement marked the start of the independence process for Malaysia, which was formally announced on 31st August, 1957. After *Merdeka*, Malaysia became a Federation that consist of 13 states, which includes Sabah and Sarawak. Of the 13 states⁷ in Malaysia, nine (all located in peninsular Malaysia) retained their monarchs, using the same title of *Sultans*, *Raja* (for the state of Perlis) or *Yamtuan Besar* (for Negeri Sembilan)⁸. The former strait settlements of Melaka (Malacca) and Penang and the colony of Sabah and Sarawak each have the *Yang Di-Pertua Negeri*, a titular Governor appointed by the *Yang Di-Pertuan Agong* (YDPA). Due to the multiple heads of States, a Conference of Rulers was established to appoint a federal head of state, the YDPA, which is chosen every 5 years from the nine rulers. Within the Federal Constitution, the YDPA holds the executive power of the Federal Council of Ministers and the discretionary power to appoint the Prime Minister⁹

Just like in the colonial era, distribution of ethnic groups in post-*Merdeka* Malaysia was still economically associated. With citizenship granted to non-Malays, Malaysia became a multi-ethnic country where the distribution of major ethnic groups, primarily between the *Bumiputeras* and the other ethnicities was almost equal. The conflict that already existed since before *Merdeka* grew, especially due to the natural segregation of the main ethnic groups based on not only geographical areas (Mokhtar et al., 2014) but also economic functions. In fact, the control of the Chinese community over tin mining and trading that was inherited during the colonial era translated into a massive imbalance of wealth distribution between the minority Chinese and the rest of Malaysia.

The distribution of ethnic groups and the imbalances in economic situation became a vital part of Malaysia's struggle post-*Merdeka*. Concerns over the racial conflict that arose from this situation led to the practice of ethno-politics. As observed in the post-*Merdeka*

⁷ Singapore was initially part of Malaysia, but left within a year of *Merdeka*

⁸ Different Malay terms for king

⁹ Selected from whichever political party that forms the Government; However, this power was never exercised

government – *Barisan Nasional* (BN) – smaller ethno-political groups created alliances to ensure each major ethnic group was represented in government. While this practice was deemed a practical solution at the time, BN failed to properly address the issue. Over time, what started out as minor racial conflicts culminated in a major and violent confrontation that occurred on May 13, 1969, resulting in large number of deaths and became a cataclysmic event that drove a major and lasting changes to Malaysian governance and policy.

The ethnically based riot started after the General Election in 1969, where BN won by a narrow margin. It was reported that the opposition parties, dominated by non-Malays, were jubilant at the sign of BN's reducing power and celebration spilled into Malay dominated areas, inciting tensions to an already present conflict (Zainon Ahmad, 2007). Although contradictory reports have argued that the May 13th riots were a *coup d'état*, planned to force the then Prime Minister Tunku Abdul Rahman to step down, the riot was officially acknowledged as a purely racial riot between the Chinese and the Malays [see Soong (2008)]. This prompted the establishment of the New Economic Policy (NEP) in 1970, with the main aim of eradicating '*poverty and to restructure society to eliminate the identification of race with economic function in order to create the conditions for national unity*' (Jomo & Sundaram, 2004). Throughout the years, despite various arguments against the credibility of data reported during the implementation of the policy (see Jomo and Sundaram (2004), there is little doubt that the NEP has managed to achieve reduction in poverty and decrease the identification of ethnicity based on economic functions, which has been useful in easing the interethnic tensions in the Malaysian society.

At this point, it is important to note that although the NEP is no longer relevant, there is still a widespread belief that current public policy is dominated by NEP's interethnic and restructuring economic policies (Jomo & Sundaram, 2004). And although the NEP succeeded, to some extent, in lessening the economic gap between the ethnic minorities and reduced poverty, the preferential treatment given to the *Bumiputeras* has led to the development of a 'subsidy mentality' (Gomez & Sundaram, 1999) among the Malays. Furthermore, NEP encouraged ethnic affirmative action policies that associated the interest of entire ethnics groups with the elites within that group. This created a generalization that

failed to look at interclass conflicts between the elites and common people of any ethnicity. These affirmative actions have also created a discriminatory culture that denied access to business opportunities based on ethnicity, which led to the use of money politics, involving the patronage of politicians and political parties for economic opportunities (Mokhtar et al., 2014), and mostly benefitted the Malay and Chinese elites as they are those who form strong ties with the ruling political party. For forestry governance, the practice initiated by the NEP provided opportunities for Malaysian elites to control the production of forest resources and land development, providing few opportunities for the common public to play a significant role in the industry. Therefore, understanding how public participation is shaped within the governance of forest reserves is critical, as it is a necessary step towards public empowerment and dissolution of elite control. This is because not only the practice of elite control and political patronage are fundamentally unjust, but can also significantly affect the sustainability of forestry resource governance (García-López, 2018).

3.3 Economic Transformation and the Forestry Industry

Following independence, Malaysia went through a period of rapid economic transformation, (Figure 3.4) where Malaysia's gross domestic product (GDP) grew exponentially, with several periods of slight economic decline during financial crises, all of which were caused by external circumstances; such as the Asian Financial crisis of 1997/1998 and the Global Financial Crisis of 2008.

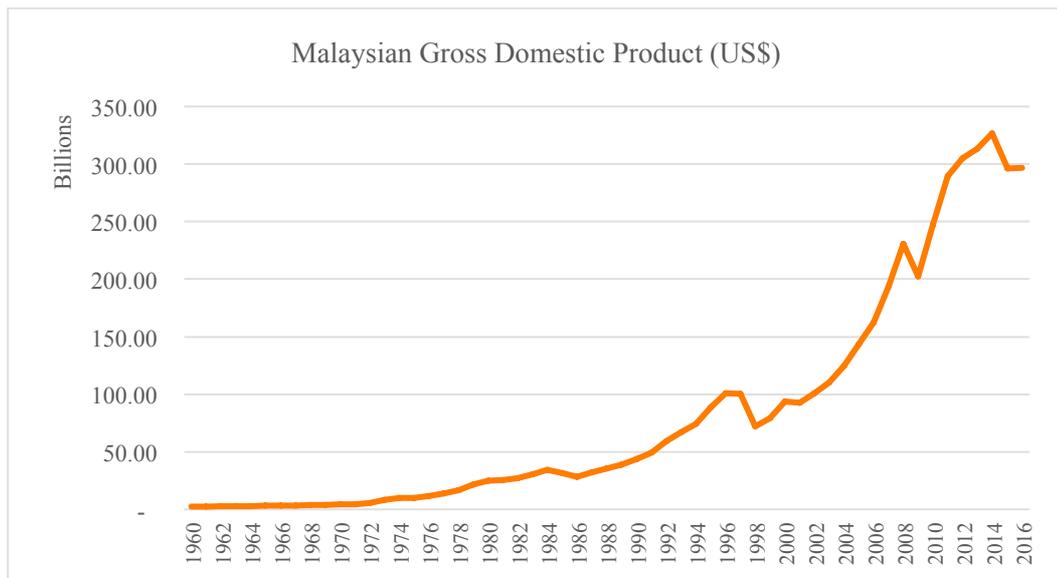


Figure 3.4: Malaysian Gross Domestic Product 1960 – 2016 (US\$) [from World Bank (2018)]

The forestry industry, which halted during the Japanese occupation era, immediately regained its pace after Malaysia obtained independence, and forests were once again exploited for timber and other non-timber resources such as rattan, bamboo and dammar (Ratnasingam et al., 2011). Within the government, dialogue regarding the forestry industry revolved predominantly around its economic contribution to the country and society; on issues of developing forests for agriculture to meet the needs of the people; and the improvement of logging methods to maximise timber yield. During this era, any discussions regarding the protection and conservation of forests were mainly for the purpose of prolonging the lifespan of the timber industry, while matters of environmental protection and conservation were only voiced by a small group of individuals (Kathirithamby-Wells, 2005)

This preoccupation with economic development has caused a strain on the governance of forest resources, where economic development and environmental conservation are perceived as discrete developmental goals. On one hand there is a need to protect the forest for environmental purposes; on the other, forests are highly valuable assets that must be exploited for the development of the country. First for the resources a forest can produce, and second, for the land itself, a critical element in urbanization. Furthermore, land and

forestry management are still under total control of the State governments, contributing to conflict in management and enforcement, a situation which continues even until today.

“Every state does indeed showed their zealousness, defending their power [over land] from the point of entry of the Federal government” (Translated Hansard speech of Wan Junaidi, Minister of Natural Resources and Environment on 16 November 2015)

As part of the effort to organize the forestry industry, the concept of reserved forest was introduced by the Prime Minister’s Department in 1967. Although the term reserved forest had been used before, the establishment of reserved forest under the Land Capability Classification (LCC), allowed a proper delineation of zones for land development. Based entirely on soil science rather than ecology, LCC consisted of five categories of land, of which mining was deemed most beneficial land use, while land that had little economic potential was designated for recreation and wildlife (S. R. Aiken, 1994). The LCC specified that reserved forests fell under the category of lands not suitable for mining or agriculture [from Lee and Panton (1971) as cited in Kumari (1995)], one which had low primary resource value. This reserved forest system later provides the foundation for the PRF scheme implemented in 1984.

3.3.1 The System of Permanent Reserved Forest

As indicated in the Federal Constitution, the responsibility over land and forestry belongs to state governments, with forestry management carried out by state forestry departments. Latest data from 2016 indicates that the size of the forested area in Malaysia is at 18.12 million hectare, approximately 55% of the total land mass. However, it is important to highlight that the calculation of forest cover is made based on the definition of forest as *‘land that covers an area of more than 0.5 hectare with height of trees over 5 meter and more than 10% tree cover; or trees that are able to reach the aforementioned specified height and cover on site’* (NRE, 2017). The actual total protected forest area, which includes national parks, wildlife sanctuaries and wildlife reserves makes up only 15% of

the total forested area (see Figure 3.5) ("Total Forested Areas in Malaysia (1990-2014)," 2018), putting the total size of protected forest in Malaysia at a mere 2.7 million hectare.

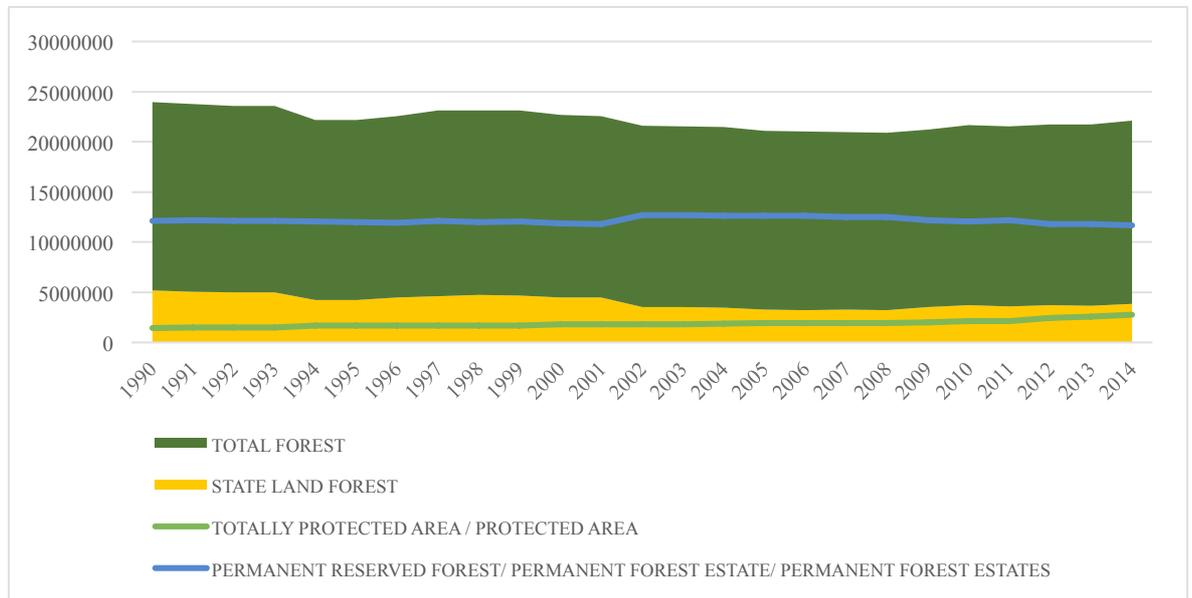


Figure 3.5: Total Forested Areas in Malaysia (1990-2014)

There are several categories of forest in Malaysia, one of which is Permanent Reserved Forests (PRF), a term used specifically for land gazetted under the National Forestry Act 1984 (NFA 1984). NFA 1984 was introduced in 1984 for the purpose of ‘*administration, management and conservation forests and forestry development within the States of Malaysia*’ ("National Forestry Act," 1984). Based on this act, all areas previously designated as forest reserves under separate state enactments were automatically gazetted as PRFs so that the management of forests are uniform throughout the country. PRF, also known as Permanent Forest Estate (PFE), is defined in the Act as ‘*any land constituted or deemed to have been constituted a permanent reserved forest*’ ("National Forestry Act," 1984) and make up the largest tract of *forested* land in Malaysia.

Currently, land classified as PRF has four main classes (JPSM, 2016) all of which serve specific functions and purposes (see Table 3.1):

Class	Function
Protection forest	stability of country's climatic and physical conditions, control of water resources, soil fertility, environmental quality, biodiversity conservation and reduction of flood damage and erosion to rivers and agricultural land
Work/Production Forest	continued supply of forest products at reasonable rates to the economy of the country, according to the needs of agriculture, domestic, industrial and export sectors
Amenity Forest	maintain a sufficient area as recreational, for eco-tourism and to increase public awareness about the forest
Research and Education Forest	research, education and preservation of biological diversity

Table 3.1: Permanent Reserved Forest Class and Functions

There are no data on the amount of land in each specific class, but within these four classes, PRF has further 11 intended purposes, including; timber production; soil protection, soil reclamation, flood control, water catchment, forest sanctuary for wildlife, virgin jungle, amenity, education, research and forest for federal purposes. In practice, PRFs can have either overlapping class functions or be divided into sections depending on their intended use. It is also important to note that the classification of PRF is not permanent, and how a PRF is classified can be changed depending on current needs and development strategies of the State government.

The current management of productive PRF is based on the Sustainable Forest Management (SFM) system, which reportedly has had a positive impact on the both sawn timber industry as well as forest conservation goals (Noraida, Abdul-Rahim, & Mohd-Shahwahid, 2017). However, some forest management techniques utilized in the colonial era such as silviculture and selective management of timber are still retained. Silviculture involves methods that allow for the maintenance of healthy communities of trees to ensure

the ‘*long-term continuity of essential ecologic functions*’ and health and productivity of forests like PRFs (Nyland, 2016). This system is usually associated with timber and timber harvesting, since timber production was once the primary objective of forest development (Foley, 1998), but the practice is not limited to wood production. Logging and other related timber management operations in productive PRFs are carried out by operators either using a long-term logging agreement or short term license. These licenses are called concessions, and are provided by the Forestry Department of Peninsular Malaysia (FDPM) based on state government recommendations. The selective management system (SMS) involves the harvesting of timber based on each state’s annual allowable cut, the quota being set by the National Land Council (MTC, 2018). This system consists of three stages; pre-harvesting, harvesting and post-harvesting (see Table 3.2). For PRFs in Peninsular Malaysia, this system requires observations by a forest manager, whose role is to ensure that all concessionaires maintain the quality of forests.

Pre-Harvesting	n-2years to n-1year	Pre-felling forest inventory of 10% sampling intensity using systematic-line plots to determine appropriate cutting regimes (limits).
	n-1 year to n	Tree marking incorporating directional felling.
Harvesting	n	Felling all marked trees.
Post-Harvesting	n + ¼ year to n ½ year	Forest survey to determine fines on trees <u>unfelled</u> , royalty on short logs and tops, and damage residual stands.
	n + 2years to n+ 5 years	Post-felling inventory of 10% inventory using systematic-line plots to determine residual stocking and appropriate <u>silvicultural</u> treatments.
	n+10 years	Forest inventory of regenerated forest to determine status of the forest.

Table 3.2: Selective Management System (MTC, 2018)

Under SMS, a pre-felling inventory is first carried out to determine the number and size of trees that can be harvested. Selective harvesting is then undertaken before another inventory is carried out to determine whether silvicultural treatment is needed. After 20 to 30 years, the PRF is left for regeneration before another cycle of harvesting is carried out (see Figure 3.6). Once harvested, logs are then taken to designated checking stations for

assessment. During this stage, royalty and cess¹⁰ must first be paid before removal passes are issued.

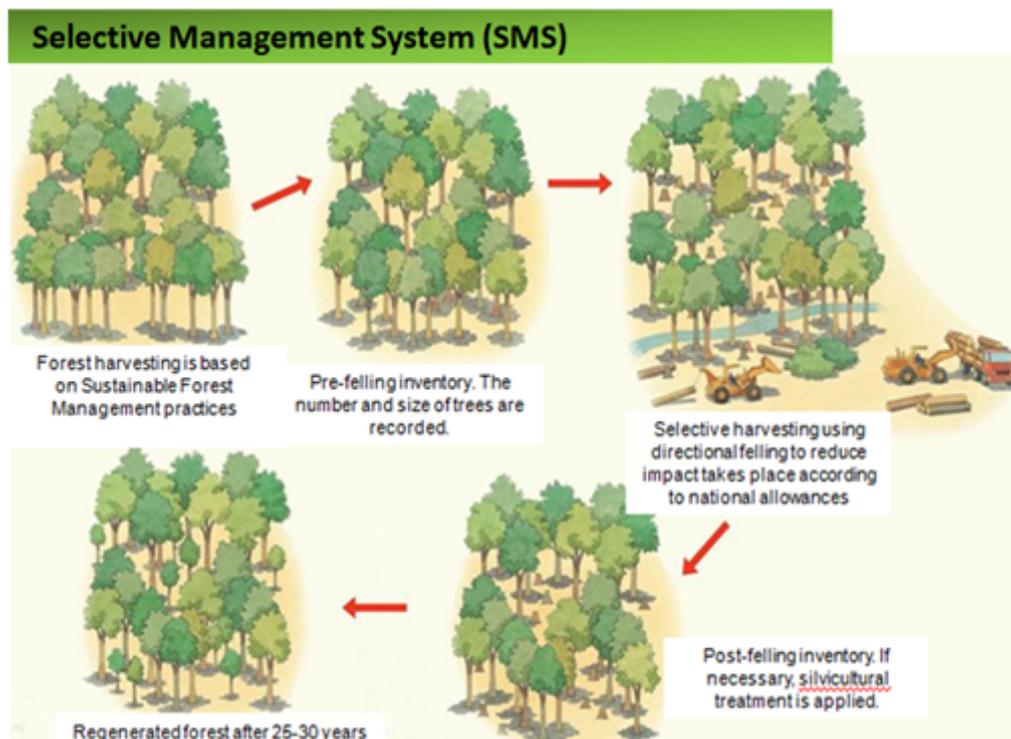


Figure 3.6: Selective Management System (MTC, 2018)

The supervision of SMS is carried out by state forestry departments (SFD), state agencies that fall under the FDPM. Apart from that, FDPM is also responsible for the administration of Malaysian Criteria, Indicators, Activities and Standards of Performance (MC&I) Certification, which is awarded by the Malaysian Timber Certification Council (MTCC). MC&I is based on the criteria and indicators formulated by the International Tropical Timber Organization (ITTO) and is used as a standard with which to assess SFM in Malaysia. So far, only the states of Kedah, Negeri Sembilan, Pahang, Perak and Selangor have been certified. Apart from the MTCC, there are also other forestry organizations that provide services connected to forestry and timber, such as the Forest Research Institute of Malaysia (FRIM) and Malaysian Timber Industry Board (MTIB). While these organizations are supposed to be autonomous, the services they provide are commonly

¹⁰ Forest development fund

integrated with the government, indicating a lack of autonomy of the services provided by these organizations (Yong, 2006).

Over the years, there has been little change made in how SFM is being carried out. However, despite its continuous use as a forestry management system, it is important to stress that SFM in Malaysia was developed from colonial practices of sustainable resource control, and the historic use of so-called scientific forestry by colonists to gain and maintain control over resources in its territories has since been entrenched in modern discourses (Garcia-Lopez, 2018). Therefore, the fact that SFM was developed based on an economically-focused system cast doubts on the sustainability aspect of SFM and further highlight the importance of exploring solutions to address this problem.

3.3.2 Other Agencies in Forestry Governance

The overall governance of forests in peninsular Malaysia involves multi-level agencies and policies that not only span across the levels in government – federal, state, local – but also across different sectors of physical development – forest, land, mineral, etc. Forestry governance overlaps with responsibilities of other agencies - such as for mining and agriculture - as well as the governance of other resources such as water, marine, and wildlife. This creates conflict between the agencies, where territory and jurisdiction become a contested resource, an issue common among colonial forestry governance across Southeast Asia (Vandergeest & Peluso, 2006). In Malaysia, most of these agencies such as SFD and FDPM, are located within the Ministry of Natural Resources and Environment; while others, such as land use fall under the Prime Minister's Department [see Hezri (2016), Marzukhi, Omar, and Leh (2012) and Kathirithamby-Wells (2005) for further clarification]. Understanding the formal roles of all these agencies, especially those that fall within the remit of forestry allows the identification of state actors involved in forestry governance, an important factor in the subsequent analysis of power relations presented in Chapter 6. However, since the emphasis of this research is primarily the governance of PRFs, and this is intrinsically tied to the governance of land, the focus of this section will only be on agencies that are connected to the land and forestry nexus.

As a federation, land use planning is formally divided into three tiers; federal, state and local. At the federal level, overall development planning is primarily guided by the Five-Year Malaysia Plan (FYMP) and the National Physical Plan (NPP) that requires the approval of the Cabinet. FYMPs involve the planning of every single aspect of the country, including land use and forest protection and are under the remit of the Economic Planning Unit, an agency within the Prime Minister’s Department. Currently, Malaysia is in the 11th Malaysia Plan¹¹ (11MP), supposedly the ‘final leg in the journey towards realising the Vision 2020¹² (Malaysia, 2017). Malaysia Plans guide state level planning, by means of documents such as Regional and State Development Plans (SDP) and Structure Plans (Marzukhi et al., 2012). These documents are produced by State Authorities via the State Planning Committees (SPC). At the lowest tier is the Local Planning Authority, whose responsibility primarily involves preparing local plans or special area plans that require the approval of the SPC (see Figure 3.7).

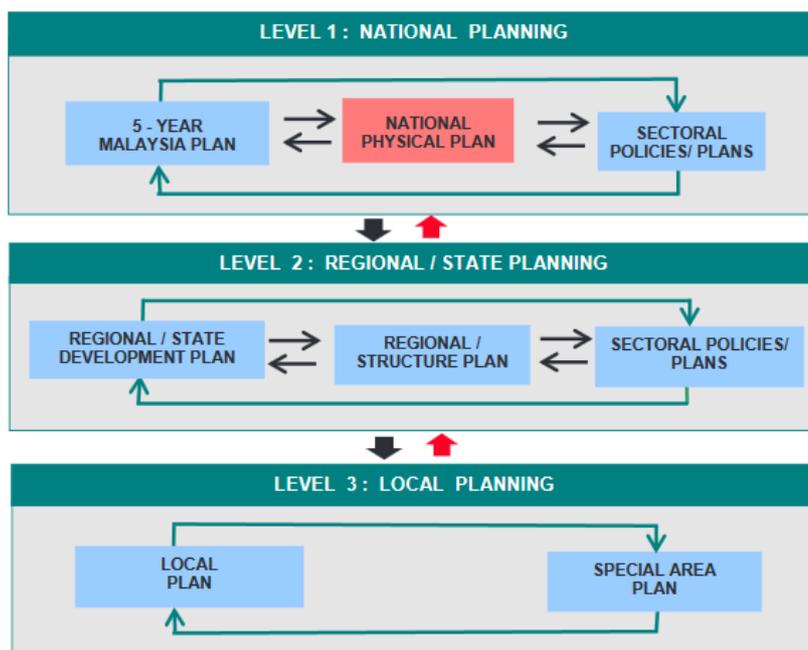


Figure 3.7: Development Planning Framework [adapted from (PLANMalaysia, Year Unknown)]

¹¹ Malaysia Plans are five year development plan which started from the First Malaysia Plan in 1966

¹² A set of development goals introduced in 1991 by third Prime Minister, Mahathir Mohamed, to be achieved by the year 2020

The link between PRF and land governance can be found within the FYMP, NPP and State Development Plans (SDP). Although it is usually not made explicit, land use planning by the federal and state government can affect areas designated for forestry such as PRFs and state land forests. Where some other forms of development take precedence, the status of state land forests and PRFs can easily be changed. In regards to managing PRFs, however, these reserved areas are within the remit of the Ministry of Natural Resources and Environment (MNRE), where the responsibility regarding timber and forest plantation is shared with the Ministry of Plantation Industries and Commodities (MPIC). This poses a coordination challenge (Chandrasekharan, 2005; ITTO, 2005) due to the dual responsibility of both ministries over forest products. Within the MNRE, the management of PRF is technically given to FDPM¹³, but the practical responsibility of PRF management is carried out autonomously by SFDs. Although both SFD and FDPM belong to the same ministry, SFDs are accountable to their respective State governments, and handle the actual administration and management of resources, which includes enforcement and revenue collection (Kathirithamby-Wells, 2005). FDPM is limited to forest sector planning, training, research and development, and technical advice and services.

The division of responsibility between the planning and managing authorities and agencies follows a hierarchical order that starts from federal to the local level. However, practical application of this hierarchy generates multiple conflicts, due to the division of power in the Federal Constitution. Within the constitution, town and country planning appears on the Concurrent list (see Section 3.1), indicating that both federal and state government may perform this function. However, land and forest has been designated as a state matter, which has been used to justify the state government's ultimate authority on any dealings that are related to land (Meng, 2013). This means that despite the centralization of power to the federal level in recent years, in matters pertaining to land and forestry, power has remained at the state level, causing conflict between federal and state, especially between states controlled by opposing political parties and the federal government. In an effort to minimise conflict, several councils were established to harmonise and coordinate

¹³ As mentioned earlier, Sabah and Sarawak's PRF governance is within a separate agency

operations between these two tiers. These councils include the National Land Council (NLC) and the National Physical Planning Council (NPPC) and are headed by either the prime minister or the deputy prime minister, with representatives from different states. For forestry, the NLC established a National Forestry Council (NFC) that serves as an avenue for federal and state government to discuss forestry management. This council is chaired by the deputy prime minister, also with members consisting of chief ministers of all 13 states (Nuruddin, 2015). Decisions made by the NFC must first be endorsed by the NLC, but the implementation is left to the respective state governments. Furthermore, the concentration of power at state level means state governments are at liberty to make changes to the plans, ensuring that the ultimate deciding authority is the state government (Meng, 2013).

3.3.3 Policies and legislations

In terms of policies and legislations, the NFA 1984 remains the supreme legislative document, however, there are other various laws, enactments and legislations that have been introduced over the years. The complex nature of land and forestry planning necessitates the use of multiple provisions to guide the management of these resources. In regard to planning law, the Town and Country Planning Act 1976 (TCPA 1976) and the National Land Code 1965 (NLC 1965) are some of the main legislations frequently used. For PRFs specifically, the National Forestry Policy 1993 (NFP 1993) supplements the provisions stated in the NFA 1984. Aside from these, there are also other enactments and policies connected to general forestry governance in other types of forested land (such as state forest, wildlife reserve). Table 3.3 provides the complete list of the major and supplementary legal documents that are connected to the governance of forestry

Year	Policy/ Legislation	Purpose
Main Legal/Policy Document		
1978/1993	National Forestry Policy	streamlining and strengthening forest laws for forest management planning and forest renewal operations; amended in 1993 to incorporate SFM
1984	National Forestry Act	to ensure effective forest administration, utilisation, management, harvesting and reforestation based on the principles of SFM
1965	National Land Code	main document for land administration; contains provision relating to zoning and land use; to ensure the uniformity of land laws and policies in Malaysia
1976	Town and Country Planning Act	provides responsibility for the state government to plan the use and development control of land; amended in 2001 to incorporate sustainable development principles
Supplementary Documents		
1954	Aboriginal Peoples Act	regarding provisions provided for the aborigines, including rights to aboriginal forest reserve
1960	Land Conservation Act	relating to the conservation of hill land and the protection of soil from erosion; connected to National Land Code in regards to the role of Land Administrator
1974	Environmental Quality Act	for the prevention, abatement, control of pollution and enhancement of the environment; contains provisions for EIA, an assessment document for land development

1974	Street Drainage and Building Act	and	to consolidate laws regarding street drainage and building in local authorities
1980	National Parks Act		for the protection of biologically critical areas;
1985	Malaysian Forestry Research and Development Board Act	and	to establish forestry board and the administration of funds for research purposes; based on ecological and economic principles
1994	Mineral Development Act		for the inspection and regulation of the exploration and mining of minerals and mineral ores
2010	Wildlife Conservation Act		for the protection and conservation of wildlife
2016	National Policy on Biological Diversity	on	updated from 1998 policy; for the conservation and sustainable use of biodiversity

Table 3.3: Policies and legislations connected to PRFs [adapted from Nuruddin (2015) and Marzukhi et al. (2012)]

All the legislation listed in Table 3.3 covers various aspects of forestry governance and includes issues from the rights of indigenous groups, to wildlife management and protection. However, for the purpose of this thesis, only specific items that contribute to conflict in PRF management and development will be discussed.

3.3.3.1 Flaws in PRF Policies

NFA 1984 highlights the duties of the Director of the FDPM, however as mentioned previously, State government control over the overall decision-making processes means that actions taken by the Director require approval of the state government. As stated in the Act, *‘all forest produce situated, lying, growing or having its origin within a permanent reserved forest or State land shall be the property of the state authority’* ("National

Forestry Act," 1984). In fact, the NFP 1993 also identified the position of the FDPM as merely ‘*assisting*’ and ‘*advising*’ the state government on the implementation of the forestry policy.

Based on records found in Hansards¹⁴, the implementation of the NFA 1984 was problematic due to the ambiguity of several provisions within the Act, one of which involves the management of the different classes of PRFs. Within the first few years of the NFA 1984 implementation, Members of Parliament (MPs) began questioning the administration of the reserves as well as questionable practices of ‘sustainable’ logging, which caused a significant amount of protest as there was visual evidence of cleared logging in PRFs. The Act, which was introduced to “*achieve the purpose of uniformity and updating of the country's forest law*” (Megat Junid, translated from Hansard of the House of Representative, October 16, 1984), was clearly implemented for a more economic purpose. In fact, it was further explained that the system of PRFs were established in order to

‘Develop the forestry sector systematically for long term benefits’ (Megat Junid, translated from Hansard of the House of Representative, October 16, 1984)

One of the reasons for the conflict caused by the NFA 1984 is in how PRF itself is defined. The Act stated that land designated as PRFs does not have to be; legally or by a universal definition, a forest. This means that any type of land can classified as a forest reserve, even one without a single tree on it. Another issue is observed in Article 11 and 12 of the NFA 1984, where the former allows the state government to excise PRF land if it ‘*is required for economic use higher than that which it is being utilized*’, but the latter fails to give clear specification regarding the quality or type of land that the PRF must be replaced with.

Another major omission from the NFA 1984 is the absence of legal participation provision that allows the involvement of non-state actors such as the public to contribute to forestry

¹⁴ Hansard of the House of Representative

governance. This is especially important, as not only is public participation the main issue analysed in this thesis, but the absence of participatory mechanisms affects how conflicts in forestry governance will be played out. Although there are brief mentions of public participation in the NFP 1993, other than the fact that the document is non-binding, the provision is also vague, alluding more to the involvement of the public in small forestry-based enterprises rather than actual meaningful participation. Other acts and legislation have also contributed little to providing avenues for invited participation, but rather added to the conflict arising from the division of powers and responsibilities specified in the federal constitution. The TCPA 1976, for instance, stated that participation may take place within specific land development, but the scope for meaningful participation is narrow, as it only involves participation at a later stage of the decision-making process.

3.3.4 Sustainable Development and Incorporation within Forestry Practices

Years of economic-centred development put undue stress on Malaysia's forests and environment. By the early 1990s, there were rising national and global concerns regarding the questionable logging practices in Malaysia. In 1995, data showed that of the 14.4 million hectare of PFRs gazetted, only 3.4 million was classified as protected, while the status of the remaining 11 million hectare was unclear. Partly an effect of the Rio Earth Summit and the rise of the sustainable development concept, internal concern regarding how PRFs were managed rose in tandem with the pressure put upon Malaysia by international NGOs and other countries.

As a result of the dual pressure, a greater emphasis on sustainable development was introduced, partly for the practicality of the concept that promotes a sense of 'holistic' development, but mainly to stop further scrutiny from international sources (Kathirithamby-Wells, 2005). By incorporating explicit sustainable development policies, forest related guidelines such as the NFP 1978 and the NFA 1984 went through significant amendments, in line with the integration of the concept across Malaysia. In fact, the timber certification system¹⁵ currently administered by the FDPMP was actually introduced shortly

¹⁵ The MC&I (see Section 3.3)

after the Rio Earth Summit as an effort to provide a standard for forestry management in PRFs. However, while the commitment towards sustainable forest management is based on the three pillars of sustainable development (Jusoff & Taha, 2008), the fact that the certification itself is awarded by the Malaysian Timber Certification Council, a council whose board of trustees are mainly from the timber-based industry, implied a more economic oriented approach.

3.4 Conclusion

Over the years, the federal government, monopolised by the BN, consolidated power via the use of coercive laws such as Internal Security Act, Official Secrets Act and Printing Presses and Publications Act (Loh, 2009). Described as '*coercive legalism*' (Loh, 2009: 195), Malaysia is now a semi-democratic government that is in paradox to the formal institutional arrangements. The centralization of governance, as well as the bias in the Federal Constitution, which allocates the bulk of '*legislative and fiscal powers*' at the federal level (Ostwald, 2017: 489), makes economic development less sustainable, and development planning is relying more and more on private consultation, resulting in a more project oriented, and politically controlled development.

Despite that, Malaysia's rapid transformation since *Merdeka* results in rising income and massive reduction of poverty (Lee & Hutchinson, 2017) and high urbanization rate between the 1980s and the 1990s led to mass migration of *Bumiputeras* and Malays from rural to urban areas and from poorly developed to more urbanised states; and has helped in reducing the disparity in ethnic composition in each states. However, Malaysia still relies largely on natural resources exploitation. Although there has been a general decline of reliance on the agricultural and mining sector, it indicates instead a shift in economic planning, where there is an increasing trend of developing land and forests not just for palm oil and timber plantation but also housing and urbanization. Furthermore, despite the introduction of other environmental concepts such as ecosystem services and climate change mitigation, and the use of new instruments such as Reducing Greenhouse Gas Emissions from Deforestation and Forest Degradation (REDD) (Hezri, 2016), PRF

governance has remained largely the same. Deforestation, unfortunately, is still occurring at an alarming rate.

This shift in economic planning in Malaysia is due to the single minded aim of the federal government to transform Malaysia towards its Vision 2020 goal: a developed nation with high income status. Unfortunately, development in this vein, where land and forests are continuously being sacrificed for urbanization and economy, is unsustainable (Lee & Chew-Ging, 2017). It neglects the social and environmental aspect of development, making Malaysia's current development framework fragmented (Hezri, 2016) and highly vulnerable to current climate change issues (Lee & Baharuddin, 2018). In the global world, the management and governance of forest has put Malaysia under international scrutiny, due to Malaysia's forest practices. Added to this global conflict is the 'war on definition' where tropical forest countries such as Malaysia and Indonesia push for a forest definition that encompass 'all types of forest' rather than just natural tropical forests (Hezri, 2016). The utilization of a broad categorization of forestry allows for a more relaxed definition of forests, inflating the statistical figure of current forest cover data. In fact, as Hezri (2016) stated, establishment of PRFs is '*underpinned by the logic of wise or rational use of resources*' and based on the earlier sections, it is evident that economic pursuits drive the management and governance of forestry resources in this country. This, unfortunately, runs counter to current environmental paradigms that are concerned with forestry conservation and protection.

Different legislations pertaining to land and forest mostly reaffirm the state government's power in managing and developing the forest and land, and for forestry related laws, most fail to provide strong legal requirement that can ensure the protection of the forest or the preservation of its environmental and cultural value. While the NFA 1984 itself is very detailed regarding issues such as penalty, types of licences and permits as well as payments of cess; it is vague regarding how 'forest management' or 'reforestation' should take place. Hezri (2016), also argues regarding the inadequacy of Malaysia's environmental policies, by providing evidence of policies made based on scientifically inappropriate assumptions. For forestry, this is very much the case, as current forestry policies, legislations and management plans are made on the basis of economic resource development, not ecology

or environmental conservation. In addition to this, there were no mention of the role of the public in forest management and development, highlighting another fundamental problem in the management of PRF; the lack of public participation in forestry development.

State-federal conflict, which defines the fundamental issue of power and control over natural resources in Malaysia, is driving most of the land and forestry related issues that the country is experiencing. The centralization of federal power does not extend to matters of land and forest, which have been jealously guarded by the respective states. Observed in the failure of policies and legislations to coordinate and integrate sustainable forestry practices, these documents instead further reaffirm the power of state over land forest. In fact, the acts and legislation have also failed to provide sufficient provision that can protect and conserve the forest. Because the guiding document, the NFA 1984, was written for the continuous exploitation of forestry resources that followed the trajectory set during the colonial era, it failed to provide strong laws that can protect forest from being utilized indiscriminately by state governments.

Overall, there has been very little provision that specifically encourages or even allows public participation in forestry governance. As mentioned, policies focused mainly on forestry management, with State government the main actor in controlling forestry resources. While public participation can be found in non-binding policy documents, the absence of meaningful participatory mechanisms in forestry governance highlights discrepancies in a system that supposedly operates based on the principles of sustainable development. As observed during the colonial era, the British created the commercialisation of natural resources in Malaya, which resulted in the influx of Chinese and Indian immigrants, thus effectively changing the population of Malaya. As a result, Malaysia had to continuously battle against an ethnic-based economy, which contributed to rising ethnic tensions. After *Merdeka*, economic growth became the dominant narrative, as it allowed the reduction of poverty and increase of income amongst the people. Unfortunately, this has put pressure on the forests to produce a continuous supply of resources, making State governments even more protective of their land, and Federal government unable to exercise their power for fear of political backlash. Added to this conflict is the practice of New Economic Policy (NEP), initiated to reduce the economic

gap between the Chinese and the Malays, but instead creating a class of elites that continuously benefitted from the special privilege provided by the NEP. However, the NEP has also created a new social group of middle class Malays who ironically, are increasingly less dependent on the NEP. Hence, the creation of the middle class Malay created a new path towards a community that are becoming more aware of universal issues of participatory democracy, justice and human rights (Saravanamuttu, 2001).

Malaysia is faced with a challenge that results from the rising concern with environmental degradation, where the government is increasingly pressured to balance continuous economic growth and environmental conservation and protection. However, this chapter shows that the fundamental principle that drives the governance of forestry has not evolved. Instead, despite the evolution of the political, and social climate, the governance of forestry is still driven by economic reasoning, which has not changed since the colonial era. Despite the implementation of sustainable development, a truly sustainable practice is not evident.

CHAPTER 4: METHODOLOGY

Previously in Chapter 2, the failure of sustainable development initiatives in incorporating the social element, as evidenced by the poor incorporation of public participation approaches have been highlighted. Failure to address different social and moral values of diverse actors can result in unsustainable growth. Chapter 3 illustrated this problem in terms of the forestry governance in Malaysia, and drew attention to the evolution of forestry management and incorporation of sustainable development in PRFs. Taking the governance of PRF as an example, the aim of this study is to explore conditions that promote or inhibit meaningful participation, and how this affects the sustainability of forest governance. The aim is achieved by understanding the interaction between the public and other agencies that make up the network of actors that drive the development of PRFs, and how public participation occurs within this context. As addressed in Chapter 2, the case for the use of environmental justice perspective is made, as both an analytical and evaluative lens that can be applied to understand public participation from a rights-based perspective as well as to identify the conditions in which public empowerment can occur. Following these chapters, the purpose of this methods chapter is to outline the steps involved in achieving the research objectives. Starting with framing the theoretical and conceptual perspective that drive this research, the use of case studies as a research design and the parameters used to identify the cases in Malaysia are then established. This is then followed by an overview of the data collection methods as well as the analysis and the reflection process involved in the interpretation of the data.

4.1 Qualitative Methods

Driven by critical realism, this research is prompted by existing conflicts in PRF governance and is guided by the concepts of public participation and environmental justice. Critical realism, according to Fletcher (2017), is used to search for causation, which helps *‘explain social events and suggest practical policy recommendations to address social problems’*. It utilizes initial theories to facilitate in-depth analysis that can help build accurate explanation of reality and in the context of this case study it facilitates

the methods used for data collection in order to explore the relationship between the multiple actors involved in forestry and the issues in participation process in PRFs. Because this research requires an intensive data collection to understand the power relations that exist between the actors and participatory events that took place in four case studies, a qualitative approach was adopted. Qualitative methods, in the most general sense, emphasize words rather than numbers (Bryman, 2016) and are applied in this research to provide understanding to the whole process of PRF development, the actors, and the various conflicts in the cases. Bryman (2016) also explains that although qualitative methods are usually used in order to generate theory, which is not the aim of this research, it is nevertheless applicable as it allows understanding of the phenomenon which quantitative methods are not able to provide. Quantitative methods are generally more linear, which is different from qualitative methods that allow the utilisation of an iterative approach. An approach adopted for this study, iteration is used as a reflexive process that can provide insight and develop meaning (Srivastava & Hopwood, 2009) to a particular event or phenomena. To carry out qualitative research, Bryman (2016) provides a visualization of the research process, based on the work of Foster (1995) on crime in communities. The steps, presented in Figure 4.1, present six common steps in conducting qualitative research.

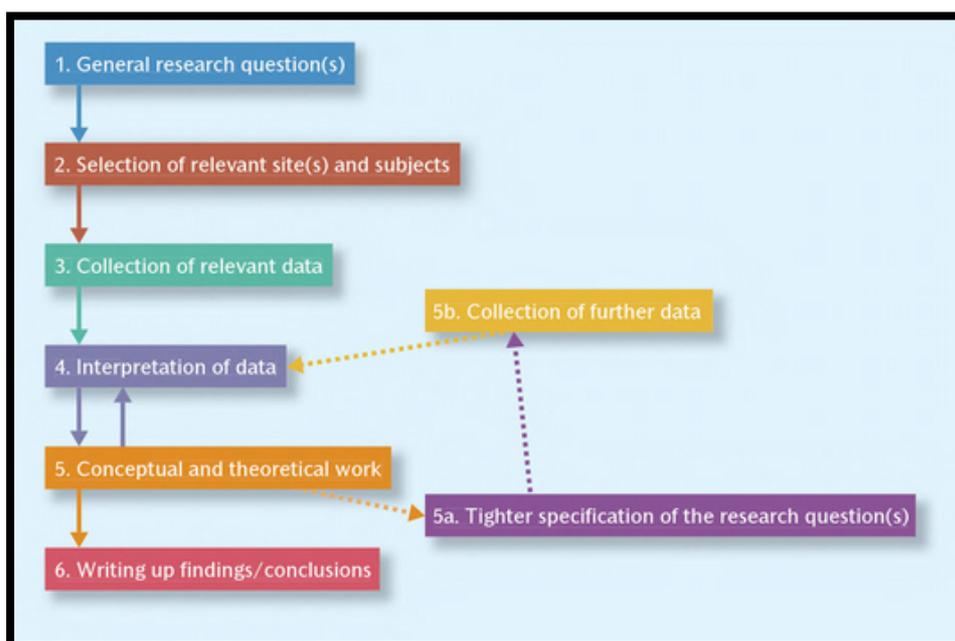


Figure 4.1: An outline of the main steps in qualitative research (Bryman, 2016:379)

Using these steps as a guide, this research started by producing research questions which were presented in Chapter 1. As discussed, the practices used in PRF was formulated as an approach that allows the sustainable use of forest resources. However, the governance of PRF is driven by State government, and are motivated by economic purposes, despite the existence of federal policies and legislations. Based on the research questions, data collection was motivated by the assumptions that; 1] power relations between actors shape the governance of forestry resources, resulting in justice issues in the public participation process; and 2] communities responded to this phenomena in different ways, depending on their intrinsic capabilities to act against established structures. These lead to the main aim of this research process, which is to explore the conditions that promote or challenge meaningful participation of the public in forestry governance.

The next step involves the selection of study site and study subjects, which is discussed in section 4.3.1. This is followed by data collection, discussed from Section 4.3.2 onwards. Section 4.4.3 presents a detailed account of data analysis, while the subsequent step of conceptual and theoretical work is based on the concepts of environmental justice highlighted in Section 4.1.1. To emphasize, this research does not involve the generation of a new theory, but rather the findings are used to answer the research questions.

4.1.1 Environmental Justice Concepts

The use of environmental justice, as justified in Chapter 2, is to provide a rights-based analytical lens with which to explain and evaluate the public participatory process that occurred in the case studies. Using environmental justice to analyse public participation has been widespread (see Paloniemi et al. (2018), Paloniemi et al. (2015) and Coolsaet (2015) for example) but the basis of analysis has been largely conceptual, allowing multiple perspectives on what is to be considered as distributive justice, procedural justice and justice as recognition.

Using the same conceptual understanding of environmental justice that was derived from multiple sources, I extracted a set of statements and questions that could be used as a broad standard to guide the evaluative part of this analysis;

1. Justice as recognition – Walker (2012) defined recognition as ‘*processes of disrespect which devalue some people compared to others*’ which includes ‘*unequal patterns of recognition across social groups*’ (2012:50). In this context, it was framed as the inability of certain groups within a society to contribute to participation, where equitable participation requires the conscious recognition of social and cultural differences of the participants (Fraser & Honneth, 2003). This was further developed by Coolsaet (2015) who highlighted that knowledge systems also influence how socio-cultural value is perceived, and injustice may occur if there is a dependence on a dominant knowledge system, regardless of equal participation. Coolsaet stresses the ‘ontological and epistemological recognition’ that will allow alternative practices to be practicable solutions. In the context of this research, the statements explain recognition as the act of recognizing different groups of society in a participation process as well as recognizing and accepting different socio-cultural perspective and knowledge system in forestry. Therefore, analysing recognition was loosely guided by two questions:
 - a. Are there unequal patterns of participation across social groups?
 - b. Is there unequal recognition of views, perspectives or knowledge systems within the participation process?
2. Procedural Justice – Procedural justice refers to the ‘*fair and equitable institutional processes of a state*’ (Schlosberg, 2007:25) which argues for a ‘a broad, inclusive and democratic decision making procedures’ (Walker, 2012). Both these authors developed these concepts where procedural justice focuses on the *process* that produces inequality. Therefore, in the context of this research, procedural justice corresponds to the ways in which public participation is organized by the authorities; in the policies or practices involved in formulating the participation/decision-making process; access to information and how fair is the incorporation of public ‘participation’ in decision making.
3. Distributive Justice – Distribution of resources, or environmental goods/bads was initially the central theme in environmental justice. Over time, this concept has

grown to incorporate recognition and procedural issues. In the context of this research, distributive justice is applied as part of the process evaluation, one which looks at distribution as pre-condition to participation. This draws on Fraser's (2002) work on parity of participation which focuses on economic support, political representation and cultural recognition that affects participation. Focusing on the original view of the 'what' of distribution as well as the Rawlsian concept of 'justice as fairness' (Rawls, 1971), this research focus on the distribution of resources that will allow the public to participate. This puts distributive justice on a similar path to recognition and procedural justice – as a precondition to participation

4.2 Ethical Considerations in the Research

Ethical considerations were reviewed continuously throughout this research, due to the topics discussed as well as the data collection process that involved multiple actors representing different agencies. The topic of forestry and PRF governance is largely political and for years, forest governance in any part of the world has encountered various conflicts, be it from national and international organizations concerned with sustainability and climate change impacts; or marginalized citizens such as forest dwellers and indigenous groups whose links to the forests are threatened by development. In Malaysia, the topic of forestry invokes various reactions from the citizens and authorities, among them dissatisfaction and distrust among the actors. While there may not be any overt negative reaction, addressing these issues with interviewees still required considerable care, as government dealings are quite often considered confidential, and any statement that can be taken as 'anti-government' may be perceived as seditious.

Prior to data collection, ethical approval was obtained from the General Research Ethics Committee of the University of East Anglia (Appendix 1). Throughout the data collection process, the research and interview measures were adapted in order to respect ethical guidelines. These measures included:

- i. Consent. I initially started my fieldwork by utilising the standard authorisation form. However, early in my fieldwork I realised that the form, which was given prior to an interview, became a deterrent as interviewees viewed it as a physical record that could be traced back to them. In addition, interviews with those who did sign the forms became more formal and I was unable to explore more with my questions. For the rest of fieldwork, I requested only oral consent, which is not recorded as it was asked at the start of the interview, as it also involved requesting consent for the interview to be audio recorded.
- ii. Group interviews. In certain situations, such as in villages or meeting with a group of officers, I had to adapt my interview methods by conducting the interview with multiple participants simultaneously. This is because meetings such as those were often unplanned, and the interviews progressed naturally from our initial conversation. Therefore, it was more efficient and practical to continue with the interview rather than requesting to meet with the participants at a later date, especially when it involved villagers in remote areas where long distance communication is often an issue.
- iii. Anonymity. Due to the political nature of some of the issues discussed, anonymity was crucial. Therefore, all the interviews are anonymised, and the participants are identified only by their role in society or affiliation to an agency. In certain cases, keeping participant anonymity from each other was difficult, as some interviews were arranged through the recommendation of another participant. However, these instances were infrequent, and I avoid any direct reference in the quotes that can be linked back to particular participants, to reduce the chance of the participants recognizing each other.

4.3 Research Design

The nature of this research, which requires understanding the power relations between all actors in forestry governance and how public participation is established in this network, necessitates the use of a case study design. A case study, according to Yin (2017), allows the understanding of a real-world case. Different from other designs such as experimental, case studies do not separate a phenomenon from its context, nor are they limited to very

specific sets of questions or details to study, as in a survey design (Yin, 2017). Case studies can involve a single case, or, as in this research, multiple cases of PRF development in two different states in Peninsular Malaysia. Commonly used in social sciences, case studies nevertheless have to overcome several concerns, one of which is their ability to generalize result (Gerring, 2007; Steinmetz, 2004), which is easier to achieve using quantitative methods that consist of large sample sizes. Concern regarding the generalisation of data has led some critics to suggest the use of case studies only for very specific purposes, such as generating hypothesis and theories. However, advocates of case study designs instead counter that a case study can be very in-depth [see Yin (2003, 2017) and Flyvbjerg (2006)], and may uncover aspects of a particular case that cannot be achieved via other research methods (Flyvbjerg, 2006). The issue of generalization is also more prevalent for generalizing within a population, and a case study has, in fact, more merit than quantitative methods in providing theoretical generalization (Tsang, 2014). The notion of theoretical generalization, rather than population generalization, emphasizes that a case, or case studies, do not represent samples, and can't therefore be generalizable to populations (Yin, 2003, 2017).

For this research, the case or phenomenon studied is public participation in PRFs. As a forestry governance initiative, the development of PRF is a contemporary issue that is creating conflict between the government and the public. As the phenomenon being studied, using case studies to understand the development of PRFs allowed this research to focus on actor interactions and the justice issues that emerged from public participation processes. The use of multiple cases, instead of a single case study, is also an important fact to highlight, as it can overcome the issue of generalization as well as allow the incorporation of spatially, and politically different context, as the cases are spread across two different states in Peninsular Malaysia, with the cases occurring discretely between 1970 up until 2018 (ongoing).

4.3.1 Case Study Selection: Description and Justification

The reason for selecting multiple case studies is to help examine how a phenomenon functions in different situations (Stake, 2013) and careful selection of cases can allow the incorporation of diverse contexts. Multi case studies are considered quite robust (Herriott & Firestone, 1983) and case studies advocates like Yin (2017) express a preference for multiple case studies over single case, due to the substantial analytical benefits, such as generalization (page 81), and replication. Replication follows an analogous logic so that each case must either '*predict similar results or predict contrasting results but for anticipatable decision*' (Yin, 2017:55). For this particular research, the focus of replication is on the latter, where contrasting results are expected provide evidence for my original assumptions (Section 4.1). Yin called this *theoretical replication*, and it is a method carried out by selecting cases based on variances along a continuum of the study variable (Hyde, 2000); which in this context is the civil society and other actors within the governance of PRF.

With respect to the aim of this research, the cases selected reflect the initial assumptions that: 1] interactions between the central actors in forestry shape the process of public participation, and 2] social aspects of the civil society affect both the community response to conflict in participation and its outcome. This therefore sets the parameters for case selection, which include factors such as multi-scale government, community social status and outcomes of public participation. As stated in Chapter 3, state-federal conflict occurs largely due to division of power over land, with State government having control of over decision-making processes. This is an important factor for the selection of the cases, as they must reflect the different dynamics between state and federal authorities. In Chapter 2, I highlighted the invited and uninvited forms of participatory mechanisms, as well as the depth to which participation is practiced. This is also an important factor to consider, as State government participatory policies are not the only factor that affects participation, but variances in the communities are also predicted to affect both the construction and outcome of participation. The selection of the four case studies based on this logic then becomes critical as the different contextual variances of the civil society and other actor

dynamics within the cases will allow the study of the network of actors in forestry governance and the public participation phenomena.

The four cases selected for this study are located in two states in Peninsular Malaysia (Figure 4.2). Peninsular Malaysia is chosen not just based on my familiarity with the area, but also due to the vastly different social and political climate of West Malaysia which means it is difficult to make cross region comparisons between peninsular and West Malaysia. As such, cases have to be located in either one of the regions. The states in question, Selangor and Pahang, provides the most appropriate setting for the cases, as each reflects the different economic, social and political variance in Peninsular Malaysia. Selangor, a state controlled by *Pakatan Rakyat*¹⁶, is the most industrialized state in Malaysia, with high distribution of urban communities and relies very little on forestry resources. Selangor has also made large progress in regards to PRF governance, particularly in the introduction of a new public participation policy in PRF development. Pahang, on the other hand, relies largely on forestry and agriculture, is less developed, with higher proportion of rural communities. Pahang is also controlled by the same political party in the federal government, the BN and has larger tracts of forested land compared to Selangor, but has yet to introduce new policies or practices in forestry that are separate from the federal sanctioned ones.

¹⁶ Opposing political party that governs Selangor since 2008, but now known as Pakatan Harapan (PH)

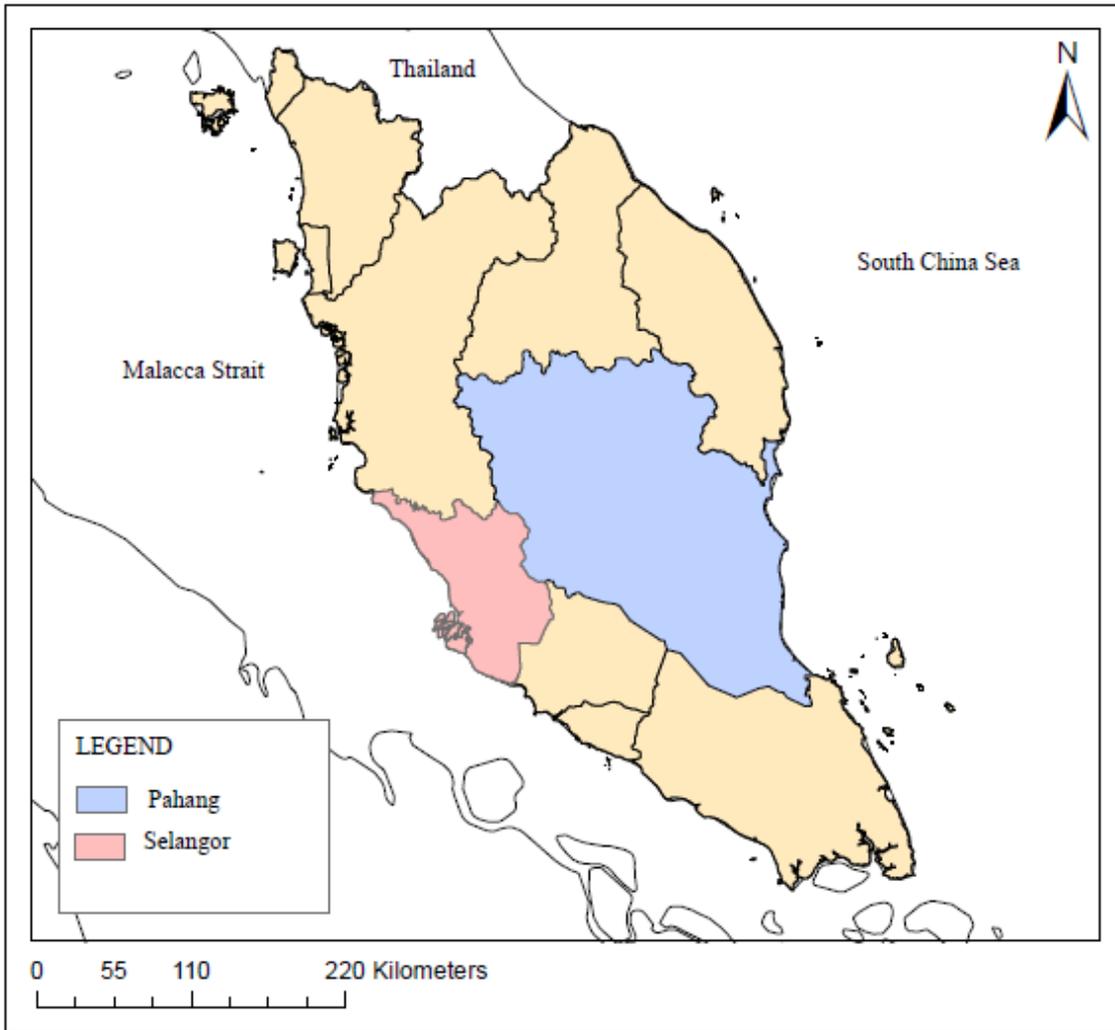


Figure 4.2: Case study locations

Aside from the selection of cases at national level, the first criterion that was essential in the selection of specific case studies was that the cases must involve the development of a PRF that had experienced conflict. A second criterion reflected the different context of participatory processes mentioned early, namely the different social scale of the civil societies involved in each case. Third, each case also reflected the temporal variability of the development. This meant cases that were selected that had occurred at different points in time to reflect the evolution of the public participation paradigm. Using these criteria for case selection, the four different cases of PRF development listed in Table 4.1 were selected.

Case Study	Issue within PRF	Year Case Started	Current Status	State
Endau Rompin	Logging	1972	Resolved	Pahang
Kota Damansara	Housing development	2002	Resolved	Selangor
Ampang	Highway construction	2008	Ongoing	Selangor
Ulu Tembeling	Logging & Palm oil plantation	2016	Resolved	Pahang

Table 4.1: List of case studies

To summarise, the four cases chosen for this study, as indicated in Table 4.1, were selected based on the multi case study design adopted for this research. This not only follows the logic of theoretical replication, but also theoretical generalization. While the situation in Malaysia is unique, particularly the practice of constitutional monarchy with race-based political parties and the system of PRF practiced in forestry governance, the focus on variances in case populations and multi government agencies was done to ensure that findings were generalizable to other cases of conflict that involve invited and uninvited participation. The focus on various multi-ethnic communities as well as various government/non-government actor is important in understanding the power relations between the actors, and how this shape public participation. As such, it allows the findings of this multiple case study to be generalizable to various context of natural resource governance, especially in situation that involves conflict in multi-actor interactions and different forms of participation. Further detail on the cases is given in Chapter 5.

4.3.2 Fieldwork

Considering the number of case studies selected for the research, fieldwork had to be separated into three phases. This was to allow time to cover all four case studies and to carry out the necessary background research and application for access, especially in Pahang, where extra arrangements were needed due to its remote location.

The first fieldwork involved scoping rather than actual data collection, and it was conducted for three weeks in March 2016. It was aimed at identifying the feasibility of doing this particular research, both in terms of practical access and in terms of the specific focus. The second fieldwork was conducted between December 2016 and February 2017 where data collection was carried out in two cases in Selangor. This was followed by a final fieldwork phase between August and October 2017 where the focus was on data collection in Pahang.

The scoping trip in Malaysia was carried out six months into starting my research. Throughout the three weeks of scoping, contacts with key academicians and practitioners of land use and sustainable policy were established. Informal interviews, which were not included in the final data, were carried out in order to strengthen the core research questions and to confirm the feasibility of proceeding with the research. The scoping trip identified key problem areas in land use governance, which includes forestry and PRFs. The trip also confirmed the focus on Peninsular Malaysia, as including Sabah and Sarawak would have been too complex and impractical for a three year project. Most importantly, the trip allowed me to identify key contact persons that assisted me in my subsequent fieldwork. These were the people who, through their contacts introduced me to potential gatekeepers, and other participants. In this sense, the scoping trip was more about establishing connections in the field of land use and forestry, and with additional information collected to confirm the feasibility of the research.

The second field visit was focused entirely in Selangor, where two case study sites were located within 30 km of each other. Prior to this fieldwork, research questions and interview protocols were identified, partly based on the initial scoping as well as extensive literature review and background research carried out using available online materials; organization reports, online newspaper and Hansards. Since the focus of this fieldwork was to explore and test the assumptions that I had previously determined, the methods formulated for this research, along with the interview protocol were designed to achieve the objectives. Throughout, a mixture of semi-structured interviews, informal interviews, and direct observation were carried out. The method of data collection and interview protocol used was also gradually adapted, especially after the first case study in Ampang, mainly due to practicality but also due to the difficulty of garnering interest of the public in the topic of concern. Some of the adaptations include altering the way questions were asked regarding the issue of forest reserves and public participation, as well as questions on relationships with and between other actors. Another adaptation was by specifically targeting key individual in the cases, such as head villager, specific members of NGOs and other actors that I had identified during the scoping and background research. This meant that data collection was carried out in two ways; first by being present on site in both Ampang and Kota Damansara to talk to the community in the area, and secondly by identifying key persons whom I directly contacted or via a mutual connection and setting up an appointment for an interview. For this fieldwork, no gatekeepers were particularly necessary despite the political nature of the topic. A full list of the interviewees can be found in Appendix 4, but in general, they consisted of;

1. The communities
 - a. Ampang – communities in four villages; Bukit Belacan, Muhibbah, Lembah Jaya Utara and Bukit Sungai Puteh
 - b. Kota Damansara – communities in the area of Kota Damansara
2. Local and state authorities - including officers of the local council
3. Members of NGO – Malaysian Nature Society (MNS) and Sahabat Alam Malaysia (SAM)

The final phase of fieldwork, carried out between August and October 2017, was focused on investigating the cases in Pahang. This meant that my time during this final fieldwork was split between Selangor (where I was living) and Pahang, in the two remote case study

sites. Before starting the fieldwork, I spent time analysing data from the second fieldwork as well as reflecting on the interview and data collection method. This allowed me to focus more on the specific issues that were extracted from the first fieldwork, rather than looking at the general context of the research. Another change made was in the strategy used to obtain interviews. As mentioned earlier, interview strategy during the second fieldwork was adapted to give equal focus on key actors who were directly involved in the cases, especially those from Federal and State government. However, for the final fieldwork, a lot more emphasis was given on obtaining interviews from key actors within government and organizations, as well as specific community members that played a prominent role in the cases. This was due to two main concerns; 1] while part of the data involved looking at community members who were not active, this was no longer one of the main focus after the fieldwork in Selangor. In fact, initial analysis indicated that more focus was needed on the actors who did participate and were directly involved in the case. 2] The Endau Rompin case in Pahang started in 1972, and most of the key figures involved in the case had either passed away; moved or were unable to be contacted. This meant that a lot of the data had to be obtained from people with second-hand knowledge (most of whom are not living in the case study site) and from news archive and official records that were located in the *Perpustakaan Negara Malaysia* (National Library of Malaysia) located in Kuala Lumpur. Furthermore, these two cases in Pahang were more remote and have smaller communities, which made it necessary for me to stay with the community, making access to the villagers easier. Smaller communities also meant that there was not that many people to meet, making the process of data collection faster.

Due to the remote location of the two Pahang cases, initial contact was established using a gatekeeper. Gatekeepers are those who have access to the community and allow the research to build a connection with participants (Petts, 2007). There was a need for gatekeepers in this fieldwork as the communities are more rural, more hierarchical, and very tight-knit, compared to the more urban communities in Selangor. In this instance, the gatekeepers were the guides I hired for the case studies. Hiring guides, as well as drivers for the Pahang cases were a compulsory requirement in order to actually find the village and gain access to it. Since the guides were from the villages, they also acted as gatekeepers who introduced me to other members of the community. There were two separate trips made for each case, each trip lasting between four to seven days. The rest of

the time was split between Selangor, Kuala Lumpur and the capital of Pahang to establish contacts and obtain interviews with federal and state officers, members of NGOs, activists and other key actors involved in the case as they were able to provide more focused data necessary to achieve the aim of this research. In general, the interviewees composed of;

1. The communities
 - a. Endau Rompin – communities in the village of Peta
 - b. Ulu Tembeling – communities in the village of Mat Daling
2. State and federal authorities - including officers of FDPM
3. Members of NGOs – MNS, SAM, PEKA and independent activists

4.4 Research Methods

4.4.1 Conducting Interviews

Interviews carried out during fieldwork were based on two sets of interview protocols (Appendix 3), which were written to be adaptable for different actors. The protocols, one for community/NGO participants and a second for government officers, focused largely on the events that were taking place/ had taken place within each case; the participation mechanisms utilized in the cases as well as the network of actors involved. There were additional questions on the second protocol, which explored issues regarding the management of PRF and how the state/federal conflict affects the management of the forests. The questions within the interview protocol were not detailed or long, and rarely did the interviews follow the same structure as in the protocol, but it served as a guide for other lines of inquiry and was adapted for each participant. For instance, Question 8 in Protocol 1 concerned assistance from other agencies/actors that occurred during the case, and depending on the situation, usually led to discussion about other actors that may not have been involved, and the interviewee's perception regarding that. In other instances, certain questions could not be asked at all, for example, interviews with the public who did not participate in the event usually focused more on why they did not participate, rather than their knowledge of the event.

The different social status of the communities in each of the case studies required careful strategy in order to obtain and carry out the interviews. For the more urban communities such as Kota Damansara and Ampang, I initially spent some days establishing my presence in the area, by spending time in the public space in the reserve or in coffee shops. I then initiated conversations with shopkeepers and visitors to the reserve who introduced me to other members of the communities. For the more rural areas such as Ulu Tembeling and Endau Rompin, gatekeepers were necessary. In both Pahang cases, my gatekeepers were the guides I hired to take me into the forest reserve. The gatekeepers not only took charge of the logistical arrangements such as living accommodation but also introduced me to people in the community. For other actors in PRF governance, such as federal and state officers, local authorities and activists, I obtained interviews either through direct contact via their personal Facebook account, email or phone address or via contacts with other interviewees based on a snowball method. These types of interview were more formal and more time was needed in order to set a proper appointment and location for the interview.

In general, exploring the topic I wanted to research was easier once I adapted the way I conducted the interviews. Despite the highly political nature of the topic, it was not particularly sensitive, and for the communities living in the area close to the PRFs, it was mostly a topic they were willing to, and interested in discussing. However, I noted early during the second fieldwork that there is a distinct difference between the type of data I was able to gather between those who had participated in the development cases and those who did not. This was one of the reasons why my interview objectives were adapted slightly and interviews with community members who did not participate were no longer a major focus, as they did little to contribute to the overall research aim. Another strategy I had to utilise to obtain interviews with the communities aside from the gatekeeper was via the assistance of my friend, whose presence helped me garner attention from certain communities. As a Malay woman, my status both helped and hindered me in getting interviews. It helped that I am Malay when obtaining interviews with other Malay members of the community, trust was very easily established due to the intrinsic nature of the Malay culture that is very open to guests. However, for other ethnic groups such as Chinese and Indians, getting interviews from the community was initially a bit difficult, so the presence of my male Chinese friend helped as our presence together made me more noticeable and approachable to the non-Malays. For Kota Damansara, walking around with

my friend made me more approachable to the public, while in Ampang and in Pahang, where there are more Malay and indigenous communities, our presence stood out as a couple with different ethnicities. This helped me as curious community members and villagers were approaching me instead of the other way around.

Interviews with the community members were more informal in nature, as opposed to the formal interviews with key actors that required set interview appointments. With the informal ones, the interviews occurred spontaneously, either initiated by me or by the community. Informal interviews like this initially started with questions about myself and my presence in the area, and although I had anticipated this scenario based on the scoping and the informal conversations I had with other Malaysian academics, large parts of these interviews required improvisation, and had no set objectives or questions. Throughout the fieldwork, as I conducted more interviews, it became easier to steer the conversation to topics related to my research and to introduce the topics of my research in a more natural manner. Because the interviews occurred spontaneously, I was also unable to record or take notes during the discussion. However, I wrote notes from memory as soon as the interview ended, to ensure little information was lost.

In certain situations, informal interviews were also conducted with multiple people. This usually consist of two people, but one instance in Ulu Tembeling consisted of nine people in a single discussion. This situation occurred during my first trip to the village, during dinner at the only one of three *gerai* (local restaurants) that serves the two villages in Ulu Tembeling. During this discussion, it was difficult to take precise notes of what each and every person said, but I paid particular attention to remarks that seemed different from what the majority were saying.

Formal interviews with key actors in governments or activists were more structured. As these were anticipated, each interview was prepared in advance with a complete list of topics to address. These interviews were recorded only after I obtained permission from the interviewees. For those who refused to be recorded, brief notes were made during the discussion, with detailed notes written immediately after. Although formal interviews were

better prepared, there were still adaptations made in the way each interview was conducted. There were those interviewed in official capacity that preferred more structured and clear questions, but the majority of the time, the interview progressed more naturally. Therefore, I was able to make the interviewee more comfortable and the interview became less rigid.

Another point to highlight in conducting the interviews is that it was conducted mainly in two languages; Bahasa Malaysia (*Malay*¹⁷) and English. As the national language, Bahasa Malaysia is main language spoken by the predominantly Malay community in Peninsular Malaysia, while English, though not technically the national language, is a product of the colonial era and used widely in higher education as well as in business. There were also cases where a mix of English and *Malay* – known colloquially as *Manglish* – were used, where certain English words were used in very different context, and mixed together with *Malay*. However, as a native *Malay* speaker who also speaks English, I had no trouble switching between the two languages, depending on whichever language that my interviewee was comfortable with.

Throughout the entire fieldwork, a total of 49 interviews were carried out. This number did not include the casual conversations I had with community members, as these did not contribute to the overall data collected.

4.4.2 Supplementary documents

Apart from interviews, data were also collected from grey literature, such as government reports and policy documents as well as Hansards, and news archive. The main purpose of this was to supplement and provide concrete evidence of the timeline of the cases, particularly for information like dates and records of events that may not be remembered clearly by the interviewees. One case in particular, Endau Rompin relied heavily on data from government and parliament reports and news archive, due to the lack of available interviewees who were able to recall specific details regarding the 1972 case.

¹⁷ Italized to avoid confusion with the 'Malay' ethnicity.

4.4.3 Data Analysis

Analysis was carried out after data had been collected for the first two cases during the second fieldwork, which then shaped the next step of data collection for the final fieldwork in August 2017. This strategy was based on an iterative approach, where there was a *'repetitive interplay between the collection and analysis of data'* (Bryman, 2016). Throughout, analysis of the cases were based on common analytical strategies and techniques highlighted by Yin (2017). In his book, Yin highlighted that analysing case studies can be carried out using either one or a combination of different strategies which include; 1] relying on theoretical propositions, or in my case the initial assumptions presented in Section 4.1; 2] working on data from the 'ground up'; 3] case description and 4] examining rival explanations. These strategies, particularly the first two, were utilized to help link data to the concept of interest, which, for this research, was participation in forestry governance.

Using a combination of inductive and deductive approaches, the data were analysed using a strategy similar to that of grounded theory, where analysis of codes were carried out to identify additional patterns and to give an informative overview. Coding essentially defines what the data is all about (Charmaz & Belgrave, 2007) and makes up the main analytical phase of this research. Prior to coding, interview and field notes were transcribed using the qualitative analysis software, NVivo. The use of NVivo enabled the process of coding to be done systematically, making it easier to identify common themes and concepts. Because the interviews were carried out in either *Malay* or English, or a mixture of both, transcribing recorded interviews was done in accordance to original language it was recorded in. Since I'm a native *Malay* speaker and I have a good understanding of the English language, translation was not necessary. Translating would have required a huge amount of time, and it was possible that translated interviews would have lost their original meaning, which could affect how the data was analysed. However, any quotes used in this thesis were translated and identified as such, and were done carefully to ensure no meanings were lost in translation.

The coding process started with a detailed open coding that allowed an overview of the entire data, where the codes used were more both general and descriptive, using terms like ‘Endau Rompin’, ‘female’ ‘daily forestry activities’, ‘receiving information’ and ‘challenges to conservation’. The coding was carried out mostly line-by-line, which yielded over 180 descriptive codes in the first coding process. This process was not guided by any specific framework, but rather was an open coding exercise. Parts of the interview were also given multiple codes, when they corresponded to more than one category. Interesting patterns that emerged from this process were noted, such as codes that had frequent overlaps or high frequency. Once initial coding was completed, a more focused coding was carried out, where the data were again explored and categorized into bigger themes. The process of assigning the data into themes was guided by the concepts and research questions identified in this study, which utilized a more deductive approach to coding and was done more selectively rather than line-by-line. Because this research looked at actor interactions, public participation and environmental justice¹⁸, coding were guided by these concepts and consisted of 52 thematic codes that focused on: 1] actors and actor relationships; 2] conflicts in forestry governance; 3] public participation mechanisms and 4] environmental justice issues. In this second coding process, codes were assigned based on terms such as ‘State-Federal conflict’, ‘procedural justice’, ‘invited participation’ etc. The codes generated fluctuated throughout the analysis, corresponding to the changes made throughout the analysis stage. This mix of inductive and deductive approach was important, as it allowed a focus on the theories that initially drove the data collection, but also enabled the identification of any additional patterns or rival data that might have been missed.

Apart from the interviews, government reports, organizational memo and letters, and news archive were also included within the analytical stage to help supplement the data collected from the interviews. However, these were not analysed and coded, but certain parts were extracted in order to complement the interview data.

¹⁸ The use of environmental justice concepts, as discussed in Section 4.1.1 guides the understanding of the public participation process from a rights based perspective.

4.5 Reflexive Account

It is generally agreed that qualitative researchers should demonstrate the credibility of their study (Creswell & Miller, 2000) and that each researcher collects and interprets data in a unique way (Bryman, 2016). Therefore, it is necessary to highlight the potential bias that might have occurred during data collection and analysis, by going through a reflexive process in order to understand how a researcher may have influenced the data produced and analysed for this research. This reflexive process involves identifying and documenting the role the researcher may have played during the research and how that affects the interpretation of data. Reflection contributes towards greater understanding of knowledge construction (Mauthner & Doucet, 2003) and there are various ways reflexivity can be taken. Mauthner and Doucet (2003) highlight issues such as the researcher's social location, theoretical perspective, and emotional responses to the respondents as well as the interpersonal and institutional contexts of the research are some of the concerns that can influence research processes and outcomes.

Conducting research in my own country helped as I had no trouble understanding the cultural norms and the processes of its society. However, coming from a middle class background and researching cases with society from across the social spectrum, my position as a researcher had to be continuously adapted, based on where my case study was located. In Selangor, a state I was born in, my presence was not very noticeable. I had no trouble communicating with the community, especially among the Malays. There were initial issues with approaching the non-Malay public, where I adapted by requesting the help of my Chinese male friend to walk around the area with me in order to make me seem more approachable to the rest of the community. However, upon reflection, I realised part of this problem was probably due to my own hesitation in approaching them, as it was easier and faster to establish rapport with another Malay. Regardless, having the presence of my friend for a few days helped in both making me more noticeable as well as overcoming my own hesitation in approaching the community. Over time, with my presence more established, and the fact that my initial conversation with the community led to personal introductions and recommendations to other people, I no longer needed the presence of my friend.

In Pahang, where the community is more rural, my presence was definitely noticeable. Even though I share the same universal ethnic group (*Bumiputera*) as most of the community members (Malay and indigenous people), it was obvious that I came from a different social background. My attire and the presence of my male friend, with whom I conversed mainly in English, contributed to that perception. However, despite the difference in both social and cultural location between me and the community, contact with them was easy, as the rural community was more welcoming, and instead perceiving my threat as ‘alien’, most viewed me as a guest, generally asking me questions about my presence and my length of stay. This ease of communication was also due to the role played by my guide, who was very helpful in introducing me to the community members.

Despite my age,²⁰ I was perceived as young, and the fact that I was there to do research, contributed to people’s perception of me as a student. This was again both a blessing and a curse, depending on the person I was interviewing. For the communities in Selangor and Pahang, this meant that I was viewed as non-threatening, and despite the highly political nature of the topic I was exploring, people were more open to discussing it with me. Some of the interviewees in fact worried for my safety, as a young female walking in the towns/villages mostly by myself, which prompted them to immediately introduce me personally to other members of the community to prevent me from walking around and getting into trouble. However, for interviews with authority figures, most of whom were male and older than me, I was perceived as naïve and unknowledgeable, which means some of the earlier interviews were dominated by the topics that the interviewees deemed more important. I had to work harder to gain control of the interview, a fact which I found difficult to do at first. Over time, I learnt to use that to my advantage, by allowing the interviewee initial control the discussion, making them more relaxed in talking to me at a later stage.

Besides the role played by social factors, data collection and analysis may have been influenced by my own social and political views. Having prior experience working with

²⁰ I was 30 years old at the time of data collection

people in the government, I am highly critical of the practices of the government, especially in regards to forest governance and public participation. To compensate for my own views regarding the subject, I focused on not just understanding the views and the perceptions of my interviewees, but also on triangulating the data as often as possible, either with grey literature or with other interviewees. This included focusing particularly on views that I did not agree with, to ensure that I understood the different perspectives of all my interviewees. For example, as a Malay in Malaysia, I grew up surrounded with very specific notions on what that entitled me to, and the special privileges afforded to *Bumiputeras*. However, living in an urban area, I was exposed to different ethnicities early on, and through my close friendship with people from other ethnicities, I understood how the racial conflict is experienced from multiple perspectives. This, I believe, helped me become more aware of sensitive topics that might arise, especially in regards to race, gender and religion in Malaysia. Some interviewees made it a point to especially stress that there were no race, gender or social related issues in regards to the cases, with which I privately, initially disagreed. However, going through the data again, and focusing more on ‘why’ our views were dissimilar, I understood that these dynamics were overshadowed by more obvious and serious issues of public misrecognition.

Overall, the process of reflection was done continuously throughout the data collection and analysis. With the help of my supervisors who constantly challenged my views into thinking beyond what I assumed, I was able to learn to adapt and focus on the issues about me that may influenced the research process.

4.6 Conclusion

The use of a qualitative approach was important in exploring and understanding the issue of public participation in PRF governance. Using mainly interviews and supported by other government documents, the data were analysed using a mix of inductive and deductive processes. This reflects the iterative nature of this methodologic approach, to ensure the reliability of the analysis. Throughout, reflexive exercises were carried out to allow understanding of the challenges that occurred during data collection, analysis and

interpretation. Following this, a detailed account of all four cases and the timeline of events is presented in Chapter 5.

CHAPTER 5 FOUR CASE STUDIES OF PERMANENT RESERVED FOREST DEVELOPMENT

This chapter discusses the timeline of events revolving around the development of PRFs in four different case studies in Peninsular Malaysia. As mentioned earlier in Chapter 4 (Section 4.3.1), the states of Selangor and Pahang were chosen purposefully to better showcase the differences/ similarities in the governance of forestry in two states in Malaysia that have almost opposing characteristics. As the biggest state in Peninsular Malaysia, Pahang's collection of PRFs is also the largest; five times the size of the reserves in Selangor. Pahang also experiences more overall deforestation due to its reliance on forest resources compared to the more industrialized Selangor, and this includes deforestation of PRFs, where the Department of Statistics Malaysia reported loss of approximately 3,000 hectares of PRF between 2010 and 2016. Additionally, these four case studies, depicted in Figure 5.1, also represent communities with different social class and economic status, and were chosen based on criteria that were also mentioned in Section 4.3.1.

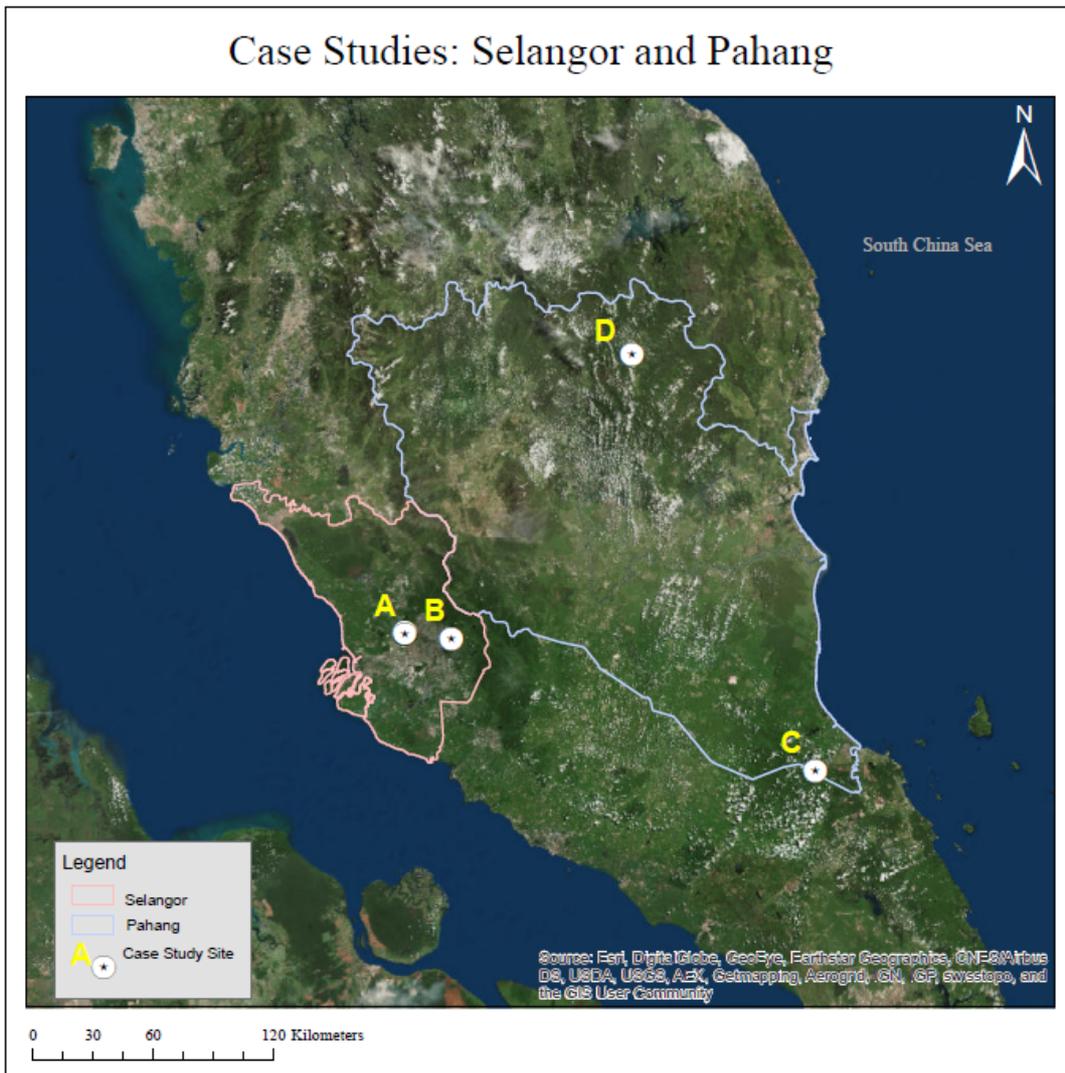


Figure 5.1: Case Studies in Selangor and Pahang (A:Kota Damansara, B:Ampang, C:Endau Rompin, D:Ulu Tembeling)

This chapter separates out the discussion of each case study and starts by illustrating the sequence of events that includes the mobilisation of invited and uninvited public participation. The purpose of this chapter is to allow understanding of participatory methods and community-based responses to forestry development. Data regarding the cases were obtained from first-hand accounts of individuals involved in the conflict, and complemented with other grey literatures and government documents. Some cases have better documentation than others, therefore, where possible, confirmation regarding certain event was obtained to ensure the credibility of the data.

5.1 Kota Damansara Community Forest (Case Study A)

The first case study is located in Kota Damansara (Figure 5.2), a locality in Selangor approximately 3 km from the boundary of Kuala Lumpur, Malaysia's capital city. Consisting of mid to upper-level income residents, Kota Damansara community were mostly professional Malaysians of mixed race. Kota Damansara is also home to the Temiar indigenous tribe, who were relocated in 2002 to Desa Temuan, east of the Kota Damansara reserve (see Figure 5.2). They have since integrated into city life, and now have little cultural or religious ties to the forest reserve. This case was chosen because the community, with the help of several environmental NGOs, organized a successful environmental campaign against a proposed housing development. Studying this case reveals an organized grassroots campaign movement that is considered a success story by all interviewees as it not only resulted in the gazettelement of the forest reserve as a community forest, but also led to one of the first community-managed forests in peninsula Malaysia. Now, the forest is managed by a group of community members and funded via private companies as part of their corporate social responsibility programmes.

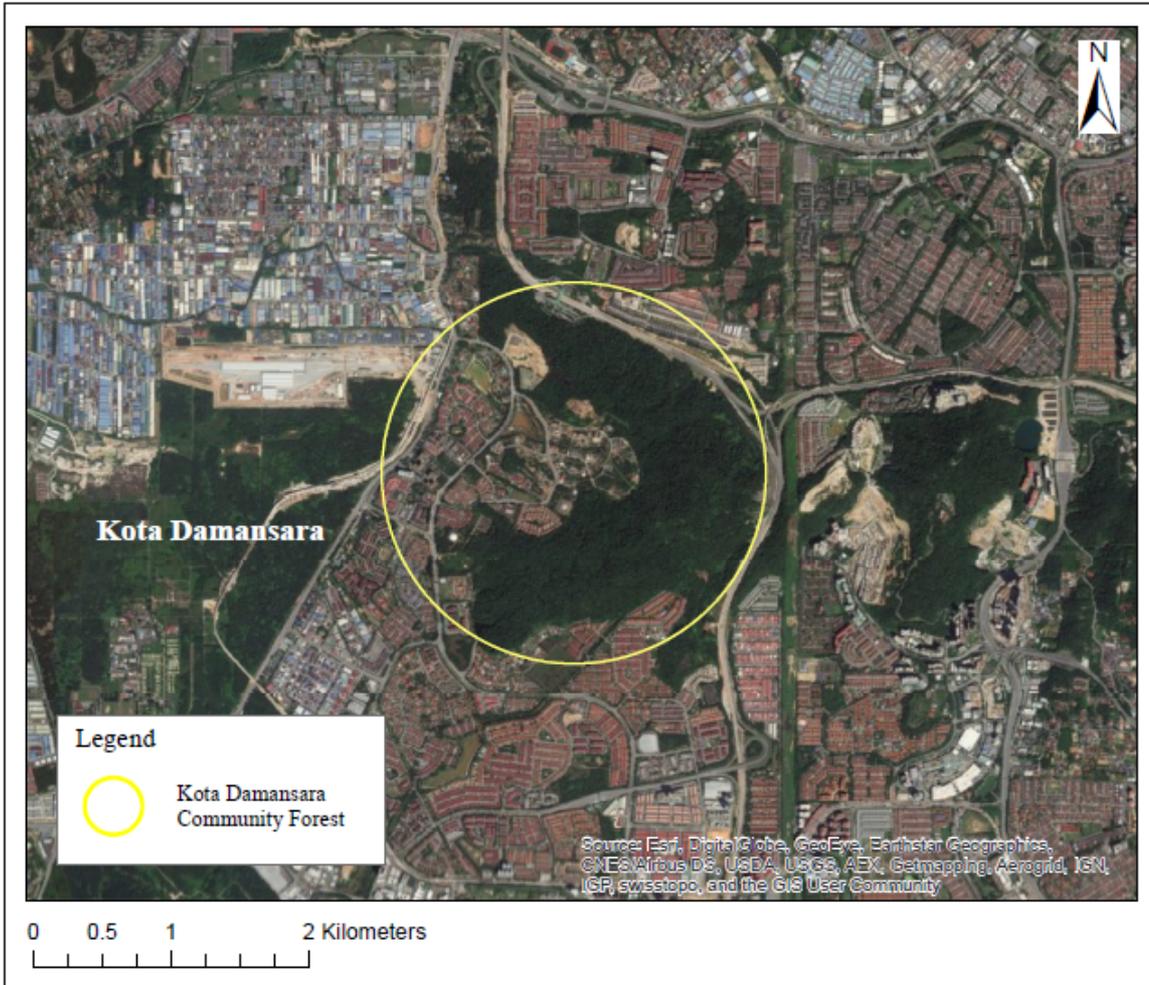


Figure 5.2: Map of Kota Damansara Community Forest

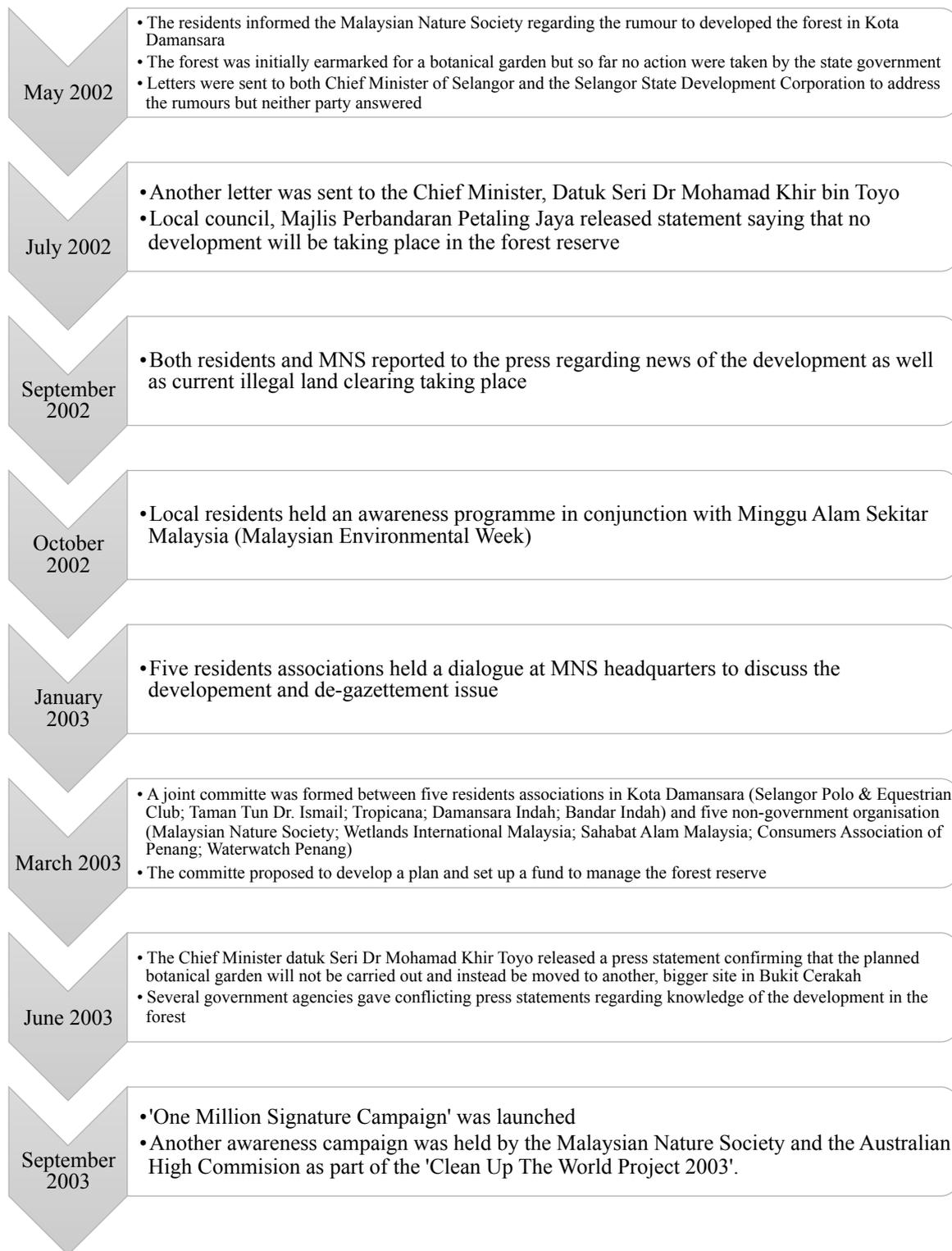
5.1.1 Early Campaign by Local Residents and Malaysian Nature Society

Initially part of the now defunct Sungai Buloh Forest Reserve, the land that is now the Kota Damansara Community Forest had previously been gazetted as a permanent forest reserve in 1989, and formerly consist of 6590 hectares of lowland mixed dipterocarp rainforest. Prior to the development conflict, the forest reserve was originally scheduled for a botanical garden development, as it is a well-known landmark for the township. In fact, in 1993, the Kota Damansara Township was launched under the slogan ‘Living in Harmony with the Environment’, and the township was promoted together with the forest reserve. However, at the time the case started, the forest had been reduced to a mere 320 hectares and was situated in the middle of an urban sprawl in the heart of Damansara

(Figure 5.2). Although it is no longer a primary forest as it had been logged before, and is now a regenerating secondary forest, Kota Damansara has managed to retain high degree of naturalness and wildness (Foo, 2016). Naturalness here indicates the degree to which a thing is natural, and the extent to which humans contribute towards changing it.

Based on the timeline of events (Figure 5.3) constructed from the interviews and the collection of news article kept by one of my interviewees, the case started around May 2002. This marked the first step of uninvited participation, one initiated by the community of Kota Damansara once news regarding the development was circulated.

The campaign started when a group of us found out about the development and we were worried that the development will cause our house prices to drop. (Interview with former resident, December 24th, 2016)



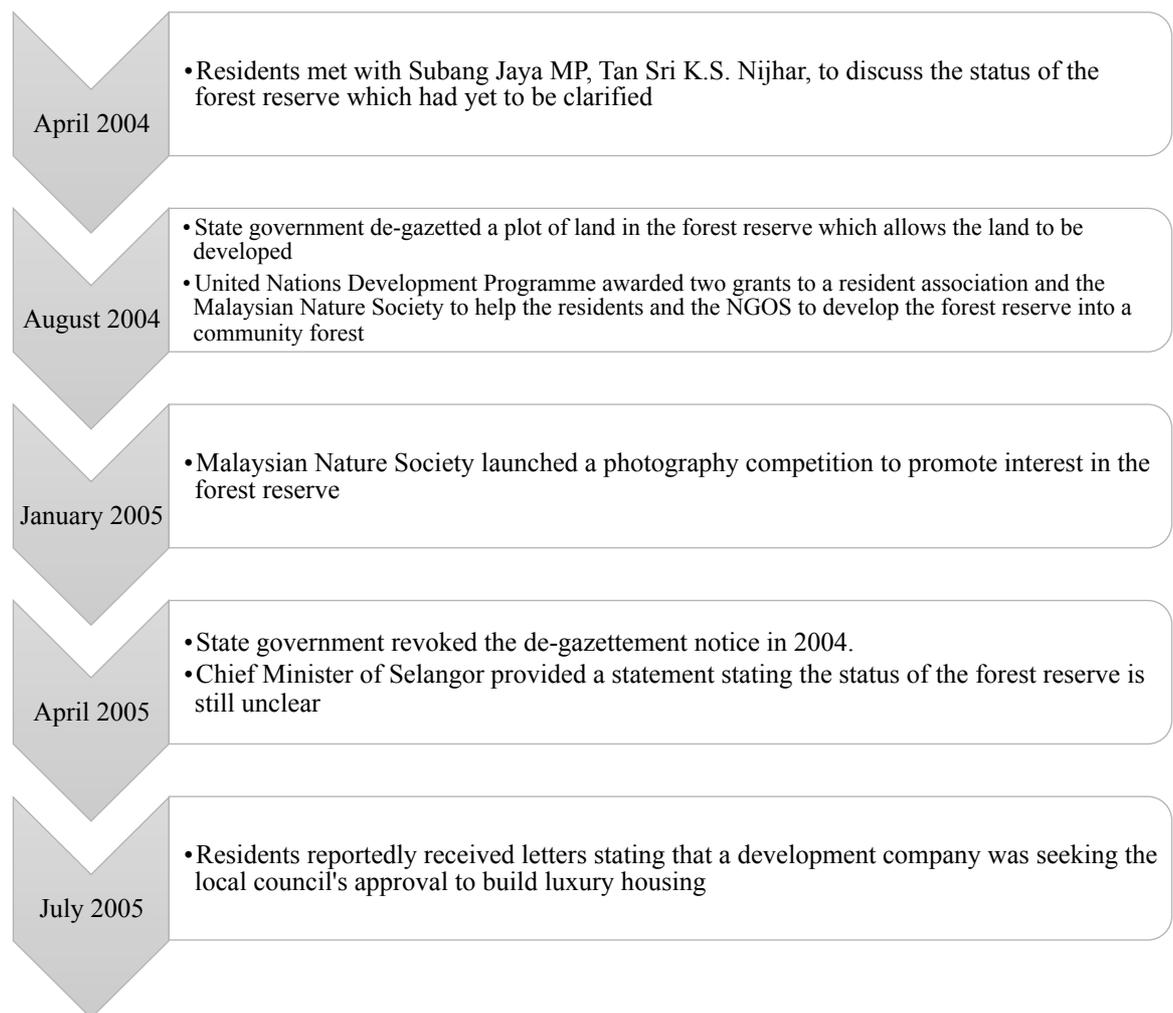


Figure 5.3: Kota Damansara Timeline

Malaysian Nature Society (MNS) was first contacted, followed by the Selangor State Development Corporation (SSDC) and the then Chief Minister of the state of Selangor, Datuk Seri Dr Mohamad Khir Toyo, to further request information and assistance regarding the possible housing development taking place in the forest reserve. Neither the SSDC nor the Chief Minister replied to the initial letter, prompting the community to send a follow-up letter on July 2002, during which the local council Majlis Perbandaran Petaling Jaya (MPPJ) also released a statement indicating that no development will be taking place in the forest reserve. Although most interviewees were confident that a development was about to take place during that time, no evidence can be found to support their claim that a development had already been planned. However, the communities noted that some land

clearing had taken place without prior knowledge of the residents, even though no actual housing construction was carried out.

Following the statement made by MPPJ, campaigns by the residents of Kota Damansara, with the help of MNS became more active. As stated in the timeline of events, between July 2002 and June 2003, activities initiated by the residents included press reports, awareness programme and a community dialogue with MNS; which culminated in a joint committee that set up a fund to manage the campaign and the forest. Almost a year after the initial actions taken by the community, the Chief Minister finally released a press statement on June 2003 that the formerly planned botanical garden would not be carried out in Kota Damansara. In addition to that, several other government agencies had given out conflicting statements, especially in regards to the development that was supposed to take place in the forest. There was no specific information regarding which agencies and what the actual statements were, but one interview specified that this caused even more conflict between the government and the communities and prompted further strategies such as the 'One Million Signature' Campaign in September 2003, and a private meeting with the Subang Jaya parliamentary representative, Tan Sri K.S. Nijhar in April 2004. Despite these initiatives taken by the communities, the residents were informed on August 2004 that a plot of land within the Kota Damansara forest reserve had been de-gazetted for development. Again, there was no evidence as to what form of development that would actually take place. Within the same year, the coalition received funding from the United Nations Development Programme (UNDP) to help develop the forest into a community forest. At this stage, the relationship between the public and the Selangor government was strained, as there were no participatory action initiated by the government that would have allowed the public to be part of the development and de-gazettement process of the forest reserves. However, in accordance to common practice, public participation in Malaysia takes place only when a development has been confirmed and the licensing process and Environmental Impact Assessment reports are well under way. This meant that by taking unilateral action, the community pre-empted the need for an invited form of participation, as there was no solid evidence of a development in 2002.

The campaign continued despite the gazettelement, with the help of funding received from the UNDP. On April 2005, the de-gazettelement notice was revoked by the state government, as a result of unrelenting public pressure. Despite that positive action, the Chief Minister of Selangor released another formal statement saying that the status of the forest reserve remained unclear (Sabaratnam & Abas, 2005), and in July 2005, interviewees indicated that some of them had received letter stating that a development company was in the process of seeking local council's approval to build a luxury housing in the forest.

Specific dates were unable to be obtained beyond 2005, but reports by interviewees indicated campaigns by the coalition and the residents continued for several years driven by monies received from several NGOs such as the UNDP and help from experts provided by the Malaysian Nature Society. The strategies utilised by the coalition were by no means original, but the coalition had proper organizational structure, clear goals and the financial backing from local and international bodies.

5.1.2 Friends of Kota Damansara and General Election 2008

The highly organized and active campaigns led to the formation of Friends of Kota Damansara (FoKD). FoKD is an organization whose members consist of the initial group of communities involved in the early campaign, and other resident associations who lived within the area surrounding the forest reserve. Together with five local environmental NGOs, FoKD formed a strong coalition that was considered an impressive feat at the time of its formation, as it involved not only NGOs, but also residents who had no prior experience leading a protest campaign.

They are both (protests and organizers) are fairly organized. Because Friends of Kota Damansara was quite an impressive organization (Interview with former resident, December 15, 2016)

Formed in 2006 with a tagline of ‘Using Nature’s Platform towards Nation Building’ (FoKD, 2006), FoKD’s sole purpose was to fight against the development. It was a strong unit that handled most of the campaigning for the forest reserve, and throughout the campaign, the coalition continuously released press statements and organized various activities to capture the interest of the public regarding the issue of development in the forest reserve. Very active in the early days of its formation, FoKD was instrumental in bringing a highly organized campaign together.

The real action that happened around 2008, when the forest was almost about to be cleared. (Interview with member of MNS, February 13th, 2017)

The campaign to protect the forest reserve became fruitful during the 2008 General Election in Malaysia when FoKD finally reached out to various political leaders whom were contesting the parliamentary seat in the 2008 General Election. As a result of the discussion, an agreement was reached between Elizabeth Wong, a representative of PH and the residents of Kota Damansara. In exchange for support during the election, the representative promised to safeguard the Kota Damansara Forest Reserve by establishing it as a community forest once PH came into power. Prior to that, the area of Kota Damansara, which falls under the constituency of Bukit Lanjan, was under the control of BN, the incumbent government during the time of the campaign. The partnership proved to be a fruitful one, as PH not only won the Bukit Lanjan seat in the 2008 election, but also won the majority of the parliamentary seats in Selangor, fully taking control of the state from the BN. Therefore, after eight years of campaigning, the Kota Damansara Forest Reserve was gazetted as a community forest and is now known as Kota Damansara Community Forest.

5.1.3 End of Campaign

Most interviewees concluded that one of the reasons (if not the main reason) for the success of the Kota Damansara Community Forest was due to the shift in power from BN

to PH. For more than four years, continuous action and campaigns by FoKD yielded very little result. Regardless, it was undeniable that the Kota Damansara campaign was made up of influential residents and NGO members, among them Tan Sri Salleh Md. Nor, former president of MNS who was also influential in another case study in this research. The strength of this influential community made for a very strong campaign. They managed to stop further construction from taking place in the forest reserve and the constant publicity ensured that the forest never became neglected. However, the defining moment developed as a result of the political instability in Malaysia during the 2008 General Election. On Elizabeth Wong, who, at that time was contesting the seat of Bukit Lanjan, one interviewee stated,

So when I heard that she was coming to that area, I made sure that MNS sent a representative to go and see her. And try and get her commitment before the elections. Not just from her also from other candidates. And when she was elected, it was beyond our expectation. Not only was she elected, but the Pakatan (PH) got the (Selangor) government (Interview with member of MNS, February 13th, 2017)

Aided in part by need to show a more positive image than the BN controlled government, the new PH government finally gazetted 320 hectares of forest reserve in 2010. However, despite being able to achieve the main goal of protecting the Kota Damansara Forest, conflict remains, this time between the members of the coalition. No longer having a common goal to keep them together, the original coalition which consisted of FoKD and other NGOs disbanded, and the Kota Damansara Community Forest Society (KDCFS) took over the management of the community forest under the leadership of Justine Vance. Although technically still active (at the time of data collection), FoKD is now focused more on nation building activities and no longer associate itself with the Kota Damansara Community Forest. And although it was once deemed ‘an impressive organization’, the FoKD and its president distanced both himself and the organization once it is clear that the goals of the members no longer aligned and conflict occurred. Thus it was then, on the heels of the success of the campaign, that the current KDCFS was formed.

Although the political instability in Malaysia played a major role in turning the tide of the campaign, it is crucial to point out that it was the community, the residents of Kota Damansara, whom first approached PH in order to establish a partnership. As mentioned earlier, the Kota Damansara community can be categorized as mid to upper class society. This means that the residents had strong networks with other members of Malaysian societies that allowed them better opportunities in their campaign. In addition to that, the campaign was also partly driven by a really strong fear that any development in their area will reduce the value of their property. Although it is unfortunate that the original coalition was not able to withstand the conflict once the goals of different members were no longer aligned, Kota Damansara Community Forest is still considered a very successful campaign, and regardless of other issues that later emerged as a result of the ‘protection’ status of the community forest²¹, the initial aim of the campaign was achieved.

²¹ Shortly following the end of the case in 2010, there were issues reported by the community that they were unable to access parts of the reserve. It is then that the public pushed for the total control of the forest, to ensure that all area is accessible to the public.

5.2 Ampang Forest Park (Case Study B)

The second case study is located in Ampang (Figure 5.4) in a forested area known as Ampang Forest Reserve. A portion of this forest reserve was initially developed into a forest park (Ampang Forest Park) and is part of a bigger cluster of forest reserves known as Selangor State Park. Also known as *Taman Rimba Ampang*, this park is one of eleven recreational spots located throughout the Selangor State Forest Park, or otherwise known as '*Taman Warisan Negeri Selangor*'. The park itself is located within Ampang Forest Reserve, and is currently facing massive environmental damage due to the construction of an expressway. Located approximately 22 kilometres east of Kota Damansara (Case Study A; refer to Figure 5.1), this case involves the development of a highway (East Klang Valley Expressway) that cuts across four forest reserves in Selangor and affects multiple communities across Ampang (Figure 5.5). The first phase was under construction at the time of data collection and is planned to cut across a significant portion of the Ampang Forest Reserve, one of the forest reserves affected by the planned highway. Active community participation started around 2008 when a group of residents formally protested against the planned development and as of now, is yet to be resolved. A court review is currently taking place against the construction company involved in the development of the highway, but the first phase of the highway development is expected to be completed in 2019.

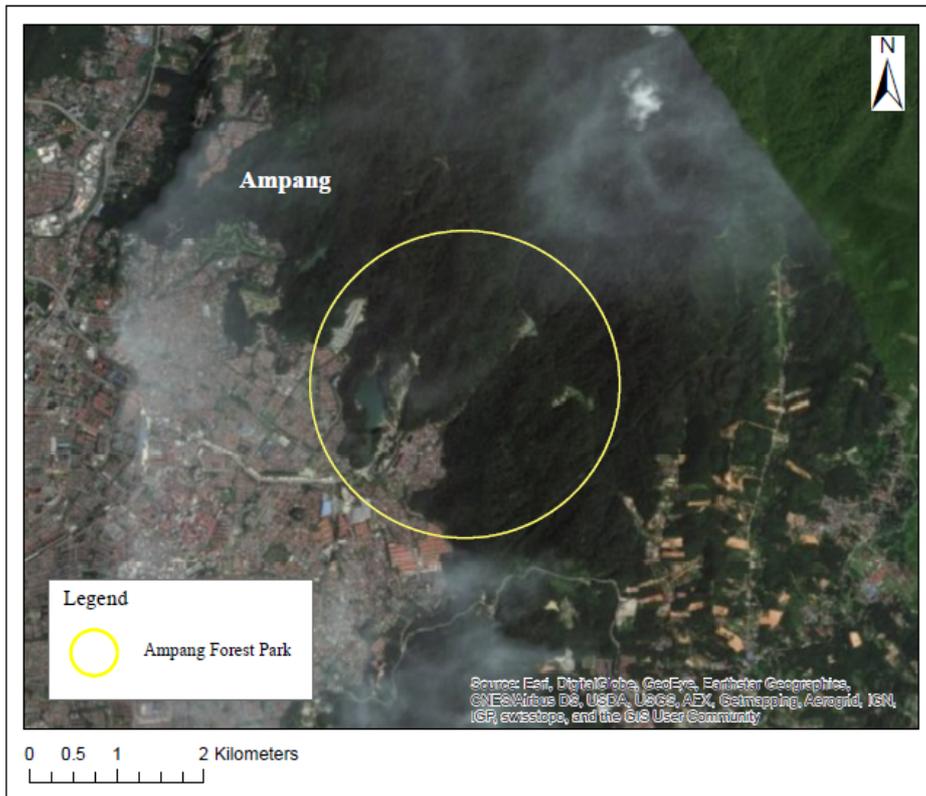


Figure 5.4: Ampang Forest Park

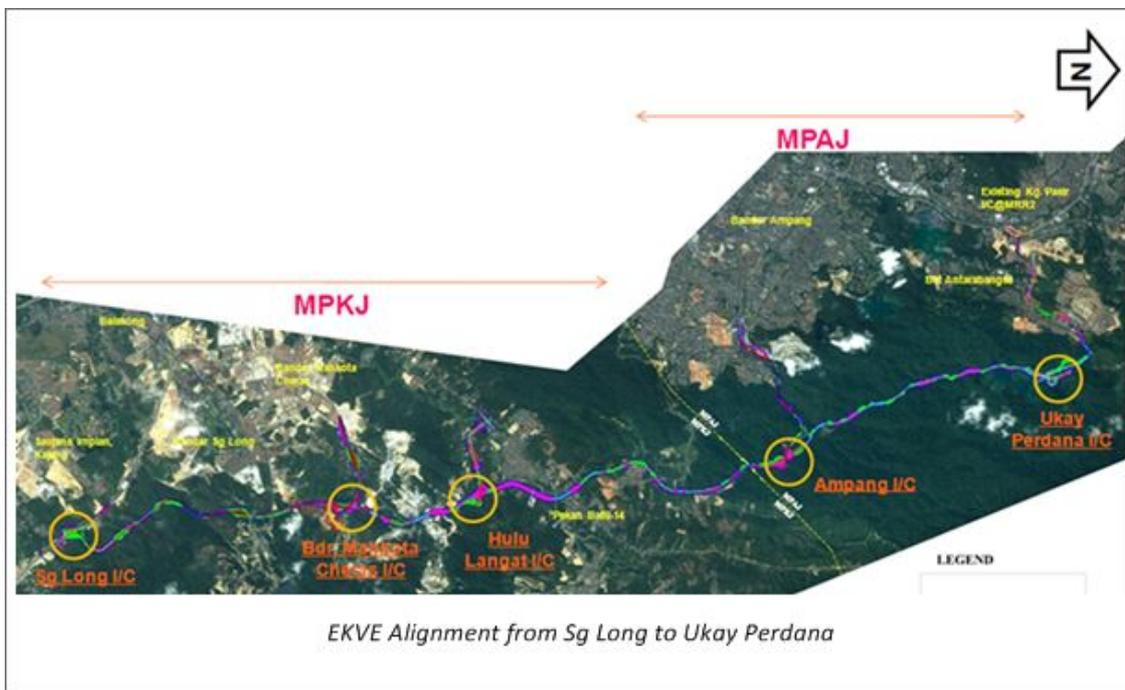


Figure 5.5: EKVE Alignment from Sungai Long to Ukay Perdana [source EKVE Bhd. (2013)] (MPKJ – Kepong Jaya Local Council; MPAJ – Ampang Jaya Local Council)

5.2.1 East Klang Valley Expressway and Ampang Forest Park

The East Klang Valley Expressway (EKVE) is a highway development that stretches across four permanent forest reserves; Hulu Langat, Bukit Sungai Puteh, Ampang and Ulu Gombak (Figure 5.5). At approximately 25 kilometre long, the first phase of EKVE will consist of dual carriageway and 5 interchanges, from Sungai Long in the district of Kajang in the south, to Ukay Perdana in the district of Ampang in the north (EKVE Sdn. Bhd., 2013) (Figure 5.6). Expected to be completed in 2019, EKVE will feed into the planned Kuala Lumpur Outer Ring Road (KLORR), a network of interlinked highways and expressways that serve to divert traffic from the centre of Kuala Lumpur (Figure 5.5).

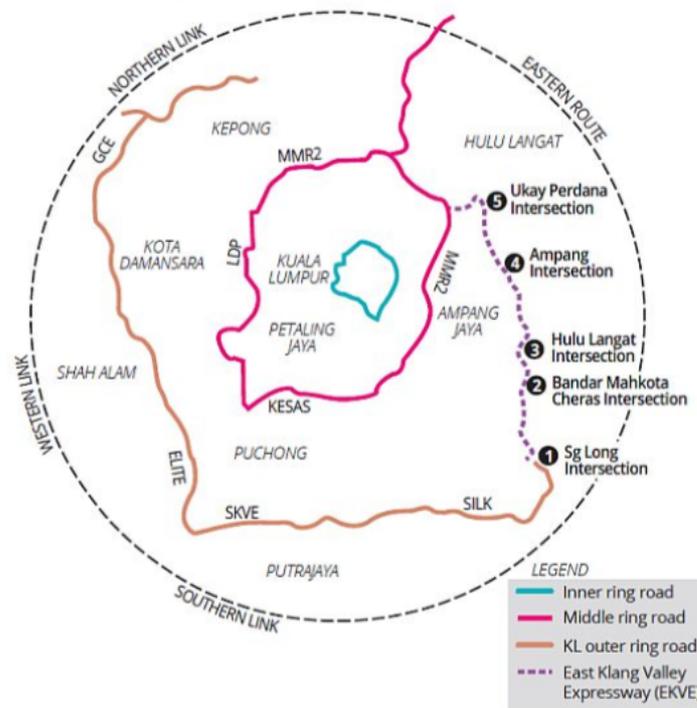


Figure 5.6: Diagram of Ring Roads serving Kuala Lumpur [source The Star, Ravindran (2015)]

Multiple communities are being affected by the construction, and the majority of these communities have all voiced objections against the project in general. However, since the focus of this study is on PRF, a major site of concern is the Ampang Forest Park, where

construction for the Ampang intersection is being carried out (Intersection 4 in Figure 5.6). Ampang Forest Park is a lowland dipterocarp forest, and serves as a water catchment area managed by the Lembaga Urus Air Selangor (LUAS)²². The park itself is maintained by the Hulu Selangor Forest District Office ("Ampang Forest Reserve," 2017) with a small office located at the entrance of the park where a forest ranger can usually be found. Prior to the development taking place, Ampang Forest Park received over 200 visitors a day on the weekends. Just outside the park, the road leading to the park is surrounded by at least four villages (Figure 5.7) that makes up the community of concern for this case study. Most of the residents in this area consist of a mid to lower class community of mainly Malays and Indian Malaysians. The area is also mixed with working class foreigners mainly from Cambodia and Bangladesh and is served by the local council Majlis Perbandaran Ampang Jaya (MPAJ). Since the villages are located in the outskirts of Kuala Lumpur, they are ideal rental location for labourers, college students and blue-collar workers who commute daily to the city.

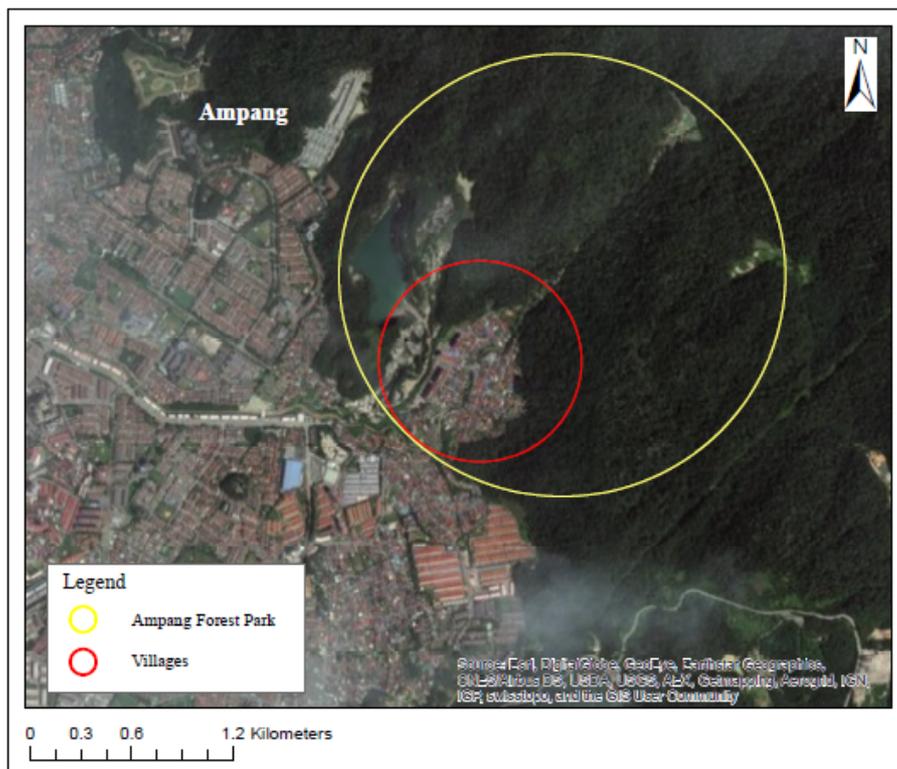


Figure 5.7: Villages affected by the construction at Ampang Intersection

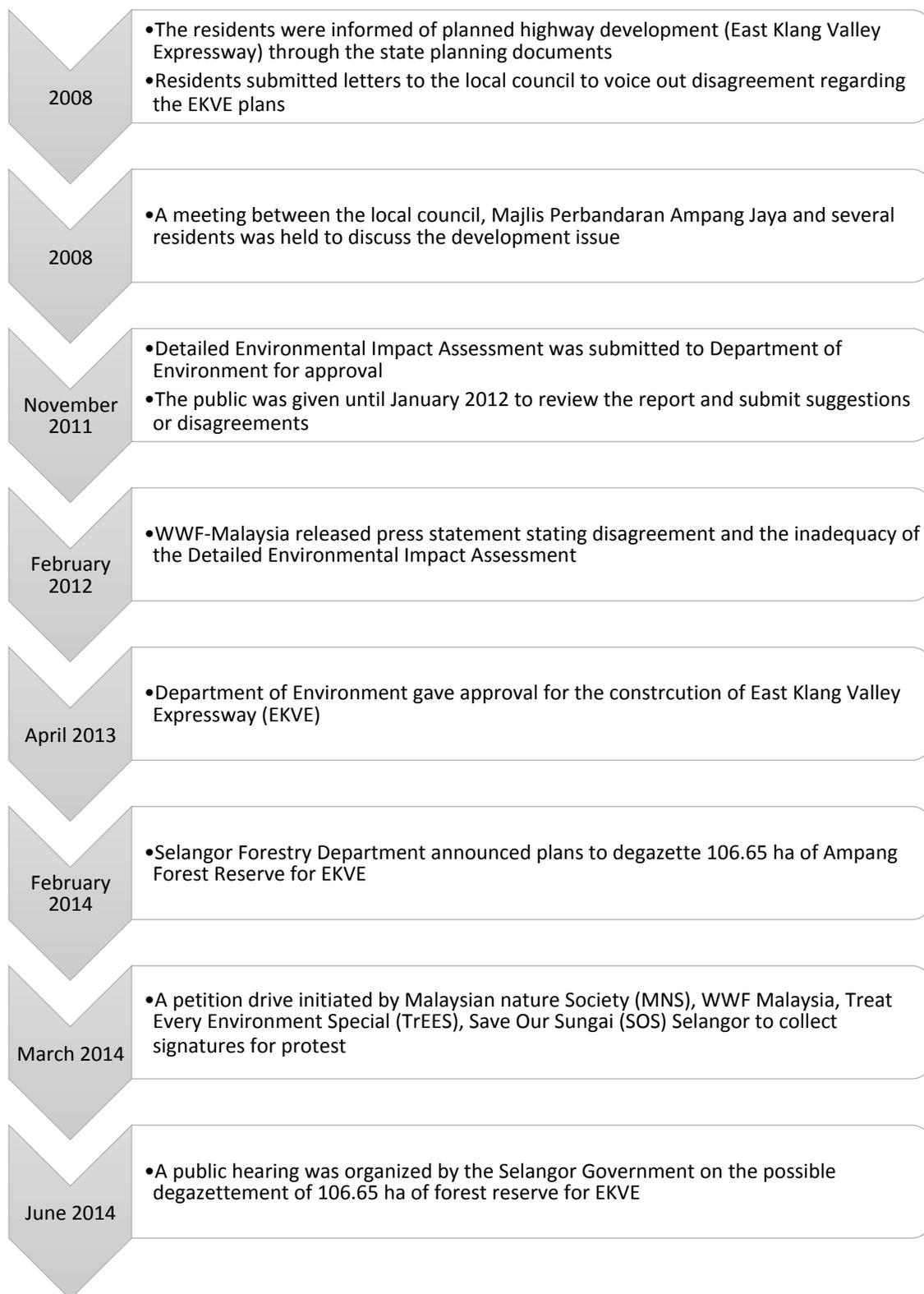
²² Also known as Selangor Water Management Agency

5.2.2 Project Initiation and Start of Community Action

Interviewees reported that Federal government's plans for the construction of the EKVE and KLORR began sometime in 1990s, where it was met with protests by several local advocacy groups. However, based on the interviews, community protest against EKVE started in 2008 (refer to Figure 5.8) when the residents in and around the project site were informed of the planned development through state planning documents, and realized that the development of the expressway would mean that parts of the Selangor State Park would be de-gazetted. Formal objections were made immediately, with residents from several localities submitting letters to MPAJ to voice disagreements regarding the proposed expressway.

I first got involved really actively, fighting the highway in 2008, when the local council, MPAJ, published a draft local plan for the whole Ampang Jaya area, which mentions the highway (Interview with former resident, February 13th, 2017)

Following that, a meeting between MPAJ and the residents was held to discuss the development plans. There is no detailed account provided regarding the outcome of this meeting, but an interview with a local council officer indicated that '*meetings with residents are part of the standard operating procedure, but local authorities are not legally required to take any objections into account*' (Interview with local council officer, January 21st, 2017). Based on the timeline of events constructed from the interviews, protest by the residents slowed down after the meeting, but active campaigning started again several years after that, initiated by the submission of the Detailed Environmental Impact Assessment (DEIA) to the Department of Environment (DOE) in November 2011.



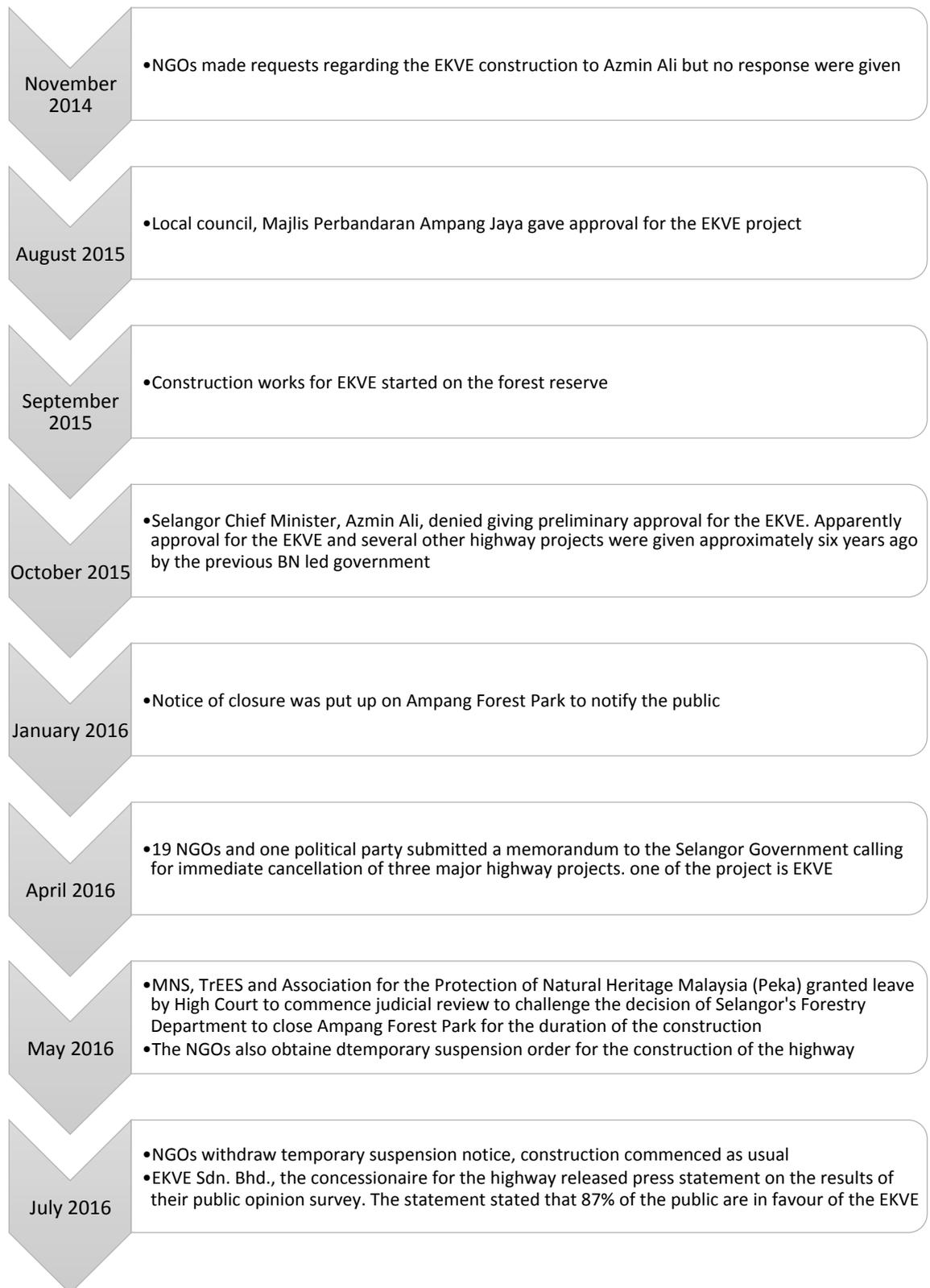


Figure 5.8: Timeline of the Ampang case study

5.2.2.1 Environmental Impact Assessment

In 2009, the concessionaire for the project, Ahmad Zaki Resources Berhad (AZRB), through one of its subsidiary company, EKVE Sendirian Berhad (EKVESB) submitted a Term of Reference for the Detailed Environmental Impact Study to the DOE. AZRB is a group of ten companies dealing with projects such as construction, plantations, concessions, property and oil and gas development. Incorporated on 26 May 1997, AZRB is also currently involved in multiple projects, such as an oil and gas supply base, a concession holder for the International Islamic University of Malaysia's teaching hospital and a palm oil plantation in West Kalimantan. The submission of the TOR is to obtain approval prior to the commencement of the Environmental Impact Assessment (EIA) Study. Prepared by EKVE's environmental consultants, the UKM Pakarunding, the TOR went through a number of amendments to accommodate several alignment modifications requested by the Selangor state government. In March 2011, EKVESB was given approval to commence with the EIA Study.

As a requirement for the report, the EIA study carried out by UKM Pakarunding consisted of the following sections:

- a) Geology and geomorphology
- b) Soil and erosion
- c) Land use and topography
- d) Climate and meteorology
- e) Surface hydrology
- f) Water quality
- g) Air quality
- h) Noise
- i) Vibration

- j) Land transport traffic
- k) Terrestrial Fauna
- l) Terrestrial herpetofauna
- m) Terrestrial flora
- n) Freshwater ecology
- o) Socio-economy
- p) Public health
- q) Economic Evaluation of Environmental Impacts

In addition to sections above, public dialogues were also held in two traditional Malay settlements, areas that were considered of concern by the consultants. The area in question is Sungai Pusu in Gombak and Pekan Batu 14, in Hulu Langat (Figure 5.9). Both sites are located along the EKVE alignment and were chosen for specific reasons. However, despite having been published for public viewing, the EIA report was not available in the National Library archive, therefore it is unclear as to why the two settlements were selected for the EIA study.



Figure 5.9: Map of Ampang Forest Reserve (case study location) and the site where public dialogue was held for the Environmental Impact Assessment Report (Google Earth, 2017)

Submission of the EIA by UKM Pakarunding was made on November 2011 and during the approval process by the DOE, the EIA report was exhibited for public viewing. Notifications were made in major newspapers, and the public was given two months to study the report. The report was made available at specific locations in Peninsular Malaysia, such as the offices of the Department of Environment, and the National Library in Kuala Lumpur. However, no copies of the report could be made and any reader who wished to study the report had to do so at the location in which it was exhibited.

The publication of the DEIA allowed both NGOs and public to provide suggestions and objections to the proposed expressway alignment. Treat Every Environment Special (TrEES), Malaysian Nature Society (MNS) and World Wide Fund-Malaysia (WWF-Malaysia), in particular were concerned regarding the impact the construction could have

on the PRFs along the expressway. MNS also stated that the DEIA failed to properly identify and assess the actual population of endangered species in the area (interview with member of MNS, February 13th, 2017) and the report did not specify that the construction of the expressway would cut through a significant portion of the Selangor State Park, thus requiring a major part of the reserve to be de-gazetted. By cutting across major parts of the PRFs, the expressway alignment would also cut across an area that is home to several endangered species, and affect at least one forest reserve that also serves as a water catchment area. The water catchment area is located next to Ampang Forest Park, located within the Ampang Forest Reserve. Further objections to the project included the proposed parallel tunnel, to be constructed below the Quartz Ridge in the Hulu Gombak Forest Reserve. If constructed, this tunnel would affect the stability of the Quartz Ridge, an area of eco-tourism significance in the Hulu Gombak Forest Reserve.

Despite the short time given to scrutinize what is usually a highly technical document, the objections made by NGOs and the public resulted in significant amendments to the original alignment of the expressway. After several revisions by UKM Pakarunding to incorporate the suggestions made, the EIA report was finally given approval in April 2013, after which it was forwarded to the Selangor state government.

5.2.2.2 Degazettement of AFR and Closure of Ampang Forest Park

Based on the timeline in Figure 5.8, active community and NGO action against EKVE started after the Selangor Forestry Department announced plans to degazette 106.65 hectares of Ampang Forest Reserve in 2014 to make way for the highway. Immediately following that, MNS, WWF, TrEEs and other NGOs initiated a petition drive, to collect signatures for the protest. This petition, although formally initiated by the NGOs, also involved residents living near or around Ampang, as most not only lived near the area of the construction, but also had ties to NGOs as formal members. A public hearing was then held on June 2014 by the Selangor Government, but interviewees did not mention any specific outcomes resulting from the public hearing. The controversial project, costing at about RM 1.55 billion, was later approved by the local council on August 2015, during a special committee meeting between AZRB and the local council, Majlis Perbandaran

Ampang Jaya (MPAJ) (Ravindran, 2015). Construction began that same year, in September 2015, amidst protests by public and NGOs alike.

In October 2015 (refer Figure 5.8), media reported that the Chief Minister of Selangor, Azmin Ali denied ever giving preliminary approval for the EKVE (Palansamy, 2015) as it was approved before he became the Chief Minister. This report was a response to the initial request made by NGOs in 2014, following the public hearing. Although interviewees were unable to provide more information regarding the nature of the request, it can be assumed that the enquiry was regarding the status of the project. At that time, the local council had yet to give approval, and there were multiple reports regarding the status of the expressway, as it was initially approved by the BN-led government back when Selangor was under their political control. In addition to that, the project itself is funded by the federal government, and the current state government gave the impression that it played minimal role in the approval process.

In regards to the park, the protesters were initially given assurances that the Ampang Forest Park would remain open to public. But in 2016, a notice of closure was put up at the entrance of the park, causing conflicts amongst the residents and NGOs. This led to the submission of a memorandum to the Selangor government, which called for the immediate cancellation of the EKVE, along with several other major highways that are being planned throughout Peninsular Malaysia. On May 2016, as part of the coalition's effort to stop further construction within the forest reserve, MNS and Protection of Natural Heritage Malaysia (PEKA) obtained a temporary suspension order for the construction. The suspension order was part of the judicial review initiated by the NGOs to challenge the Selangor state government's decision in de-gazetting Ampang Forest Reserve and closing down the Ampang Forest Park. However, the suspension order was later lifted, and although no official reason was given, one interviewee stated that AZRB had wanted to sue the NGOs for compensation of the losses incurred by AZRB as a result of the suspension order (Interview with MNS member, September 12th, 2017).

5.2.3 Environmental Degradation and Current Situation

The proximity of the expressway construction and the villages meant that any change to the physical environment of the PRF directly affects the residents living near the area as well. During data collection, it was obvious that the construction not only defaced the park, causing uneven road surfaces and build-up of silt and mud in the area, but it has caused several floods in nearby homes, especially during heavy rain. Furthermore, the site of the construction, which takes place just beyond the park entrance, initially prevented visitors from accessing the park. The park was later opened again to the public after protests by NGOs. However, due to the construction, the condition of the park deteriorated (Figure 5.10), and water quality of the river that runs through the park became degraded due to sedimentation. This river, which cuts across the villages near the park, has become noticeably shallower and physically unappealing, despite efforts by AZRB to control mud and silt flows by constructing bunds and catchment ponds.



Figure 5.10: Picture taken 500 meter from the entrance of the Ampang Forest Park. This shows the extent of damage caused by the construction, making access to the park difficult.

Interviews with the local communities in the area surrounding the forest reserve, however, showed little conflict between the communities and AZRB.

The other day (we had the flood) here, we (ourselves) call the contractor... ask them to settle the problem. It's fine, they (the contractor) say. They will see if the house is in bad condition, they will give several hundred (Malaysian ringgit) for cleaning (Interview with villager, January 31st, 2017)

The residents indicated that they were in direct contact with the contractors, and compensation was readily given by AZRB for damages accrued as a result of the expressway project. Contacts between the villages and AZRB were usually mediated through the head villager, or *ketua kampung*, and several town-hall type discussion had also taken place between AZRB and the residents, although none were able to provide specific dates for the discussion. Based on interviews, most of the discussions apparently occurred prior to construction starting in Ampang, during which AZRB informed the residents regarding the project. Based on observations, the discussions and the close relationship between AZRB and the residents near Ampang Forest Park have helped mitigate potential conflict that would have occurred due to the impact the construction, and this further ensured that there was little resistant from the residents living in the area.

As of mid 2018, active protests and resident participations have reduced, with only sporadic media coverage initiated by the NGOs. The court review that was initiated in 2016 is still on going, with no indication of an immediate outcome. Although the campaign still continues, the affected residents living in the villages, especially those with no ties to any NGOs, has largely accepted the development within and the closure of Ampang Forest Reserve. Aided by immediate participatory actions initiated by AZRB in the event of any environmental impact in the area, conflicts from the development of the EKVE remain non-existent.

5.3 Endau Rompin National Park (Case Study C)

The Endau-Rompin case is one of the most researched examples of environmental activism in Malaysia. It is also one of the earliest instances of large scale environmental activism and thus marked a pivotal moment that clearly showcased the rise of environmental advocacy, the evolution of the environmentalism framing in the country, as well as providing a clear view of the conflict that exist within the governance of forestry in Malaysia. The community affected in this case is mostly indigenous groups who still live within the boundary of the reserve and who once relied fully on forest resources. Now, the community has expanded and become less dependent on forest resources, diversifying instead as farmers and tourist guides for visitors coming into the park. Over the years, various authors have provided multiple perspective on this case (R. Aiken, 1993; S. R. Aiken & Leigh, 1986; Cooke, 2015; Cooke & Hezri, 2016; Kathirithamby-Wells, 2005), but there are still various aspects of the Endau-Rompin case that can nevertheless provide some interesting observations.

5.3.1 Conflict in Endau Rompin and Development of a National Campaign

The high value of the Endau Rompin region has long been established among nature lovers, scientists and environmentalists alike. It covers more than 200, 000 hectare of land spanning across Johor and Pahang (Figure 5.11). While the size of the Pahang side of Endau Rompin is slightly smaller than in Johor, the bulk of the conflict in this case originated in Pahang, and as such, is the focus of this case study. Gazetted in 1933 as a forest reserve, the Johor section of the region was once part of the Endau-Kluang Wildlife Reserve. In Pahang, the region was part of the Lesong Forest Reserve, established in 1906. It garnered public interest in the 1970s as it created conflict between the federal and state government and between the Pahang and the Johor state government. Depending on perspectives, Endau Rompin may be highlighted as a success story, as it expanded the role of environmental NGOs from that of nature appreciation to nature protector and later, social justice advocate (Cooke & Hezri, 2016). However, other perspectives may instead highlight the powerlessness of the public and the NGOs in shifting the state's framing of

the forest from a source of economic output that could be exploited to a source of natural biodiversity that should be conserved. It also highlighted the federal-state conflict, and the flaws in the current constitutional system in Malaysia. Even today, the Endau Rompin case is fraught with legal and ethical issues that will be highlighted later on in this and subsequent chapters.

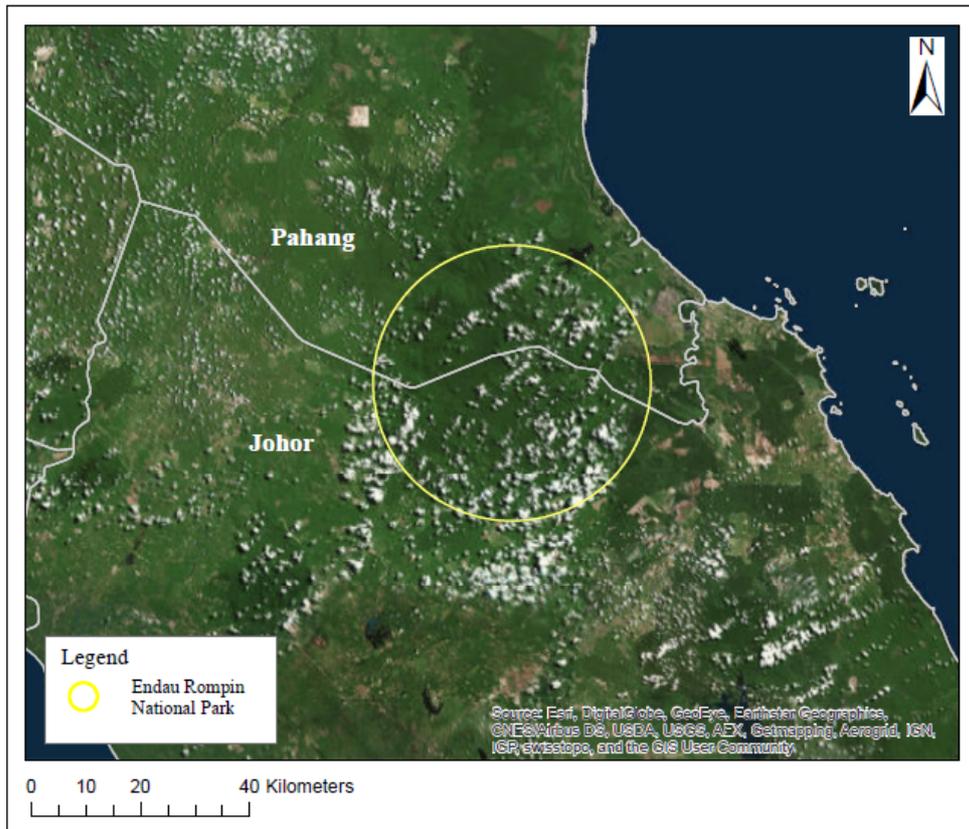


Figure 5.11: Map of Endau Rompin at the border of Pahang and Johor



Figure 5.12: Endau Rompin Timeline

Based on the timeline provided in Figure 5.12, an informal agreement was made between the federal government, Pahang and Johor in 1972. This agreement consisted of a proposed national park to be established in the Endau Rompin region that sits between Johor and Pahang. The reason for the proposed National Park was due to the importance of Endau

Rompin as not just a nature reserve, but also as a major catchment area, with five major rivers flowing across the region, including the Jemai, Kemapan and Kinchin river in Pahang, and the Endau river basin and Pukin river in Johor. It is also topographically diverse, inclusive of lowland and hill dipterocarp forests (Aiken & Leigh, 1986) and is home to various rare and endangered animal species in Malaysia, including the Sumatran rhinoceros. Due to the importance of the region for nature conservation, the proposed national park was suggested in the Third Malaysia Plan, which proposed the land to be a multi-use national park with sustained yield logging to be restricted to a buffer zone and the remaining core area as a nature reserve (Economic Planning Malaysia, 1976).

However, despite the informal agreement, in March 1977, it was discovered that Pahang state government granted 12 logging licences covering 12 000 hectares of the proposed core area of the park without prior consultation with any government or public stakeholder. The issue of the licences sparked outrage among Malaysian NGOs and MNS, in particular, organized a campaign to pressure the Pahang state government to revoke the licence. This campaign garnered the attention of other organizations and the UMNO youth party, the main faction in BN. The widespread attention of the Endau Rompin conflict ensured that it received political recognition, particularly with the incumbent government, BN.

An incident has occurred recently that shames our country, and this is regarding the logging in Endau Rompin. As you, Mr Chairman, are aware, Endau Rompin is an area famous for recreation and is a protected national treasure. But logging has already been done in that area and maybe as a result of that logging Endau Rompin may not be saved, it is damaged forever (Suhaimi Kamaruddin, Member of Parliament; translated from the Hansard of the House of Representatives, 30 November 1977)

Despite the fact that the Pahang government blatantly flouted the agreement made in 1972 – the reason being the agreement was non-binding – the federal government had distanced itself from the whole issue. Content to let the state government deal directly with the campaigners, officially, the federal government's non-involvement in the case was because it is stated in the Federal Constitution that *land authority is dependent upon state*

government (Ong Kee Hui, Minister of Science, Technology and Environment; translated from the Hansard of the House of Representatives, 19 July, 1977). Although there were provisions within the constitution that allows the federal government to acquire state land for federal purposes, it has never been exercised. In addition, the fact that the federal government and state government was under the control of the Barisan Nasional, contributed to the reluctance of the federal government to interfere as this could cause internal conflict within the party.

This plan (to gazette Endau Rompin) has been agreed by Pahang state government, as they have a representative in the (National Land) council, but this matter has been disregarded by Pahang government and therefore there is nothing Federal government can do (Ong Kee Hui, Minister of Science, Technology and Environment; translated from the Hansard of the House of Representatives, 19 July, 1977)

However, once the conflict became highly politicised, the federal government finally took action by banning all exports of timber from Pahang. This ban of timber forced the Pahang government to cease the issue of new logging licences (Hirsch, 2016). Therefore, logging ceased entirely in August 1978, but there was still no official establishment of a national park. Campaigns by the Malaysian Nature Society continued at this point, with MNS taking the role of leader and organizer. Headed by Tan Sri Salleh, the president of MNS at the time, the campaign reached its peak when MNS organized the Malaysian Heritage and Scientific Expedition to Endau Rompin in 1985. This highly successful expedition was launched on June 1985 (Wong, Wong, & Saw, 1988) by Malaysia's first Prime Minister, Tunku Abdul Rahman and was joined by:

- a) Forest Research Institute Malaysia (FRIM)
- b) Malaysia's Agricultural Research and Development Institute (MARDI)
- c) Universiti Kebangsaan Malaysia (UKM)
- d) Universiti Malaya (UM)
- e) Universiti Pertanian Malaysia (UPM)
- f) The Botanic Gardens, Singapore
- g) National University of Singapore (NUS)
- h) Royal Botanic Gardens, Kew

The expedition resulted in an extensive record of plant and animal species, that was later published in the book 'Endau Rompin: a Malaysian Heritage' in 1988. The expedition also led to the gazettelement of the Johor part of Endau Rompin in 1993, which is currently managed by the Johor Park Corporation.

The conflict in Endau Rompin represented the beginning of a national campaign on environmental protection. To date, this conflict is still considered one of the biggest campaign MNS has ever organized, even if it did not manage to fully achieve its initial goal to establish a national park. The campaign, fronted by MNS, received widespread media attention, with almost daily coverage for more than 6 months until logging in Pahang officially stopped (Leong, 1989). The expedition itself was a huge success, as it was not only extended for a year, but it managed to gain the involvement of hundreds of graduate researchers, secondary and primary school students and obtained funding from the public.

Since it was not possible to obtain any interviews with the people who were personally involved with the case at that time, interviews were instead carried out with former members of NGOs who had knowledge of the case, as well descendants of the indigenous tribe who still live within the Endau Rompin region. During the campaign, there were reports of public participation, but by all accounts, the involvement of the public never went beyond minimal collaborations with NGOs and government or as participants in the activities. In this case, the public in general played a less integral part in the campaign. While there was massive public support for the campaign, it was MNS who led the campaign, which then garnered the interest of various political figures in government. Indeed, it is more correct to say that the involvement of the public provided a support system for the NGOs to legitimise their campaign at a national scale, as the participation of the public was not technically through collaboration or partnership, but in the fact that the sheer extent of public support allowed the campaign to grow in power. Data from previous literature and interviews with former members of MNS showed that participation of the public was a result of 'invitation' by the campaigners. However, to quote Arnstein (1969), if the participation of the public is to ensure "*the redistribution of power that enables the*

have-not citizens, presently excluded from the political and economic processes, to be deliberately included in the future”, then this did not happen.

Interviews also suggested that issues with the logging licences and conflict between the Pahang state government and federal government were made complicated by the involvement of the Sultan of Pahang and many were reluctant to interfere with the royal family. In fact, the Sultan of Pahang’s connection with the land and forest has had a long standing history dating back to the pre-colonial era. This power over land and forest never changed, despite the establishment of the Federation of Malaysia in 1957. Apart from that, the lack of strong local community presence in the Endau Rompin region meant that the Orang Asli community in the area was never able to wrest control of the campaign, should they have wished to. In fact, the whole region, and Pahang at the time, was in the early stages of development. Therefore, with only the Orang Asli (indigenous people) communities living in the area, it was hardly surprising that there was little active public participation, especially in an era where people not only lacked the resources we have today, but also a serious deficit of environmental awareness among the public as well.

5.3.2 Establishment of State Park and Current Issues

25 years since the establishment of the Johor side of Endau Rompin, *Taman Negara* Endau Rompin (Endau Rompin National Park) is one of the most visited national parks in Peninsular Malaysia. However, the name ‘National Park’ itself is a misnomer, as the park is technically a state park, managed by the Johor National Park Corporation.

*Incidentally, Your Honor, I would like to draw the attention of this parliament, I have been informed that the first national park gazetted under National Parks Act is Teluk Bahang National Park. Maybe many thought it is Endau Rompin, but it is actually Teluk Bahang in Balik Pulau*²³ (Mohd Yusmadi Mohd Yusoff, Member of Parliament; translated from the Hansard of the House of Representatives, 5 November 2012)

Because neither Johor nor Pahang were able to come to an agreement with the federal government, and the states were reluctant to relinquish control over their land, a state park was instead established, and only within the Johor part of the region. As of now, the Pahang side of the region operates itself as a *park*²⁴, but has yet to be formally established as a state park by the Pahang state government. The reason behind this reluctance is simple. A gazetted National Park, managed and governed by the Federal government, would be entirely useless to a state government that relies on the exploitation of natural resources. In fact, any changes to the status of a gazetted National Park would require the consent of the federal government. Partly to blame is the constitution, as it bars the states to raise loans without the consent of the federal government ("Federal Constitution," 1957) and the allocation of power and responsibilities to the states promotes exploitation of its one available resource; land and by extension, the forests. Therefore, in an era before sustainable development became popular, it is understandable that environmental protection was deemed the antithesis of economic development.

As things stand, the original size of the Endau Rompin region itself is slowly diminishing, with the proposed buffer zone around the core area of the proposed park almost non-existent due to extensive logging and conversion of the area surrounding the park into palm oil plantation (Interview with NGO member, September 12th, 2017). Although logging is no longer permitted in either side of the park, this ban only extends to the core area of the park. The size of the park is also a lot smaller than what was originally proposed by the federal government in 1972. Currently measuring approximately 87, 000 hectares, the size

²³ Balik Pulau is a constituency in Penang, up until now, the only formally gazetted National Park gazetted under the National Parks Act

²⁴ As opposed to a forest reserve

of the current park is less than half of the proposed 200, 000 hectares. In addition to that, it is unclear whether the 87, 000 hectare is inclusive of the buffer zones, in which case it would seem reasonable to assume that the original size of the park itself is smaller than reported, as the buffer zone in some areas has been reported by interviewees as ‘*all but gone*’ (interview with various villagers, August 30th, 2017).

During fieldwork, a visit to the Orang Asli village within the park was permitted only via an entrance located on the Johor side of the park. To get to the village requires driving through more than 40 kilometre of palm oil plantation before finally arriving at the boundary of the park. Mostly from Jakun origin, there are seven different Orang Asli villages, with Kampung Peta being the biggest. Located just outside of the park entrance, it consists of around 400 houses with most of the people living in the village depending fully on eco-tourism. However, since the park is closed during the monsoon season, due to the heavy rain, the villagers rely on their income from rubber plantation and palm oil on land received from the government. Visually, the forest reserve that served as a boundary to the core area showed clear signs of logging. Officers in the area assured that selective logging was carried out, and the system practiced by the loggers required new trees to be planted in place of the logged trees. However, the system is clearly flawed, as, according to a local,

Whether or not the (planted) trees actually grow, is another story. (Interview with a local, August 29th, 2017)

This indicates that while efforts are being made to ensure the sustainability of forest resources, a monitoring system is still lacking. However, further enquiry indicated that no new logging concessions will be licenced, as the Sultan of Johor forbids it. While it is not clear whether or not the Sultan of Pahang imposes a similar ban on Pahang side of the park, logging in the area is limited to older concessionaires.

Interviews showed that there were no negative sentiments over how the creation of the park affects the livelihood of indigenous communities in Endau Rompin. While their way

of life did change, most attribute it to the 'change in time' and presented it as a natural development that needed to occur eventually. To the region, however, the establishment of a separate park was able, to some extent, safeguard the core section of Endau Rompin from further degradation. However, its status as a state park (Johor) and forest reserve (Pahang), means that its future remains uncertain. Neither state requires the consent of federal government should they wish to excise the area. Coupled with illegal logging and continuous development of palm oil plantation, Endau Rompin will continue to be more and more isolated, a rich tropical forest surrounded by plantations.

5.4 Ulu Tembeling Forest Reserve (Case Study D)

Another case located in Pahang, Ulu Tembeling was chosen to also represent a rural area, as it involves a small indigenous tribe and rural villagers whose main income comes from fishing, farming and eco-tourism. Also involving forest reserves, the Ulu Tembeling case started when land development negatively affected the livelihood and living conditions of villagers in the area, leading to vocal protests from villagers and NGOs. As a community that is very much affected by the development, Ulu Tembeling nevertheless showcased a form of uninvited public participation that lost its voice due to the manipulation of politics. It showed an initially strong NGO movement, but proved that without an equally strong public participation, it became an essentially useless exercise.

5.4.1 Land Clearing and the Beginning of Ulu Tembeling Declaration

Ulu Tembeling is a *mukim* (area) located within the district of Jerantut in Pahang (Figure 5.13). Covering an area of approximately 410, 000 hectare, it has a population of only 2217, stretching across 27 small villages (Pahang, 2018), most of which is situated along Tembeling river. Parts of Ulu Tembeling also make up approximately a third of *Taman Negara* Kuala Tahan (Kuala Tahan National Park) and the area of Ulu Tembeling that lies just outside of the *Taman Negara* has been gazetted as forest reserves, serving as a buffer zone for the park. However, due to these developments, and other discrete land clearing throughout the years, the buffer zone has been depleted, making the overall protected area of *Taman Negara* and the surrounding forest reserves smaller. Also located in the area is the Tembeling River, which serves as a main tributary for the Pahang River and cuts across several villages in the *mukim* of Ulu Tembeling and Tembeling Tengah. Tembeling river was once the main mode of transportation to travel from Kuala Tahan to the more remote villages, such as Kampung Bantal, Kampung Mat Daling, Kampung Kuala Sat and other villages located deep within Ulu Tembeling. Recently, the river is now mostly used to connect Kampung Bantal and Kampung Mat Daling and to transport tourists to more remote eco-tourism sites in Ulu Tembeling. Over the years, off road vehicle usage has increased, as it reduces the time to travel from the main town of Kuala Tahan.

Due to low population density, Ulu Tembeling is one of the least developed areas in Pahang. Surrounded by forest reserves, and situated just next to the *Taman Negara* Kuala Tahan, the communities in Ulu Tembeling consist of the tribe Negrito Bateq²⁵ and Malays, and depend heavily on water sourced from a gravity feed system. Although water is also managed by the Pahang Water Management Board, water disruptions are frequent, especially during the monsoon season. As the area is a known water catchment, protecting the rivers and forest that surrounds Ulu Tembeling is even more important.



Figure 5.13: Map of Ulu Tembeling

²⁵ Indigenous tribe living within the Taman Negara area

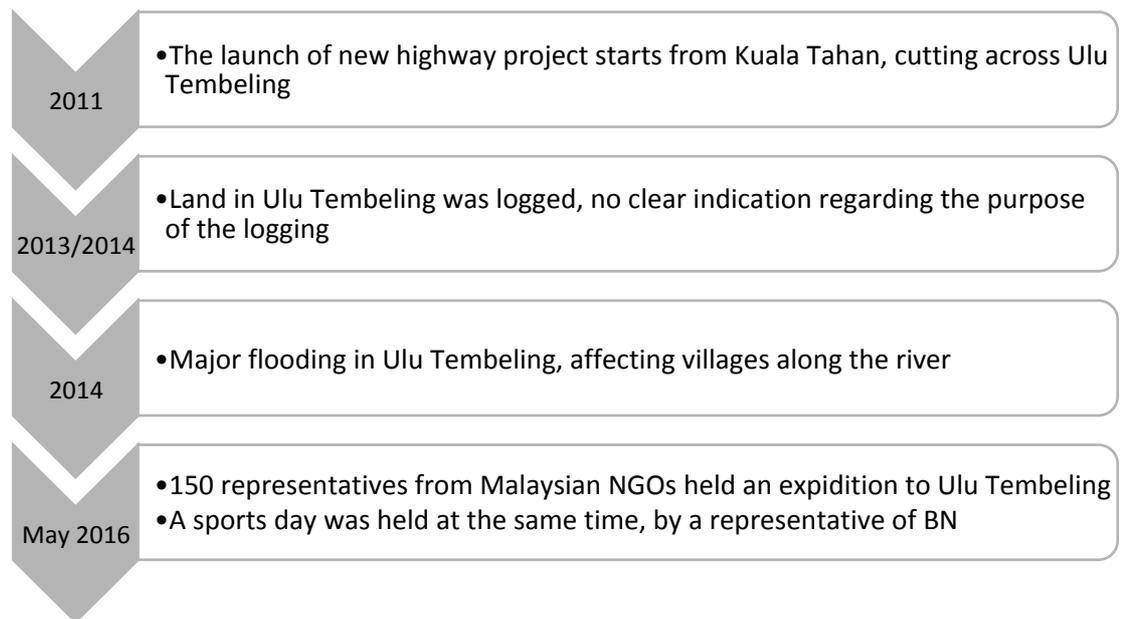


Figure 5.14: Timeline of events in Ulu Tembeling

The case in Ulu Tembeling cannot be solely attributed to a single development or event. The loss of forest reserves is gradual, and reports of environmental degradation have been occurring over a period of several years. Based on documentation and interviews with the villagers, there has been an increase of general development in the area in recent years, and this includes the construction of a new highway project that started around 2011, as indicated in the timeline (Figure 5.14). Signs of construction were obvious during fieldwork, and based on data obtained from villagers, this three-phased project involves the construction of roads connecting Pahang and Terengganu, starting from Kuala Tahan in Pahang, cutting across three villages (Kampung Pagi, Kampung Bantal and Kampung Mat Daling) until it reaches Kampung Pasir Raja (see Figure 5.15).

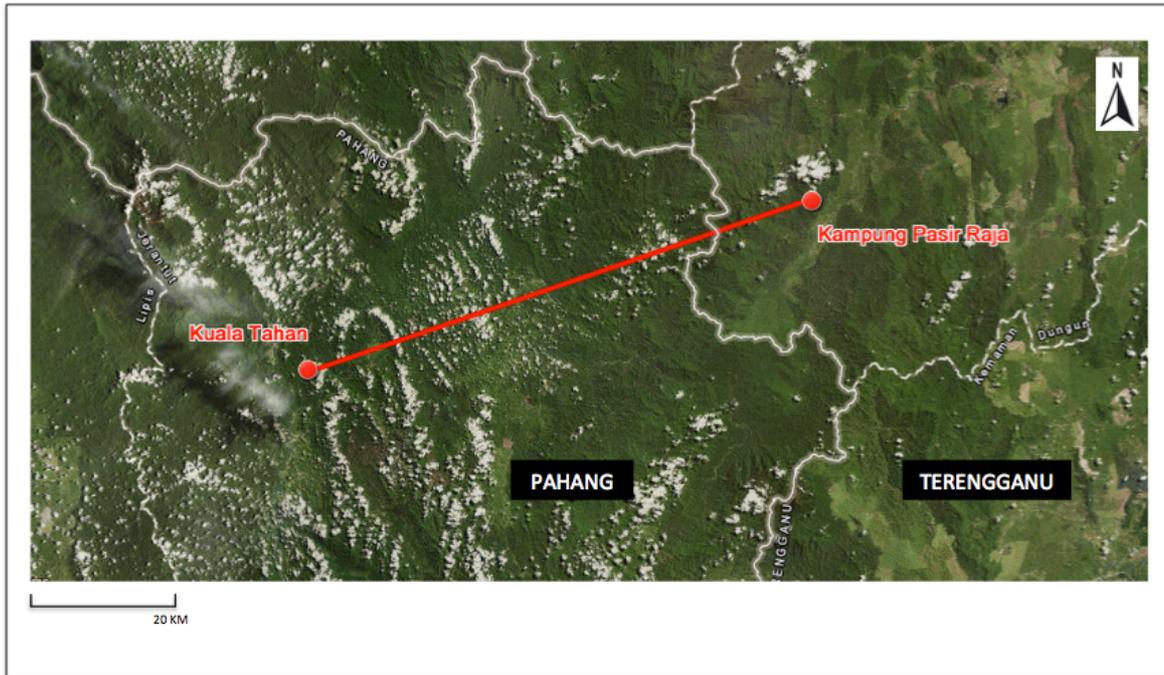


Figure 5.15: Approximate location of road construction starting from Kuala Tahan in Pahang to Kampung Pasir Raja in Terengganu

Overall, the villagers viewed the project positively, as the completion of the project will reduce dependence on the Tembeling River, and it will cut the time needed to travel from Kuala Tahan and bring in more development to the once remote villages (interview with various villagers, August 21st & 22nd, 2017). Although there were reports that some villagers had to give up their land to the government to make way for the highway project, the issue was never taken any further as some indicated that the land had initially belonged to the state.

Some of our lands were taken away to make way for the highway, but that is fine, as the land really is owned by the state (Pahang government) (Translated interview with villager, August 20th, 2017)

Set to finish within the next few years, the project initially received little attention from the media and public. With the first phase now completed, the second phase that is currently being carried out will connect Kampung Pagi to Kampung Bantal and Kampung Mat

Daling in Pahang. The third, with the date of construction yet unknown, will then connect Kampung Mat Daling to Kampung Pasir Raja in Terengganu (Utusan, 2014). Despite the size of the project, it is interesting to note that very little reliable information can be found regarding the project itself. A search through the archives of the National Library and Department of Environment showed no evidence of an EIA report being produced. However, observation in August 2017 showed that land all along the proposed road had already been cleared and that the villagers are now slowly reducing their dependence on the river as the main form of transportation.

Another cause of environmental degradation in Ulu Tembeling is the massive development of forest reserve into plantations. Prior to the highway development, several hectares of land had been released to the villagers for rubber and agarwood plantation. However, as indicated in the timeline (Figure 5.14), between 2013 and 2014, villagers reported that land covering more than 16, 000 hectares was completely cleared for palm oil plantation without their prior knowledge, which is located some kilometres north of the main village of Kampung Mat Daling and Kampung Bantal. This land is reportedly owned by Pahang State Development Corporation (Perbadanan Kemajuan Negeri Pahang, PKNP) and clear felling had caused large amounts of debris to flow into Tembeling river, causing a build-up of silt, sand and wood chips at a tributary that connects a small river to the larger Tembeling River making river access to villages in the area (Kampung Bantal, Kampung Mat Daling) difficult. (see Figure 5.16) Additionally, heavy monsoon rain at the end of 2014 caused the Tembeling River to overflow, leading to floods in the villages surrounding the area. This event was made even worse due to lack of forest cover that could slow down the flow of water into the river.

I remember the flood. It was high, almost covering the houses next to the riverbank. I was afraid that I had to move (Interview with a villager, August 21st, 2017)

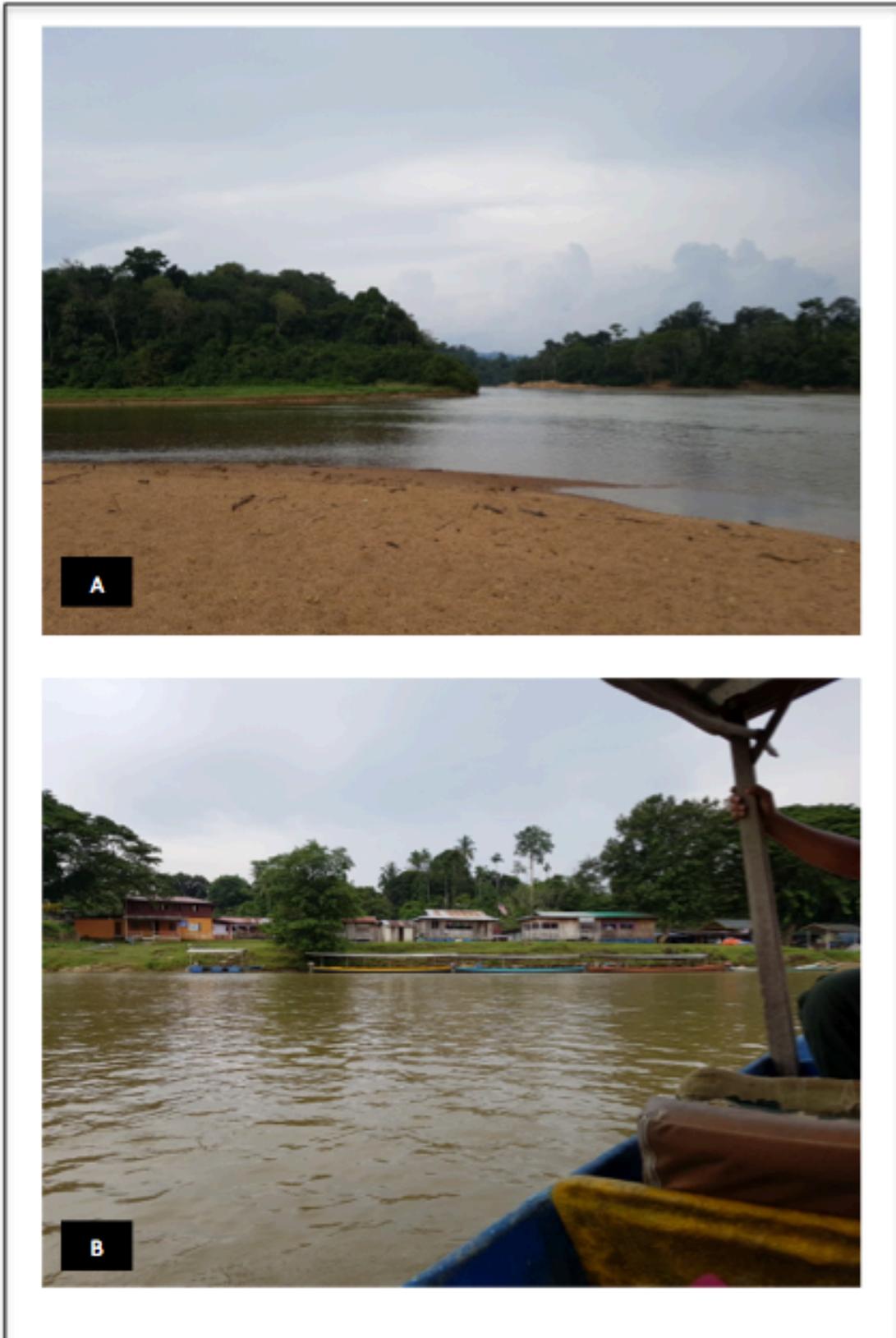


Figure 5.16: Picture taken at Tembeling River, a mode of transportation for the villagers.
(A: Sedimentation at the tributary, creating a slope at the riverbank; B: Boat ride from
Kampung Bantal to Kampung Mat Daling)

Despite the fact that reports of environmental degradation in the surrounding PRFs had been reported prior to the flood in 2014, the disaster triggered active protests from the villagers as it now directly affected them. This led to the mobilisation of several NGOs, mainly PEKA, whose member was personally contacted by one of the villagers in Kampung Mat Daling. Other NGOs included Himpunan Hijau (HH) and Sahabat Alam Malaysia (SAM). On May 2016, a team of 150 NGOs, environmental scientists, academicians, environmental activists and journalists embarked on a two-day expedition to Ulu Tembeling to witness first-hand the destruction that had been going on in the area. This led to the publication of Deklarasi Ulu Tembeling (Ulu Tembeling Declaration) (Appendix 2), which consisted of seven provisions including;

1. The degradation of Tembeling and Pahang river
2. Acknowledgement of excessive and uncontrolled logging in Pahang
3. Call to stop logging and land clearing for palm oil in PRFs that serves as water catchment area
4. Reforestation efforts
5. To increase buffer zones throughout the forest reserve
6. Allegations of corruptions within Pahang Forestry Department
7. Suggestions for changes to the Federal Constitution, specifically regarding the division of power over land and forestry

This declaration, signed by various representatives of NGOs, public universities and indigenous groups, was submitted to both the Chief Minister of Pahang and the Sultan of Pahang. However, up until 2018, there are no reports of a reply from either the Sultan or Pahang state government.

Throughout this case, there had been no invited participation initiated by either the Pahang state government, or by PKNP. Although most palm oil plantation would have required EIA reports which will involve some form of public participation²⁶; in this case, the issue of EIA reports was never brought up. References to the Environmental Quality (prescribed Activities) (Environmental Impact Assessment) Order 1987 indicated that there could be a reasons for this: 1] the area for conversion to palm oil is less than the 50,000 hectare specified in land development schemes involving forest land; and 2] logging or conversion of forest land was not within a catchment area used for municipal water supply. While the first reason is clear, as the land being cleared is less than 20,000 hectare, however, the second reason could be contested. This is because the Declaration of Ulu Tembeling specified clearly that the affected area is within a water catchment area. Unfortunately, the fact that the logging does not technically takes place *within* a catchment area, nor has it been legally recognised as a water catchment area complicate matters.

²⁶ Public participation in EIA reports in Malaysia is usually some form of public consultation

5.4.2 Villagers' Reaction and Current Situation

Interviews showed that although the villagers initiated the contact with PEKA, these villagers were, in fact, a minority. Most villagers never participated in the declaration action and some interviewees were very adamant that they had no issues at all in their villages. The reason for this is apparently not just due to their general support for development in the area, but also due to the strong support and loyalty to the incumbent government, BN. One villager stated,

The people here are very loyal to the state government (Barisan Nasional) if you ask them if there's any problem in the area they will say, no problem, no problem (Translated interview with a villager, August 22nd, 2017)

Observations during fieldwork showed that is indeed the case. Very strong supporters of Barisan Nasional, the villagers in the area showed an interesting mix of loyalty to the party and resignation over the obvious political manipulations in the area.

The expedition on May 2016, which included a large number of activists and researchers, had very little support from the villagers. An activist from another NGO stated that he initially advised PEKA against the Ulu Tembeling case as it had very little public support (interview with MNS member, September 12th, 2017). To make matters worse, it was reported that a representative of Pahang State Legislative Assembly had also travelled to Ulu Tembeling on the exact same day of the expedition and organised a community activity in one of the villages.

Wan Amizan did another event, calling all the community and gave out gifts and trees. Even the area where PEKA wanted to initially go to had then been closed off. And there were two security guards guarding the area blocking the activist from entering (Translated interview with villagers, August 21st, 2017)

It appears from the interviews that not only were the activists prevented from entering certain area of the PRFs, but political manipulations by a Minister in Pahang State Legislative Assembly prevented more villagers from participating and supporting the expedition.

By early 2018, the cleared site had been planted with palm oil, and the Tembeling River no longer showed obvious signs of debris from logging. However, sedimentations of sand and soil occurs along the riverbank and in the shallower parts of the river, creating a gentler slope and thus changing the profile of Tembeling River. As data collection occurred just before the monsoon season started, the water level was low and bigger boats were unable to cross. This means that crossing from one village to another had to be carried out by foot. As for the declaration, it is now considered a failed campaign, and has so far yielded no result except as a means of reminding the NGOs of the need for participation of the public in environmental campaigns.

5.5 Conclusion: Invited and Uninvited Participation

Overall, invited participatory methods in the cases occurred via four different mechanisms: 1] town-hall type discussions or meetings between local authorities and public; 2] public hearings to discuss the degazettement of forest reserve; 3] review of EIA or draft state planning documents and 4] public survey for EIA. These actions are mechanisms of public participation that have been embedded in land development policies via the TCPA 1976 and Environmental Quality Act 1984. Unfortunately, they are considered amongst those that rely more heavily on ‘*informing*’ rather than ‘*consulting*’ and do not go any further to actually ‘*involve*’ (IAPP, 2016) (see Figure 5.17) the public in decision making process.



	Inform	Consult	Involve	Collaborate	Empower
Public Participation goal	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	To obtain public feedback on analysis, alternatives and/or decisions	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered	To partner with the public in each aspect of decision including the development of alternatives and the identification of the preferred solution	To place final decision making in the hands of the public
Promise to the public	We will keep you informed	We will keep you informed, listen to and acknowledge concerns and aspirations and provide feedback on how public input influence the decision	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decisions	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible	We will implement what you decide
Example techniques	<ul style="list-style-type: none"> • Fact sheets • Websites • Open house 	<ul style="list-style-type: none"> • Public comment • Focus groups • Surveys • Public meetings 	<ul style="list-style-type: none"> • Workshops • Deliberative polling 	<ul style="list-style-type: none"> • Citizen advisory committees • Consensus-building • Participatory decision making 	<ul style="list-style-type: none"> • Citizen juries • Ballots • Delegated decisions

Figure 5.17: Spectrum of Public Participation (IAPP, 2016)

The first form of invited participation in Ampang was public meetings and town-hall discussions, which took place between the local council, the public and the contractor involved in development. As mentioned earlier in this chapter, the meetings held between the local authorities and public did not provide meaningful participation, nor did they do much more than conflict management, as there were no obligations to take the public's input into account. In Ampang, the utilization of this mechanism represented a symbolic action by the local authorities and were readily acknowledged by the interviewees, from multiple stakeholders, as a meaningless exercise in terms of participation. However, meetings with AZRB indicated that it was successful in mitigating conflict, allowing the close ties between the residents and the contractors, creating a mutually beneficial network between these two actors (see Section 5.2.3).

Unlike public meetings and discussions, the inclusion of public hearings before the process of degazettement of PRFs was viewed as progressive and an 'environmentally conscious' move by the opposition government (Sharom, 2014). However, despite being mentioned by the interviewees, there were no references made to the outcome of the process nor regarding what had occurred during the public hearing held in Ampang. The lack of data regarding what happened during the public hearing made it difficult to assess this mechanism, but the fact that the forest was degazetted and highway development was carried out meant that the decision was made against the public's wish.

The third method, public comment and review of either state planning documents or EIAs, is a common method for participation in land development throughout all the states in Malaysia. In Ampang, the plan for EKVE was first heard by the public via the publication of the draft state planning document. Later on, after the project received the approval of both local authority and DOE, the EIA was then published within a limited time frame for a public review, allowing the public to make comments and suggestions. However, this particular method of participation fails at actually allowing meaningful participation (Innes & Booher, 2004) and is considered more of a method that assembles input from actors or civil society (Beierle, 2010), which will be sufficient if the purpose of participation of the public is only for data collection. In the context of Ampang, the review process embedded within EIA and state planning document was actually an information gathering process that

collected data to allow the developers and the state to make the best possible decision regarding a project. The review method did not allow the public to truly dispute the project, but merely to add comments and suggestions that could improve it.

The final mechanism utilized in Ampang and also embedded within EIA was a public survey. A public survey was apparently carried out (Mohamed, 2016) in Ampang to identify the percentage of public support for the project. However, how the survey was carried out was never made public, and interviews with the affected residents living near the Ampang PRF and the main development site found that none had ever been involved in the survey. This casts doubts on the selection process for the survey, there were no data regarding how survey locations were selected.

Contrary to invited participation that occurred only in Ampang, uninvited participatory mechanism took place throughout all four case studies. The organization of uninvited participation was triggered by the civil society, either the community, or the NGOs; and throughout the cases, uninvited participation occurred via three main methods: 1] submission of petition and declaration of intent; 2] environmental campaign or protests; and 3] legal action in the form of judicial review.

How these mechanisms were organized depended very much on the actor that led the participatory process. For submissions of petition and declarations in the cases, petitions organized by the public were carried out in small, multiple groups like in Ampang and Kota Damansara, where the public sent separate communications to various state agencies to declare their dispute with the development of PRF. However, declarations and communications organized by NGOs were done more collectively, like in Ulu Tembeling where a single declaration was dispatched to the Sultan of Pahang and the Pahang state government. In truth, how it was organized mattered little, as this particular method of participation never resulted in any resolution. However, throughout the cases, this mechanism was always the first step towards organizing an environmental campaign, which indicates some form of uninvited participatory 'rule' that was followed by the civil society.

Immediately following the initial communications instigated by the civil society, environmental campaigns then started to take shape, a mechanism that occurred throughout all cases. Environmental campaigns for this section refers to strategies such as demonstrations, protests and expeditions, organised either by the public or NGOs. The development of environmental campaigns across all case studies was similar, but the outcome differed greatly between the cases. The size and organization and outcomes of these campaigns depended largely on the amount of resources the civil society had, as evidenced by Endau Rompin, where the campaign was organized by MNS, an established society with various political connections and financial support. Financial support is vital in public participation (Koch & Christ, 2018; Shvedova, 2005) and for Kota Damansara, the available financial resources allowed the residents to organize a well-publicised campaign, while their political connection to PH allowed them to come to an agreement regarding the status of the PRF. These resources affected how far the campaign can go, thus influencing the effectiveness of this uninvited participation.

While this chapter only serves to provide a description of the cases studied for this research, it still provides some emphasis on the types of public participation that occurred within each of the cases. All four case studies involved uninvited participation initiated by specific events that directly affected the communities. For cases like Kota Damansara and Endau Rompin, uninvited participation was strong, well-organised, and especially for Kota Damansara, reflected the type of resources available to a community that possessed a high density network. However, in Ulu Tembeling, despite the initial involvement of the public by initiating contact with the NGOs, the lack of network to other actors apart from the civil society meant that the campaign failed to reach a bigger audience. While there were clear indications of political influence as well as deep political loyalty that may have then inhibited uninvited public participation, NGOs were unable to proceed with campaigns, unlike in Endau Rompin, where not only the public, but support from multiple actors was essential to the success legitimization of the campaign.

Across all four cases, Kota Damansara demonstrated the most success, as uninvited participation was meaningful, allowing the residents control over the outcome of the

decision-making. Endau Rompin may also be considered as successful, despite being unable to ensure the protection of both sides of Endau Rompin as a National Park, logging has ceased, and the area is now managed as a park, rather than a reserve. While the Ampang case is still ongoing, strong network and connection between the NGOs and the protesters ensures the continuation of the campaign, unlike Ulu Tembeling where lack of public and political support provided little incentive for the NGOs to continue their campaign. Interestingly, any dissimilarities between the states of Pahang and Selangor did not influence the case development, despite the differences in political control, size and dependence of these states on PRFs. Formal forestry actors, mentioned in Chapter 3, such as the federal level Ministry and Forestry Department, National Planning Councils and even state level Forestry Departments played very minimal roles in the conflicts. Interactions within the case studies occurred mainly between the public, NGOs, local council and project developers; and unless there were personal connections to specific political actors, interactions between the civil society and state/federal level actors were limited.

CHAPTER 6 FORESTRY GOVERNANCE: ACTORS AND CONFLICT IN PERCEPTIONS

One of the fundamental prerequisites for the achievement of sustainable development is broad public participation in decision making.

(UNCED, 1992)

The conflicts that occurred in the case studies described in Chapter 5 highlighted not only the different mechanisms of public participation, but also the different actors involved in the development of PRFs. While the public played a very central role in the cases, their position as actors involved in PRF governance is limited. Within this chapter, the role and functions of the different actors are analysed and discussed, as well as how each contributed to the decision making process of PRF governance. At the end of this chapter, the networks between these actors will be analysed further with a focus on the power relationships influencing public participation processes.

6.1 Actors in PRF Governance

Various formal actors in forestry management have already been discussed in Chapter 3, and include the federal government, state government, local authority, forestry department and other agencies within the MNRE as well as the Ministry of Plantation Industries and Commodities. However, while the predominantly top-down governance style adopted for forestry and forest reserves seemed straightforward initially, analysis of the four cases and the individuals involved in the cases highlighted the interaction with non-state actors; those who are not part of the governance structure.

Within the system of PRF governance, the actual structure of the system is a complicated construct of interactions, partnerships and conflicts that shift according to the circumstances. The actors involved in PRF can be loosely divided into two distinct set of

actors; 1] influential actors and 2] ineffectual civil society. Before this chapter goes further, it is important to note that this categorization is used only to categorize the actors into a more manageable structure.

6.1.1 Influential Actors in PRF Governance

6.1.1.1 Federal Government and the Barisan Nasional

Despite being considered as the ultimate authority in Malaysia, data from the cases actually showed that the federal government had little to no involvement throughout any of the campaigns. This was specifically evident from the observations made in the interviews with actors in Kota Damansara and Ulu Tembeling, where not only were there no mentions of official²⁷ federal level involvement in the development of forest reserves, but any mentions of ‘government’ at all automatically referred to the state government. One interviewee in particular, responded that contacting federal government was a useless endeavour, as they will not interfere with state matters (Interview with former resident, December 24th 2016). Similarly in Ampang, where the project was funded by the federal government, there were no formal avenues that allowed the public to directly contact the federal government.

“We did write several times [to multiple ministry departments], in fact, I had a letter to the Prime Minister, published by the News Strait Times two years ago. To the PM, saying that, look. You were the one who officiated this park, so we appeal for you to respect the park. But no, we didn’t get any response from the federal” (Translated interview with member of MNS. February 13, 2017)

Observations and interviews showed that minimal involvement of the federal government was evident only in Ampang and Endau Rompin. In Ampang, the construction of EKVE was a development initiated and funded by the federal government. In this context, it may

²⁷ Not including those who, while associated with federal government, did not represent the federal in the case studies.

seem that federal government took on the role of the developer, but later on, that responsibility was passed on to the concessionaire, AZRB, to proceed with the construction of the expressway. Once the project was awarded to AZRB, the federal government figuratively removed itself from the process, and subsequently allowed the state government to take over.

“Even though the project is funded by the federal. It’s not entirely fair to say it’s federal. Because the idea, the original idea, is part of the plan that was actually included in the State Structure Plan” (Interview with member of MNS. February 13, 2017)

Despite being funded by the federal government, the EKVE project received the full support of the state government, as it involves development that is beneficial to the state of Selangor. Not only that, once the project received approval from the local council – an agency that politically, is an extension of the state government – the subsequent process of excising parts of the forest reserves for the expressway and approval to proceed with construction was carried out by the state government.

In Endau Rompin, however, the federal government took on a pro-conservation stance, and was the one that suggested the creation of Endau Rompin as a national park. Here, it was clear that the power held by the state government in land surpassed that of the federal, as despite the defiance of Pahang state government to the non-binding agreement made with the federal government, the federal government remained largely uninvolved. Although there were reports of the federal government’s disapproval of the logging of Endau Rompin (R. Aiken, 1993; R. Aiken & Leigh, 1984), no direct action were taken until the matter of the Endau Rompin became highly politicised by major political parties within parliament.

In the context of these two case studies, the federal government’s minimal involvement reflected the constitutional division of power between federal and state ("Federal Constitution," 1957), which has been acknowledged as a cause of conflict in land

management (Awang 2003). The case studies not only provided the perfect example of how conflict may arise, but also showed how powerful the state governments are in land and forestry governance. Therefore, despite being part of the power structure and the epicentre of the legitimate authority in Malaysia, in terms of land governance, the power of the federal government did not override that of the state government

6.1.1.2 State Government and the Difference Between Pahang and Selangor

“Every state does indeed show their zealousness, defending their power from the point of entry of the Federal government” (Translated from a speech by Wan Junaidi, from Hansard of the House of Representatives, 16 November 2015)

Conflict over land use is a critical factor in various environmental justice issues (Kennedy et.al, 2017) and in Malaysia, the conflict caused by the division of power over land was readily acknowledged by different actors involved in forestry governance. The lack of federal involvement can also be attributed to politically motivated issues rather than just legal constraints. Observations from the cases gave this research an interesting perspective on the role played by different politically aligned state governments in forestry. On one side of the political divide, the opposing Selangor state government had formerly been applauded for its forward stance on protecting the rainforest. As of now, Selangor is the only state government that has a legal provision that allows the public to contribute to forest reserve governance by participating in a public hearing (Sharom, 2014). On the other side is Pahang, a state government that is politically aligned with the federal. Unlike Selangor, Pahang is more active in land and forestry development, and the utilization of its natural resources is vital for the state’s economy.

Initially, it was assumed that a state that was politically aligned with the federal government would have less conflict in dealing with land and natural resource use. In reality, the support of the state government is not automatic even if both state and federal are governed by the same political party. As evident in Ampang, where the state

government is governed by a different political party, there was no opposition to the federal-funded project, due to the benefit it would bring to Selangor. It is only when the development goals of the state government did not align with the federal government that the defiance of the state government against the federal's directive could occur. Like in Endau Rompin, state government essentially went against the federal government's initial agreement, and due to the federal government's reluctance to interfere, would have remained uncontested had civil society not taken action.

“[The federal government] can easily say, Endau Rompin, we are going to protect it under Federal law and we will take over Endau Rompin because we are party to the Biodiversity Convention, it encourages in-situ conservations and we are going to use Endau-Rompin for in-situ protection site. But they don't because it's political suicide. Because states are very, very jealous about their land” (Translated interview with an activist, August 14, 2017)

Apart from the potential for political conflict, the monopoly of state governments over land and forestry is also economically related. Literature has shown that dependence on natural resources negatively affects economic growth in developing countries (Badeeb, Lean & Clark, 2017), where the term 'natural resource curse' is commonly used to depict countries that suffer slow economic growth and development due to natural resource reliance (Adams, 2018). Although Malaysia has technically been able to break away from the 'curse' and is considered a success story amongst other resource-rich countries (Venables, 2016), there are still state governments, such as Pahang, that are very much dependent on the income provided by the exploitation of natural resources. Despite national level success in economic diversification (Venables, 2018), this success clearly does not occur uniformly across all states in Malaysia. Furthermore, not only do these state governments like Pahang heavily rely on the revenue derived from land and forests, the federal government are also unable to provide an alternative means of income. In fact, lack of federal funds to help support the state governments means that the federal government is also unable to force the state governments to conserve and protect the forest, especially in the absence of sufficient compensation. This, and the potential political conflict that can be caused by federal

government interference, are the main reason why state governments are a much powerful stakeholder in forestry governance.

“States have got very little source of revenue. Among their sources of revenue is of course, land and mining. So, the states, you can’t tell the states no, you must preserve your forest because it’s good for the environment. But they have no income. So they issue licences for logging or mining.... because they need, they need the money. The federal government cannot give them that kind of money. So, between the state and the federal government, there is always a tussle. If the state is ruled by another party, an opposition party, then of course, the problem becomes more serious. Because the opposition party, they don’t get enough from the federal government” (Interview with former government officer. January 13, 2017)

From the interviews, the state governments are consistently among the first actors that the public would refer to in instances of PRFs development. This is because, unlike federal government, state governments are a more prominent developer. The development in Ampang, for instance is driven as much by AZRB and federal government as it is by the state of Selangor. While in Kota Damansara it is unclear as to which specific developer was involved in the rumoured project, any development that takes place in an area like Kota Damansara would have still needed the approval of the local council. And since the local council is an extension of the state government, it could still be considered as a state-approved development. As for the developments in Ulu Tembeling and Endau Rompin, both areas were also involved in development either funded by the state or approved by the state. Therefore, all case studies provided evidence of state-sponsored development, taking place in PRFs or former PRFs own by respective state governments.

6.1.1.2.1 Department of Forestry and Local Council: An Extension of the State

Although state governments are the sole proprietor of land and forest, developments are not carried out independently. Within each state governments, development of PRFs relies on different branches of the government such as the forestry department and the local council. To develop forest reserves, the initial step is to first ascertain the type of development as it may require the de-gazettement of PRF from its reserve status. For projects like a highway and housing development, approval must be requested from the local council or forestry department. For the project in Ampang construction of the EKVE started after the DOE and later local council approved the plans submitted by AZRB. For Ulu Tembeling and Endau Rompin, logging and plantation licenses were issued via the forestry department, before land clearing could take place. In this context, it appears there is a decentralisation of power, where both local council and forestry department are actors within the forestry governance structure that drives development. However, in reality, both these agencies are merely an extension of the state government.

The Forestry Department Peninsular Malaysia (FDPM) is a department situated within the portfolio of the Ministry of Natural Resources and Environment and Chapter 3 defines the roles and functions of the forestry department in the management of PRFs. However, despite their responsibility in managing forest reserves, the forestry department defers almost entirely to the decision of the state government. Among those familiar with forestry governance, it is known that the forestry department is generally powerless and has no legal recourse to act without the approval of the state government

“[The forestry department] *issues the license* [for logging]. *But we did not approve the license. Because in, if you look at the legislation, under article 74, forest is state matter*” (Translated interview with forestry officer. October 6, 2017)

“The moment the [forestry] department goes to state level, the management and administration is transferred to the state government. Whatever work will follow what the state government said” (Translated interview with an activist September 12, 2017)

Similarly, the local council is also an agency that is considered an extension of the state government. Although local councils are supposed to be independent bodies, the fact that the officers in local councils are selected by the state government makes it difficult for local councils to be autonomous. Even development of PRFs, in areas like Ampang and Kota Damansara, where projects – regardless of state or federal funding – must obtain the approval of the local council, political pressure from the state government ensured that local council followed its edict. In fact, during the campaign against the development of EKVE, the local council (MPAJ) initially held a meeting with the public. This meeting, unfortunately was an exercise in conflict management and did not affect the approval of the project (Interview with local authority officer. August 15th, 2017)

“It doesn’t matter if it’s a Selangor state project, or a Federal project, the local government has to give approval. The problem is that, of course, there is no separation of powers, at least at State level, because the state government appoints the local government” (Interview with activist, August 14, 2017)

Although involved in the development of land and PRFs, the forestry department and local council have little autonomous power to influence the development process and are accountable to the state government. A similar case presented by Ribot (1999) indicates that this practice of devolution of power to local council fails to positively affect participation as local agencies are also ‘*systematically structured upwards*’, making them accountable to the state, rather than to local populations. It shows that despite being formal actors within the governance of PRFs, both agencies are merely a conduit that enforces the will of the state government, and therefore has little power to address issues of concern to the public, making public-local council interaction meaningless.

6.1.1.3 Developers: Private and State Associated Development Agency

Another actor to consider within the power structure is the actual developer. While earlier it was established that federal and state governments – via local council and forestry department – were part of the formal authority that drove the development of the forest reserves, private developers such as AZRB and state planning committees also played a role. In Ampang, AZRB not only acted as a developer, but also played a major role in resolving conflicts with the residents regarding the project. By ensuring good connections with the public living near Ampang Forest Reserve, AZRB managed to calm any issues that affected the residences, such as landslides and flooding that occurred as a result of the construction. Within this context, AZRB was not simply a developer that focused on developing the forest reserves, but also a conflict manager that ensured the project received little opposition from the public.

While the influence of AZRB in PRF development may be considered minor in comparison to state government, comparison with Ulu Tembeling effectively shows the importance of a developer in conflict management. Initiated by Pahang State Development Corporation (PKNP) the land clearing in Ulu Tembeling forest reserve turned into a serious conflict partly due to the lack of proper conflict management by either the state government or by PKNP. Unlike Ampang, there was no developer who was able to interact with and gain the trust of the public. Although Ampang did receive resistance, the success of AZRB in its role of managing the potential conflict meant that the majority of those campaigning against the development did not include the people living in the vicinity of the forest reserve, despite being the ones who were most affected.

6.1.1.4 The Sultan and Royal Families in Malaysia

The final influential actor that needs to be highlighted are the royalty, and in Malaysia, there's currently nine of them, each headed by a Sultan or *Raja* that figuratively sits at the top of the state government hierarchy but outside of the formal governance structure. The roles and functions of the Malaysian monarchs were formalised within the Federal Constitution, among them as a defender of Malay customs, and a symbol of the Islamic status of Malaysia. While these formal roles and functions of the monarch have been discussed openly both academically (Abdul Hamid & Ismail, 2012; Dzulkifli & Mohd Zamri, 2010) and in the media (Bowring, 1993; "How powerful are Malaysia's sultans?," 2017), very little has been written regarding their role in land and forest development. Traditionally, the status of the monarch is considered sacrosanct, and the Malay culture has a very strong sense of loyalty to the Sultans. This insulates the monarchs from any direct criticism and chastisement. This situation has not improved over the years, in fact, Human Rights Watch has twice in 2015 and 2016 highlighted the rising usage of the Sedition Act 1948 and the Communications and Multimedia Act to curb those criticizing the government and the rulers (Lakhdir, 2016).

In light of that, it was difficult to obtain any concrete data regarding the contribution of the Sultans in the governance of PRF. Different from the federal/state government and independent developers, the royals of Malaysia are not part of the legitimate authority involved in governance or development of the forest. However, they are very much entrenched within the system, so that despite the lack of concrete evidence to prove their direct involvement in forestry, interviews with several individuals representing different groups of actors all stated the involvement of the Sultans in forestry as fact.

The Sultan went and lost in gambling in London. Say if he owe them 50 million pounds. So he comes back and tell the state government, I want that forest. So the government gives him 500, 5000 acres of forest to the Sultan and then he start destroying the forest, giving to the highest bidders, the loggers. (Translated interview with a Member of Parliament, December 8, 2016)

If you want to pull back, de-gazette, you want to de-gazette (forest reserve), you have to table (the application) at the State Executive Council. State Council. But, they have a way to bypass. That's the evil thing right now, they use the name of the Sultan. They transfer (the ownership of) an area to the Sultan, so the law does not apply. Not civil law. The Sultan only abide by criminal law..... Sultan has full right to the state. (Translated interview with an activist, September 27, 2017)

Forests are matters of state and belonged to the state. Therefore, the land, those with the status of state land, forest reserves, automatically still owned by the state. So, that belongs to the Sultan. So now, like the case of Pahang, right? (People) say, how to make noise; that is Sultan's land. If an area that has been approved with a license bearing the name of the Duli Yang Maha Mulia Sultan, we will give approval based on the area that has been approved (by the state). Say (they requested) five thousand hectares of land in Ulu Tembeling, then its five thousand hectares of land. I cannot say anything. The laws stated it is legal. How to comment? What wrong has (the Sultan) done? (Translated interview with a forestry officer, October 6, 2017)

Based on this evidence, the Sultans in these case studies represent what is commonly referred to as elite actors, a critical entity in forestry that is crucial in challenging sustainable and equitable forest governance worldwide (Garcia-Lopez, 2018). In forestry governance, elite actors are those with considerable power that influence the management of forestry, despite not being part of the formal forestry management process. In Cameroon, for instance, elite actors did not have any visible role in forestry governance, but are powerful enough to influence the adaptation or adoption of new forestry practices (Nkemnyi et al, 2016). In Congo, political and military elites are amongst those in control of the forestry and mining resources, a matter that was especially attributed to decentralization of resource governance (Kuditshini, 2008). Similarly it was evident from the interviews that not only do the Sultans have the power to allocate land for personal use, but that power was exercised frequently, despite not being part of the formal government structure. In fact, the involvement of the Sultans in timber has been reported before, and was acknowledged as a contributing factor to Federal-states tension (Kathirithamby-Wells,

2005). However, comparison with data and interviews from the case studies showed that the level of involvement of the Sultan may differ between each state. During fieldwork on the cases in Selangor, no mention of the Sultan of Selangor was ever made, however, various mentions were made regarding the involvement of the Sultan of Pahang and the use of the Sultan's name to expedite land and forest development during fieldwork in Pahang.

In Ulu Tembeling, the Declaration of Ulu Tembeling was presented to both the Sultan of Pahang and the Chief Minister of Pahang, but there was no follow up from either party. However, my visit to the logging site south of the village in Ulu Tembeling on August 20th 2017 showed that the land was clearly marked as belonging to the PKNP (Figure 6.1). While this did not identify, in any way, the involvement of the Pahang Sultan in the development of the Ulu Tembeling, all interviewees who were willing to broach the topic indicated that the development in Ulu Tembeling involved the royal family.



Figure 6.1: Signboard located at the entrance to the logging site in Ulu Tembeling
(Translated: Land Owned by PKNP [Perbadanan Kemajuan Negeri Pahang] No Entry
Without Permission)

Contrary to the case in Ulu Tembeling, Endau Rompin has always been associated with the royalty. Despite the lack of concrete evidence, any mention of the Endau Rompin case in 1977 would inevitably bring up the issue of the involvement of the Sultan of Pahang.

Although in Chapter 5 the case of Endau Rompin was discussed mainly in terms of state-federal conflict, data from interviews indicated that it was possible that the Sultan of Pahang himself ordered the release of 12 logging licences to private companies in 1977. Kathirithamby-Wells (2005) has in fact written that grave concerns regarding the participation of Pahang royalty in timber extraction were aired during the UMNO General Assembly in 1992. During interviews regarding Endau Rompin, one interviewee who held a position in the federal government during the case stated,

“Oh yes, I know that. We used to, when we had the tussle with the Sultan (laughs), we exposed the fact that this Endau Rompin (land), it was given to the (Sultan). There are signboards there saying who owns that area for logging. It’s so, (Endau Rompin) is a case of the state government being unable to resist the pressure (of the Sultan)” (Interview with a former government officer, January 13, 2017)

This statement was made as a response to a question regarding the possible interference of the Sultan of Pahang in the conflict in Endau Rompin. Apart from directly associating the Sultan of Pahang with the Endau Rompin case, the interviewee also alluded to the powerful position of the Sultans in land and forest by highlighting that the Sultan put pressure on the state government. In fact, throughout the fieldwork, interviews taken from multiple actors representing different agencies all highlighted the ability of the Sultans to affect how the forestry is managed or governed. In addition to that, the influence of the Sultan has also been reported in an unpublished thesis, which detailed the extent of the Sultan of Johor’s influence in the construction of a township development in Johor, a state located south of Pahang. Stated in the thesis, the interviewees not only specifically pointed out that the ownership of land with no previous legal ownership belongs to the Sultan (via the state government), but that the Sultan of Johor was able to appropriate land at a lower price, via a company that represented his interests (Williams, 2016). As such, this highlights that ownership of land can be transferred into the hands of the Sultan, either by direct transfer of ownership, or by purchase of land via a private enterprise.

Based on these findings, it is clear that while there may not be concrete evidence that links the Sultans directly in the governance of permanent forest reserves, their actions and ability to appropriate land for personal use has both direct and indirect implications on how other actors governed land and forest in Malaysia. While the role of the Sultan in land and forest is never explicitly stated in policy, it is considered an accepted fact that the power of the Sultan over *his* land remained almost inviolate, even after the formation of the Federation of Malaysia. Therefore, in the context of forestry governance, if not in these case studies, the role of the Sultan as a driving force of forest reserve development is an important one.

6.1.2 Civil Society: Powerless Actors in Forestry Governance

6.1.2.1 Community and the Public

Time spent in all case study areas showed that the community associated with the case studies initially played no role in the governance or development of PRFs. This is expected, as despite the growing awareness of the vital role of the civil society in a modern governance system (Džatková, 2016), public participation in governance in Malaysia is not yet the norm. Within the context of PRF governance, the lack of proper mechanism for public participation is even more obvious, as there were little mentions of participation in the National Forestry Policy mentioned in Chapter 3. This not only indicated that the role of the public within the decision-making process of forest reserve is limited, but also meant that ‘public participation’ may be viewed only in terms of participation in programs with an end goal that is determined by the agencies.

“We welcome (the public). To join us in tree planting or anything” (Translated interview with forestry officer on public involvement, October 6, 2017)

In Kota Damansara and Ampang, the forest reserves are utilized by the public, perhaps even illegally, as some permanent forest reserves are not accessible without consent from the Forestry Department. Because Ampang and Kota Damansara are located near the city,

the use of forest reserves by the public is for recreational purposes such as hiking and camping. In Pahang, however, the relationship of the community to the forest reserve is much closer, as both communities were traditionally forest dependent. Here, the legal status of the accessibility to the forest is less clear, as forest reserves belong solely to the state government and legally, should not be accessible to the public. However, due to the vast area of the Pahang forest reserves as well as the lack of formal boundaries that clearly define the land, the community has a much freer access to the forest reserves. Especially in Endau Rompin, the indigenous community has full access to the forest resources, despite the community itself no longer solely depending on assets from the forest. Now, communities from both Pahang case studies carry out agrofarming activities, and most of the interviewees living in Endau Rompin and Ulu Tembeling stated that they were either involved in fruit, rubber or palm oil plantations.

The lack of influence of the public within PRF governance contradicts the rule of any value-based interactions. In situations where the public are the most at risk of any effects (positive or otherwise) from the development of permanent forest reserves, why then were their roles in it so minimal? Even in the preparation of EIA reports, the mode of 'participation' is typically decided by the consultants and rarely goes beyond taking part in surveys. An example of this was observed during the fieldwork in Ampang, carried out throughout December 2016 and January 2017, where several residents confirmed that they had been contacted prior to the construction of the EKVE, but most indicated that these were 'meetings' that were held to inform them of the construction. In fact, a more meaningful participation only occurred after the EIA was released for public viewing. It was only at this point that the public was able to influence the project in some manner, as they were able to persuade EKVESB to change the alignment so as not to disturb the Quartz ridge that ran across the planned route of the highway. However, the release of EIA meant that the project was already going ahead, and any objections were considered only if they did not affect the entire project.

This form of invited participation, while not entirely perfect, does allow minor participation of the public in governance. In fact, observations also showed that initially, there were those who were content to either not be involved or only marginally involved in

any aspect of the governance of permanent forest reserves. However, that situation changed as conflict arose when the public wished to contribute far more than what was allocated to them by the government. As such, it was the occurrence of that conflict that illuminated the contradiction in the way the policy and governance operates. Despite being the most at risk of effects of the development, none of the cases showed the public being allowed early involvement in developing the forest reserves. Furthermore, once the public did decide to participate at a later stage, there was little avenue for them to do so effectively. The current public participation policy not only renders the public almost powerless but was constructed to ensure the lack of power remained so. Because of this, it is no wonder then that the public had to resort to uninvited forms of participation.

6.1.2.2 Involvement of Non-Government Organizations

In addition to the public, case studies involving the development of forest reserves also featured the NGOs as another prominent actor. It is important to note that past studies have identified NGOs as part of the 'public' in public participation. In fact, apart from the NGOs, the term public is used to represent a wide range of groups, such as women, youth, indigenous and local populations, local authorities, workers, business and industry, scientists and farmers (Zhang, 2017). However, in this research, NGOs and the public are considered two distinct groups of actors. The reason for doing so is because it allows a more nuanced analysis of these two actors, especially since the NGOs and the public represented different groups of people, and had distinctly different agendas. Therefore, categorizing the groups separately will allow for a better explanation of the role each group played in the case studies and in the governance of PRF. For the purpose of this analysis, NGOs are used to describe organizations involved in environmental advocacy. These organizations can either be aligned with or against the government policies but are not part of the formal state or federal government organization structure.

Throughout this research, several environmental NGOs operating in Malaysia have been identified as critical agents that facilitated and assisted in campaigns on PRFs development. However, case studies showed that there are vast differences between the

NGOs, where some NGOs were found to be more prominent than others and therefore are featured more extensively in the case studies. Of the most prominent NGOs in Malaysia is MNS, an environmental non-government organization that is mostly involved in environmental education and awareness programs. Founded in 1940, MNS features an extensive resume, and has taken credits for some of the major environmental programmes in the country. Apart from MNS, other NGOs that also played active roles in the case studies include PEKA, ALAM, Sahabat Alam Malaysia (SAM), and Treat Every Environment Special (TrEES). Individually, these NGOs have slightly different agendas, however, most are pro-conservation, and involvement of the NGOs in the cases meant that their goals contradict with those of the drivers.

Globally, NGOs are recognized as critical organizations, not only in facilitating societal development, but also in addressing environmental issues (Vivian, 1994) as well as promoting institutional change in society (see Barnes & van Laerhoven (2015) for example). However, within the governance of permanent forest reserves, the role of the NGOs is viewed as almost similar to that of the public.

“We do tree planting programs in degraded area in areas that we have identified and we give it to NGOs to plant (the tree). We will look for any (NGO) volunteer and plant immediately. So we have no issues with (the NGOs). We always (work) with all NGOs”
Interview with forestry officer, October 6, 2017)

From the perspective of the government at least, environmental NGOs are seen only as a vehicle to promote and carry out programmes designed by the government or forestry department. Even in the United States, governments and corporations are usually the ones with more influence in forestry decision-making process (Bravo-Gonzalez, 2010); and interviews with forestry officers involved in the case studies indicated that this might also be the case in Malaysia. Although acknowledged as important in providing a check and balance system to the forestry departments (Interview on January 17, 2017); NGOs are not involved in any decision-making processes and are promoted only as agencies that work ‘with’ the government, and assist in government-funded conservation and reforestation

programs. However, in instances observed in the case studies; where development of PRFs contradicted with the aims and goals of environmental NGOs, they then became critics of the government. NGOs, in this instance became opposing actors, working with aggrieved public either as collaborators, or representatives of the community.

In Kota Damansara and Ampang, the NGOs started out by providing support to the residents, and later acted as a mediator between the public and the government. An interviewee who is both MNS member and a former resident of Ampang said that initially,

“ ... we had the support from NGO. The NGOs are MNS, especially MNS Selangor branch” (Interview with former resident of Ampang, February 13, 2017)

Later, due to the lack of active participation from the Ampang residents living near the forest reserve, NGOs became the driving force in the protest. The same situation can be observed in Ulu Tembeling, where PEKA initially came together to support the public, and later took on the role of organizers.

Interestingly, the case of Endau Rompin did not start with a public campaign. Back then, it was the NGO, more specifically MNS that initiated the campaign to protect the Endau Rompin Forest Reserve. A former MNS member interviewed on September 12, 2017, said that during the Endau Rompin campaign in 1977, MNS was a lot more involved in environmental activism. Not only did MNS plays the role of campaign organizer, but it took the lead in driving the protest against the logging of Endau Rompin and became a powerful force in ensuring that the campaign achieved partial success. Data from interviews and reports showed that the involvement of NGOs in Endau Rompin did not initially start as a support to the public as observed in the other three case studies, but instead it used the public to support its campaign. Spurred on by reports of environmental degradation in Endau Rompin that were released with the help of the media, the public rallied and provided the necessary backing to the campaign initiated and lead by MNS.

The importance of the NGOs in facilitating and assisting the campaigns on PRF developments highlights not just the critical role of NGOs in the forestry sector, but also the importance of uninvited participation. Formally, the involvement of environmental NGOs in PRF governance is still restricted within the narrow context set by the government with the NGOs having no influence in decision-making process. Despite that, conflicts in PRFs triggered advocacy actions by the NGOs. Furthermore, in cases where the development was not aligned with the aim of environmental NGOs, which is to protect and conserve, NGOs became either as representative of the public or initiator of the campaign.

6.2 Hegemonic Actions of Key Actors in Forestry

The actors involved in the case studies reflect the nature of PRF governance in Malaysia. To quote Weber, power is the *'probability that one actor within a social relationship will be in a position to carry out his own will despite resistance'* (1978:55) and using the case studies as a basis, it is easy to see that the majority of power belongs to State governments and Sultans. Visualization of the observed power relationship between the actors in the case studies (Figure 6.2) shows state government as the most influential formal actor, and could only be potentially rivalled by the Sultan, an actor not within the formal government structure.

States (government) have their own way (of managing the forests), but the palace interferes a lot (Interview with activist, September 27, 2017)

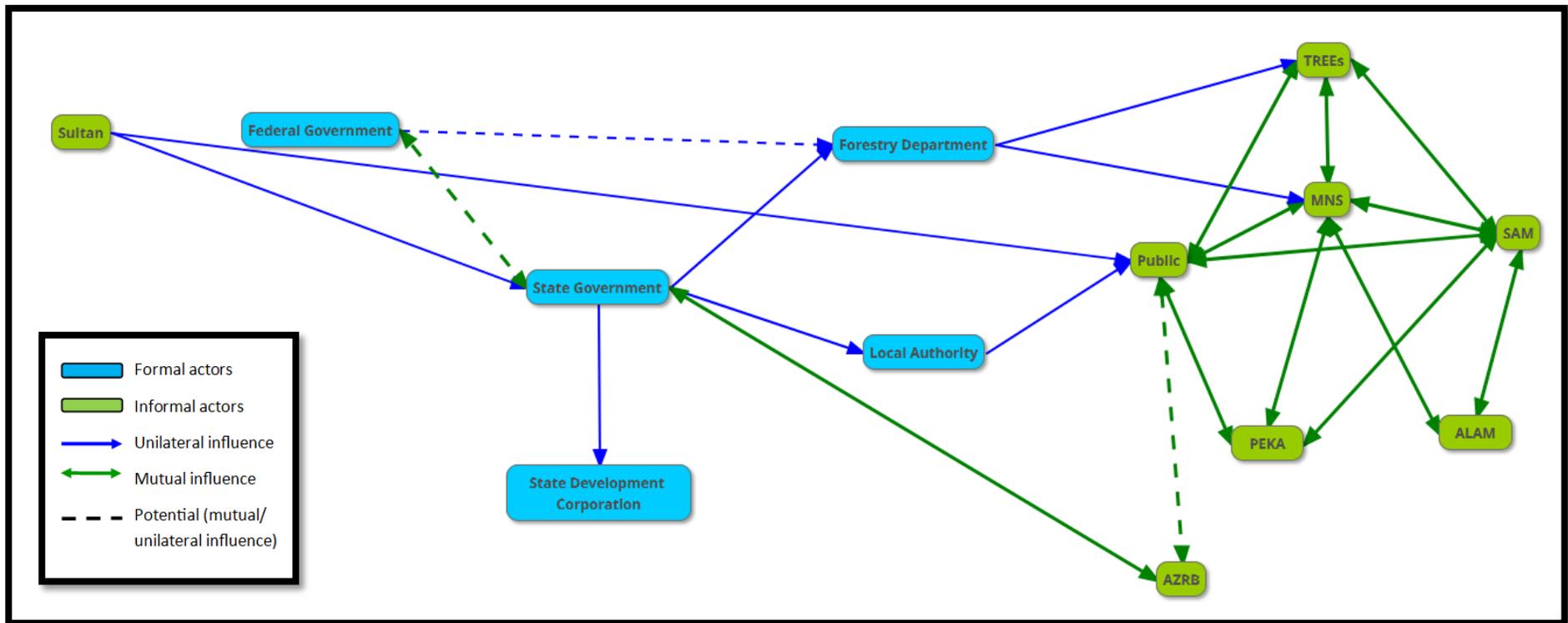


Figure 6.2: Visualization of the network between actors in PRF governance [Based upon ideas in Walker et al. (2008)].

The visualization presented in Figure 6.2 is a simplified version of an influence map, which draws upon ideas from Walker et al. (2008) and highlights the relationships between formal and informal actors involved in the case studies. The relationships between the actors are categorised as either mutually or unilaterally influential and based on observations during field work and specific mentions by the interviewees regarding their association to other actors. The first step in developing this visualization involved the identification of the groups of actors in the cases, both formal and informal ones. Once the actors had been identified, mentions of the interviewees' association and relationship with other group of actors were especially noted during the interview. The focus of this exercise was on the dynamics of the relationship, whether any actor has had a mutually influential relationship to another or whether one actor has more power to influence another actor. This data was triangulated with data obtained from other interviewees and groups of actors, as well as my own observations during fieldwork. For example, a forestry officer indicated that they will call upon the NGOs to carry out reforestation programmes, thus indicating that forestry departments were in control of the involvement of NGOs in government initiatives; however, observations showed that there was no reciprocal relationship with the NGOs and this was corroborated by interviews with members of different environmental NGOs. Another example is the relationship between state government and local councils, where it was observed that local councils are not able to go against the decisions implemented by the state, despite being technically responsible for approval of developments and EIAs. This was also corroborated not only by interviews with government officials, but also with other NGOs. Potential influential relationships, such as between state and federal government, is categorised as 'potential', and this was made on the basis of the potential influence the federal government has over the state based on the legal power conferred by the Federal Constitution to the federal government over the state as well as data obtained from interviews; but which was never observed in the case studies. Meanwhile, relationships of actors such as the Sultan, who was not available for interviews, were made based on inputs by interviewees representing different group of actors to ensure consistency of data.

As mentioned earlier, both the Sultan and the State government are powerful actors in forestry governance. As shown in the Figure 6.2, the Sultan can directly influence the State government, which in turns has power over other actors such as the forestry departments

and local councils. Mistakenly assumed to be a symbolic monarchy in Malaysia, the power of the Sultan is not technically embedded in policy, but in fact rooted within the cultural processes of the country and reinforced by the belief system still held by public and government officers alike. Malaysians for the most part still believe in the sanctity of the role of the Sultan, which is reinforced throughout government departments. The notion that land belongs to state governments and *therefore it belongs to the Sultan* had been repeated throughout the research. Based on the case studies, interviewees believe the power of the Sultan is irrefutable and unlike those with formal authority, there are no overt signs of influence in decision-making process. The first being that there is lack of evidence, and secondary to that is the possibility that the power actually lies not with the Sultan himself, but with the prestige of the title of the Sultan. Because this research is unable to find direct evidence of the Sultan's involvement, it is also difficult to pinpoint exactly how the power of the Sultan works to drive the development of PRF.

In PRF governance, the federal government holds the potential for power in influencing both the state government and the forestry department (see Figure 6.2); the agency responsible for the management of PRF. As evidenced by the NPA 1980, NFA 1984 and the Federal Constitution, federal government has strong legal recourse to exercise its power over the state but this was never exercised, due to the threat of political unrest that might occur as a result of federal government's intervention in state funded development. Federal government might put pressure on state governments regarding some issue (see Endau Rompin case study, Chapter 5), but throughout the cases, no overt or direct action was ever taken.

Apart from the Sultan, other informal actors such as the public and the NGOs, have no power to influence the formal actors in PRF governance. They were only marginally involved in the development of PRFs with mutually influential relationships existing only between the public and NGOs. This mutually influential relationship, visualised in green in Figure 6.2, allowed the easy formation of coalitions between the civil society actors; the public and the NGOs. In the event of uninvited participation, both the NGOs and the public rely on each

other and thus potentially affect the PRF actor dynamic in forestry development campaigns.

In regards to the lack of civil society power to influence formal actors in forestry governance, one can argue that of course neither public nor NGO should have any say in the development of PRF, since the land belonged to the state and not to the people. However, is it fair to view this situation in this manner if the impact of the development affects the people? The EKVE project in Ampang has caused flooding and minor landslides in the area, affecting the communities residing near the park. Development in Ulu Tembeling, for instance, caused an already critical river to be unable to support the village it straddled. This situation highlights the need to observe PRF management based on the principles of justice and fairness, as it will allow the understanding of issues arising from the power relations between the actors involved in the cases. One thing remains clear, of all the actors involved in the cases, the public are the ones at the receiving end of any PRF development impacts, and yet, they have the least power to exert influence in the decision-making process.

6.3 Conducting Public Participation: Public's Response to Established Process

The lack of public power in PRF governance makes it necessary to better understand the issues that affect public participation in forestry governance. Within this system, there's a myriad of conflicts that exist, all of which contributed to the failure of public participation and sustainable development policies. Analysis of the cases, interviews and parliamentary debates reveals a major conflict that lies in the perspectives among the actors regarding forests and participation. Initially, perceptions regarding forests, PRF and participation and how each is perceived were not the sole focus of the case study. These issues became a recurring theme only during data collection. It highlighted the fact that these concepts have been understood in different ways by different actors, leading to conflicts and misconceptions.

6.3.1 Forest and Permanent Reserved Forests

One of the fundamental issues that contributes to conflict in PRFs governance is how forests and PRFs are legally and structurally defined. In general, the accepted concept of forest among decision makers in Malaysia is based on the description provided by the Food and Agriculture Organization (FAO) of the United Nations. FAO (2012) defined forest as ‘Land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural or urban land use’

“Food and Agriculture Organization recognizes rubber plantation as a forest plantation. So that's why our central forest cover is growing. After all, we [will still] continue to make forest inventory. If we make forest inventory adopting FAO's definition, it says in one area, one hectare if there is 10% forest cover or forest coverage, this means that the area is considered a forest area. So we follow the definition of FAO because this is an international definition” (Translated speech by James Dawos Mamit²⁸, from Hansard of the House of Representatives, June 10, 2015)

The use of this definition as a basis on which the concept of forest is defined in Malaysia was confirmed by the Deputy Minister of Natural Resources and Environment himself, in a debate regarding the data on forest cover in Malaysia. However, this definition of forestry has been contested (Chazdon et al., 2016; Griffith et al., 2017; Kant, 2006; Putz & Redford, 2010; Sasaki & Putz, 2009), particularly due to the fact that the description of forest provided by FAO means that degraded forest and forest plantations such as rubberwood may also be considered as forests. Therefore, the use of this broad definition of forest in Malaysia means that the veracity of current estimates of forest and forest cover reported by the Department of Forestry Peninsular Malaysia can be challenged, as it is never made clear how the forest is categorized by the department.

²⁸ Deputy Minister of Natural Resources and Environment

Within the National Forestry Act, the legal definition of PRFs (Malaysia, 1984) does not state the need for any structural or ecological evidence of ‘forest’ or tree cover as an essential criterion for land to be designated as PRF. As stated in Chapter 3 (Section 3.2.1.1) the Act defines PRFs as any *land* that gazetted under the NFA as a reserve forest. This makes it legal for state governments to designate any land, regardless of its ecological status, to simply be recognised and legally gazetted as permanent reserved forest. In fact, interviews with forestry officers also indicate possible evidence of formerly forested PRFs that retain the legal status of a reserve forest, despite having been developed.

“You look at Genting Highland road, the whole stretch is still a forest reserve. Old Gombak road, the whole stretch is reserved forest. Selayang road to [go to] Senawang, that whole road is reserved forest. That includes infrastructures” (Translated interview with forestry officer. October 6, 2017)

The legality of the practices described in the statement above is unquestionable, since the way the statute is written allows a very broad interpretation of PRF. In truth, it reflects the way PRF is defined in government. As mentioned in Chapter 3, the governance of PRF has always been economic-centric, rather than conservationist. Although it was also promoted as a means of protecting the forests, the economic value of the forest remains at the forefront of the country’s focus and the management of PRFs is based entirely on resource exploitation.

The combination of broad legal definition of PRF as well as the focus on its economic value contradicts the perception civil society has regarding PRFs. In Malay, the term used for PRF is ‘*hutan simpanan kekal*’. It is commonly understood by the general public that ‘*hutan simpanan kekal*’, is forest that has been categorized as a reserve area.

“Permanent forest reserves? In my opinion, my view, it is forest that cannot be developed”
(Interview with resident of Ampang. February 4th, 2017)

The public's perception regarding forest reserves as entirely for protection strengthens civil society discourse that they must be protected, and conserved for current and future generation. Regardless of actual participation of the public in conservation and protection programmes, analysis of interviews indicated that the public assumes that the fundamental purpose of PRFs is forest protection, when in fact it is sustainable use of forest resource

This misunderstanding of the actual status of PRF may signal communication issues between the actors. Miscommunication is an issue that has been acknowledged as a source of conflict across different areas of research (see Amigun, Musango, & Brent , 2011; Lee, Strohmeier, Bunker, & Van Orden, 2008; Pearson, 2001) and the fact that miscommunication increases the lack of trust between the actors creates a cycle of miscommunication and misperception that exacerbates the conflict in permanent forest reserve governance. Even worse, confusion regarding the status of permanent forest reserves occurs even amongst the key individuals in Parliament, signalling the need for this issue to be addressed rapidly.

“I have asked this question multiple times, over and over again. And every time the [federal] government stated that the area of permanent forest reserve is still at 19 million hectare and so I hope this is true. However, if we take the plane [fly] to Sabah or Sarawak or over the peninsular, including the Belum Forest Reserve, in Gerik, Perak, we see that [which] we said permanent [forest] is bald. Clearing the forest cannot be said for permanent [reserve]” (Translated speech from Tan Seng Giaw, from the Hansard of the House of Representative. May 26, 2015)

I would like to ask how will the federal synchronize with state regarding this land so it can be gazetted as mangrove [permanent] forest reserve? This is because along the coast from Tanjung Piandang, Kuala Kurau until Kuala Gula, there had been massive invasion by developers for economic interest (Translated speech by Mujahid Yusof Rawa, from Hansard of the House of Representatives, November 13, 2014)

This issue has been brought forward to the National Forest Council where all state ministers are urged to ensure that areas that have been identified, about 132 thousand hectare to be gazetted as permanent forest reserve so this area can be saved (Translated speech by S. G. Sothinathan, from Hansard of the House of Representatives, April 27, 2005)

6.3.2 Public [Non]participation: *Apa kita boleh buat?*

(*Translation: What can we do?)

The inconsistency between how PRFs are governed and how they are perceived by civil society contributes to a barrier in public participation processes. In fact, observations made during fieldwork also highlight the disconnect between the role which the public is expected to play in participation, and the extent to which they were actually allowed to contribute to the decision making process.

The Aarhus Convention makes it clear that the public must have the right to access to justice in environmental matters. Although Malaysia is not a signatory country, the convention has been frequently quoted as a benchmark and it is generally understood that all public should be provided equal opportunities to participate in matters pertaining to the environment. However, very little invited public participation was observed in PRFs, either embedded in legal documents (Chapter 3), or in practice (Chapter 5). As stated in Chapter 3, meaningful public participation is not part of forestry governance and the cases showed (see Chapter 5) that invited public participation took place only when PRF development coincided with projects that fell within the provisions of the TCPA 1976 and the Environmental Quality Act 1971 (EQA 1974). This means that activities that do not fall into the category of land development, such as logging, conversion of PRFs for forest plantation and other developments that do not require the change of status of PRFs do not legally necessitate any public input at all.

Therefore, it was interesting to observe that most of the actors that were interviewed indicated that the public needed to participate more, and that the public may be too

complacent, thus not doing enough to be part of the governance. The same view was repeated throughout my interviews with several veteran politician and government officers, all of whom expressed their wish to see the public to be more actively involved in environmental governance and be more aware of environmental matters (Interviews on December 8, 2016; January 13, 2017; January 21st, 2017).

“Malaysia is not a problem. We got a good rule and regulation. We got a system for enforcement. But the public so complacent” (Interview with activist. January 6th, 2017)

“The public are also careless in their action towards the environment, as they are more concerned with economic pursuits” (Interview with activist. October 10th, 2017)

Overall, the interviews indicated that the public is perceived as disinterested in participation, especially in cases where the development had no direct effect on their lives. In Kota Damansara, active participation occurred only after the realisation that rumoured development may potentially affect their land and property values. In Ulu Tembeling, one local resident stated that there was no need for him to participate, as the logging in the area had already been completed and the river was once again functioning (Interview on August 20th, 2017). The statements from various interviews indicated that the willingness of the public to participate only went so far if the issue in question directly affected them. Beyond that, there was no reason for public participation, as there were ‘no more problem’. This situation in the case studies corresponds to the NIMBY syndrome, a not-in-my-backyard situation that explains the lack of participation amongst those whom were not directly affected by the development of permanent forest reserves.

Initially, NIMBY was exclusively associated with nuclear and waste siting facilities (Gervers, 1987; Matheny & Williams, 1985; Wolf, 1987) and it was once considered a social challenge to public planners. Over time, more participatory activists have championed more encompassing not-in-OUR-backyard initiatives (Freudenberg & Steinsapir, 1991) and recent articles in fact challenged the former understanding of the

issue . Now, NIMBY is considered inadequate, a superficial explanation for development and planning challenges (D. Bell, Gray, Haggett, & Swaffield, 2013; Swofford & Slattery, 2010). The move away from a simplified explanation of NYMBY-ism prompted a deeper look at the interviews. Based on the same understanding that NIMBY does not adequately explain why a community does not participate in development, I believe that the seeming complacency and the lack of public will to participate may be attributed to the lack of recognition of the public's ability to contribute and the lack of formal avenues that allow invited participation to take place. This means that the public have no power to influence decision making process. In fact, when asked regarding the reason for non-participation, several interviewees asked me in return, *'what can we do?'*. This rhetorical question not only indicated the lack of power the public experienced within the invited participation methods, but also hinted at their lack of faith in a system that has consistently failed them.

"What can [the public] do [to stop the construction], but accept it" (Interview with residents of Ampang. January 17th, 2017)

"What can they do? There had been a protest, it was advertised on social media, on Facebook, but there's nothing that the community can do" (Interview with a resident. January 17, 2017)

"There is no use to complain. Here, even if we give suggestion, I don't know. [Our] suggestion [the local authorities] will not accept" (Interview with resident. January 18th, 2017)

"Despite the fact that we got 3000 signatures, they went ahead and they approved the plan which includes the highway" (Interview with former Ampang resident. February 13th, 2017)

The failure of the PRF management to embed various forms of meaningful public participation into their practices contradicts with the expectation put upon the public to

participate more in environmental matters. Because PRFs are governed using the logic of resource management, rather than environmental protection and conservation, the public are not given an adequate avenue to meaningfully participate in decision-making. There is a limited scope for participation, via TCPA 1976 and EQA 1984, but as stated in Chapter 5 (Section 5.5), the mechanisms are inadequate. Therefore, as observed in the cases, participation generally takes the form of uninvited protests and campaigns, a community-based response that occurs only after a direct impact has been experienced by a community. The lack of meaningful participatory measures creates a cycle of non-participation, which, may seem similar to complacency or NIMBY-ism, but is in fact related to the lack of trust and faith in the consistently failing public participation system. As such, this issue identifies an unjust system which; 1] allows very limited avenue for formal and invited participation; and 2] yet expects the public to actively participate. Public participation is not implemented within PRF and forestry governance, but there exist expectations that the public must and should participate, despite the absence of a meaningful participatory avenue. This disconnect between expectation of the government and the limited power of the people affects both the relationship between the civil society and the government, but also inhibits future participatory efforts, invited or otherwise.

6.4 Conclusion

The findings of the first part of the analysis corresponds to the first two research questions posed in Chapter 1 (Section 1.2). The case studies identified the different roles played by actors that would not have been observed had analysis relied only on policy documents. Based on the cases, the actors all in some way contribute to PRF governance, but the degree to which they are able to influence or drive said development differ significantly. The ability to influence or dominate the governance of permanent forest reserves is tied to the power held either by certain key individuals or group of actors. That power in turn allows the governance of PRF and forestry to follow the specific goals and aims set by these dominant actors, thus ensuring that the less powerful actors are unable to meaningfully participate in governance. As the main drivers of PRF development, state governments and Sultans have the power to direct the development and management of PRF. As a formal actor, the State government's authority is evident, and is exercised via forestry departments for the management of PRF, and via local councils in matters relating

to public participation. The Sultan's influence, however, is more ambiguous, as it is difficult to ascertain whether there is actually direct interference in decision-making by the Sultans, or if the name and position of the Sultan is instead used by another actor to initiate development. What is evident is that the Sultan's power surpassed that of the state government, to the extent that PRF development may be influenced based on the actions of the Sultan. While they are not part of the formal government structure, the Sultan's power to allocate land for personal use, should he wish to exercise it, may interfere with the directive of state governments.

For the public to be able to influence the governance of PRF, they need to first be in a position of power, and based on the current public participation policy in Malaysia, that seems impossible. The analysis highlights a disconnect in both the logic that underpins how PRFs are managed and in how PRF is perceived by different actors. The first issue is that the goals for the governance of PRF between the government – as a source of economic income – and the public are intrinsically different and what PRF represent to the government affects how development in these reserves is given priority. Initially, this contradiction of views regarding PRFs between civil society and the government can be blamed on the lack of public understanding or knowledge of the legal statute itself. Both the NFA 1984 and the NFP 1993 is clear (see Chapter 3) that PRFs can be classified as either protection, production or education. However, this concept of multiple use of forest, underpinned by the economic predisposition of PRF management since the colonial era, has been misunderstood and PRFs are now synonymous as a means of protection and conservation of forest resources. Since PRF is managed based on economic-centric forest resource production, this then limits the scope of public participation, as resource management does not require the participation of the public. Corresponding to the second research question, data shows that public participation is then restricted to a very narrow scope of PRF development, which creates a cycle of non-participation, where the public increasingly feels marginalised in decision-making. This, however, contradicts with the expectations put upon the public. They are viewed as disinterested actors, and are expected to 'participate' more, despite the absence of meaningful public participation mechanisms in the first place.

Power relations may alter the outcome of collaborative efforts, or even preclude collaborative action (Reed, 1997). The dominance of elite and formal actors in Malaysia not only controls the development and management of PRFs, but prevents meaningful place participation from taking place. However, as the cases have shown, limited participatory mechanisms prompt uninvited participation, which relies on the mutual relationship between NGOs and the public. Despite the unjust system that prevents the public from participating in processes that directly affect their social space, there may be alternative avenues to utilise. Further analysis, considering both invited and uninvited participation processes that occurred in the cases will be presented in the following chapter.

CHAPTER 7 PUBLIC PARTICIPATION: INSIGHTS FROM ENVIRONMENTAL JUSTICE

Domination of state governments and elite in forestry governance results in an unequal balance of power, especially among the civil society. Further contributing to the problem in governance is the notion of public participation and PRF that is understood differently between the actors. Using a rights-based approach that focuses on meaningful participation and the capacity to influence decision-making processes, environmental justice is applied as an analytical tool that allows an understanding of public participation processes. In this chapter, the environmental justice principles are first used as an analytical lens to explore the justice issues that emerged from the public participation mechanisms that occurred in the case studies. This chapter also highlights how uninvited participation was used to overcome barriers to participation and the conditions in which empowerment of the public and implementation of public input can occur.

7.1 Environmental Justice: Highlighting Issues in Participation

Environmental justice struggles in Asia are shaped by the division of urban-rural populations, and commonly revolve around ‘extraordinary struggles’ rather than everyday experiences of environmental pollution (Basu, 2017). In Malaysia, environmental justice is still a small movement that has predominantly focused on the rights of the indigenous community to the forests before slowly moving towards an emphasis on procedural injustice that occurs due to limitations in the Malaysian legislative and judicial system (Hezri, 2011; Hezri & Hasan, 2006; Sharom, 2007, 2014). Among the Malaysian scholars, the environmental justice arguments are closely tied to the lack of power and the procedural injustice experienced by the ‘have-nots’, those who live on the lower end of the social class, which quite often involves the indigenous group. As a community, the indigenous people in Malaysia have had a long history of marginalization and oppression, and are generally regarded as the marginalized forest dwellers who have no power beyond what is handed to them by the government.

“They don’t have any rights to these forests. Who imposed the rights on these forests? Who owned the lands? And why do the state government parcel these lands out?” (Interview with a Member of Parliament, December 8, 2016)

“[Environmental justice] is not something which is particularly strong in this country. I mean, indigenous people feel it. Because their land is easily taken away” (Interview with activist, August 14, 2017)

Outside of the environmental justice movement, the rights of indigenous communities within forestry itself is a widely discussed issue, one which has garnered massive attention in Malaysia. Despite that, it was mainly the interviewees who had worked in government or are involved in forestry that voluntarily provided their opinion regarding the issues related to indigenous groups.

....for example, the natives who live in the forest. Our idea is that they should join the rest of the population, in getting better education, and training and all that. And live a better life. We don’t want them forever be just denizens of the forest. And living by hunting for wild animals, and monkeys and all that for their food. But when we try to do this, they try to keep this people as primitive as possible. I think it is not fair to these people. These people are primitives, simply because they have no chance. (Interview with a former government officer. January 13, 2017)

“My reading now is that in 1984, the Forest Act took away all the rights, or it claim to, or it tried to take away all the rights of the people inside the forest reserve. Without compensating them. Which is against basic human rights. And also against the provision in the Federal Constitution” (Interview with an activist, February 13, 2017)

“So most states, no, all states. In fact, I feel none of the states (in Malaysia) fully accepted the presence of the indigenous people in the state’s governance system. They would accept,

but they want the indigenous groups to come up with the solution themselves” (Translated interview with a forestry officer. October 6, 2017)

Regardless, the link to broader environmental justice concepts were never made in the case studies, even the ones in Pahang, where at least one community of indigenous people can be found in both Endau Rompin and Ulu Tembeling. The reason for this may be due to the fact that the issue of forestry and environmental justice is exclusively associated with indigenous groups and their oppression in forestry development. The cases in this research are all examples of forestry development, but none that exclusively targeted indigenous communities. Unlike some forestry development cases in Malaysia that have utilized the environmental justice narrative previously, the lack of direct attack on the indigenous groups in the cases meant that the public and civil society in the cases had no reason to claim environmental injustice. Therefore, the extremely narrow focus of the environmental justice movement in Malaysia as well as the lack of awareness of environmental justice movement itself, ensured that the environmental justice argument does not go beyond indigenous issues.

However, the absence of environmental justice narrative in the cases does not mean absence of environmental injustice in the public participation processes. Drawing from other academic literatures, the use of environmental and social justice concepts – either in their entirety or certain elements – to provide insights to public participation can be observed across different areas of research (Brisman, 2013; Coolsaet, 2015; Cvetkovich & Earle, 1994; Fraser, 2009; Martin et al., 2016; Paloniemi et al., 2015; Paloniemi et al., 2018; Zhang, 2017). Within these literatures, each highlighted the issues related to either the process or outcome of public participation, contributing multiple perspectives and insights to the participation and justice nexus.

More recent examples of environmental justice-participation studies include Coolsaet (2015), whom developed an evaluative framework that was then applied to two agricultural case studies. The paper draws predominantly from Fraser’s (1998) work on parity of participation, where the focus is on recognition and the distribution of resources that

precedes participation. Paloniemi et al. (2015), highlighted that participation processes failed to not only solve large scale environmental problems but the use of environmental justice frameworks highlighted fundamental problems related to distributional and procedural justice. Further building on the procedural and distributional framework, Paloniemi et al. (2018) then used it as an analytical lens through which to evaluate the governance of aquatic environments.

There are also studies that do not explicitly use the term environmental justice, but still draw on the rights based evaluative criteria similar to the environmental justice ideals. Zhang (2017) for instance, provides evidence of procedural injustice within formal public participation that fail to protect the rights of the people. Others instead focus on specific dimensions of environmental justice such as capabilities within participation (Simpson & Basta, 2018), recognition in conservation programmes (Martin et al., 2016) or procedural rights in environmental decision-making (Gellers & Jeffords, 2018).

However, more often than not, the analysis of ‘participation’ or ‘stakeholder engagement’ within these literatures focuses on the formal or invited processes of stakeholder participation. While it was not made explicit in most, the participatory processes that were analysed are those that were organised by a dominant stakeholder, a government agency or a third party actor. They failed to provide a picture of situations where both invited and uninvited participation were utilised or where there is no formal participatory process at all. Furthermore, despite the fact that environmental justice activists and scholars argue that fairness in decision-making procedures is important, their writings often focuses on outcomes and effects more than processes (Pearsall & Pierce, 2017). Pearsall further wrote that there is a need to examine the justice of process, because neither the stated nor actual intentions of empowered actors to conduct an inclusive process will actually provide a guarantee that it will be so. Another point to highlight is that analysis of public participation using the environmental justice lens in Asian countries is limited, especially since environmental justice issues commonly revolve around ‘extraordinary struggles’ of the people, such as displacement of communities, land grabbing for palm oil, rather than everyday experiences of environmental consequences (Basu, 2017) that involves routine public participation.

In light of the limitations in current literature, the use of environmental justice lens in this research will be twofold: the first is to analyse participation processes and to draw out environmental injustices within that processes, and the second is to highlight key factors within a participation exercise that can lead to a successful or failed outcome, viewed in terms of the capacity to influence decision-making. The following Table 7.1 provides an overview of justice issues that will emerge later in this chapter. It highlights specific recognition, procedural and distribution issues as well as the current outcomes of the cases. The table follows the structure of the subsequent analysis, starting with an analysis of recognition issues in the cases, followed by procedural justice and finally, distributive justice. Structuring the analysis as such allows a coherent flow of analysis that starts with looking at how injustice occurs and ends with an analysis of the conditions that lead to specific outcomes of the cases. As stated in Chapter 5, three of the cases have ended their participation exercises. However, the outcomes of the cases, especially in Endau Rompin and Ulu Tembeling indicate unresolved issues between the civil society and the government, despite the dissolution of the conflict.

Timeline	Cases	Participation mechanism	Recognition issues	Procedural issues	Distributive issues	Outcome
1972-1993	Endau Rompin	Uninvited	<p>Absence of public participation provision in the logging of PRF discriminates the public in decision-making processes, discriminating against those at most risk of developmental effects.</p> <p>(refer to paragraph 5 page 69; paragraph 1 page 70 and paragraph 2 page 128)</p>	<p>There are no legal provision for public participation in the logging of PFR since the decision making process is centralized to the state</p> <p>(refer to page 128-129)</p>	<p>High network and financial resources benefits campaign, publicising it at local and international level. Massive public support puts pressure on government to take action</p> <p>(refer to page 129-130)</p>	<p>The outcome of uninvited participation results in a compromise between state and civil society actors. A national park was created but under the state's enactments, which means management of the park is divided between the state of Pahang and Johor. Also, the creation of the 'national' park creates restriction for the indigenous people to access the natural resources</p>
2002-2008	Kota Damansara	Uninvited	<p>Development process disregarded the public entirely, to the point where no consultation was carried out or clarification provided to the public regarding the development in KD forest.</p> <p>(refer to 105 and page 106)</p>	<p>There were no legal provision for public participation to take place before any decision had been made by state</p> <p>(refer to line 25-29 page 106)</p>	<p>High network and financial resources allows the organization of structured community campaign leading to a mutual partnership with powerful actors</p> <p>(refer to section 5.1.3 page 108-109)</p>	<p>The community came to an agreement with the opposing political party, allowing them complete control of the forest. This agreement was made in light of the general election that took place just before the gazettelement of PFR to community forest</p>

2008-Now	Ampang	Invited and Uninvited	<p>Invited participation processes were only used to gather information or tokenistic, while the issue of locus standi limits the ability of the civil society to legally dispute the development</p> <p>(refer to paragraph 3 page 115 and paragraph 1 page 119)</p>	<p>Invited participation took place after decision has been made; There were no legal provision that requires the input of the public to be incorporated to the final decision-making process;</p> <p>(refer to page 120-121)</p>	<p>Lack of influential connections and political help prevented the public from mounting an effective campaign.</p> <p>(refer to section 5.2.2.2 page 121-122)</p>	<p>Legal case is still currently on going, but development of the first phase is expected to be completed in 2019. Uninvited participation was unable to allow influence of public's initial aim to stop the construction, but allowed them to highlight issues related to environmental destruction. Campaigns are continuing due to the various environmental consequences faced by residents living near the project area</p>
2016	Ulu Tembeling	Uninvited	<p>The Ulu Tembeling community was not involved in the development of the PFR, despite being directly affected by it. In fact, efforts were made by state government to actively ensure that the community did not participate in the campaign</p> <p>(refer to page 142 and paragraph 1 page 144)</p>	<p>There were no legal provisions for public participation in the logging of PFR since the decision making process was centralized to the state</p> <p>(refer to paragraph 5 page 69 and paragraph 1 page 70)</p>	<p>Lack of financial resources and political connection impeded participation of the public</p> <p>(refer to page 148-149)</p>	<p>The case ended unresolved. The area is now completely logged and is being converted to palm oil plantation</p>

Table 7.1: Environmental Justice issues in Participation

7.1.1 Justice as Recognition

It is unreasonable to wish for full protection and non-development of PRFs, as the state economies rely on the resources generated from forestry – some State government more than others. However, it is entirely possible that governance of these resources is handled more sustainably, and in order to do that, the meaningful participation of public in governance and management of resources is crucial, as it requires the knowledge and experience of the local communities (Dungumaro & Madulu, 2003) who should be regarded as a key actor. If anything else, the participation of the public can also be regarded as a check and balance system to the state's governance of resources. However, interviews indicated that not only were the communities in the cases unable to meaningfully participate in forestry governance, they were, in fact, never allowed to be part of the actual decision-making to begin with. This problem arises from the different conception of the 'participation' concept among the public and state that led to mistrust among the civil society and lack of apathy towards participation (see Chapter 6, Section 6.2.2). It also points to a fundamental problem in PRF and forestry governance in Peninsular Malaysia; the absence of public recognition in decision-making.

Fraser and Honneth (2003) wrote that equitable participation requires the recognition of social and cultural differences in the participants. Schlosberg (2009) also argues for the need to ensure recognition in public participation, describing it as a cycle caused by political processes that undermined social recognition of certain parties over the other. Walker (2012) goes further and defines recognition as '*processes of disrespect which devalue some people compared to others*' which includes '*unequal patterns of recognition across social groups*' (2012:50). Previous works that focused on justice as recognition had also indicated recognition as a problem in governance (Fraser, 1998, 2009; Martin et al., 2016) where emphasis was given on the recognition of social and cultural differences within the civil society or within a particular stakeholder. However, more recent works have extended the concept of recognition as one that includes collective political identity or knowledge systems. Explored in Chapter 2 (Section 2.2.1.1), Coolsaet (2015), for instance, focused on knowledge systems that influences how socio-cultural value is

perceived, and stated that injustice may occur if there is a dependence on a dominant knowledge system, regardless of equal participation. This perspective stresses on the ‘*ontological and epistemological recognition*’ that will allow alternative practices to be practicable solutions (Coolsaet 2015:1094). Velicu and Kaika (2017), on the other hand, develop the notion of visibility. Invisibility, according to Velicu and Kaika, is equated with misrecognition that injures one’s status as political being, having the power to produce one’s own version of society, thus going beyond misrecognition of social identity or status.

Based on these previous works, lack of recognition in participation is framed as the inability of certain groups within a society whom are unable to meaningfully contribute to decision-making, because; 1] they are unable to participate due to misrecognition of socio-cultural differences and 2] their views and knowledge system are eclipsed by a dominant norm, which creates injustice regardless of ability to participate. In the context of this research, it stresses that misrecognition did not just occur in different groups of communities, but also a misrecognition of different knowledge systems, which prevented actors from meaningfully contributing to participation due to different understanding of key concepts within governance, be it of ‘participation’ itself or ‘forestry’.

7.1.1.1 Absence of Public Recognition

One of the signs of failed public participation processes is the inability of the public to meaningfully contribute to decision-making (Arnstein, 1969) and since the construction of public participation policies is the responsibility of the state, the burden to ensure participation of all actors as well as every single community rests with the government. The community or the public, in this context, are entitled to moral consideration in public participation (Sikor, Martin, Fisher, & He, 2014), not just in allowing equal participation of everyone, but also in ensuring that participation is actually meaningful. Within the justice literature, recognition has not only been used as an argument to challenge the traditional distributive justice approach in environmental justice movements (Fraser, 1998; Young, 1990) but has also been directly associated with participation (Schlosberg, 2009).

Public participation in Malaysia shows an interesting dichotomy between expectation and practice. On one hand, the level of public participation in governance is low, and the public is viewed as ‘unconcerned’ or ‘unaware’, as evident by the interviews as well as previous studies that looked at public participation in various aspects of governance (Marzuki, Hay, & James, 2012; Nurudin et al., 2015).

People don't think about (environmental issues) unless it affects them (Interview with activist, August 14th 2017)

There are so many Malaysians who are not aware of the importance of protecting the environment (Translated interview with former MNS member, September 12, 2017)

Malaysia is not a problem. We got a good rule and regulation. We got a system for enforcement. But the public so complacent (Interview with politician, January 6, 2017)

On the other hand, the public have not been recognized as an integral factor in decision-making, nor have they ever been allowed to meaningfully participate in decision-making processes (Marzuki et al., 2012; Sharom, 2014). As observed in Ampang for instance, invited participatory mechanisms were either tokenistic (e.g. public hearing) or took place only after a decision had been made (e.g. EIA review). Even worse, invited participation in the remaining three case studies never occurred at all, and there is even evidence where the public were actively prevented from participating (Ulu Tembeling) despite the fact that the public are the ones most affected by the development.

Within the justice literature, recognition is argued to be the ‘foundation of distributive justice’ (Schlosberg, 2009) and lack of recognition can cause harm to oppressed individuals and communities. Fraser (2000) also highlights the identity model, in that recognition is subjective, by virtue of recognizing and being recognized by other subjects. From the case studies, the lack of public recognition in decision-making was obvious, and the public are well aware that their ‘voices’ were disregarded.

“*What we protested, all of it, is not heard by the government*” (Interview with head villager, February 4, 2017)

This contrast between the realities of public participation processes and the expectations towards the public has created a level of mistrust that further reinforces non-participation and misrecognition. However, unlike Walker’s definition that emphasises the disrespect *across social groups*, this misrecognition targets the civil society collectively, resulting in further procedural and distributive issues in the governance of forests in the country. In fact, this practice of misrecognition of the public is established within the Malaysian governance, and goes beyond PRF management. Embedded within the *Rukun Negara* (national ideology) is the notion of loyalty to King and country, and it implies the institutionalization of cultural hierarchy that exist among the Malaysians, especially the majority Malays. Drawing from Coolsaet (2015) and Velicu & Kaika (2017), institutionalization of socio-cultural hierarchy inhibits participation. In Malaysia, the institutionalization of hierarchy occurs in the form of Sultan’s and government’s authority, aided by the culture of absolute respect and loyalty given by the *rakyat* or people to the leaders: elected or otherwise. This results in the legitimization of state or Sultan decisions since the people are reluctant to go against the decisions made by the leaders. This process results in two interrelated outcomes: the first is that by recognising the superiority of Sultan and state in decision-making, it significantly increases the public’s reluctance to participate or contest the decisions; and second, the ideology that ‘*government knows best*’, in turn supports the state’s lack of appreciation for meaningful public participation in decision-making; and this is translated into symbolic and meaningless public participation exercises. This prevents the public from being viewed as a peer, a form of ‘social subordination’ (Fraser, 2000) that inhibit equal participation with other governance actors, leading to misrecognition.

7.1.1.1.1 *Locus standi* and Misrecognition Within the Legal System

Another example of public misrecognition can be observed in the judicial system in Malaysia. Within the case studies, the legal mechanism of public participation and the issue of standing was not a significant problem, however, it warrants a mention because it provides another example of public misrecognition. Within the last decade, the issue with the legal procedures in Malaysia has always been the core point of any environmental justice arguments amongst Malaysian scholars (Maidin & Abdulkadir, 2012; Sharom, 2007, 2014). Legal standing, or *locus standi*, is defined as the ‘right or ability to bring legal action to a court of law, or to appear in court’ (Cambridge, 2018). The issue of *locus standi* within common law is a serious matter in environmental justice discussion. Globally, public standing in environmental disputes has been well discussed (Geddes, 1992; Hilson & Cram, 1996; van Wolferen, 2016) and in Malaysia, multiple papers have been devoted to address the challenge of the limits imposed by the courts on the issue of *locus standi* (Maidin & Abdulkadir, 2012; Noor, 2015; Sharom, 2014). Starting from 1988 in the case of *Lim Kit Siang vs United Engineers (M)*²⁹, the argument over who has standing has been narrowed by the courts. The Lim Kit Siang case set the precedent which limits the ability of third parties to bring forward environmental disputes to the judicial system. The case restricts the ability to legally contest development decision to a small group of people who need to provide irrefutable evidence that the contested development has or will cause direct harm. In fact, even without the issue of *locus standi*, cases involving environmental disputes take years to be resolved and for cases like Ampang, where the NGO filed an injunction to stop the development of the EKVE highway, the costs of the legal process are borne entirely by the NGOs. This institutional challenge embedded within the legal system in Malaysia has not only failed to recognise the right of the public to contest developments, but it also ties to the lack of procedural justice in the legal system as well as the lack of environmental appreciation amongst those who control it. For future environmental and land disputes, the issue of *locus standi* could be a barrier that prevents the NGOs to continue the fight without the full participation of the public and local residents. Coupled with the time and resources needed to fund the legal cases, it stands to reason why the use of the court to settle land or environmental disputes between the public and the government

²⁹ Lim Kit Siang tried to contest the development of a highway using his position as a taxpayer

is never the first strategy of uninvited participation, especially since the court fails to recognise the rights of the people.

7.1.1.2 Misrecognition and Participatory Mechanisms

Overall, the case studies show no evidence of misrecognition of either indigenous people, or based on other social aspects such as gender, class, race or religion. Although ethnic and racial issues especially are a big part of Malaysia (see Chapter 3), this is not a declaration that these types of recognition issues do not take place in PRF governance, but instead is a clarification that it was not observed during the case studies. Partly due to the fact that the entire civil society was not recognized within invited participatory processes, therefore, the social and cultural nuances within that recognition dilemma became a less central issue. Positive outcomes to both nature and public were observed only where the civil society was empowered via uninvited participation, such as Kota Damansara and Endau Rompin. Although there is an obvious distinction – in terms of social resources or capital – between the empowered society and the ones who failed to affect change in decision-making process, the most important point to highlight is that the empowerment of the community came only when uninvited participation was utilised

Although invited public participation in the case studies allowed the involvement of anyone who wished to participate, the mechanisms failed to recognize the most important aspect in the exercise; the public itself. The failure to ensure that the public must and need to be part of decision-making highlights the problem of recognition as an injustice, and within forestry governance, misrecognition occurred not in the disrespect or exclusion of certain groups of people in decision-making, but it occurred in the exclusion of all members of civil society in anything that closely resembles decision-making. Drawing from evidence presented in Section 7.1.1.1, the public themselves is viewed as unaware, or complacent; both of which were considered as the reason for non-participation. In truth, this worldview of the public in general not only discriminated against the public in decision-making processes but led to the lack of action from the decision-makers to ensure inclusive and just public participation processes. The position of the civil society as a

social subordinate, in relation to other formal and elite actors, contributed significantly to the unjust public participation procedures, which then led to unjust distribution of participatory outcomes. This places recognition as the central justice element that contributes to both distribution and procedural injustice, echoing the arguments of Schlosberg (2004; 2009), Fraser (1998; 2000) and Young (1990), all of whom challenge a purely distributive approach to justice.

7.1.2 Procedural Justice

The emergence of procedural justice came after the extensive early research on distribution as part of the environmental justice paradigm. It relates to the process that contributes to or causes unequal distribution of resources and environmental risks, thus challenging the former one-dimensional understanding of environmental justice. A necessary secondary element in environmental justice, procedural justice is not just an element of justice in its own right, but is also viewed as a tool, or a precondition of achieving distributional justice, which argues for a '*a broad, inclusive and democratic decision making procedures*' (G. Walker, 2012).

7.1.2.1 Meaningless Participation in Decision-Making

Within the case studies, procedural injustice can be observed almost exclusively within the invited participatory mechanism employed by the state. These mechanisms, discussed in Chapter 5, are considered among those that weighed more heavily on '*informing*' rather than '*consulting*' and did not go any further to actually '*involve*' (IAPP, 2016) the public in decision making process. Public meetings and discussions mechanism in general have been identified as limited, as they provided only 'an opportunity for people to be heard officially' (Creighton, 2005) and required a more conscious effort by the organizers to allow the public more power in decision-making. EIA in particular has been criticised as inadequate and various previous studies have criticized EIA's contribution as a participatory action (Boggs, 1991; Wood, 2003). Furthermore, the role of public and the

degree to which public is involved in EIAs very much depends on the ‘institutional and political structures existing within a country’ (Wathern, 2013). One example is the public survey embedded within the EIA procedure. According to press releases regarding the EKVE project, a public survey was carried out (Mohamed, 2016) to identify the percentage of public support for the project. However, how the survey was carried out was never made public, and interviews with the affected residence living near the Ampang PFR and the main development site found that none had ever been involved in the survey. This type of situation occurs frequently in EIAs in Malaysia where there have been reports of selective participation among the survey participants (Marzuki, 2009; Sharom, 2014). Selective participation means that the results of the survey may be biased, since there was no obligation to have proper representation of the civil society, especially those that could be affected by a particular development. Therefore, a public survey could just as well have taken place amongst selected members of the public who would not be affected by the development or have particular reasons to support it.

Unlike EIA and public meetings, public hearings in forestry in Malaysia are not common, and so far, Selangor is the only state where public hearings in natural resource governance can be observed. This legislative provision introduced by the Selangor government to include public hearings before the process of de-gazettement of PRFs was viewed as a progressive step taken by Selangor’s more ‘environmentally conscious’ opposition government (Sharom, 2014). The use of public hearings is widespread, and especially in Europe and America, public hearings are a traditional method for citizen participation. However, the mechanism is considered as flawed, and does little to incorporate the input from the public in final decision-making (Checkoway, 1981). Previous studies also indicated that the use of public hearing is mere formality (Almer & Koontz, 2004; Lovrić et al., 2018) as well as ineffective (Mease, Erickson, & Hicks, 2018). For Ampang, the public hearing held in June 2014 was rarely mentioned by the interviewees, and there were no references made to the outcome of the process nor regarding what had occurred during the hearing itself. However, since the construction of EKVE (phase one) is now in the final stages, the development of Ampang PRF clearly was allowed to go forward. The lack of interview evidence as well as documented reports regarding the proceedings of the public hearing unfortunately tells us little regarding how the actual process was carried out. But taking into account the lack of public recognition within forestry governance, it indicates

that the public hearing in Ampang may just as well have been a politically conscious move towards legitimizing the development as well as providing an ‘environmentally conscious façade’ by the opposing Selangor government, and there is no evidence to suggest otherwise.

7.1.2.2 Injustices in PRF Governance

Invited participation mentioned in this study occurred only in Ampang, and this has to do with how the public participation in PRF governance was implemented, or more correctly, its absence in forestry governance. As of now, there is no formalised public participation policy within forestry governance and the current participatory processes employed in Ampang were in fact participation processes formulated within land use planning and development policy. Because the nature of PRF is that it is a classification for forests that can be utilised for multiple purposes (supposedly sustainably), development of PRF that does not include the legal removal of the forest from its PRF status meant that development does not fall within the land use planning remit. Therefore, since Ampang’s development involved the degazettement of the Ampang PRF, then participatory processes such as public hearing, and EIAs applied. For Ulu Tembeling and Endau Rompin, logging is one of the purposes of PRF, and regardless of the social and environmental implications of the development to the people; legally, public participation was not necessary. In fact, the Kota Damansara case demonstrated perfectly one of the major injustices within the procedures of invited public participation in Malaysia, and this is the fact that public participation was organized only after the decision had been made. It was a process that occurred as a result of decision-making, and in a situation where no actual decision regarding the development of PFR had been made like in Kota Damansara, invited public participation will not be organized.

The absence of meaningful public participation policy in PRF governance is connected to the highly centralized decision-making process, with control over land belonging solely to the respective state governments.

Because the power over land is very much (belongs to) the state (government) and the federal government pretty much leaves them alone. They can have policies, so for example they can have forestry policies, for example they say you need to have a number of hectares of protected forests or forest reserves. The state never ever follows (Translated interview with activist, August 14, 2017)

Furthermore, despite the devolution of management responsibilities to the forestry department, and local authorities, these agencies are still accountable to the state government, especially in matters relating to land and PRF governance. The state government's power - and in some cases the elite - supersedes all authorities and all actors, creating no space for the public to meaningfully participate. Politically, this also prevents the federal government from interfering in management of PRFs as it can create conflict. Due to current practice, participation becomes a challenge not just for the public, but other actors as well. While decentralization of governance could increase citizen participation (Porter & Olsen, 1976) and can allow stakeholders to participate in the management of forests, past research has shown that decentralization rarely occurs in high-value forests, as centralization of power allows the state government to exploit the forest for economic purposes (Phelps, Webb, & Agrawal, 2010), similar to what happened in the case studies.

7.1.3 Distributive Justice

In contrast to the environmental justice movement in US that initially focused on the distributive justice of environmental burdens, the cases in Malaysia revolve around the access to environmental benefits. Although reasons that trigger uninvited participation may be more economic in nature rather than purely environmental (see Kota Damansara case), conservation and protection of natural resources were the dominant narrative used by those who protested against PRF development.

(We need) protected areas for future generation, and economic gain should not interfere with the preservation for the future (Translated interview with former member of MNS, September 12, 2017)

We don't agree (with EKVE). MNS don't agree. Because they are passing through (water) catchment area (Translated interview with activist, January 6, 2017)

The most important thing is to protect. Because the forest has its own flora and fauna.... So we need to protect the forest (Translated interview with resident, February 4, 2017)

Meanwhile, the states counter their arguments by highlighting economic and collective benefit, downplaying the environmental burden and instead focused on the regional economic benefits of the project.

It's true our focus mainly is on, was on economy development to benefit the people. But at the same time, the interest to the people with regard to the environment was given consideration and that was why we have, we restrict felling of trees, and logging, but we have to continue to give permission for logging, because we need living space. Apart from that, because logging represents an income for our country. On the other hand, we want to replace the trees with new plantations. We are good in plantation. We have developed a lot of skills in that area and we thought that nationwide campaign should be carried out (Interview with former government officer, January 13, 2017)

The misrecognition of the public and the resultant procedural injustices within the invited participatory processes, however, prevented not only equal distribution of power in decision-making, but resulted in massive environmental burden to the communities living near the development areas. The domination of the decision making processes by the elites means that the public turns to uninvited participation, but even uninvited participation is unable to guarantee the success of a public campaign; as evident from the final outcomes of the cases that range from total cessation of public participation in Ulu Tembeling to total

control of PRF management being taken over by the public in Kota Damansara. Exploring different outcomes of the cases, despite all utilizing similar forms of uninvited participations, make it necessary to ask under which conditions improved outcomes may occur (Coolsaet, 2015) as well as the conditions that contributed to its failure. To answer this question, the distributive dimension is applied as an analytical lens.

The distributive justice dimension has been used predominantly to question equity in the distribution of social goods (Schlosberg, 2009). In this context, it means that it can be applied to explain how the outcome of public participation processes is distributed (Paloniemi et al., 2015; Paloniemi et al., 2018). However, outcomes of policies or participation exercises depend on the institutional and societal responses that may take months or years to manifest (Rowe & Frewer, 2004) and this may even be influenced by other variables, least of all what every actor in that exercise wants. Furthermore, it has been established early on this chapter that; 1] there was a recognition injustice in PRF governance; and 2] invited participation utilised in the cases were procedurally unjust. Therefore, there is little need to analyse outcomes of public participation that were clearly unjust, making the application of the distributive justice concept to the outcome of public participation exercises pointless. As mentioned in Chapter 2, meaningful participation underpins the whole process of public and stakeholder participation, and environmental justice is utilized in this study based on the ideal that public participation should and must be just and meaningful. Taking these factors into account, the distributive dimension discussed in this chapter is instead applied to explore the *processes* of public participation, rather than the outcomes.

As Coolsaet (2015:1093) argued, participation '*does not just happen, it requires financial and human resources*'. In this, he draws on Fraser's work on parity of participation that puts forward the idea of limiting resources that inhibit participation amongst civil society (Fraser 2000). Parity of participation explains just participation as requiring social arrangements that allow equal interaction of everyone in a society (see Chapter 2, Section 2.2.1.3). These social arrangements, which includes economic support, political representation and cultural recognition put equal distribution of resources as one of the conditions that must be first satisfied in order for meaningful participation to occur.

Following this vein, the distributive justice dimension can also be linked to the capabilities approach (Nussbaum, 2001), which Schlosberg once described as another dimension to environmental justice (see Chapter 2). The capabilities approach, according to Nussbaum, is used to explain how distributions affect well-being and social functions. Governments are being made responsible to deliver the '*social basis of these capabilities*' (Nussbaum, 2001:81), which include health, life, being recognized, and the ability to control one's environment, among others. While the capabilities approach is essentially an individualist framework and it focuses more on individual human capabilities to have a functioning life, it is nevertheless applicable in further exploring the distributive dimensions from a 'process' perspective. Applying this concept to public participation allows us to look beyond the distribution of environmental goods, but at the capabilities that are necessary to enable influence in decision-making. This provides another argument to look at distribution of resources, not as an outcome of public participation, but as something needed for the public to meaningfully participate.

7.1.3.1 Capabilities and Social Capital: Enabling Influence in Decision-Making

Public participation in Malaysia is open only for those who are capable to participate. However, since existing participatory exercises do little to allow public influence in final decisions, this makes the argument for an actively inclusive participatory processes rather moot. The utilization of informal or uninvited participatory processes then becomes important, in order to compensate for the inadequacy of invited participation as well as in protecting the right to information and participation of the civil society (Zhang, 2017). However, the case studies showed that while invited participation is meaningless and unjust, the use of uninvited participation still did not necessarily guarantee public influence in final decisions. The different outcomes of uninvited participation make it necessary to ask; what are the conditions that affect meaningful participation? As mentioned in Chapter 5, each of the communities studied in the cases had different socioeconomic status, but several cases had also the advantage of assistance from well-funded NGOs, such as MNS, who were able to provide both financial and administrative support to the campaign. However, another important point to highlight is that the success of these cases also relied

on the political support from influential figures in government, allowing the cases to gain political recognition.

In Figure 7.1 the four case studies are ranked based on the level of public/NGO influence in the outcomes of the case studies; starting from Ulu Tembeling where there was no public/NGO influence at all, to Kota Damansara, where the outcome of the case resulted in the total incorporation of public and NGOs aims. Adapted from the Stakeholder Influence/Power Matrix, this diagram was created based on observations and interviews carried out during fieldwork in the case study areas. The development of this diagram involved the identification of case study outcomes that are then used to reflect the level of influence the public/NGO has on each case studies. An outcome that fits closer to the demands of the public/NGO reflects high level influence, while cases where outcomes did not incorporate the public/NGO's demands are considered as low public/NGO influence. Other data used include presence of political support/opposition as well as information obtained from the interviews regarding the level of public support and financial resources available to the public/NGO during the campaign. These aforementioned factors are also ranked from high to low, and are placed on the matrix to allow visualizations of the influence and resources available for each case study.

As shown in Figure 7.1, Ampang, Endau Rompin and Kota Damansara have an advantage during the campaign; unlike Ulu Tembeling, where not only did the case have little public support, but weak financial resources from smaller NGOs as well as the interference from Pahang's minister stopped the campaign entirely. Although the Ampang community failed to stop the EKVE construction, protests were at least able to influence the original alignment of the EKVE, and in stopping the closure of Ampang Forest Park. For Endau Rompin and Kota Damansara, the campaigns ended with the incorporation of the campaign's goals and although there were some trade-offs, such as the lack of full protection status of Endau Rompin, both these cases were able to reach to an outcome that is generally agreed by all parties involved.

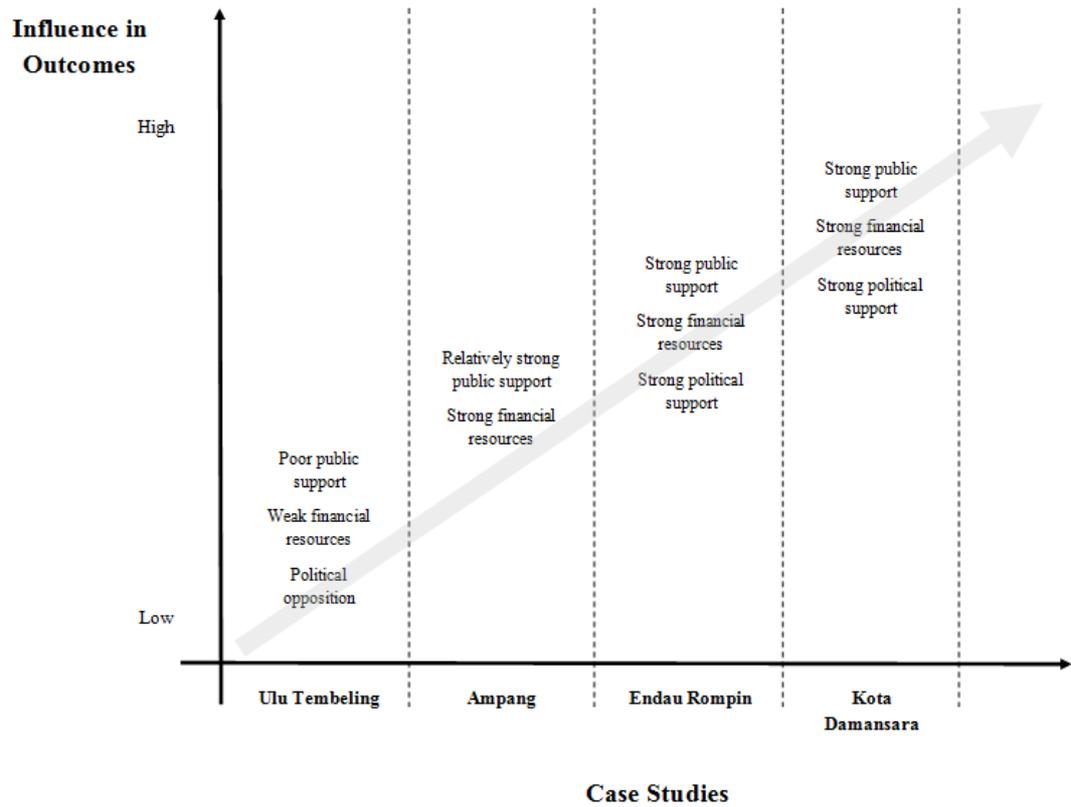


Figure 7.1: Influence and Resources diagram of the case studies

What set these case studies apart is the presence or absence of resources that can enable the public/NGOs to overcome institutionalized barriers in existing participatory mechanism. In Endau Rompin, for instance, MNS had the advantage of strong support from key political individuals that garnered the campaign both attention and public support through the utilization of nationally well-known news media, *The Star*. This allowed MNS to gather sufficient funding for their expedition, while the overwhelming public and later political support finally forced the federal government to intervene (Cooke & Hezri, 2016) thus putting significant pressure on the Pahang government to cease operations. Similarly in Kota Damansara, resources mobilised by the affluent community of Kota Damansara and MNS not only made for a strong campaign, but also led to the endorsement by key political figures. The outcomes of these two case studies differ greatly from Ulu Tembeling where neither the communities nor the leading NGO has the necessary financial and political resources to overcome barriers in invited participation as well as intervention from a political figure in Pahang (see Chapter 5, Section 5.4.2). In the context of PRF

governance, these resources, usually associated with well connected, affluent communities and organizations, allowed the public and NGO an opportunity for public empowerment, which led to the ability to influence PRF development.

How these resources function in facilitating a meaningful uninvited participation campaign can be explained by looking at both capabilities theory as well as social capital. Capabilities, as explained in Chapter 2 (Section 2.2.3), refers to human capabilities, a '*principle of each person's capability*' (Nussbaum 2001: 5) that enables a person to have a fully functioning life. Later works, which expand the individualistic capabilities approach to the idea of collective capabilities, explore capabilities as being generated by virtue of engagement in a collective action or social network (Ibrahim, 2006). Using capabilities, or collective capabilities, allows a very wide range of dimensions to be evaluated, which includes capabilities a person has in order to influence decision-making processes. Social capital, is '*features of social life – networks, norms and trust – that enable participants to act together more effectively to pursue shared objectives*' (Putnam, 1995). It refers to social connections and the attendant norms and trust that arise from these connections, as well as who benefits from them. In connecting social capital with capabilities, it places the notion of social capital as a set of means to achieve a life of value (Bertin & Sirven, 2006) and in the context of this research, social capital determines the public's capacity to influence decision-making.

The use of social capital in this study explains how the resources are able to affect the outcomes of the cases. Szreter and Woolcock (2004) highlights three distinctive forms of social capital; 1] bonding social capital; 2] bridging social capital and 3] linking social capital. These different types of social capital correspond to how the interaction between and across social groups occurs. Bonding, for instance, describes the ties that link similar people together based on some form of key dimension such as community, or race. Bridging social capital describes ties across social groups, while linking social capital extends the concept of bridging social capital to ties to people with formal power, in institutions or organizations.

Taking Kota Damansara for example, for an affluent community, the capabilities of individuals within that community allow them an advantage in controlling their environment (Nussbaum, 2001) and in participating in political choices that affect their way of life. This community exhibit greater bridging and linking social capital, which is vital in shaping the capacity of a community to engage (Baker & Chapin III, 2018). In comparison, a homogenous community exhibit more bonding social capital but less bridging and linking social capital at societal and institutional levels (Lin, 2000). While bonding capital manifests in stronger connections compared to linking and bridging social capital (Hawkins & Maurer, 2009), it is unable to produce a valuable resource that can be mobilised to influence decision-making. This means for communities like Ulu Tembeling, the lack of bridging and linking capital translates to lower density of external networks that could enhance the community's capacity to influence decision-making.

Diverse networks have been proven as important in environmental conflicts (Bodin & Crona, 2009; Johnson, Lora-Wainwright, & Lu, 2018) and for the case studies, the absence of networks between the actors is detrimental to the outcomes. One key example is the ties between individual actors in Kota Damansara to MNS, a powerful environmental organisation that was also a key factor in the success of the Endau Rompin case. The link to MNS manifested in two forms; the first in obtaining significant financial resources from UNDP that allowed the community to further strengthen their campaign; and secondly, it resulted in further linking ties with Elizabeth Wong, a rising political figure who was active in the General Election 2013 (GE13) period. The personal relationship between Elizabeth and another member of MNS was mobilised as a resource that facilitated political patronage; the protection of Kota Damansara PRF in exchange for support in GE13.

Another example of linking social capital was observed in Endau Rompin. When the issue of logging first emerged, MNS mobilized a campaign that reached its peak in 1985, with an expedition involving multiple organizations. Among the key persons within MNS at that time was Salleh Mohd Nor, who also held a key position in the Forest Research Institute Malaysia (FRIM). His connections to the MNRE, and to Malaysia's political network, allowed information to reach influential members of the parliament, which

further strengthened MNS's campaign. Information, in this context is a form of social capital inherent in social relations. The connection of the key person in MNS to the government allowed the spread of information to occur, creating a social capital that provided information which then facilitated action (Coleman, 2000). This, together with external funding obtained by MNS, further enabled the campaign to influence the protection of Endau Rompin.

In Ampang and Ulu Tembeling however, while there was evidence of bridging and linking capital that connected members of the public to NGOs, these cases failed to establish a link to key figures in government. Since linking provides access and connections to power structures and institutions (Hawkins & Maurer, 2009), absence of a link between the civil society and political figures that wield significant power indicates that for uninvited participation to allow public influence, there must exist a linking social capital to a political entity that can be mobilised as a resource. While links to NGOs and other environmental institution are crucial, as they provide significant administrative support and even financial capital to campaigns, they need to be complemented by social capital that exists in relationships to political actors. Therefore, the absence of linking social capital to a powerful political actor then becomes a barrier that prevents influence in the final outcome of the cases.

Observations made in this section not only highlight the importance of social capital, but the specific forms of social capital that are needed for the public to be able to influence participation. While public support and financial aid are both important resources in any uninvited participation, linking social capital generates a stronger resource that can be mobilised to overcome existing barriers. Using the distributive justice concept, the concept of social capital and capabilities highlight the unjust distribution of social resources among the less affluent communities, as well as the dependence on networks that are available only to specific groups of people. Formal institutions fail to recognise the public as key actor in PRF governance, leading to unjust participatory procedures. However, that injustice cannot be countered by uninvited participation and the problem lies in the distribution of social capital, viewed here as capabilities. This is because for uninvited

participation to allow influence of the public in decision-making, rich social capital is critical, but it is not distributed justly, and is only available to the affluent.

7.2 The Environmental Justice Lens: Local Context and Beyond

Decision makers in Malaysia are faced with the challenge of a growing economy as well as to ensure the protection of natural resources for future generations. Quite often, environmental conservation of forests is giving way to more economic pursuits, ones that provides a higher return on investments. Public participation, therefore, becomes crucial, as it not only provides a local knowledge in decision-making, but the different perspective on PRFs between the actors can provide a check and balance in the decisions made regarding forest development.

Aside from PRF, the notion of public participation, its process and outcome, is also understood differently by various actors (Lowndes, Pratchett, & Stoker, 2001; Webler & Tuler, 2006; Webler, Tuler, & Krueger, 2001). There are varying degrees of ‘participation’ and different types of participatory actions that can be utilized depending on the different goals of the organizer. To borrow from Arnstein (1969), a participatory action can range from tokenistic, to citizen empowerment. These different ‘degrees’ of participation emphasize the need to consider and pay attention to these varying perspectives in the governance and decision-making process in PFR, because the organizer’s approach to participation establishes the extent to which individuals can contribute to decision-making (Lowndes et al., 2001).

The benefit of an environmental justice approach to participation is that it is essentially rights-based. In the absence of meaningful public participation policies, this provides a normative standard, which the whole process of participation can be compared to. Conceptually, the incorporation of an environmental justice element is a powerful tool in public participation process and decision-making and the use of environmental justice to explore the conditions that inhibit and contribute to the successful implementation of civil

society goals in public participation is another way of utilising the environmental justice paradigm. Throughout this chapter, the application of environmental justice to the case studies has revealed two important findings that correspond to the last two research questions; 1] it allows the understanding of justice based issues in public participation (Section 7.2.1); and 2] fulfilment of all environmental justice principles is not necessary for a meaningful participation (Section 7.2.2).

7.2.1 Social Subordination

Schlosberg (2009) stated that recognition is an important dimension of justice and environmental justice. Other later works such as Martin et al. (2016) also highlight the need to incorporate recognition within other social processes, such as conservation. These authors view recognition as part of the process that leads to and interacts with other forms of injustice, and just like procedural and distribution, is also a distinct element of environmental justice in its own right (Schlosberg, 2009; Walker, 2012). In this research however, the case studies showed that aside from being interrelated with distributive and procedural injustice, recognition is also the underlying dimension that precedes other forms of injustice. The cases highlight that the public is viewed as a social subordinate, affecting their ability to participate and how participation is established by the government. This then leads to procedural injustice that prevents them from either participating at all or to be able to meaningfully participate. What occurs as a result of failed invited participation is then connected to two forms of distributive injustice. The first is the unjust distribution of outcomes, where case studies like Ulu Tembeling and Ampang, show how forestry governance was formulated in such a way that there was only token involvement of the public (Ampang) or no involvement at all (Ulu Tembeling). This resulted in a massive environmental burden faced by the communities that affected their quality of life. The second necessitates the utilization of resources that in reality, are not equally distributed, in order to allow uninvited participation to be effective. This resource, in the form of social capital, is important to enable the civil society to work together to reach a shared objective (Putnam, 1995).

However, these findings do not dismiss the mutually supporting nature of environmental justice dimensions, nor do they claim that recognition is a superior dimension. Walker's (2012) visualization of interrelations between distribution, participation and recognition (Figure 7.2) is still highly relevant, but as Walker himself clarifies, it does not fully capture the different ways the range of injustice claims can be viewed.

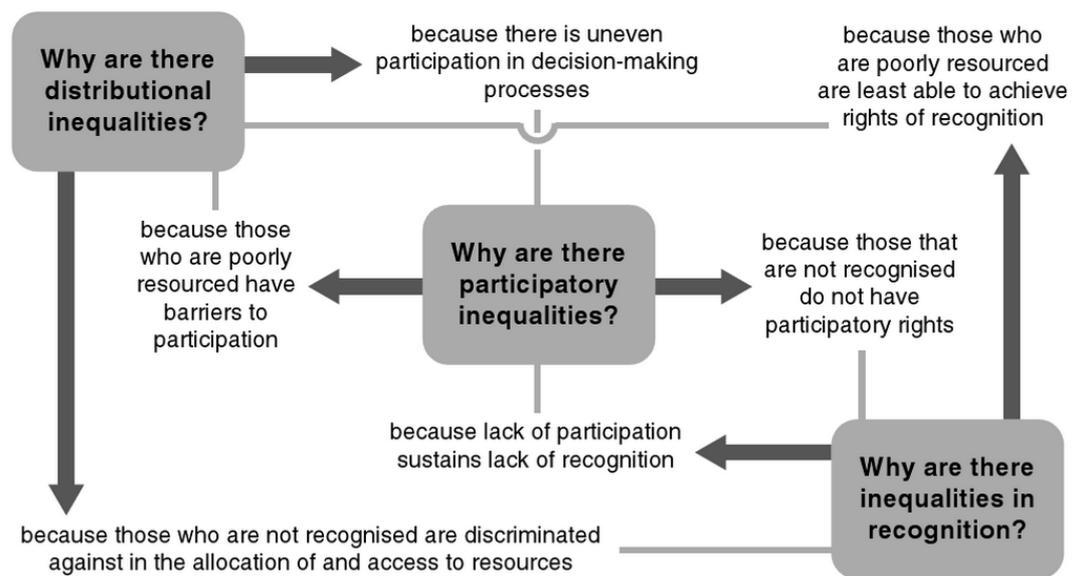


Figure 7.2: Explanatory interrelations between distribution, participation and recognition (from Walker (2012:65))

To better illustrate the environmental injustice issues within the case studies, I have created my own version of the explanatory interrelations diagram (Figure 7.3), adapted from Walker's own, and emphasising the key issues identified in my research. This diagram presents the three main environmental justice concepts - distribution, procedural and recognition - as well as their interconnections, which are represented in both grey lines and black arrows. However, this diagram puts emphasis on the issue of social subordination, with arrows used to stress on the main issues identified during the case studies, and how social subordination is connected to the environmental justice concepts. This diagram is not meant to be a replacement, but instead, using Walker's original interpretation, focuses

on the key issues identified solely within the case studies. By highlighting the causal relationships between the three concepts, this adapted diagram indicates that despite the inter-connectedness of all dimensions, misrecognition, experienced in the form of social subordination of the public, is a fundamental problem that causes procedurally unjust public participation policies, that either allows only token participation or none at all

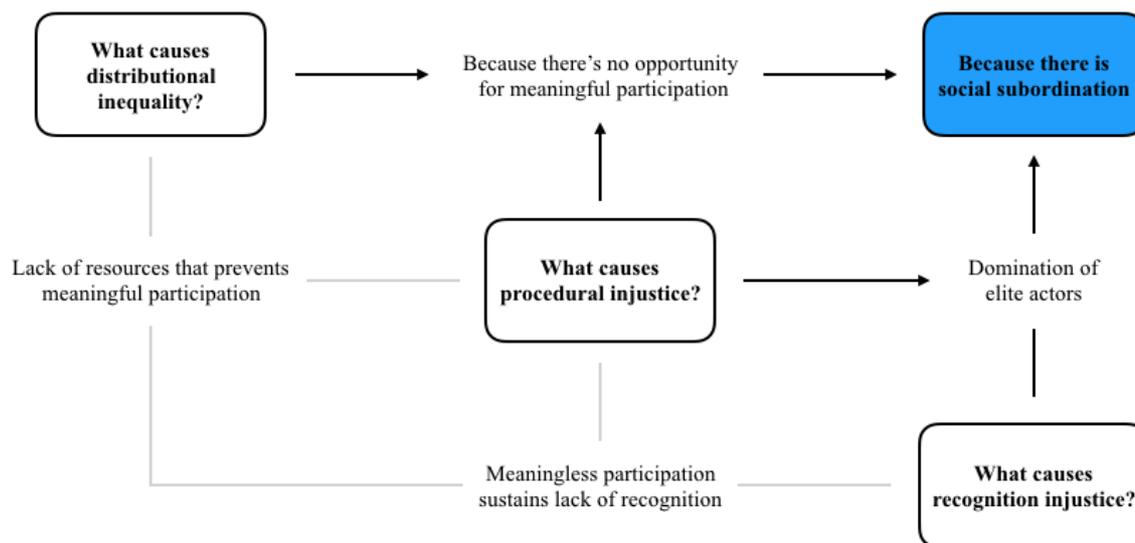


Figure 7.3: Adapted explanatory interrelations between distribution, procedural and recognition based on the case studies

Highlighting misrecognition as the fundamental problem implies a more hierarchical relationship between recognition, procedural and distribution, that is more central within the interrelations of the dimensions. The use of an environmental justice lens identifies the subordination of the public actors in governance and domination of elite and state as mutually supportive. Theoretically, it suggests that addressing this recognition issue may summarily change how public participation is constructed, and therefore allows for a more meaningful participation. *‘Both injustices and their remedies are integrally linked’* (Schlosberg, 2007:16) and the failure to recognise the public and civil society within governance leads to meaningless participation policies. This argues for the importance of

highlighting recognition issues as one that goes beyond the unequal rights of individuals or groups of people in a society. To address the issue of recognition, it requires status elevation of the public actors, allowing them both opportunities to meaningfully participate, as well as acknowledging them as key actors in governance.

7.2.2 Social Capital and Participation

The failure of invited participation necessitates the utilization of uninvited participatory mechanisms. Based on the ex-ante application of the distributive justice element, meaningful participation can be achieved only by those with rich social capital that can be mobilised to overcome the barriers in invited participation. Social capital allowed the communities in Endau Rompin and Kota Damansara more power in decision-making, influencing the final outcomes of the cases. The need for social capital highlights two issues. The first is the issue of social class and socioeconomic factors, as these factors affect the capacity of individuals within a community to mobilize social capital as a resource. Another consequence is the distribution of environmental burdens and risks, as less affluent communities are unable to overcome the barriers due to the lack of social capital and therefore will continue to experience the adverse environmental impacts that resulted from developments of PRFs. Indeed, the starting point for the environmental justice movement involved the unequal distribution of environmental burdens within race or social class and various researchers have shown how inequality in social class affects the burden of risk and environmental consequences (Brulle & Pellow, 2006; Cutter, 1995; Mohai & Bryant, 1992; Walker, 2012).

The second issue is the need for a specific form of social capital, in this case linking social capital, which highlights the problem that arises from unequal power relations as well as the practice of political patronage that further reinforces the status quo. Patronage defines the relationship between a powerful patron and a client whose status is lower (Scott, 1972), which entails the patron to provide benefits in exchange for some form of support by the client, as evident in Kota Damansara. In the case of Endau Rompin, Salleh Mohd Nor acted more as an information channel rather than a patron, but his links to powerful

political actors that facilitated political support for the case and public influence in decision-making were critical.

Local resistance to a decision process, according to Walker (2012) can provide a political opportunity to influence future decision making. The case studies, unfortunately, indicated that it was not so. As a landmark case, Endau Rompin showed an empowerment of the civil society, and it resulted in changes to how the PRF is protected. However, it provided no political opportunity for change and failed to address the fundamental issue of recognition or procedural injustice within the governance of forestry and PRF. Even Kota Damansara's success in allowing public influence in decision-making was relative only to the case. Why this occurred is connected to the need for linking social capital, which actually reinforces the existing status quo in the relationship between the actors.

However, the findings of this research open up the possibility that the lack of fundamental change in governance could also be attributed to the lack of explicit environmental justice narrative used in any of the case studies. A previous study of an environmental dispute in China explains how the use of an environmental justice narrative allowed the dispute to move beyond local specificities and exposed '*broader, systemic inadequacies*' in the system (Johnson et al., 2018). In the case studies, there were no explicit claims of environmental injustice made, despite the existence of environmental injustice issues highlighted in the early part of this chapter. This indicates that although appreciating context is important to understand environmental injustice, in order for any resistance to transcend local problems and trigger fundamental change in governance, perhaps there must also be an explicit connection made to the broader environmental justice narrative.

The identification of social subordination and social capital concept based on the application of the environmental justice lens also highlights the importance of understanding participation in terms of both invited and uninvited processes. Participation processes are co-produced, and is dependent on the dynamics of the actors involved. Without changes within the dominant power structure, participation cannot promote social–environmental justice, but rather reproduces inequalities and creates false promises

(Paloniemi et al., 2015). Despite the success of social capital in allowing public influence in decision-making processes, the need for relationships with political actors to facilitate public influence is an injustice in itself. Addressing the problem of recognition then becomes of paramount importance, as the current situation only serves to reinforce the status quo. By making explicit connection between contextual understanding and the broader theoretical and conceptual issues of environmental justice, contextual problems can become more relevant across the social scale, allowing it to be recognised by different levels of society and government. In this, uninvited participation must go back to basics, and draw lessons from the environmental justice movement itself. By broadening the campaign narratives into issues of environmental justice, the participatory process can then gain national or even global scale legitimacy, and perhaps even trigger fundamental change.

7.3 Implications for Public Participation and Sustainable Development

The concepts of public participation and sustainable development have been circulating in both mainstream and academic literature for a very long time, and both concepts are still relevant in current situations. Recent literature, for instance, highlights the importance of public participation, both for the sustainability of resource management (Sinclair, Doelle, & Gibson, 2018; Varady, Zuniga-Teran, Garfin, Martín, & Vicuña, 2016), as well as the effective implementation of sustainability policies (Kinzer, 2018). In line with the UN's current Sustainable Development Goals, these literatures provide even more evidence of the important link between public participation and sustainable development, and how participation is vital in the attainment of any sustainability goals. It highlights that not only this research is important to the overall sustainable development of the forestry industry in Malaysia, but also the importance of public participation in any decision-making process.

Because public participation is viewed not only as a necessary element in decision-making, but also as a fundamental right that should be granted to every citizen, environmental justice then becomes a useful tool when applied to the processes of public participation in environmental governance. Based on the analysis early in this chapter, the use of environmental justice as an evaluative lens in this research highlights the inequalities that

arise in how public participation is carried out, which further implies a fundamental problem in the sustainable development of PRFs. Although the concept of just, equal and meaningful participation is conceptually embedded in the very notion of public participation, it is rarely practiced in such a manner. Similar to the findings of past research, this study also reveals that governments are fundamentally working against the principles of environmental justice (Amster, DeLeon, Fernandez, Nocella, & Shannon, 2009; Smith, 2009) which also goes against the basic principles of human rights and sustainable development.

At a national scale, the problem in forestry governance is not in the practice of SFM, but in the practice of land allocation that allows gazettement and de-gazettement of PRF to take place independent of national and state sustainable development plans. It means that the major issue in the sustainable development of forestry in Malaysia is related to political, economic, and cultural imperialism of elites as well as peremptory decision making by the State government. Although 'public participation' is embedded within Malaysia's sustainable development framework, the absence of meaningful participatory exercises allowed the implementation of incompatible social objectives. For forestry, the concept of PRF itself is interpreted differently (see Chapter 6), and the absence of meaningful participation means that there are those whose views will never be heard. This means that the implementation of sustainable forest management system is useless, as unjust public participation stemming from the social subordination of the public and the domination of elite in decision-making processes, means that actual governance of PRF and forestry resources can be influenced by specific economic or political agendas.

Governance of forest and forestry resources in Malaysia is tied to the country's history with colonialism (see Chapter 3), and current global capitalism. Current injustices in forest resource management as evident in the application of environmental justice concept highlight the consequences of economic-centred 'sustainable' development goals, due to the pressure on the forestry sector to produce valuable forestry resources that are necessary for the growth of economy. This issue, which started due to the colonial division of labour where countries in South East Asia provided cheap raw materials to European industry, results in unequal exchange of resources. Since raw materials are considerably cheaper

than the finished product, this results not only in loss of forestry resources, but increasing dependency on export of these resources abroad, rather than serving the local populations (Basu, 2017). The dependency on forest resource exploitation puts pressure on countries like Malaysia to continuously produce more resources at a cheaper price, in order to ensure competitiveness in global markets. This economic pressure further prevents participation of the public in resource governance, as it may be viewed as hindering economic pursuits.

Despite the increasing pressure to adhere to international call for climate change mitigation and sustainable development, for countries like Malaysia, diversification of economy is impossible to attain in a short period of time. Burdened by the need to ensure competitiveness in global market, the only possible alternative is to ensure that the forestry industry adheres to strict sustainability practices. This cannot be achieved if social subordination continues. Therefore, it is imperative for the government to acknowledge that elite domination in decision-making is negatively affecting sustainability of the forestry industry as well as take a conscious step towards recognizing the importance of the public and the rest of the civil society in governance. Not simply because it is the right thing to do, but because failure to do so will only result in more harm to Malaysia's already threatened resources. Also important is to acknowledge the role of political actors in facilitating meaningful participation, one that also highlights an unjust system of society that benefits only the affluent. Addressing these issues requires not only a policy change in terms of public participation, but also a practical change in how resources are governed and social change in the power dynamics between actors. Continuation of current practices of elite control in how land is managed affects PRF development, and the State government monopoly over land renders other actors apart from the public, such as the forestry department and local authorities, entirely useless.

CHAPTER 8 CONCLUSION

8.1 Introduction

‘Forests and trees contribute to many SDGs, but the focus in most countries has been on the role of their productive rather than their regulatory or cultural services, thus not realizing their full potential’ (FAO, 2018:83).

Tropical rainforests have been the subject of decades worth of research on sustainable management of their resources (Bonan, 2008; FAO, 2018) and neglect of other components of forest services means that not only is the global community unable to ensure the long term sustainability of forest, but is also unable to contribute to the current global effort of protection and conservation of forest ecosystems. As a contribution to global forestry initiatives, this research has examined the issue of participation in sustainably managed forests. By focusing on the key actors that influence and shape the governance of forests, the research has investigated the power relations between these key actors and how it subsequently affects public participation efforts. Participation processes need to be supported by a *‘philosophy that emphasises empowerment, equity, trust and learning’* (Reed, 2008:2426), and are crucial in ensuring social and environmental justice, *‘as it breaches a range of structural and cultural obstacles’* (Schlosberg, 2007:65). Failure of public participation not only hinders global and national sustainability initiatives, but it abuses basic human rights, and goes against democratic values. The key concepts that emerge in this research are sustainable development, participation and environmental justice, where the latter is used as an analytical lens to explore the participatory process. As the final chapter in this thesis, the following Section 8.2 summarises the contextual findings of this research. This is followed by Section 8.3 which addresses the contributions of this research in academic literature as well as the global implications by drawing from various other countries’ experience with natural resource governance. Section 8.4 highlights the limitation and current political situation in Malaysia that affect how data was obtained and analysed. Following a section on policy

recommendations and implications for future research (Section 8.5), this chapter concludes on the overall research impact in both a local and global context.

8.2 Contextual Findings

The first research question focused on key actors involved in governance of PRFs, in particular identifying the power relations between these actors and how it influences the development of PRFs. Based on actors identified in Chapter 3 and the analysis in Chapter 6, data showed that while state government actors are clearly in control over forestry and land as indicated in the Federal Constitution, the governance of forestry and its resources may also be influenced by elite actors that are not part of the formal government structure. In terms of management, PRF is managed by federal and state forestry agencies, but the royalty and state government actors hold absolute power over the direction in which a PRF can be developed. Analysis of the interactions between these actors showed that while the state government has a legal right over the land and forests, elite actors, in this case the royalty, retain cultural ownership of the land and forests that predates the colonial era. Although there was no concrete evidence of royal interference in PRF development, comments from interviews and other research (see Williams, 2016) suggested that the Sultans (in this research, it is the Sultan of Pahang) feature prominently in land governance. Additionally, other actors, both government and civil society, are still certain of the influence of the royalty, especially the Sultan of Pahang, which could be mobilised either; 1] via direct order from the Sultan himself; or 2] via the use of the Sultan's name to push for certain projects or developments. The influence of both the Sultan and the state government means that development process is highly centralized, especially in light of the federal government's hesitancy in exercising veto power in case of political backlash from the state governments.

Chapter 6 also addressed the second research question in this study, which asks, "How is public participation perceived and how does it affect public's action in PRF governance?" Findings highlighted that not only did the public perceived themselves as powerless, this then contributed to non-participation due to lack of faith in the system. The concept of PRF, unfortunately, is understood differently by government and public actors, which then

affects how the participation process is set up by the government. As a result of the forest management system inherited from the colonial era, PRF, despite it being managed on the basis of SFM, is purely an economic resource where its management and governance is underpinned by the principle of resource use (Hezri, 2016). However, the public view PRF as an environmental management system, one which allocates forests as a 'reserve' for protection. This means there is a conflict in the perception of PRF between these two actors, creating issues especially when there is local resistance against the development of PRF. In particular, participation is viewed by the government as involvement in the *economic* development of PRF. Therefore, participatory mechanisms initiated by the government are limited, and meaningless, as the government are not likely to organize participatory exercises that could undermine their economic development goals. Despite the lack of formal participatory mechanisms, the public are expected to participate, and contribute to the protection and conservation of the forest. This disconnect creates conflict, and as a result, the public, in realizing their lack of power to affect any important change in the governance and development of PRFs, have lost faith in invited participatory processes, contributing to the government's and activists' view of the general public as lacking environmental awareness and being complacent.

Subsequently, Chapter 7 addressed the third research question which asks, "What insights emerged from the application of the environmental justice concepts to the process of public participation in PRF?" The injustices resulting from the conflicts in power relations and public participation implementation identified in Chapter 6, emphasize the fundamental issue of social subordination, corresponding to justice as recognition in the environmental justice framework. Social subordination, according to Fraser (2000), refers to status that prevents an individual from participating as a peer. In this research though, subordination is not an individual experience, but rather a collective subordination of the public, who are not recognised as peers in governance. As a result of this absence of recognition, procedural injustice then develops in terms of how public participation is organized, as well as in the level of power and influence provided to the public in invited participatory mechanisms.

Distributive justice issues, which were highlighted based on an ex-ante approach to participation, link the findings with the final research question posed in Chapter 1. This question, which also addressed the overarching aim of this research, asked about the conditions that promote meaningful participation, and what it means for the overall sustainability goals. Frequently, distributive injustice is attributed to outcomes of participatory processes, with recognition and procedural injustices as issues that emerge before or during participation. However, by highlighting distribution as an issue emerging within invited and uninvited participation process, distributive injustice appears not necessarily as the outcome of participation process, but also in the distribution of resources that prevents the public from fully contributing to participation process. Evidence indicated that affluent communities have more capacity to participate and sustain meaningful uninvited participation than less affluent communities. While this finding is not new, what is interesting is that the mobilisation of individual political actors with personal connections to individuals in the case studies was found to be an important factor in uninvited participation. This is explained by the concept of social capital, which identifies linking social capital as a critical resource that must be mobilised in order to influence decision-making processes. Political actors were important agents in lobbying civil society concerns to government decision-makers or by using their own personal networks to gain support from other actors; and situations that utilized this form of linking social capital (see Kota Damansara, page 101 and Endau Rompin, page 125) had meaningful public participation, viewed here as the ability to influence the outcome of the cases. Therefore, the use of environmental justice as an ex-ante lens to evaluate both invited and uninvited participation indicated that not only there is an injustice in invited participatory process, but that uninvited participation further sustained the lack of power among the public, as it requires the mobilisation of specific social capital in order to be meaningful.

Based on these contextual findings, this research highlights two main points; 1] social subordination as the central justice issue, and 2] the failure of uninvited participation as a solution to ‘counteract’ predominant injustice. The use of environmental justice is not only useful as a rights-based standard for public participation, but it allows the identification of key issues in the public participation process, thus highlighting critical issues in forestry governance that was supposedly managed based on the principles of SFM. In this case, the recognition element of environmental justice highlights the problem of social

subordination, where the public are not viewed as a social peer among other actors in governance. The results of this research posit social subordination as the fundamental problem in public participation which will subsequently affect sustainable development initiatives. Subordination of the public in governance not only affects how public participation is organized by the government, but it also affects the involvement of the public in environmental participation, caused by lack of trust in government systems. This sustained lack of participation means that social and environmental goals are not being met, hence the ineffectiveness of sustainable development initiatives.

Based on the case studies, subordination of the public is entrenched within the social structure of the Malaysian society, which means uninvited participations requires the patronage of political figures to be mobilised in order to have some effect. This form of social capital, inherent in affluent communities, requires a rich and diverse social network. It also indicates that uninvited participation not only fails to address the injustices that arise from social subordination but also reinforces it. Therefore, while this research agrees that in order to *understand* environmental justice, we must be sensitive to context, *addressing* injustice however, requires connection be made back to the broader elements of environmental justice. Because uninvited participations were very contextual, focusing very much on local issues, by themselves they were inadequate to fundamentally address inherent injustices in PRF governance.

Chapter 3 highlighted several racial issues that could contribute to injustices in Malaysia such as ethnic affirmative action policies and race-based parties. However, neither of these topics were observed in the case studies nor in the interviews. Injustices were attributed to social hierarchy and social class, which therefore suppress any other existing racial or ethnic conflicts. Instead, the analysis of four different cases of forest development revealed that in an era where participation in sustainable development and environmental governance is a normative right that is expected to apply to all, there those whose fundamental right was violated. The public is essentially powerless to affect change in a system that was supposedly managed based on the concept of sustainable development, a fact which was further exacerbated by the lack of meaningful participation process. The results highlight how the lack of power is sustained via other participatory measures, which

means there is continuous environmental injustice evidence, despite efforts by the public to go against government sanctioned mechanisms. This is detrimental to the sustainability of natural resource governance, environmental protection and social well-being. Furthermore, the practice of SFM is good only for managing resources for economic benefit, not necessarily effective for environmental and social goals. If protection and conservation of forests are to also be the aim of forestry governance, then SFM alone is no longer a viable option. Due to the centralization of power at state level and elite control, the SFM system is rendered ineffective, as land can be gazetted and de-gazetted at whim. Therefore, the main solution is to address the way land parcels are allocated, thus providing assurance that they are not transferred around like a piece of jigsaw puzzle. To achieve this, change must come from the state government and power must be devolved from elite actors.

8.3 Contributions of the Research

Current theoretical understanding of environmental justice relies predominantly on context derived from the Global North (see Bullard and Johnson (2000); Schlosberg (2009); and Walker (2012) for examples), where it is then applied to various global communities with little emphasis on how the different contextual settings contribute to further development of the environmental justice dimensions. In fact, the majority of current literature commonly uses environmental justice as a theoretical benchmark in which only to observe and explain social processes (see Chaudhary et al. (2018); Johnson et al. (2018); Martin et al. (2014); and Wayessa and Nygren (2016) for examples). This research, however, not only highlights an alternative application of distributive, procedural and recognition as justice – as an ex-ante evaluative lens to participation mechanisms – it also emphasises a broader understanding of recognition and its importance in social processes. Since this research posits all three dimensions of environmental justice as a precondition to participation, results revealed not only injustices in participation, but how actions of both civil and state actors actually re-produced elite status quo due to social subordination of the civil society. Hence by breaking away from current trend of using environmental justice to explain forms of injustices in environmental governance, this research was able to highlight the main factor that caused injustice.

Despite previous emphasis on the equal status of all three dimensions of environmental justice (Schlosberg, 2004; Walker, 2012), this research shows that addressing environmental injustices must start with tackling recognition issues. Until the misrecognition/social subordination is addressed, elite domination within forestry governance will continue, despite continuous civil action. This conclusion draws parallel to other forestry governance research, where poor understanding of social structures and power relations caused failure in efforts to decentralize forestry governance. Understanding social subordination requires the understanding of social structures, which is critical in the application of forestry initiatives. Drawing from García-López (2018) on elite persistence in Mexico's community forestry, efforts to decentralize forestry governance via participatory or community forestry have failed due to control by elite actors and the lack of understanding of the power structures that exist in local governance. A review of literature on Nepal's forestry governance also highlighted that waves of civil conflicts and international aid and policies described as deliberative politics were unable to break the dominance and further entrenched powerful actors in forestry governance (Ojha et al., 2014). This article further stated that despite the waves of deliberative politics, *'progressive change in policy is a rare possibility'* (Ojha et al, 2014:8) which further implies the need to dig deeper at the issues within social structures to understand why efforts at creating a more participatory and inclusive forestry governance are not successful.

Another contribution to academic literature from this research is the analysis of both invited and uninvited participation. Public participation, especially in natural resource governance, is embedded not just in local and national policy-making and decision-making processes, but also international ones (Bryson et al., 2013) such as the Rio and Aarhus Convention. The rationale for public participation is not just based on its instrumental use of conflict resolution or for obtaining local information and support, but also a normative one which is rights-based, as participation supports democratic values (Baker & Chapin III, 2018). However, while it has been largely acknowledged that the concept of participation itself comes in various forms, be it based on a structured, organized format or a more organic and co-produced one, analysis of both invited and uninvited participation in natural resource governance has rarely been addressed. While there has been research that also includes public engagements like citizen activism and advocacy as forms of participation

(see Chilvers & Longhurst, 2016 and Wehling, 2012) the analysis of both invited and uninvited participation using a rights-based approach, particularly environmental justice, is not common. This is an important factor to consider because despite being considered a democratic right that is instrumental for environmental decision-making, meaningful participation may not necessarily be a 'right' afforded to all. In the Global South especially, where economic attainment commonly overrides environmental and social goals, invited public participation may not necessarily allow actual public contributions in decision-making. It is why uninvited participation such as activism and advocacy is considered an important avenue for the public to demand their rights as citizens. However, as the case studies have shown, uninvited participation itself may be limited by constraints in social structures and cultural values; a situation which may differ from countries in the Global North.

While both public participation (see Fung, 2006 and Baker and Chapin III (2018) and environmental justice (see Chapter 2, Section 2.2) literatures must be sensitive to context; analysis of both forms of participation showed that it is important to understand the underlying issue that goes beyond the question of 'what makes participation processes effective'. Analysis of various participatory measures in a single social event shows that social subordination doesn't just occur within invited processes, but it is entrenched even within uninvited ones. Meaningful participation cannot be forced simply by the use of different strategies. As Velicu and Kaika (2017) have shown, until civil society is acknowledged by state actors as political actors that '*can reason and pass judgement*', civil conflict, hence uninvited participation, will continue to reinforce the status quo. Public participation is contingent upon one's normative values (McLaverty, 2017), and until powerful actors are willing to cede power and acknowledge the injustices that occur within governance and society, participation mechanisms will never be able to breach embedded structural and cultural barriers.

8.3.1 International Forestry Initiatives

Fraser (2003) stated that social subordination prevents a person from participating as peer, and redressing this issue means changing an institutionalised socio-cultural system that constitutes some actors as superior to others. For forestry resource governance, this means acknowledging the fact that the institution requires a fundamental change, one which focuses on the issue of social subordination. However, valuable resources like forests and lands provide a strong incentive for powerful actors to retain control (Basu, 2018; García-López, 2018; Nelson & Agrawal, 2008) and it's a problem that occurs not just in Malaysia.

Currently, international forestry policies (see UN SDGs and UN Strategic Plan for Forests 2030 for examples) and forestry initiatives like community/participatory forestry and REDD+, all put emphasis on multistakeholder partnership and on recognizing rights of those living in and around the forests (CIFOR, 2018; Duchelle et al., 2018; UN-REDD, 2019; UN, 2015b). Because these initiatives rely very much on equal partnership, participation and power among every actor involved in forestry governance; issues like elite control and social subordination would definitely undermine efforts for successful implementation of any forestry program. Taking an example from Mexico, decentralization efforts have made the country a 'model' of successful community forestry which provides multiple collective benefits to both the community and the state (García-López, 2018). However, this mechanism has also reported significant drawbacks, where elites in local forestry governance are progressively gaining power, and accountability and equal representation of actors are steadily declining. Couched in terms of institutional theories and political ecology, the case study carried out in Durango, Mexico, showed similar parallels to Malaysia. Despite the difference in national style of governance, cultural and socio-economic factors, as well as forestry management style, fundamental problems of unequal power relations and elite domination still persist. What's worse, these forms of elite control are being further entrenched within current policy system.

What does this mean for international forestry governance? Concerns over climate change have dominated the global debate, and the role of forests in mitigating climate change has

only received more attention in recent years (see Keith et al., 2019 and Watson et al., 2018). In addition, there is increased emphasis on the importance of partnerships and multistakeholder collaborations, with countries urged to take an aggressive approach to mitigate climate change. For the forestry sector, this means every country is being expected to impose and implement sustainable forestry policies, in an effort to reduce carbon emissions, limit deforestation and halt expansion on forested land for development and agriculture purposes. In Europe, where boreal forests system have faced significantly less scrutiny compared to tropical forests, efforts are being made to ensure coherent policies across multiple sectors to promote and sustain collaborative partnership among all actors (Johansson, 2018). Emphasis is given to the idea of ‘collaborative governance’ where policy and decision-making must involve the collaboration of every actor (Emerson & Nabatchi, 2015), be it government actors, civic sectors or the general public. This indicates that not only forests are increasingly being recognised as a major player in climate change mitigation, but that participation of every actor is key to addressing and overcoming challenges to climate change.

However, for developing countries that rely significantly on their forestry and land resources, the challenge is bigger. While the international community has done much to promote various climate change mitigation programs, such as the REDD+ and community forestry, forestry resources are too valuable to surrender, which means the issues of rights and recognition still persist. The incorporation of REDD+ for instance, has been reported as problematic, and evidence can be found that indicated current REDD+ implementations suffers from human rights abuse, as well as exacerbating pre-existing practices of discrimination and exclusion of specific sectors of society (Sarmiento Barletti & Larson, 2017). Not only that, REDD+ is still unable to guarantee results-based financing to practicing countries and fails to provide significant local benefit (Luttrell, Sills, Aryani, Ekaputri, & Evinke, 2018). Issues like this makes it important to give the problem of social subordination and recognition a deeper deliberation. Recognition injustice occurs not just within commonly recognised marginalized groups like women and indigenous tribes, but it can occur at a different scale entirely. It has the potential to cripple efforts at climate change mitigation and renders initiatives like REDD+ and community forestry ineffective, because the fundamental problem is not addressed.

8.4 Limitations and Current Situation

A reflexive account of the data collection process, and how my position as a researcher may have affected the data collected during fieldwork was provided in Chapter 4. However, there are other limitations that were identified during the subsequent process of analysis and writing that were not mentioned previously. One major limitation is the lack of depth in the analysis of power relations between the actors in all the case studies. I believe this research would have benefited from more empirical evidence derived from a detailed social network analysis, but due to the large amount of data that needed to be collected across four case studies in the limited time frame of six months, a more in depth analysis was not possible. Apart from that, data collection focused mainly on the issues of environmental justice emerging from public participation processes that took place in the case studies. Interviews therefore were not truly able explore the nuances in the ways linking social capital was mobilised and utilised as a resource. More in depth analysis of social capital would have added interesting findings to this research.

Starting this research, the main aim was not only to identify what's wrong with the forestry system in Malaysia, but to also identify solutions to address the problem. Growing up with the sort of socio-cultural tradition that is very different from Western communities, it is easy for me to understand how the problem occurs. Applying western theories and standards to highlight the problems in forestry governance and public participation is straightforward, but providing suggestions to change the socio-cultural hierarchy that supports social subordination is less so, especially when applying western standards to address issues connected to Asian cultural values. This problem requires a focus on normative change, one that must address cultural and social hierarchy that legitimize elite control. While there have been efforts that look at changing social norms and legitimacy (see Dowling and Pfeffer (1975) and Miller and Prentice (2016) for examples), it does mean that more research is required, as a more definitive solution would require additional data on social norms and behaviours, an area which was not the focus of this research.

8.4.1 General Election

At the time this thesis is being written, Malaysia has just experienced a historic shift of power during the May 2018 general election (GE14). For the first time since independence in 1957, the once powerful ethno-political party of *Barisan Nasional* (BN), a coalition of several ethnic based parties, was toppled by Malaysia's own former Prime Minister, Mahathir Mohamad, who now heads the *Pakatan Harapan* (PH) (also called Alliance of Hope). As a key player within BN, UMNO³⁰ lost the support of the majority Malays and the rest of the *Bumiputeras* mainly due to ingrained capitalism within the party, and an inability to meet the expectations of the new generation of Malays (Fee & Appudurai, 2011). Coupled with Najib's money laundering scandal in 2016 (see Ramesh, 2016 and Case, 2017) that signalled deep corruption within the party, BN's (or more correctly UMNO's) excesses after so long in power have lost them the trust of the people. However, further evidence showed that ethno-politics is still embedded within Malaysia's new PH government as it is made up of parties that are largely if not blatantly ethnic-based (Segawa, 2017) but with a focus on the *realpolitik* of ethnic interest in a plural society (Fee & Appudurai, 2011). PH gained advantage thanks to 1] Najib Razak's money laundering scandal; 2] the economic burden faced after the introduction of the Goods and Services Tax (GST)³¹; 3] increasing transparency and flow of information from social media (Sani, 2014; Sani & Zengeni, 2010); as well as 4] the return of Mahathir Mohamad, Malaysia's former premier who denounced UMNO and became a strong opponent of Najib. Furthermore, unlike BN that promotes the idea of multiculturalism based on equal participation of UMNO, MIC and MCA; PH instead reconfigured the issue of multiculturalism as issues of social justice, transparency and democracy. It indicates that ethno-politics in Malaysia is still strong, but is now taking a different form.

Regardless of the reason for PH's win, this major victory marked a historical change in not only the alteration of governing coalition, but also in the way the government is held accountable for its actions. The former government was insulated from outright criticism, due to media control and cultural and legal reinforcement of the supremacy of the leaders.

³⁰ See Chapter 3

³¹ GST is value added tax, introduced in 2015 at 6% rate. GST is blamed for the rising cost of products and services in Malaysia, which caused the reduction of people's buying power.

Now, the media is no longer suppressed, the new government seems to actively encourage public scrutiny, and appears to practice transparency in governance.

Because fieldwork and analysis was carried out prior to the elections, the findings discussed in this research do not reflect the current change experienced in Malaysia as well as in the states of Pahang and Selangor. Although the state of Pahang is still controlled by BN, and the state of Selangor by PH, the federal government has now changed, meaning Pahang is now controlled by the opposition, and Selangor is now politically aligned with the federal government. Despite the change in government, I remain deeply sceptical of any future changes in how public participation will be carried out as well as how forestry will be managed. This is because change in government does not translate to change in forestry governance and the status quo of the key actors responsible for land and forest management in Malaysia remains the same. Elite control is institutionalised and legitimized within Malaysia, and forests are too valuable to be given up. Furthermore, there is no evidence of dissimilarities in how these different state governments responded to public participation in the case studies. Governance of PRF is still carried out on the basis of economic development and there has yet to be any significant changes by the new PH government in the way forestry resources are governed and protected.

Perhaps it is too early to tell, but the PH government is certainly making more effort to show that they are aware of environmental issues such as sustainability and climate change. The focus of the new government has been to address the mistakes made by the previous one, therefore little attention is given to issues of forestry. The change in government has also influenced local resistance, and opened up the eyes of the public, making them realise their potential in triggering a fundamental change. The citizens of Malaysia are no longer content to allow the government to make the decisions, and every single action of the government is now deeply scrutinised and publicly criticised. Whether this newfound realisation of citizen power extends to matters of forestry and environmental governance, however, remains to be seen.

8.5 Policy Recommendations and Implications for Future Research

It is a struggle to pin down specific policy recommendations, when participatory issues are the consequence of the system that creates social subordination. To use the analogy given by Velicu and Kaika (2017:314), *‘what is the point of asking for better conditions for slaves when the regime of slavery itself is not recognised as the key issue?’*. The domination of elite and government actors due to institutionalized socio-cultural hierarchy means that whatever solution is provided to address the issues in public participation must first address the issue of social subordination. Added to this dilemma is the fact that PRFs are ultimately managed based on the principle of resource use, rather than environmental conservation, indicating that there will always be conflict in how the development of PRF takes place. Therefore, this section will attempt to recommend several solutions to improve both the management of PRF as well as the organization of public participation.

There are several practical ways participatory mechanisms in Malaysia can be improved, and while these may not fully address the issue of social subordination, they may perhaps assist in balancing the unequal power distribution among the actors involved in forestry governance. Invited participation mechanisms specific to the development of PRF exist only in the state of Selangor, where a public hearing will be conducted in the event that a PRF is to be de-gazetted. While this is laudable, it still does not provide any invited participatory opportunities for the public in the development of PRF that do not involve de-gazettement of a reserve. Therefore, although the public may be affected by activities within the PRF, as long as the activities are within the remit of the PRF, they have no legal right to object. In this context, policy should make allowances for meaningful public participation in the development and management of PRF, especially if said development will have an impact on the surrounding communities. Policy documents such as the National Forestry Act 1984 must be reviewed to also include elements of meaningful public participation and impact assessment, to ensure that activities within the PRF remit do not adversely affect the public. In the event that existing participation processes do apply, effort must then focus on addressing the issue of meaningless participation, and providing more opportunity for the public to be empowered. Existing measures such as EIA take place after a decision has been made, and meetings with local authorities are

usually meaningless and organized only to reduce conflict. Highlighting these issues means that authorities must first acknowledge that existing public participation is unjust and unfair, and the structure of participation processes must embed rights-based or democratic principles that can reduce power imbalance among the actors.

To address the issues in PRF governance, however, first requires the acknowledgment that PRF can no longer be managed based on economic principles alone, and that the current system puts too much power in the hands of state government and the elite. Addressing both these issues, requires the mobilisation of the public and NGOs, and cannot be done via suggestions of policy change. Most importantly, it also requires the action of influential individuals who not only have the network to be mobilised as resources, but who also represent the common people. While triggering normative change may not be an easy feat, it is not entirely impossible, as evidenced by the recent global movement against plastics. Where once they were indispensable items, plastics have gained negative connotation worldwide and the ban against single-use plastics and other plastic items like straws are being aggressively implemented at a global scale. For PRF, this means a concentrated effort that is both strategic and sensational aiming specifically for fundamental change in how elite actors are involved in land and forestry governance.

Additionally, uninvited participation and citizen activism should not be limited to problems experienced by the local communities, but also engage with issues that explicitly highlight the injustice that stem from an economically-oriented PRF governance as well as the domination of state government and elite actors. Based on the findings of this research, uninvited participations benefited from the mobilisation of social capital, allowing the public more influence in decision-making processes. Therefore, future research should look into further analysing how the lessons learned from this research, especially in the mobilisation of social capital to engineer a more meaningful uninvited participation. Drawing on current research that focuses on social capital, social activism and community groups (e.g. Baker & Chapin, 2018 and Pujo et al., 2018), future research on SFM and forestry governance should look at how social capital can be mobilised to allow the public more power in decision-making and go beyond local context to address broader justice issues.

8.6 Conclusion

‘Questions of environmental justice and fairness are not technical or statistical questions; they are ethical and political questions’

(Davoudi & Brooks, 2014)

With the looming threat of climate change and the adverse problems caused by unsustainable development, those least responsible and most vulnerable will always bear the greatest cost. As this research has shown, it is the public who experience greater adversity from poor governance of natural resources, but the power to decide how these resources are used is not in their hands. How is this in any way fair or just? While I acknowledge that attaining a just society is unattainably idealistic, the pursuit of fair and just institution should always be a goal. This research show that there are those out there who are willing to go the extra mile to fight for their rights, be it for practical reasons such as for valuable land or for altruistic motives such as the protection of the natural resources for future generations. Aside from the results discussed throughout this thesis, if there is only a single thing I learned from this research it is this; in any given situation, there is always a choice. Institutions may be working against us, but to act or not to act is the decision that we must all make.

REFERENCES

- Abdul Hamid, A. F., & Ismail, M. T. (2012). The Monarchy and Party Politics in Malaysia in the Era of Abdullah Ahmad Badawi (2003–09): The Resurgence of the Role of Protector. *Asian Survey*, 52(5), 900-923. doi:10.1525/as.2012.52.5.924
- Abelson, J., Forest, P.-G., Eyles, J., Smith, P., Martin, E., & Gauvin, F.-P. (2003). Deliberations about deliberative methods: issues in the design and evaluation of public participation processes. *Social Science & Medicine*, 57(2), 239-251. doi:[https://doi.org/10.1016/S0277-9536\(02\)00343-X](https://doi.org/10.1016/S0277-9536(02)00343-X)
- Adams, D., Ullah, S., Akhtar, P., Adams, K., & Saidi, S. (2018). The role of country-level institutional factors in escaping the natural resource curse: Insights from Ghana. *Resources Policy*.
- Agyeman, J., Cole, P., Haluza-DeLay, R., & O'Riley, P. (2010). *Speaking for ourselves: Environmental justice in Canada*: UBC Press.
- Ahmad, Z. (2007). Multiculturalism and religio-ethnic plurality: the Malaysian experience. *Culture and Religion*, 8(2), 139-153.
- Ahmad, Z. (2007). The Tragedy of May 13, 1969. Retrieved from http://www.malaysianbar.org.my/echoes_of_the_past/the_tragedy_of_may_13_1969.html
- Aiken, R. (1993). Struggling to Save Malaysia's Endau–Rompin Rain Forest, 1972–92. *Environmental Conservation*, 20(02), 157-162. doi:doi:10.1017/S0376892900037668
- Aiken, R., & Leigh, C. (1984). A second national park for peninsular Malaysia? the endau-rompin controversy. *Biological Conservation*, 29(3), 253-276. doi:[https://doi.org/10.1016/0006-3207\(84\)90102-2](https://doi.org/10.1016/0006-3207(84)90102-2)
- Aiken, S. R. (1994). Peninsular Malaysia's protected areas' coverage, 1903–92: creation, rescission, excision, and intrusion. *Environmental Conservation*, 21(1), 49-56.
- Aiken, S. R., & Leigh, C. H. (1986). Land use conflicts and rain forest conservation in Malaysian and Australia. *Land Use Policy*, 3(3), 161-179. doi:10.1016/0264-8377(86)90059-1
- Almer, H. L., & Koontz, T. M. (2004). Public hearings for EIAs in post-communist Bulgaria: do they work? *Environmental impact assessment review*, 24(5), 473-493. doi:10.1016/j.eiar.2003.12.004
- Amigun, B., Musango, J. K., & Brent, A. C. (2011). Community perspectives on the introduction of biodiesel production in the Eastern Cape Province of South Africa. *Energy*, 36(5), 2502-2508. doi:10.1016/j.energy.2011.01.042
- Ampang Forest Reserve. (2017). *Tourism Selangor*. Retrieved from <http://www.tourismselangor.my/destinations/ampang-forest-reserve/>
- Amster, R., DeLeon, A., Fernandez, L., Nocella, A. J., & Shannon, D. (2009). *Contemporary Anarchist Studies: An Introductory Anthology of Anarchy in the Academy*: Taylor & Francis.
- Arnstein, S. R. (1969). A Ladder Of Citizen Participation. *Journal of the American Planning Association*, 35(4), 216-224. doi:10.1080/01944366908977225
- Awang, A. (2003, July). Conflict in the land law under the federation structure. In *International Convention on Urban Development & Management (ICUDM 2003)* (pp. 7-9)
- Badeeb, R. A., Lean, H. H., & Clark, J. (2017). The evolution of the natural resource curse thesis: A critical literature survey. *Resources Policy*, 51, 123-134.
- Baker, S., & Chapin III, F. S. (2018). Going beyond" it depends:" the role of context in shaping participation in natural resource management. *Ecology and society*, 23(1).

- Ballester, A., & Mott Lacroix, K. E. (2016). Public participation in water planning in the Ebro River Basin (Spain) and Tucson Basin (US, Arizona): impact on water policy and adaptive capacity building. *Water*, 8(7), 273.
- Ballet, J., Bazin, D., Koffi, K. J., & Koména, K. B. (2015). Cultural heterogeneity, inequalities, power, and the management of natural resources: How the capability approach contributes to the debate. *Society & Natural Resources*, 28(4), 377-387.
- Ballet, J., Dubois, J. L., & Mahieu, F. R. (2007). Responsibility for each other's freedom: agency as the source of collective capability. *Journal of Human Development*, 8(2), 185-201.
- Bank, W. (2018). World Development Indicator. *Malaysia*. Retrieved from <http://databank.worldbank.org/data/reports.aspx?source=2&country=MYS>
- Bannon, I., & Collier, P. (2003). *Natural resources and violent conflict: Options and actions*: The World Bank.
- Basiago, A. D. (1999). Economic, social, and environmental sustainability in development theory and urban planning practice. *Environmentalist*, 19(2), 145-161. doi:10.1023/a:1006697118620
- Basu, A. M. (2018). Local Communities in Forest Management: An Evaluation *Marginalities in India* (pp. 95-109): Springer.
- Basu, P. (2017). Environmental Justice in South and Southeast Asia: Inequalities and struggles in rural and urban contexts. In Ryan Holifield, Jayajit Chakraborty, & G. Walker (Eds.), *The Routledge handbook of environmental justice* (pp. 670). New York: Routledge.
- Barnes, C., & van Laerhoven, F. (2015). Making it last? Analysing the role of NGO interventions in the development of institutions for durable collective action in Indian community forestry. *Environmental Science & Policy*, 53, 192-205.
- Begg, C. (2018). Power, responsibility and justice: a review of local stakeholder participation in European flood risk management. *Local Environment*, 1-15.
- Beierle, T. C. (1998). *Public participation in environmental decisions: an evaluation framework using social goals*: Resources for the Future Washington, DC.
- Beierle, T. C. (2002). The quality of stakeholder-based decisions. *Risk analysis*, 22(4), 739-749.
- Beierle, T. C. (2010). *Democracy in Practice: Public Participation in Environmental Decisions*: Taylor & Francis.
- Beierle, T. C., & Konisky, D. M. (2000). Values, Conflict, and Trust in Participatory Environmental Planning. *Journal of Policy Analysis and Management*, 19(4), 587-602.
- Bell, D. (2004). Environmental justice and Rawls' difference principle. *Environmental Ethics*, 26(3), 287-306.
- Bell, D., Gray, T., Hagggett, C., & Swaffield, J. (2013). Re-visiting the 'social gap': public opinion and relations of power in the local politics of wind energy. *Environmental politics*, 22(1), 115-135. doi:10.1080/09644016.2013.755793
- Bell, S., Morse, S., & Shah, R. A. (2012). Understanding stakeholder participation in research as part of sustainable development. *Journal of Environmental Management*, 101, 13-22. doi:<https://doi.org/10.1016/j.jenvman.2012.02.004>
- Benford, R. (2005). The half-life of the environmental justice frame: innovation, diffusion, and stagnation. *Power, justice, and the environment: A critical appraisal of the environmental justice movement*, 37-53.
- Bertin, A., & Sirven, N. (2006). Social capital and the capability approach: A social economic theory. *Ethics and the Market: Insights from Social Economics*. London: Routledge.
- Bhd., E. S. (2013, 2017). What is EKVE. *East Klang Valley Expressway*. Retrieved from <http://ekve.com.my/history.html>
- Bickerstaff, K., & Walker, G. (2001). Participatory local governance and transport planning. *Environment and Planning A*, 33(3), 431-451.
- Blewitt, J. (2014). *Understanding Sustainable Development*: Taylor & Francis.

- Blicharska, M., & Mikusiński, G. (2014). Incorporating social and cultural significance of large old trees in conservation policy. *Conservation Biology*, 28(6), 1558-1567.
- Blowers, A., Boersema, J., & Martin, A. (2012). Is sustainable development sustainable? *Journal of Integrative Environmental Sciences*, 9(1), 1-8. doi:10.1080/1943815x.2012.666045
- Bodin, Ö., & Crona, B. I. (2009). The role of social networks in natural resource governance: What relational patterns make a difference? *Global Environmental Change*, 19(3), 366-374.
- Boggs, J. P. (1991). EIA within democratic politics: contradiction in terms or emerging paradigm? *Impact Assessment*, 9(3), 1-11.
- Bohman, J. (2007). Beyond distributive justice and struggles for recognition: Freedom, democracy, and critical theory. *European Journal of Political Theory*, 6(3), 267-276.
- Bonan, G. B. (2008). Forests and climate change: forcings, feedbacks, and the climate benefits of forests. *Science*, 320(5882), 1444-1449.
- Boomgaard, P. (1992). Forest management and exploitation in colonial Java, 1677-1897. *Forest & Conservation History*, 36(1), 4-14.
- Bourne, L., & Walker, D. H. (2005). Visualising and mapping stakeholder influence. *Management decision*, 43(5), 649-660.
- Bowring, P. (1993, January 7, 1993). Royals in Trouble: Malaysia's Sultans Have a Role. *The New York Times*. Retrieved from <http://www.nytimes.com/1993/01/07/opinion/07iht-edbo.html>
- Bravo-Gonzalez, R. (2010). *NGO Influence on Forest Legislation: Experiences from Federal Forest Management in the United States*. Universal Publishers
- Brebbia, C. A. (2009). *Sustainable Development and Planning IV*: WIT Press.
- Brisman, A. (2013). The violence of silence: some reflections on access to information, public participation in decision-making, and access to justice in matters concerning the environment. *Crime Law and Social Change*, 59(3), 291-303. doi:10.1007/s10611-013-9416-3
- Brulle, R. J., & Pellow, D. N. (2006). Environmental justice: human health and environmental inequalities. *Annu. Rev. Public Health*, 27, 103-124.
- Bryman, A. (2016). *Social Research Methods*: Oxford University Press.
- Bryson, J. M., Quick, K. S., Slotterback, C. S., & Crosby, B. C. (2013). Designing public participation processes. *Public administration review*, 73(1), 23-34.
- Bucchi, M., & Neresini, F. (2008). 19 Science and Public Participation. *The handbook of science and technology studies*, 449.
- Bullard, R. D., & Johnson, G. S. (2000). Environmentalism and Public Policy: Environmental Justice: Grassroots Activism and Its Impact on Public Policy Decision Making. *Journal of Social Issues*, 56(3), 555-578. doi:10.1111/0022-4537.00184
- Bullard, R. D., & Lewis, J. (1996). Environmental justice and communities of color. *San Francisco*.
- Bustos, B., Folchi, M., & Fragkou, M. (2017). Coal mining on pastureland in Southern Chile; challenging recognition and participation as guarantees for environmental justice. *Geoforum*, 84, 292-304.
- Caine, S. (1958). The passing of colonialism in Malaya. *The Political Quarterly*, 29(3), 258-268.
- Callahan, K. (2006). *Elements of effective governance: measurement, accountability and participation*: Routledge.
- Cambridge. (Ed.) (2018) *Cambridge Dictionary*. Cambridge: Cambridge University press.
- Canadell, J. G., & Raupach, M. R. (2008). Managing forests for climate change mitigation. *Science*, 320(5882), 1456-1457.
- Carr, D. S., & Halvorsen, K. (2001). An evaluation of three democratic, community-based approaches to citizen participation: Surveys, conversations with community groups, and community dinners. *Society & Natural Resources*, 14(2), 107-126.
- Carrick, J., & Bell, D. (2017). Procedural environmental justice *The Routledge handbook of environmental justice* (pp. 127-138): Routledge.

- Case, W. (1994). The UMNO Party Election in Malaysia: One for the Money. *Asian Survey*, 34(10), 916-930. doi:10.2307/2644970
- Case, W. (2013). *Politics in Southeast Asia: Democracy Or Less*: Taylor & Francis.
- Case, W. (2017). Stress testing leadership in Malaysia: the 1MDB scandal and Najib Tun Razak. *The Pacific Review*, 30(5), 633-654.
- Chandrasekharan, C. (2005). Stakes, Suspicions and Synergies in Sustainable Forest Management - The Asian Experience. In S. Kant & R. A. Berry (Eds.), *Institutions, Sustainability, and Natural Resources: Institutions for Sustainable Forest Management* (Vol. 2, pp. 361). Netherlands: Springer.
- Charmaz, K., & Belgrave, L. L. (2007). Grounded theory. *The Blackwell encyclopedia of sociology*.
- Chaudhary, S., McGregor, A., Houston, D., & Chettri, N. (2018). Environmental justice and ecosystem services: A disaggregated analysis of community access to forest benefits in Nepal. *Ecosystem Services*, 29, 99-115.
- Chazdon, R. L., Brancalion, P. H. S., Laestadius, L., Bennett-Curry, A., Buckingham, K., Kumar, C., . . . Wilson, S. J. (2016). When is a forest a forest? Forest concepts and definitions in the era of forest and landscape restoration. *Ambio*, 45(5), 538-550. doi:10.1007/s13280-016-0772-y
- Cheah, B. K. (2007). The Malayan Union and Its Impact. Retrieved from http://www.malaysianbar.org.my/echoes_of_the_past/the_malayan_union_and_its_impact.html
- Checkoway, B. (1981). The politics of public hearings. *The Journal of Applied Behavioral Science*, 17(4), 566-582.
- Chess, C. (2000). Evaluating environmental public participation: Methodological questions. *Journal of Environmental Planning and Management*, 43(6), 769-784.
- Chess, C., & Purcell, K. (1999). *Public participation and the environment: Do we know what works?* : ACS Publications.
- Chilvers, J., & Longhurst, N. (2016). Participation in transition (s): Reconceiving public engagements in energy transitions as co-produced, emergent and diverse. *Journal of Environmental Policy & Planning*, 18(5), 585-607.
- Chilvers, J., Pallett, H., & Hargreaves, T. (2018). Ecologies of participation in socio-technical change: The case of energy system transitions. *Energy Research & Social Science*, 42, 199-210. doi:<https://doi.org/10.1016/j.erss.2018.03.020>
- CIEC. Centre for Industry Education Collaboration (2005). Principles Of Sustainability: People, Planet and Profits. *Sustainability*. Retrieved from <http://www.sustainability-ed.org.uk/pages/what3-1.htm>
- CIFOR. Centre for International Forestry Research (2018). Forest Policy. *Center for International Forestry Research*. Retrieved from <https://www.cifor.org/forest-policy/>
- Coenen, F. H. J. M. (2008). *Public Participation and Better Environmental Decisions: The Promise and Limits of Participatory Processes for the Quality of Environmentally Related Decision-making*: Springer Netherlands.
- Coleman, J. S. (2000). Chapter 2 - Social Capital in the Creation of Human Capital *Knowledge and Social Capital* (pp. 17-41). Boston: Butterworth-Heinemann.
- Commission, E. (1998). *Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters*. Retrieved from Aarhus:
- Cooke, F. M. (2015). The Challenge of Sustainable Forests: Forest Resource Policy in Malaysia, 1970 to 1995. *Biography*, 38(4).
- Cooke, F. M., & Hezri, A. A. (2016). THE ORIGINS OF THE ENVIRONMENTAL MOVEMENT IN MALAYSIA: Movement Structure and Agency. In P. Hirsch (Ed.), *The Routledge Handbook on the Environment in Southeast Asia*. Abingdon and New York: Routledge.

- Cooke, F. M., Nordensvard, J., Saat, G. B., Urban, F., & Siciliano, G. (2017). The Limits of Social Protection: The Case of Hydropower Dams and Indigenous Peoples' Land. *Asia & the Pacific Policy Studies*, 4(3), 437-450. doi:10.1002/app5.187
- Coolsaet, B. (2015). Transformative Participation in Agrobiodiversity Governance: Making the Case for an Environmental Justice Approach. *Journal of Agricultural and Environmental Ethics*, 28(6), 1089-1104. doi:10.1007/s10806-015-9579-2
- Creighton, J. L. (2005). *The Public Participation Handbook: Making Better Decisions Through Citizen Involvement*: Wiley.
- Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into practice*, 39(3), 124-130.
- Culley, M. R., & Hughey, J. (2008). Power and Public Participation in a Hazardous Waste Dispute: A Community Case Study. *American Journal of Community Psychology*, 41(1-2), 99-114. doi:10.1007/s10464-007-9157-5
- Curran, D. (2018). Environmental Justice Meets Risk-Class: The Relational Distribution of Environmental Bads. *Antipode*, 50(2), 298-318.
- Cutter, S. L. (1995). Race, class and environmental justice. *Progress in human geography*, 19(1), 111-122.
- Cvetkovich, G., & Earle, T. C. (1994). The Construction of Justice: A Case Study of Public Participation in Land Management. *Journal of Social Issues*, 50(3), 161-178. doi:10.1111/j.1540-4560.1994.tb02425.x
- Daly, H. E. (1990). Toward some operational principles of sustainable development. *Ecological Economics*, 2(1), 1-6.
- Davoudi, S., & Brooks, E. (2014). When does unequal become unfair? Judging claims of environmental injustice. *Environment and Planning A*, 46(11), 2686-2702. doi:10.1068/a130346p
- De Weger, E., Van Vooren, N., Luijkx, K., Baan, C., & Drewes, H. (2018). Achieving successful community engagement: a rapid realist review. *BMC health services research*, 18(1), 285.
- Dekker, P., & Uslaner, E. M. (2003). *Social Capital and Participation in Everyday Life*: Taylor & Francis.
- Dempsey, N., Bramley, G., Power, S., & Brown, C. (2011). The social dimension of sustainable development: Defining urban social sustainability. *Sustainable Development*, 19(5), 289-300.
- DOSM. Department of Statistics Malaysia (2015). Malaysia at a Glance:
- DOSM. Department of Statistics Malaysia (2018). Malaysia Economic Performance First Quarter 2018. *Statistics*. Retrieved from https://www.dosm.gov.my/v1/index.php?r=column/cthemedByCat&cat=100&bul_id=SU85RzF6TjNQdWJqUTd1RG9XeGF5dz09&menu_id=TE5CRUZCb1h4ZTZMODZlbnk2aWRRQTO9
- Dowling, J., & Pfeffer, J. (1975). Organizational legitimacy: Social values and organizational behavior. *Pacific sociological review*, 18(1), 122-136.
- Drabble, J. H. (1972). Investment in the Rubber Industry in Malaya c. 1900–1922. *Journal of Southeast Asian Studies*, 3(2), 247-261.
- Drake, P. J. (1979). The Economic Development of British Malaya to 1914: An Essay in Historiography with Some Questions for Historians. *Journal of Southeast Asian Studies*, 10(2), 262-290.
- Duchelle, A., Seymour, F., Brockhaus, M., Angelsen, A., Larson, A., Moeliono, M., . . . Martius, C. (2018). *REDD+: Lessons from national and subnational implementation*. Retrieved from
- Dungumaro, E. W., & Madulu, N. F. (2003). Public participation in integrated water resources management: the case of Tanzania. *Physics and Chemistry of the Earth, Parts A/B/C*, 28(20), 1009-1014. doi:<https://doi.org/10.1016/j.pce.2003.08.042>

- Džatková, V. (2016). The Role of Civil Society in Public Governance. *Rocznik Administracji Publicznej*, 2016(2016 (2)), 373383.
- Dzulkifli, F. Z., & Mohd Zameri, N. D. (2010). *The functions of constitutional monarchy in Malaysian political system: The perceptions of Malay community* Paper presented at the Seminar on Nasional Resilience, Langkawi, Malaysia.
- Edwards, G. A. S., Reid, L., & Hunter, C. (2016). Environmental justice, capabilities, and the theorization of well-being. *Progress in human geography*, 40(6), 754-769. doi:10.1177/0309132515620850
- Elkington, J. (1998). *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*: New Society Publishers.
- Emerson, K., & Nabatchi, T. (2015). Evaluating the productivity of collaborative governance regimes: A performance matrix. *Public Performance & Management Review*, 38(4), 717-747.
- Environment, W. C. o., & Development. (1987). *Our Common Future*: Oxford University Press.
- FAO. Food and Agriculture Organization (2012). *Forest Resource Assessments*. Retrieved from Rome: <http://www.fao.org/3/a-ap862e.pdf>
- FAO. Food and Agriculture Organization (2018). *The State of the World's Forests 2018 - Forest pathways to sustainable development*. Retrieved from Rome: <http://www.fao.org/3/I9535EN/i9535en.pdf>
- Federal Constitution, 236 (Percetakan Nasional Malaysia Berhad 1957 31 August 1957).
- Fee, L. K., & Appudurai, J. (2011). Race, class and politics in Peninsular Malaysia: the general election of 2008. *Asian Studies Review*, 35(1), 63-82.
- Fiorino, D. J. (1990). Citizen participation and environmental risk: A survey of institutional mechanisms. *Science, Technology, & Human Values*, 15(2), 226-243.
- Fletcher, A. J. (2017). Applying critical realism in qualitative research: methodology meets method. *International Journal of Social Research Methodology*, 20(2), 181-194.
- Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative inquiry*, 12(2), 219-245.
- FoKD. Friends of Kota Damansara (2006, 2015). About Friends of Kota Damansara. *Friends of Kota Damansara*. Retrieved from http://kd.communityforest.net/?page_id=52
- Foley, L. H. (1998). *Silviculture: From the Crane of Forestry to Ecosystem Management*: DIANE Publishing Company.
- Foo, C. H. (2016). Linking forest naturalness and human wellbeing—A study on public's experiential connection to remnant forests within a highly urbanized region in Malaysia. *Urban Forestry & Urban Greening*, 16(Supplement C), 13-24. doi:<https://doi.org/10.1016/j.ufug.2016.01.005>
- Foster, J. (1995). Informal social control and community crime prevention. *The British Journal of Criminology*, 35(4), 563-583.
- Fraser, N. (1998). *Social Justice in the Age of Identity Politics: Redistribution, Recognition, Participation*: WZB.
- Fraser, N. (2000). Rethinking recognition. *New left review*, 3, 107.
- Fraser, N. (2003). Recognition without ethics? In C. McKinnon & D. Castiglione (Eds.), *The culture of toleration in diverse societies* (pp. 224): Manchester University Press.
- Fraser, N. (2009). Social justice in the age of identity politics. *Geographic thought: A praxis perspective*, 72-91.
- Fraser, N., & Honneth, A. (2003). *Redistribution Or Recognition?: A Political-philosophical Exchange*: Verso.
- Freeman, R. E. (1984). *Strategic Management: A Stakeholder Approach*: Pitman.
- Freudenberg, N., & Steinsapir, C. (1991). NOT IN OUR BACKYARDS - THE GRASS-ROOTS ENVIRONMENTAL MOVEMENT. *Society & Natural Resources*, 4(3), 235-245. doi:10.1080/08941929109380757

- Fung, A. (2006). Varieties of participation in complex governance. *Public administration review*, 66(s1), 66-75.
- Fung, A., & Wright, E. O. (2003). *Deepening Democracy: Institutional Innovations in Empowered Participatory Governance*: Verso.
- García-López, G. A. (2018). Rethinking elite persistence in neoliberalism: Foresters and technobureaucratic logics in Mexico's community forestry. *World development*.
- Geddes, A. (1992). Locus Standi and the EEC Environmental Measures. *Journal of Environmental Law*, 4(1), 29-39. doi:10.1093/jel/4.1.29
- Gellers, J. C., & Jeffords, C. (2018). Toward Environmental Democracy? Procedural Environmental Rights and Environmental Justice. *Global Environmental Politics*(Early Access), 99-121.
- Gerring, J. (2007). The case study: what it is and what it does *The Oxford handbook of comparative politics*.
- Gervers, J. H. (1987). THE NIMBY SYNDROME - IS IT INEVITABLE. *Environment*, 29(8), 18-&. doi:10.1080/00139157.1987.9931352
- Gomez, E. T., & Sundaram, J. K. (1999). *Malaysia's Political Economy: Politics, Patronage and Profits*: Cambridge University Press.
- Gregory, D., Johnston, R., Pratt, G., Watts, M., & Whatmore, S. (2011). *The Dictionary of Human Geography*: Wiley.
- Griffith, D. M., Lehmann, C. E. R., Strömberg, C. A. E., Parr, C. L., Pennington, R. T., Sankaran, M., . . . Bond, W. J. (2017). Comment on "The extent of forest in dryland biomes". *Science*, 358(6365). doi:10.1126/science.aao1309
- Hampton, G. (1999). Environmental equity and public participation. *Policy Sciences*, 32(2), 163-174. doi:10.1023/a:1004591620163
- Hawkins, R. L., & Maurer, K. (2009). Bonding, bridging and linking: how social capital operated in New Orleans following Hurricane Katrina. *British Journal of Social Work*, 40(6), 1777-1793.
- Hennart, J.-F. (1986). Internalization in practice: Early foreign direct investments in Malaysian tin mining. *Journal of International Business Studies*, 17(2), 131-143.
- Herriott, R. E., & Firestone, W. A. (1983). Multisite qualitative policy research: Optimizing description and generalizability. *Educational researcher*, 12(2), 14-19.
- Hezri, A. (2011). Sustainable shift: institutional challenges for the environment in Malaysia. *Akademika*, 81(2), 59-69.
- Hezri, A. (2016). *The Sustainability Shift: Refashioning Malaysia's Future*: Areca Books.
- Hezri, A., & Hasan, M. N. (2006). Towards sustainable development? The evolution of environmental policy in Malaysia. *Natural Resources Forum*, 30(1), 37-50. doi:10.1111/j.1477-8947.2006.00156.x
- Hicks, C. C., Levine, A., Agrawal, A., Basurto, X., Breslow, S. J., Carothers, C., . . . Levin, P. S. (2016). Engage key social concepts for sustainability. *Science*, 352(6281), 38-40. doi:10.1126/science.aad4977
- Hilson, C., & Cram, I. (1996). Judicial review and environmental law —is there a coherent view of standing? *Legal Studies*, 16(1), 1-27. doi:10.1111/j.1748-121X.1996.tb00397.x
- Hirsch, P. (2016). *Routledge Handbook of the Environment in Southeast Asia*: Taylor & Francis.
- Holifield, R. (2009). Actor-Network Theory as a Critical Approach to Environmental Justice: A Case against Synthesis with Urban Political Ecology. *Antipode*, 41(4), 637-658. doi:10.1111/j.1467-8330.2009.00692.x
- Holifield, R. (2012). Environmental justice as recognition and participation in risk assessment: Negotiating and translating health risk at a superfund site in Indian country. *Annals of the Association of American Geographers*, 102(3), 591-613.
- Holifield, R., Chakraborty, J., & Walker, G. (2017). *The Routledge Handbook of Environmental Justice*: Taylor & Francis.
- Holligan, B. (2017). Narratives of capital versus narratives of community: conservation covenants and the private regulation of land use. *Journal of Environmental Law*, 30(1), 55-81.

- Honneth, A. (2001). Recognition or redistribution? *Theory, Culture & Society*, 18(2-3), 43-55.
- How powerful are Malaysia's sultans? (2017, 1/11/2017). *The Economist explains*. Retrieved from <https://www.economist.com/blogs/economist-explains/2017/02/economist-explains-1>
- Hurlbert, M., & Gupta, J. (2015). The split ladder of participation: A diagnostic, strategic, and evaluation tool to assess when participation is necessary. *Environmental Science & Policy*, 50, 100-113. doi:<https://doi.org/10.1016/j.envsci.2015.01.011>
- Hutchins, M. J., & Sutherland, J. W. (2008). An exploration of measures of social sustainability and their application to supply chain decisions. *Journal of Cleaner Production*, 16(15), 1688-1698.
- Hyde, K. F. (2000). Recognising deductive processes in qualitative research. *Qualitative market research: An international journal*, 3(2), 82-90.
- IAPP. International Association of Public Participation (2016, September 19 2016). IAP2: Good Public Participation Results in Better Decisions. Retrieved from <http://www.iap2.org/>
- Ibrahim, S. S. (2006). From individual to collective capabilities: the capability approach as a conceptual framework for self-help. *Journal of Human Development*, 7(3), 397-416.
- Innes, J. E., & Booher, D. E. (2004). Reframing public participation: strategies for the 21st century. *Planning Theory & Practice*, 5(4), 419-436. doi:10.1080/1464935042000293170
- Institute, A.-E. (2018). Evolution to Malaysia. *Economic History of Malaya*. Retrieved from <https://www.ehm.my/about/history-of-malaysia>
- ITTO. International Tropical Timber Association (2005). Malaysia. *Country Profile*. Retrieved from <http://www.itto.int/partner/id=12410000>
- Johansson, J. (2018). Collaborative governance for sustainable forestry in the emerging bio-based economy in Europe. *Current Opinion in Environmental Sustainability*, 32, 9-16.
- Johnson, T., Lora-Wainwright, A., & Lu, J. (2018). The quest for environmental justice in China: citizen participation and the rural–urban network against Panguanying’s waste incinerator. *Sustainability Science*, 13(3), 733-746.
- Jomo, K. S., & Sundaram, J. K. (2004). *The new economic policy and interethnic relations in Malaysia*: UNRISD Geneva.
- JPSM. Jabatan Perhutanan Semenanjung Malaysia (2016). National Forestry Policy. *Official Website Forestry Department Peninsular Malaysia*. Retrieved from <https://www.forestry.gov.my/index.php/en/about-us/national-forestry-policy>
- Jusoff, K., & Taha, D. H. D. (2008). Sustainable forest management practices and environmental protection in Malaysia. *WSEAS Transactions on Environment and Development*, 4(3), 191-199.
- Kant, P. (2006). Definition Of Forests Under Kyoto Protocol: Choosing Appropriate Values for Crown Cover, Area and Tree Height for India. *Indian Forester*, 132(5), 632.
- Karner, A., & Marcantonio, R. A. (2018). Achieving transportation equity: Meaningful public involvement to meet the needs of underserved communities. *Public Works Management & Policy*, 23(2), 105-126.
- Kates, R. W., Parris, T. M., & Leiserowitz, A. A. (2005). What is sustainable development? Goals, indicators, values, and practice. *Environment(Washington DC)*, 47(3), 8-21.
- Kathirithamby-Wells, J. (2005). *Nature and Nation: Forests and Development in Peninsular Malaysia*: University of Hawai’i Press.
- Keith, H., Vardon, M., Stein, J. A., & Lindenmayer, D. (2019). Contribution of native forests to climate change mitigation—A common approach to carbon accounting that aligns results from environmental-economic accounting with rules for emissions reduction. *Environmental science & policy*, 93, 189-199.
- Ken, W. L. (1979). Twentieth-Century Malayan Economic History: A Select Bibliographic Survey. *Journal of Southeast Asian Studies*, 10(1), 1-24.

- Kennedy, A., Schafft, K. A., & Howard, T. M. (2017). Taking away David's sling: environmental justice and land-use conflict in extractive resource development. *Local Environment*, 22(8), 952-968.
- Keulartz, J., & Leistra, G. (2007). *Legitimacy in European nature conservation policy: case studies in multilevel governance* (Vol. 14): Springer Science & Business Media.
- Kinzer, K. (2018). How can we help? An exploration of the public's role in overcoming barriers to urban sustainability plan implementation. *Sustainable Cities and Society*, 39, 719-728.
- Koch, J., & Christ, O. (2018). Household participation in an urban photovoltaic project in Switzerland: Exploration of triggers and barriers. *Sustainable Cities and Society*, 37, 420-426. doi:10.1016/j.scs.2017.10.028
- Kuditshini, J. T. (2008). Global governance and local government in the Congo: the role of the IMF, World Bank, the multinationals and the political elites. *International Review of Administrative Sciences*, 74(2), 195-216.
- Kumar, R. (1986). *The forest resources of Malaysia: their economics and development*: Oxford University Press.
- Kumari, K. (1995). Is Malaysian forest policy and legislation conducive to multiple-use forest management? *Unasylva* (FAO).
- Lakhdir, L. (2016). Deepening the Culture of Fear: The Criminalization of Peaceful Expression in Malaysia. Retrieved from Human Rights Watch website: <https://www.hrw.org/report/2016/10/12/deepening-culture-fear/criminalization-peaceful-expression-malaysia> Retrieved from <https://www.hrw.org/report/2016/10/12/deepening-culture-fear/criminalization-peaceful-expression-malaysia>
- Lauer, F. I., Metcalf, A. L., Metcalf, E. C., & Mohr, J. J. (2018). Public Engagement in Social-Ecological Systems Management: An Application of Social Justice Theory. *Society & Natural Resources*, 31(1), 4-20. doi:10.1080/08941920.2017.1364456
- Lee, C., & Chew-Ging, L. (2017). The Evolution of Development Planning in Malaysia. *Journal of Southeast Asian Economies (JSEAE)*, 34(3), 436-461.
- Lee, C., & Hutchinson, F. E. (2017). Introduction: The Malaysian Economy Towards 2020 and Beyond. *Journal of Southeast Asian Economies (JSEAE)*, 34(3), 433-435.
- Lee, R. J., Strohmeier, B. R., Bunker, K. L., & Van Orden, D. R. (2008). Naturally occurring asbestos - A recurring public policy challenge. *Journal of Hazardous Materials*, 153(1-2), 1-21. doi:10.1016/j.jhazmat.2007.11.079
- Lee, W. C., & Baharuddin, A. H. (2018). Impacts of Climate Change on Agriculture in Malaysia *The Impact of Climate Change on Our Life* (pp. 179-195): Springer.
- Lehtonen, M. (2004). The environmental - social interface of sustainable development capabilities, social capital, institutions. *Ecological Economics*, 49(2), 199-214. doi:10.1016/j.ecolecon.2004.03.019
- Lele, S. M. (1991). Sustainable development: a critical review. *World development*, 19(6), 607-621.
- Leong, Y. K. (1989). The proposed Endau-Rompin national park: the mass media and the evolution of a controversy.
- Lin, N. (2000). Inequality in social capital. *Contemporary sociology*, 29(6), 785-795.
- Loh, K. W. (2009). Federation of Malaysia. In H. Michelmann (Ed.), *Foreign Relations in Federal Countries* (Vol. 5, pp. 188-210). Montreal: McGill-Queen's University Press.
- Lovrić, N., Lovrić, M., & Konold, W. (2018). A Grounded Theory approach for deconstructing the role of participation in spatial planning: Insights from Nature Park Medvednica, Croatia. *Forest Policy and Economics*, 87, 20-34.
- Lowndes, V., Pratchett, L., & Stoker, G. (1998). Enhancing public participation in local government: Department of the Environment, Transport and the Regions.
- Lowndes, V., Pratchett, L., & Stoker, G. (2001). Trends in public participation: part 1—local government perspectives. *Public Administration*, 79(1), 205-222.

- Luttrell, C., Sills, E., Aryani, R., Ekaputri, A. D., & Evinke, M. F. (2018). Beyond opportunity costs: who bears the implementation costs of reducing emissions from deforestation and degradation? *Mitigation and adaptation strategies for global change*, 23(2), 291-310.
- Lyytimäki, J., Vikström, S., & Furman, E. (2018). Voluntary participation for sustainability transition: experiences from the 'Commitment to Sustainable Development 2050'. *International Journal of Sustainable Development & World Ecology*, 1-12.
- Maidin, A. J., & Abdulkadir, A. B. (2012). Resolving Disputes Arising from Land Development and Environmental Degradation in Malaysia: Proposals for Reforms. *Social Science Research Network*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2014747
- Malaysia. (1976). *Third Malaysia Plan, 1976 - 1980*. Malaysia: Economic Planning Unit Retrieved from <http://www.epu.gov.my/en/rmk/third-malaysia-plan-1976-1980>.
- National Forestry Act, § 117, 313 Stat. 105 (Pesuruhjaya Penyemak Undang-Undang, Malaysia 1984 April 1, 1986).
- Malaysia. (2017). Eleventh Malaysia Plan 2016-2020. *Malaysia Plan*. Retrieved from <http://www.epu.gov.my/en/rmk/eleventh-malaysia-plan-2016-2020>
- Martin, A., Coolsaet, B., Corbera, E., Dawson, N. M., Fraser, J. A., Lehmann, I., & Rodriguez, I. (2016). Justice and conservation: The need to incorporate recognition. *Biological Conservation*, 197, 254-261. doi:10.1016/j.biocon.2016.03.021
- Martin, A., Gross-Camp, N., Kebede, B., McGuire, S., & Munyarukaza, J. (2014). Whose environmental justice? Exploring local and global perspectives in a payments for ecosystem services scheme in Rwanda. *Geoforum*, 54(Supplement C), 167-177. doi:<https://doi.org/10.1016/j.geoforum.2013.02.006>
- Marzukhi, M. A., Omar, D., & Leh, O. L. H. (2012). Re-appraising the framework of planning and land law as an instrument for sustainable land development in Malaysia. *Procedia-Social and Behavioral Sciences*, 68, 767-774.
- Marzuki, A. (2009). A Review on Public Participation in Environmental Impact Assessment in Malaysia. *Theoretical and Empirical Researches in Urban Management*, 4(3 (12)), 126-136. Retrieved from <http://www.jstor.org/stable/24872442>
- Marzuki, A., Hay, I., & James, J. (2012). Public participation shortcomings in tourism planning: the case of the Langkawi Islands, Malaysia. *Journal of Sustainable Tourism*, 20(4), 585-602.
- Matheny, A. R., & Williams, B. A. (1985). KNOWLEDGE VS NIMBY - ASSESSING FLORIDA STRATEGY FOR SITING HAZARDOUS-WASTE DISPOSAL FACILITIES. *Policy Studies Journal*, 14(1), 70-80. doi:10.1111/j.1541-0072.1985.tb00205.x
- Mauthner, N. S., & Doucet, A. (2003). Reflexive accounts and accounts of reflexivity in qualitative data analysis. *Sociology*, 37(3), 413-431.
- McGurty, E. M. (2000). Warren County, NC, and the Emergence of the Environmental Justice Movement: Unlikely Coalitions and Shared Meanings in Local Collective Action. *Society & Natural Resources*, 13(4), 373-387. doi:10.1080/089419200279027
- McLaverty, P. (2017). Is public participation a good thing? *Public participation and innovations in community governance* (pp. 185-197): Routledge.
- Mease, L. A., Erickson, A., & Hicks, C. (2018). Engagement takes a (fishing) village to manage a resource: Principles and practice of effective stakeholder engagement. *Journal of Environmental Management*, 212, 248-257. doi:<https://doi.org/10.1016/j.jenvman.2018.02.015>
- Mebratu, D. (1998). Sustainability and sustainable development: historical and conceptual review. *Environmental impact assessment review*, 18(6), 493-520.
- Meng, L. L. (2013). Who is the Ultimate Planning Authority in Malaysia? Reviewing the Power and the Role of the Appeal Board. *Journal of Malaysian and Comparative Law*, 29(1).
- Miller, D. T., & Prentice, D. A. (2016). Changing norms to change behavior. *Annual review of psychology*, 67, 339-361.

- Mohai, P., & Bryant, B. (1992). Environmental injustice: weighing race and class as factors in the distribution of environmental hazards. *U. Colo. L. Rev.*, 63, 921.
- Mohamed, M. K. (2016, July 14, 2016). 87% in favour of EKVE Highway, p. 1. Retrieved from <https://www.thestar.com.my/metro/views/2016/07/14/87-in-favour-of-ekve-highway-developer-claims-there-is-strong-support-for-project/>
- Mokhtar, K. S., Reen, C. A., & Singh, P. S. J. (2014). The New Economic Policy (1970–1990) in Malaysia: The Economic and Political Perspectives. *Journal of Law and Social Sciences (JLSS)*, 2(2).
- Mongabay. (2018). Deforestation skyrockets in the Amazon rainforest. *Mongabay Series*. Retrieved from Mongabay: News & Inspiration From Nature's Frontline website: <https://news.mongabay.com/2018/07/deforestation-skyrockets-in-the-amazon-rainforest/> Retrieved from <https://news.mongabay.com/2018/07/deforestation-skyrockets-in-the-amazon-rainforest/>
- MTC. Malaysian Timber Council (2018). Sustainable Forestry In Malaysia. *Resources*. Retrieved from <http://www.mtc.com.my/resources-SustainableForestryinMalaysia.php>
- Murphy, K. (2012). The social pillar of sustainable development: A literature review and framework for policy analysis. *Sustainability: Science, Practice, and Policy*, 8(1), 15-29. Retrieved from <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84862507324&partnerID=40&md5=b3e3b34907311c6df437b2a627108a3e>
- Muzaffar, C. (1996). Accommodation and acceptance of non-Muslim communities within the Malaysian political system: The role of Islam.
- National Forestry Act, 92 (Malaysia 1984 1 April 1986).
- Nelson, F., & Agrawal, A. (2008). Patronage or participation? Community-based natural resource management reform in sub-Saharan Africa. *Development and Change*, 39(4), 557-585.
- Newig, J., & Fritsch, O. (2009). Environmental governance: participatory, multi-level—and effective? *Environmental Policy and Governance*, 19(3), 197-214.
- Nkemnyi, M. F., De Herdt, T., Chuyong, G. B., & Vanwing, T. (2016). Reconstituting the role of indigenous structures in protected forest management in Cameroon. *Forest Policy and Economics*, 67, 45-51.
- Noh, A. (2014). Malaysia 13th General Election: A short note on Malaysia's continuing battle with ethnic politics. *Electoral Studies*, 34, 266-269.
- Noor, N. F. M. (2015). Environmental Control in Malaysia-Striking the Balance. *Advanced Science Letters*, 21(5), 1373-1375. doi:10.1166/asl.2015.6034
- Noraida, A., Abdul-Rahim, A., & Mohd-Shahwahid, H. (2017). The Impact of Sustainable Forest Management (SFM) Practices On Primary Timber-Based Production in Peninsular Malaysia (Kesan Amalan Pengurusan Hutan Secara Mampan (SFM) Kepada Pengeluaran Produk Berasaskan Kayu di Semenanjung Malaysia). *Jurnal Ekonomi Malaysia*, 51(2), 159-177.
- NRE. Natural Resources and Environment (2017). Forestry Facts. Retrieved from <http://www.nre.gov.my/en-my/Forestry/Pages/Forestry-fact.aspx>
- Ntiamao-Baidu, Y. (1987). West African wildlife: a resource in jeopardy. *Unasylva*, 39(2), 27-35.
- Nuruddin, A. A. (2015). Malaysia: Governance and Community Participation in Forestry. In M. Inoue & G. P. Shivakoti (Eds.), *Multi-level Forest Governance in Asia: Concepts, Challenges and the Way Forward* (pp. 508). India: SAGE Publications India.
- Nurudin, S. M., Hashim, R., Rahman, S., Zulkifli, N., Mohamed, A. S. P., & Hamik, S. A. (2015). Public Participation Process at Local Government Administration: A Case Study of the Seremban Municipal Council, Malaysia. *Procedia-Social and Behavioral Sciences*, 211, 505-512.
- Nussbaum, M., & Sen, A. (1993). *The Quality of Life*: Oxford University Press.
- Nussbaum, M. C. (2001). *Women and Human Development: The Capabilities Approach*: Cambridge University Press.
- Nyland, R. D. (2016). *Silviculture: Concepts and Applications, Third Edition*.

- O'Faircheallaigh, C. (2010). Public participation and environmental impact assessment: Purposes, implications, and lessons for public policy making. *Environmental impact assessment review*, 30(1), 19-27. doi:<https://doi.org/10.1016/j.eiar.2009.05.001>
- Ojha, H. R., Banjade, M. R., Sunam, R. K., Bhattarai, B., Jana, S., Goutam, K. R., & Dhungana, S. (2014). Can authority change through deliberative politics?: Lessons from the four decades of participatory forest policy reform in Nepal. *Forest Policy and Economics*, 46, 1-9.
- Ostwald, K. (2017). Federalism without Decentralization: Power Consolidation in Malaysia. *Journal of Southeast Asian Economies (JSEAE)*, 34(3), 488-506.
- Otsuki, K. (2014). *Transformative Sustainable Development: Participation, Reflection and Change*: Taylor & Francis.
- Pahang. (2018). Peta & Keluasan. Retrieved from <http://pdtjerantut.pahang.gov.my/index.php/profail-daerah/latarbelakang/peta-keluasan>
- Paloniemi, R., Apostolopoulou, E., Cent, J., Bormpoudakis, D., Scott, A., Grodzińska-Jurczak, M., . . . Pantis, J. D. (2015). Public Participation and Environmental Justice in Biodiversity Governance in Finland, Greece, Poland and the UK. *Environmental Policy and Governance*, 25(5), 330-342. doi:10.1002/eet.1672
- Paloniemi, R., Niemelä, J., Soininen, N., Laatikainen, T., Vierikko, K., Rekola, A., . . . Kopperoinen, L. (2018). Environmental justice for the governance of aquatic environments. *Local Environment*, 1-12.
- Pearsall, H., & Pierce, J. (2017). A spoiled well (of data): addressing the procedural injustice of contemporary environmental justice research through collaborative qualitative data gathering. *Local Environment*, 22(3), 388-392. doi:10.1080/13549839.2016.1196349
- Pearson, F. S. (2001). Dimensions of conflict resolution in ethnopolitical disputes. *Journal of Peace Research*, 38(3), 275-287. doi:10.1177/0022343301038003001
- Pellow, D. N., & Brulle, R. J. (2005). *Power, Justice, and the Environment: A Critical Appraisal of the Environmental Justice Movement*: MIT Press.
- Petts, J. (2007). Learning about learning: lessons from public engagement and deliberation on urban river restoration. *Geographical journal*, 173(4), 300-311.
- Phang, S. N. (1997). *Financing local government in Malaysia*: University of Malaya Press.
- Phang, S. N. (2008). Decentralisation or Recentralisation? Trends in local government in Malaysia. *Commonwealth Journal of Local Governance*, 1.
- Phelps, J., Webb, E. L., & Agrawal, A. (2010). Does REDD+ threaten to recentralize forest governance? *Science*, 328(5976), 312-313.
- Pirk, S. (2002). Expanding Public Participation in Environmental Justice: Methods, Legislation, Litigation and Beyond. *Journal of Environmental Law and Litigation*, 17(1), 207-240.
- PLANMalaysia. (Year Unknown). National Physical Planning Framework. *PLANMalaysia*. Retrieved from <https://www.townplan.gov.my/download/RFN/Bab%201%20%20National%20Physical%20Planning%20Framework.pdf>
- Porter, D. O., & Olsen, E. A. (1976). Some Critical Issues in Government Centralization and Decentralization. *Public administration review*, 36(1), 72-84. doi:10.2307/974743
- Powell, M. C., & Colin, M. (2009). Participatory paradoxes: Facilitating citizen engagement in science and technology from the top-down? *Bulletin of Science, Technology & Society*, 29(4), 325-342.
- Ptak, R. (1992). The northern trade route to the spice islands: South China Sea-Sulu Zone-North Moluccas (14th to early 16th century). *Archipel*, 43(1), 27-56.
- Pujo, P., Sofhani, T. F., Gunawan, B., & Syamsudin, T. S. (2018). Community Capacity Building in Social Forestry Development: A Review. *Journal of Regional and City Planning*, 29(2), 113-126.

- Putnam, R. D. (1995). Tuning in, tuning out: The strange disappearance of social capital in America. *PS: Political science & politics*, 28(4), 664-683.
- Putnam, R. D. (2001). *Bowling alone: The collapse and revival of American community*: Simon and Schuster.
- Putz, F. E., & Redford, K. H. (2010). The importance of defining 'forest': tropical forest degradation, deforestation, long-term phase shifts, and further transitions. *Biotropica*, 42(1), 10-20.
- Ramesh, R. (2016). 1MDB: The Inside Story of the World's Biggest Financial Scandal. *The Guardian*, 28.
- Ratnasingam, J., Ioras, F., Neelakandan, G., Mariapan, M., & Swan, T. T. (2011). *Malaysian Forestry: Past, Present and the Future* (pp. 138). Retrieved from http://www.forr.upm.edu.my/dokumen/90401_Forestry.pdf Retrieved from http://www.forr.upm.edu.my/dokumen/90401_Forestry.pdf
- Ravindran, S. (2015, 20 August 2015). RM1.55 bil highway project gets green light. *The Star*. Retrieved from <https://www.thestar.com.my/metro/community/2015/08/20/rm155bil-highway-project-gets-green-light-mpaj-orders-ekve-developer-to-submit-traffic-and-social-im/>
- Rawls, J. (1971). *A Theory of Justice*: China Social Sciences Publishing House.
- Reed, M. G. (1997). Power relations and community-based tourism planning. *Annals of Tourism Research*, 24(3), 566-591.
- Reed, M. G., & George, C. (2011). Where in the world is environmental justice? *Progress in human geography*, 35(6), 835-842.
- Reed, M. S. (2008). Stakeholder participation for environmental management: a literature review. *Biological Conservation*, 141(10), 2417-2431.
- Renn, O. (2006). Participatory processes for designing environmental policies. *Land Use Policy*, 23(1), 34-43. doi:<https://doi.org/10.1016/j.landusepol.2004.08.005>
- Renn, O., Webler, T., & Wiedemann, P. (1995). *Fairness and competence in citizen participation: Evaluating models for environmental discourse* (Vol. 10): Springer Science & Business Media.
- Ribot, J. C. (1999). Decentralisation, participation and accountability in Sahelian forestry: legal instruments of political-administrative control. *Africa*, 69(1), 23-65.
- Robinson, J. (2004). Squaring the circle? Some thoughts on the idea of sustainable development. *Ecological Economics*, 48(4), 369-384.
- Rojanamon, P., Chaisomphob, T., & Bureekul, T. (2012). Public participation in development of small infrastructure projects. *Sustainable Development*, 20(5), 320-334.
- Rosener, J. B. (1975). A cafeteria of techniques and critiques. *Public Management*, 57(12), 16-19.
- Rosener, J. B. (1978). Citizen participation: can we measure its effectiveness? *Public administration review*, 457-463.
- Rowe, G., & Frewer, L. J. (2000). Public participation methods: A framework for evaluation. *Science, technology & human values*, 25(1), 3-29.
- Rowe, G., & Frewer, L. J. (2004). Evaluating public-participation exercises: a research agenda. *Science, Technology, & Human Values*, 29(4), 512-556.
- Rowe, G., & Frewer, L. J. (2005). A typology of public engagement mechanisms. *Science, Technology, & Human Values*, 30(2), 251-290.
- Sani, M. A. M. (2014). THE SOCIAL MEDIA ELECTION IN MALAYSIA: THE 13TH GENERAL ELECTION IN 2013. *Kajian Malaysia*, 32(2), 123.
- Sani, M. A. M., & Zengeni, K. T. (2010). *Democratisation in Malaysia: The impact of social media in the 2008 general election*. Paper presented at the 18th Biennial Conference of the Asian Studies Association of Australia in Adelaide.
- Saravanamuttu, J. (2001). Is there a politics of the Malaysian middle class? *Southeast Asian Middle Classes. Prospects for Social Change and Democratisation*, 103-118.

- Sarmiento Barletti, J. P., & Larson, A. M. (2017). *Rights abuse allegations in the context of REDD+ readiness and implementation: A preliminary review and proposal for moving forward* (Vol. 190): CIFOR.
- Sasaki, N., & Putz, F. E. (2009). Critical need for new definitions of “forest” and “forest degradation” in global climate change agreements. *Conservation Letters*, 2(5), 226-232. doi:doi:10.1111/j.1755-263X.2009.00067.x
- Schenk, A., Hunziker, M., & Kienast, F. (2007). Factors influencing the acceptance of nature conservation measures—A qualitative study in Switzerland. *Journal of Environmental Management*, 83(1), 66-79.
- Schlosberg, D. (2004). Reconceiving environmental justice: global movements and political theories. *Environmental politics*, 13(3), 517-540.
- Schlosberg, D. (2009). *Defining Environmental Justice: Theories, Movements, and Nature*: Oxford University Press.
- Schlosberg, D. (2018). Environmental (in) justice *Companion to Environmental Studies* (Vol. 629, pp. 629-634): ROUTLEDGE in association with GSE Research.
- Schlosberg, D., & Carruthers, D. (2010). Indigenous Struggles, Environmental Justice, and Community Capabilities. *Global Environmental Politics*, 10(4), 12-+. doi:10.1162/GLEP_a_00029
- Schroeder, R., Martin, K. S., Wilson, B., & Sen, D. (2008). Third World Environmental Justice. *Society & Natural Resources*, 21(7), 547-555. doi:10.1080/08941920802100721
- Scott, J., & Carrington, P. J. (2011). *The SAGE Handbook of Social Network Analysis*: SAGE Publications.
- Scott, J. C. (1972). Patron-client politics and political change in Southeast Asia. *American Political Science Review*, 66(1), 91-113.
- Segawa, N. (2017). Double-layered ethnic politics in Malaysia: national integration, ethnic unity and social stability. *Commonwealth & Comparative Politics*, 55(1), 63-81. doi:10.1080/14662043.2017.1258102
- Sen, A. (1999). *Commodities and Capabilities*: OUP India.
- Sen, A. (2001). *Development as Freedom*: OUP Oxford.
- Sen, A. (2011). *The Idea of Justice*: Harvard University Press.
- Sharom, A. (2007). Access to Environmental Justice In Malaysia (Kuala Lumpur). In A. Harding (Ed.), *Access to Environmental Justice: A Comparative Study*: Martinus Nijhoff Publishers.
- Sharom, A. (2014). Environmental Justice in Malaysia. In S. Lemiere (Ed.), *Misplaced Democracy: Malaysian Politics and People* (pp. 379). Malaysia: Strategic Information and Research Development Centre.
- Shrader-Frechette, K. (2002). *Environmental justice: Creating equality, reclaiming democracy*: Oxford University Press.
- Shvedova, N. (2005). Obstacles to women’s participation in parliament. *Women in parliament: beyond numbers*, 33.
- Sikor, T., Martin, A., Fisher, J., & He, J. (2014). Toward an empirical analysis of justice in ecosystem governance. *Conservation Letters*, 7(6), 524-532.
- Simpson, N. P., & Basta, C. (2018). Sufficiently capable for effective participation in environmental impact assessment? *Environmental impact assessment review*, 70, 57-70. doi:10.1016/j.eiar.2018.03.004
- Sinclair, A., Doelle, M., & Gibson, R. (2018). Implementing next generation assessment: A case example of a global challenge. *Environmental impact assessment review*, 72, 166-176.
- Singapore, N. L. B. (2014, 2015). Malayan Union is Inaugurated. *HistorySG*. Retrieved from <http://eresources.nlb.gov.sg/history/events/e8db672a-3571-4fa3-9df0-220e83ee2a88>
- Slocum, S. L. (2015). The viable, equitable and bearable in Tanzania. *Tourism Management Perspectives*, 16, 92-99. doi:<http://dx.doi.org/10.1016/j.tmp.2015.07.012>

- Smith, M. (2009). Against ecological sovereignty: Agamben, politics and globalisation. *Environmental politics*, 18(1), 99-116.
- Soong, K. K. (2008). Racial conflict in Malaysia: against the official history. *Race & Class*, 49(3), 33-53.
- Srivastava, P., & Hopwood, N. (2009). A practical iterative framework for qualitative data analysis. *International journal of qualitative methods*, 8(1), 76-84.
- Stake, R. E. (2013). *Multiple Case Study Analysis*: Guilford Publications.
- Steinmetz, G. (2004). Odious comparisons: Incommensurability, the case study, and “small N's” in sociology. *Sociological theory*, 22(3), 371-400.
- Stoddard, J. E., Pollard, C. E., & Evans, M. R. (2012). The Triple Bottom Line: A Framework for Sustainable Tourism Development. *International Journal of Hospitality & Tourism Administration*, 13(3), 233-258. doi:10.1080/15256480.2012.698173
- Swofford, J., & Slattery, M. (2010). Public attitudes of wind energy in Texas: Local communities in close proximity to wind farms and their effect on decision-making. *Energy Policy*, 38(5), 2508-2519. doi:10.1016/j.enpol.2009.12.046
- Szreter, S., & Woolcock, M. (2004). Health by association? Social capital, social theory, and the political economy of public health. *International journal of epidemiology*, 33(4), 650-667.
- Tippett, J., Handley, J. F., & Ravetz, J. (2007). Meeting the challenges of sustainable development—A conceptual appraisal of a new methodology for participatory ecological planning. *Progress in Planning*, 67(1), 9-98. doi:<https://doi.org/10.1016/j.progress.2006.12.004>
- Total Forested Areas in Malaysia (1990-2014). (2018, January 2). *Forestry*.
- Tsang, E. W. (2014). Generalizing from research findings: The merits of case studies. *International Journal of Management Reviews*, 16(4), 369-383.
- UN-REDD. United Nations Programme on Reducing Emissions from Deforestation and Forest Degradation (2019). Stakeholder Engagement. *UN-REDD Programme Collaborative Workspace*. Retrieved from <https://www.unredd.net/knowledge/redd-plus-technical-issues/stakeholder-engagement.html>
- UN. United Nations(2015a). Life on Land *Sustainable Development Goals*. Retrieved from <https://www.un.org/sustainabledevelopment/biodiversity/>
- UN. United Nations (2015b). Transforming Our World: the 2030 Agenda for Sustainable Development. Retrieved from <https://sustainabledevelopment.un.org/post2015/transformingourworld>
- UNCED. United Nations Conference on Environment and Development (1992). *Agenda 21*. Retrieved from <https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>
- UNCSD. United Nations Conference on Sustainable Development (2012). *Future We Want*. Retrieved from Brazil: <https://sustainabledevelopment.un.org/majorgroupparas.html>
- Urkidi, L., & Walter, M. (2011). Dimensions of environmental justice in anti-gold mining movements in Latin America. *Geoforum*, 42(6), 683-695.
- Utusan. (2014, 6 August 2014). Jalan Hulu Tembeling bakal lonjak pembangunan. *Utusan Online*. Retrieved from http://ww1.utusan.com.my/utusan/Timur/20140806/wt_04/Jalan-Hulu-Tembeling-bakal-lonjak-pembangunan
- van Wolferen, M. (2016). The Limits to the CJEU's Interpretation of Locus Standi, a Theoretical Framework. *Journal of Contemporary European Research*, 12(4), 914-930.
- Vandergeest, P., & Peluso, N. L. (2006). Empires of forestry: Professional forestry and state power in Southeast Asia, Part 1. *Environment and History*, 12(1), 31-64.
- Varady, R. G., Zuniga-Teran, A. A., Garfin, G. M., Martín, F., & Vicuña, S. (2016). Adaptive management and water security in a global context: definitions, concepts, and examples. *Current Opinion in Environmental Sustainability*, 21, 70-77.

- Velicu, I., & Kaika, M. (2017). Undoing environmental justice: Re-imagining equality in the Rosia Montana anti-mining movement. *Geoforum*, 84, 305-315. doi:<https://doi.org/10.1016/j.geoforum.2015.10.012>
- Venables, A. J. (2016). Using natural resources for development: why has it proven so difficult?. *Journal of Economic Perspectives*, 30(1), 161-84.
- Vivian, J. (1994). NGOs and sustainable development in Zimbabwe: No magic bullets. *Development and Change*, 25(1), 167-193
- Walker, C., & Baxter, J. (2017). Procedural justice in Canadian wind energy development: A comparison of community-based and technocratic siting processes. *Energy Research & Social Science*, 29, 160-169. doi:<https://doi.org/10.1016/j.erss.2017.05.016>
- Walker, D., Bourne, L. and Rowlinson, S. (2008). Stakeholders and the Supply Chain. Procurement Systems - A Cross Industry Project Management Perspective. Walker D. H. T. and S. Rowlinson. Abingdon, Oxon. Taylor & Francis: 70-100.
- Walker, G. (2009). Globalizing environmental justice: The geography and politics of frame contextualization and evolution. *Global social policy*, 9(3), 355-382.
- Walker, G. (2012). *Environmental Justice: Concepts, Evidence and Politics*: Taylor & Francis.
- Walker, G. P., & Bulkeley, H. (2006). Geographies of Environmental Justice. *Geoforum*, 37(5), 655-659.
- Wandersman, A. (1981). A framework of participation in community organizations. *The Journal of Applied Behavioral Science*, 17(1), 27-58.
- Wathern, P. (2013). *Environmental Impact Assessment: Theory and Practice*: Taylor & Francis.
- Watson, J. E., Evans, T., Venter, O., Williams, B., Tulloch, A., Stewart, C., ... & McAlpine, C. (2018). The exceptional value of intact forest ecosystems. *Nature ecology & evolution*, 2(4), 599.
- Wayessa, G. O., & Nygren, A. (2016). Whose Decisions, Whose Livelihoods? Resettlement and Environmental Justice in Ethiopia. *Society & Natural Resources*, 29(4), 387-402. doi:10.1080/08941920.2015.1089612
- Weber, M., Roth, G., & Wittich, C. (1978). *Economy and Society: An Outline of Interpretive Sociology*: University of California Press.
- Webler, T., & Tuler, S. (2006). Four perspectives on public participation process in environmental assessment and decision making: Combined results from 10 case studies. *Policy Studies Journal*, 34(4), 699-722.
- Webler, T., Tuler, S., & Krueger, R. (2001). What Is a Good Public Participation Process? Five Perspectives from the Public. *Environmental Management*, 27(3), 435-450. doi:10.1007/s002670010160
- Wehling, P. (2012). From invited to uninvited participation (and back?): rethinking civil society engagement in technology assessment and development. *Poiesis & Praxis*, 9(1-2), 43-60.
- Weisse, M., & Goldman, L. (2018). 2017 Was the Second-Worst Year on Record for Tropical Tree Cover Loss. *Global Forest Watch Blog*. Retrieved from Global Forest Watch website: <https://blog.globalforestwatch.org/data/2017-was-the-second-worst-year-on-record-for-tropical-tree-cover-loss>
- Williams, G., & Mawdsley, E. (2006). Postcolonial environmental justice: Government and governance in India. *Geoforum*, 37(5), 660-670.
- Williams, J. M. (2016). *Evaluating the Diverse Impacts of Megaprojects: The Case of Forest City in Johor, Malaysia*. (Master in City Planning), Massachusetts Institute of Technology, Massachusetts.
- Winterton, N. (2011). *Chemistry for Sustainable Technologies: A Foundation*: RSC Publishing.
- Wolf, C. P. (1987). THE NIMBY SYNDROME - ITS CAUSE AND CURE. *Annals of the New York Academy of Sciences*, 502, 216-229. doi:10.1111/j.1749-6632.1987.tb37654.x
- Wong, K., Wong, Y., & Saw, L. G. (1988). *Notes on the Early Exploration and Botanical Collection in the Endau-Rompin Area of Peninsular Malaysia*: US Government Printing Office.
- Wood, C. (2003). *Environmental Impact Assessment: A Comparative Review*: Prentice Hall.

- Wynne, B. (2007). Public participation in science and technology: performing and obscuring a political–conceptual category mistake. *East Asian Science, Technology and Society: An International Journal*, 1(1), 99-110.
- Yin, R. K. (2003). *Case Study Research: Design and Methods*: SAGE Publications.
- Yin, R. K. (2017). *Case Study Research and Applications: Design and Methods*: SAGE Publications.
- Yong, C. (2006). *Forest Governance in Malaysia: An NGO Perspective*. Retrieved from <https://loggingoff.info/wp-content/uploads/2015/09/256.pdf>
- Young, I. M. (1990). *Justice and the Politics of Difference*: Princeton University Press.
- Zeng, Z., Estes, L., Ziegler, A. D., Chen, A., Searchinger, T., Hua, F., . . . Wood, E. F. (2018). Highland cropland expansion and forest loss in Southeast Asia in the twenty-first century. *Nature Geoscience*, 1.
- Zhang, K. (2017). Right to Information about, and Involvement in, Environmental Decision Making along the Silk Road Economic Belt. *The Chinese Journal of Comparative Law*, 5(1), 58-78.
- Zhang, L., & Zhang, J. (2018). Perception of small tourism enterprises in Lao PDR regarding social sustainability under the influence of social network. *Tourism Management*, 69, 109-120.
- Zillman, D. M., & Lucas, A. (2002). *Human rights in natural resource development: Public participation in the sustainable development of mining and energy resources*: Oxford University Press.

APPENDICES

APPENDIX 1: Ethical Approval



Research and Enterprise Services
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Alia Azmi
School of Environmental Sciences
UEA

23 September 2016

Dear Alia Azmi

Our reference: GREC 06-505

I am writing to you on behalf of Professor Stephen Church, Chair of the University's General Research Ethics Committee, in response to your request for ethical approval for your research project "Sustainable Forest Management and Environmental Justice: The Case of Permanent Forest Reserves in Peninsular Malaysia".

Having considered the information that you have provided in your correspondence Professor Church has asked me to tell you that your study has been approved on behalf of the Committee.

You should let us know if there are any significant changes to the proposal which raise any further ethical issues.

Please let us have a brief final report to confirm the research has been completed.

Yours sincerely

A handwritten signature in cursive script that reads 'Cassy Spearing'.

Cassy Spearing

Research Manager, Research & Enterprise Services
GREC@uea.ac.uk

APPENDIX 2: Ulu Tembeling Declaration



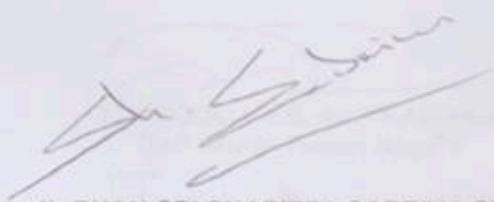
DEKLARASI ULU TEMBELING

SEMPENA MISI SELAMATKAN HUTAN TADAHAN AIR NEGARA,
ULU TEMBELING, JERANTUT, PAHANG 13 HINGGA 15 MEI 2016

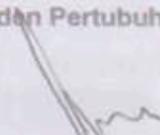
KAMI, yang mewakili 150 orang terdiri daripada Pakar-pakar Alam Sekitar, Ahli Akademik Universiti-universiti Tempatan, NGO dan Aktivis Alam Sekitar, Kumpulan Hak Asasi Manusia serta Editor-Editor Kanan Media Arus Perdana dengan sokongan lebih 50 jentera daripada kelab-kelab 4X4 seluruh Malaysia; dan setelah meninjau sendiri kawasan Hutan Tadahan Air Semulajadi di Ulu Tembeling dengan ini mengeluarkan satu deklarasikan sebagai DEKLARASI ULU TEMBELING, seperti berikut:

- 1- Memperakui bahawa kejadian air sungai cetek khususnya Sungai Tembeling dan Sungai Pahang yang berlaku sekarang bukan semata-mata kerana fenomena *El-nino* atau kemarau panjang. Sebaliknya ia juga berpunca daripada pembalakan dan pembukaan hutan bagi tujuan perladangan yang tidak terkawal di kawasan hutan tadahan air semulajadi bagi sungai-sungai di Ulu Tembeling.
- 2- Mengisytiharkan kejadian air Sungai Tembeling dan Sungai Pahang yang cetek ini sebagai "BENCANA AIR NEGARA" sejajar dengan status Sungai Pahang sebagai sungai terpanjang di Semenanjung yang membekalkan sumber air mentah kepada sebahagian besar penduduk Malaysia.
- 3- Sehubungan itu, kami mendesak Kerajaan Negeri Pahang supaya menghentikan serta-merta semua kegiatan pembalakan yang membabitkan kawasan Hutan Tadahan Air Semulajadi bagi ulu Sungai Tembeling dan semua anak-anak sungainya, termasuk Sungai Kembir, Sungai Kanchin, Sungai Pengau, Sungai Sepia, Sungai Neriak, Sungai Lempah dan Sungai Tekai serta di kawasan sekitar Gunung Dulang dan Gunung Aais, meliputi kawasan banjaran gunung berkenaan.
- 4- Mendesak rancangan pembangunan ladang kelapa sawit secara besar-besaran di Lembah Sungai Kembir khususnya oleh Perbadanan Kemajuan Negeri Pahang (PKNP) dihentikan segera, manakala kawasan yang sudah ditebang dan dibersihkan bagi tujuan itu, hendaklah ditanam semula dengan pokok spesis hutan asal.
- 5- Memperakui kegiatan pembalakan tidak terkawal di Ulu Tembeling berpunca daripada penyelewengan dan kegagalan penguatkuasaan oleh pihak berkuasa negeri terutama Jabatan Perhutanan Pahang. Justeru itu, kami mendesak Suruhanjaya Pencegahan Rasuah Malaysia (SPRM) menyiasat dan mengambil tindakan tegas terhadap pegawai-pegawai yang terbabit.

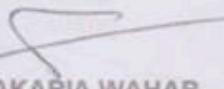
- 6- Mendesak Kerajaan Negeri Pahang memperluaskan kawasan "ZON PENAMPAN SUNGAI" di semua kawasan pembalakan kepada minimum 50 meter di kedua-dua belah tebing sungai serta mengenakan hukuman yang berat kepada mana-mana pihak yang menebang pokok di kawasan zon berkenaan.
- 7- Mencadangkan pindaan Perlembagaan Negara supaya kuasa dan tanggungjawab terhadap hutan dan sungai tidak hanya di bawah bidang kuasa Kerajaan Negeri semata-mata, sebaliknya turut diberi hak bersama kepada Kerajaan Persekutuan.



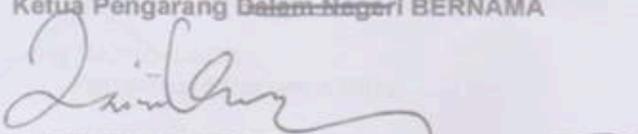
1) PUAN SRI SHARIFFA SABRINA SYED AKIL
Presiden Pertubuhan Pelindung Khazanah Alam Malaysia (PEKA)



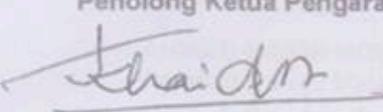
2) PROF. DR. MAKETAB MOHAMED
Bekas ~~Air~~ ^{Kima} ~~Fakulti Kejuruteraan~~ Universiti Teknologi Malaysia (UTM)



3) DATO' ZAKARIA WAHAB
Ketua Pengarang ~~Dalam Negeri~~ BERNAMA



4) DATO' ZAINI HASSAN
Penolong Ketua Pengarang 1 Kumpulan Utusan



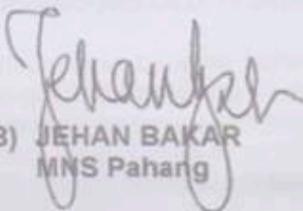
5) KHAIDIR AHMAD
Pengerusi PEKA Pahang.



6) DATIN DR. SARIMAH ISMAIL
Timbalan Dekan Fakulti Sains Sukan dan Rekreasi UiTM Shah Alam

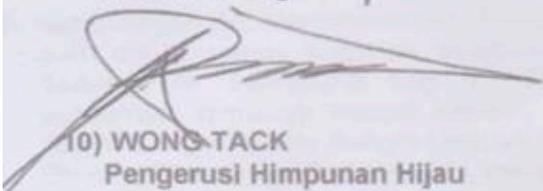


7) ABDUL JALIL ABD RAHMAN
Bird Group Taman Negara



8) JEHAN BAKAR
MNS Pahang

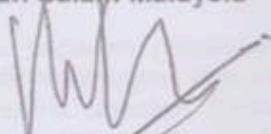
9) SHAFIE DRIS
JKOA Pahang



10) WONG TACK
Pengerusi Himpunan Hijau



11) AHMAD HASNI MOHD JALILAH
Yayasan Salam Malaysia



12) MEOR RAZAK MEOR ABDUL RAHMAN
Sahabat Alam Malaysia (SAM)

Appendix 3: Interview Protocol

Protocol 1: Community/NGO

The purpose of this interview is to reconstruct the sequence of events that lead to community action and the role played by communities and their relationship with different actors/agencies in the protest against the development of PRF in each case study area

In this section, I would like to ask a few questions regarding your perceptions of PRFs and what you think of the development of PRF in (*Name of place*)

1. Do you know what permanent forest reserves are and what are the role of PRFs in Malaysia?
2. Currently, there has been/ previously, there was (state the development issue). Can you tell me what you know about that development?
3. Can you tell me if you or anyone you know is reacting/ had reacted negatively about the development? Why was the reaction negative?
 - a. Is there anyone in your community who supported the development?
4. How and why did the community protest against the development?
 - a. How and when did it start? Who started the initial protest?
 - i. *If the protest is initiated by the NGO, why?*
 - b. What was the purpose of the protest?
 - c. Did you go through a formal participatory process or did you any other method? Why did you chose this method of protesting?
 - d. Who are/were involved in the protest?
 - e. Was there anyone who did not agree with the protest?
5. What is currently happening right now?
 - a. Are there any new issues that occur as a result of the same development?
6. How will the development issues be resolved/ how were the development issues resolved?
 - a. If the issue has been resolved, how satisfied were everyone with the outcome?

- b. Were there anyone who feel dissatisfied with the current outcome and if so, what is being done about it?
 - c. Were there people who feel that the development should have taken place or that the protest have caused more harm than good?
7. PRF is divided into either protective, productive or research forest. However, current data released by the Ministry of Natural Resources and Environment showed that of the 18.27 million hectare of forest in Malaysia, only 1.86 million hectare is protected. What do you think of this statement?
- a. Based on the different economic, environmental and social objectives in the management of PFRs, can you rank them based on what you think is more important?

Earlier we talked about PRFs and protests against the development in (*Name of place*). This next section focuses on public participation in the management of PRFs

8. During the protest against the development of (*Name of place or development*), were there any assistance from other agencies/actors?
- a. What sort of assistance were provided?
 - b. Why did you receive help from certain actors and not others?
9. The fact that there has been protest against the development of (*Name of place*) meant that a group of people are not satisfied with the development taking place. Were you or do you know of anyone who was involved when the development was being planned?
- a. If yes, how were you involved? And why did the protest takes place despite your involvement development planning?
 - b. *If no, why?*
 - c. What do you think of the level of your involvement right now? Would you prefer to be more/less involved in development?
 - d. Why do you want to be involved/ don't you want to be involved?
10. Public participation is a part of the local agenda implemented by the local government. The Town and Country Planning Act 1976 has also been amended in 1995 to add a section on public participation in development plans.

- a. Can you briefly explain what you understand by the term public participation?

Based on your experience, where do you think Malaysia is at in terms of participation of the public in government policies and development plans?

11. Do you think that if you, personally, were to participate in development plans, would your input be taken into account? Why?
 - a. Do you think it will be different if you are from a different community (more or less affluent), race or political party?
 - b. Taking into account your social, cultural, religious or political background, would your values matter to the government?
 - c. Based on your experience, how fair is the public participation process in Malaysia to all members of society?
12. There is a legal provision which allows the community to make a formal protest against a development that affects their community. But this does not guarantee an outcome favourable to the community. Based on your opinion, can your community/NGO make a difference?
 - a. Why do you think your protest can/cannot produce a favourable outcome?
 - b. Apart from using the legal route, there are various other informal methods for protesting against a development, such as using the media, signing a petition or organising an assembly. If you are given a choice, which method would you use to ensure a favourable outcome for your protest?
 - c. What do you think of the current system of formal and informal public engagement that we have now?

Protocol 2: Local/State/Federal government

The purpose of this interview is to understand how government officers and local authority officers manage development of PRFs and the protests from NGOs and communities.

In this first section of interview I would like to ask a few questions on how the state government view PRFs and the management of PRFs.

1. As a state/federal government officer, how do you see the main role of PRF in contributing to the state's development?
 - a. Why do you think PRF is important? How do you see the future of PRF in the next decade?
2. Management, conservation and protection of forest reserves are a continuously debated topic in the parliament. But often the issue remains that land use is under the jurisdiction of the state. In your opinion, does this division of power and responsibility between state and federal government complicates or simplifies matter?
 - a. Do you believe that the management of PRF should be left entirely to the state government?
 - b. Should federal government also play a role in management of PRFs? How?
 - c. What about the community/ NGO? What should their role be in the management of PRF?
3. There are cases of PRF development that has been getting opposition from community and NGOs. As a state/federal official, why do you think some developments in PRFs (*case study*) are opposed?
 - a. In some cases, (*give example*) protests against development have taken a physical turn, why do you think this occurred?
 - b. Can you give an example of a similar development where there were no opposition from the community? What was the difference between the two situations?
4. As of now, PRFs are divided into either production, protection or research forest. However, current data released by the Ministry of Natural Resources and Environment showed that of the 18.27 million hectare of forest in Malaysia, only 1.86 million hectare is protected. What do you think of this division?

Earlier we talked about the management of PRF from the perspective of state/federal government. In this next section, I would like to discuss in more detail about PRF development protest and public engagement with PRFs

5. As in the case of (*Name of place*), where there is some amount of protest from (*community/NGOs*), what are your opinions regarding the reason given by protesters to challenge the development (*state the reason of the protest*)?
 - a. Do you find their claim reasonable? Why?
 - b. What would the state government action be in this situation this matter?
What would you do to ensure everyone is satisfied?
6. What is your opinion regarding strategy used by the community and NGO to stage this protest?
 - a. How do you think protests against development should be carried out?
 - b. Are the protests handled using the right legal procedures?
 - c. Is this course of action stated in government policy? *If yes, can you point it out to me?*
7. Public participation is a part of the local agenda implemented by the local government. The Town and Country Planning Act 1976 has also been amended in 1995 to add a section on public participation in development plans
 - a. Can you briefly explain what you understand by the term public participation?
 - b. Based on the Act, the public would have participated in development planning. Why do you think there is still protest taking place? Ideally, wouldn't there have been no protest at all if the opinion of the public had been take into account since the beginning?
 - c. What about protest against logging in PFRs? Is logging considered as development and can the community be involved in granting logging concession or protest against logging activities that has been given green light by the government?
8. Based on your experience, where do you think we are at in terms of participation of the public in government policies and development plans?
 - a. Do you think that the public participation process in Malaysia is fair to all members of society?
 - b. Do you think it will be different for those in different community (more or less affluent), race or political party? Or with less resources such as the indigenous people?

9. Several academic articles have highlighted the lack of legal avenues for communities to be involved in development, either in its planning or staging a protest against it, what are your thoughts regarding this issue?
 - a. Do you think that the current policy the federal or state have is adequate?
10. (*Using a case study as an example*) In your opinion, do you think the outcome of that protest is satisfactory to everyone? Why?
 - a. If not, (*or if the protest is still unresolved*) what do you think the best outcome should be?
 - b. In reality, do you think this is achievable?

*Assuming that interviews are carried out among the community/ NGO first, there will be additional questions depending on the responses given by the community/NGO on participatory process and outcome.

Appendix 4: List of Interviewees

Interviewees	Location	Date of Interview
Government Official	Selangor	08/12/16
Resident	Kota Damansara	13/12/16
Villager	Kota Damansara	13/12/16
Villager	Kota Damansara	13/12/16
Activist	Selangor	14/12/16
Academician	Selangor	15/12/16
Resident; Activist	Kota Damansara	24/12/16
Academician	Selangor	05/01/17
Member of MNS	Selangor	06/01/17
Government Official	Kuala Lumpur	13/01/17
Resident	Ampang	16/01/17
Forestry Officer	Ampang	17/01/17
Resident	Ampang	17/01/17
Resident	Kota Damansara	18/01/17
Village Head	Ampang	18/01/17
Resident	Ampang	18/01/17
Local Government Officer	Ampang	20/01/17
Local Government Officer	Ampang	20/01/17
Resident	Ampang	21/01/17
Private Contractor	Ampang	31/01/17
Resident	Kota Damansara	31/01/17
Resident	Kota Damansara	04/02/17
Activist; Former Member of MNS	Ampang	13/02/17
Activist	Kuala Lumpur	14/08/17
Local Government Officer	Kuala Lumpur	15/08/17
Villager; Activist	Ulu Tembeling	19/08/17
Village Head	Ulu Tembeling	19/08/17
Villager	Ulu Tembeling	19/08/17
Villager	Ulu Tembeling	20/08/17
Villager	Ulu Tembeling	21/08/17
Member of MNS	Kuala Lumpur	12/09/17
Village Head	Endau Rompin	18/09/17
Villager	Endau Rompin	18/09/17
Villager	Endau Rompin	19/09/17
Villager; Activist	Endau Rompin	20/09/17
Villager; Activist	Endau Rompin	20/09/17

Interviewees	Location	Date of Interview
Activist	Ulu Tembeling	27/09/17
Public	Kuala Lumpur	02/10/17
Public	Kuala Lumpur	05/10/17
Forestry Officer	Kuala Lumpur	06/10/17
Forestry Officer	Kuala Lumpur	06/10/17
Villager	Endau Rompin	08/10/17
Villager	Endau Rompin	08/10/17
Forestry Officer	Endau Rompin	09/10/17
Activist	Kuala Lumpur	10/10/17