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**FEDERALISM AND POLICY IMPLEMENTATION: A CASE STUDY OF
MALAYSIA'S CENTRAL FOREST SPINE POLICY**

by
Agkillah Maniam

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ABSTRACT

Malaysia's biodiversity standing is significant to the country and the world. Regardless of its importance and the increased efforts to save its biodiversity through forest and wildlife conservation, implementation of the Central Forest Spine (CFS) policy remains a challenge. Though it is a comprehensive and seemingly inclusive federal policy, a variation in implementation outcomes exists among states involved. Many implementers acknowledge a stand-off between the federal and state governments, blaming it on characteristics of federalism and its challenges of policy implementation.

This research aims to understand factors that have influenced the implementation of the CFS in some states and not others, and to what extent the federal nature of Malaysia plays a part in explaining policy success or failure. To understand the variation in policy outcomes, I used a theory inspired by the policy network analysis. Using the contextual interaction theory (CIT), I observed the influence of formal and informal powers, availability and quality of information and agencies' motivation vested in each implementing entity. In doing so, this study also identified veto players, implementing officials and actors as well as target groups across federal and state levels.

The findings of this study reveal that the Malaysia's federal structure does highly influence the Central Forest Spine policy implementation. The formal and informal powers of federal and state implementers do play a significant role in ensuring implementation success. Additionally, Sultans have informal but visible powers in ensuring conservation and preservation activities are undertaken, championed or advocated for. The magnitude of power they hold and practice, despite the descriptions in the Constitution, is demonstrated through their lifestyle and demands. I also conclude that intergovernmental relations are highly dependent on inter-party relations, while the same political parties at federal and state levels find a way to resolve their differences.

This study also contributes to two theoretical bodies of knowledge: federalism and policy implementation. A key finding of my research is that contrary to the literature's emphasis on constitutional power, it is informal powers in Malaysian federalism that influenced CFS policy implementation success. Malaysian federalism demonstrates overlaps in the forestry, wildlife and environmental protection domain although the constitution describes separation of powers and these powers are assigned to states. Furthermore, Malaysia's environmental governance and policy sector indicates a decentralisation in spite of literature indicating a centralisation or consolidation of powers for other domains, especially finances. The policy implementation mechanism practices in Malaysia are still largely top-down despite the policies requiring active participation from front line implementers to ensure success, especially in the environmental policy area. Unlike the Western representation on how the role of street-level bureaucrats is significant to the success or failure of policy implementation, the actors involved in the environmental policy sector in Malaysia do not play an extensive role. Rather, the policy implementation outcome is determined by the political pay masters of the implementers involved.

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Glossary

<i>ASEAN</i>	<i>Association of Southeast Asian Nation</i>
<i>BN</i>	<i>Barisan Nasional</i>
<i>CP</i>	<i>Cartegena Protocol</i>
<i>CFS</i>	<i>Central Forest Spine</i>
<i>CFS I</i>	<i>Central Forest Spine – North</i>
<i>CFS II</i>	<i>Central Forest Spine – South</i>
<i>CI</i>	<i>Conservation International</i>
<i>CIT</i>	<i>contextual interaction theory</i>
<i>CBD</i>	<i>Convention on Biological Diversity</i>
<i>CCD</i>	<i>Convention to Combat Desertification</i>
<i>JKPTG</i>	<i>Department of Director of Land and Mines</i>
<i>TCPD</i>	<i>Department of Town and Country Planning Peninsular Malaysia</i>
<i>DWNP</i>	<i>Department of Wildlife and National Parks Peninsular Malaysia</i>
<i>DLO</i>	<i>District Land Offices</i>
<i>EPU</i>	<i>Economic Planning Unit</i>
<i>ESA</i>	<i>Environmentally Sensitive Area</i>
<i>FMS</i>	<i>Federated Malay States</i>
<i>FDPM</i>	<i>Forestry Department Peninsular Malaysia</i>
<i>GDP</i>	<i>Gross domestic product</i>
<i>GEC</i>	<i>Global Environment Centre</i>
<i>GEF</i>	<i>Global Environment Facility</i>
<i>IC-CFS</i>	<i>Improving Connectivity in the Central Forest Spine</i>
<i>ITTA</i>	<i>International Tropical Timber Agreement</i>
<i>IUCN</i>	<i>International Union for Conservation of Nature</i>
<i>JWCP</i>	<i>Johor Wildlife Conservation Project</i>
<i>KP</i>	<i>Kyoto Protocol</i>
<i>PTG</i>	<i>Land and Mining Offices</i>
<i>LTC</i>	<i>Latex-timber-clone</i>
<i>MYCAT</i>	<i>Malaysian Conservation Alliance for Tigers</i>
<i>MEME</i>	<i>Malaysian Ecology and Management of Elephants</i>
<i>MNS</i>	<i>Malaysian Nature Society</i>
<i>MHLG</i>	<i>Ministry of Housing and Local Governance</i>
<i>MNRE</i>	<i>Ministry of Natural Resources and Environment</i>
<i>NBBC</i>	<i>National Biodiversity Council</i>
<i>NFP</i>	<i>National Forest Policy 1977</i>
<i>NFA</i>	<i>National Forestry Act</i>
<i>NFC</i>	<i>National Forestry Council</i>
<i>NLC</i>	<i>National Land Council</i>
<i>NPPC</i>	<i>National Physical Planning Council</i>
<i>NEP</i>	<i>New Economic Policy</i>
<i>PES</i>	<i>payment-for-ecosystem-services</i>
<i>PEMANDU</i>	<i>Performance Management and Delivery Unit</i>
<i>PRF</i>	<i>Permanent Forest Reserves</i>

<i>PEKA</i>	<i>Pertubuhan Pelindung Khazanah Alam Malaysia</i>
<i>PL</i>	<i>Primary Links</i>
<i>PTD</i>	<i>Administration and Diplomatic Officer</i>
<i>PSM</i>	<i>Public Service Motivation</i>
<i>REACH</i>	<i>Regional Environment Awareness Cameron Highlands</i>
<i>SAM</i>	<i>Sahabat Alam Malaysia</i>
<i>SL</i>	<i>Secondary Links</i>
<i>DOA</i>	<i>State Department of Agriculture</i>
<i>PERHILITAN</i>	<i>State Department of Wildlife and National Parks</i>
<i>SDC</i>	<i>State Development Corporation</i>
<i>SDO</i>	<i>State Development Offices</i>
<i>DID</i>	<i>Drainage and Irrigation Department</i>
<i>SEC</i>	<i>State Executive Council</i>
<i>SFD</i>	<i>State Forest Department (state agency)</i>
<i>NPC</i>	<i>State National Parks Corporation</i>
<i>JKR</i>	<i>Public Works Department</i>
<i>SS</i>	<i>Straits Settlement</i>
<i>SASET</i>	<i>Sultan Ahmad Shah Environment Trust</i>
<i>TC</i>	<i>Technical Committee</i>
<i>SEASSA</i>	<i>Environment and Natural Resource Economic Section</i>
<i>UNFCCC</i>	<i>United Nations Framework Convention on Climate Change</i>
<i>TCPA</i>	<i>Town and Country Planning Act 1976</i>
<i>JPBD</i>	<i>Town and Country Planning Department</i>
<i>TPPA</i>	<i>Trans-Pacific Partnership Agreement</i>
<i>TRCRC</i>	<i>Tropical Rainforest Conservation and Research Centre</i>
<i>UFMS</i>	<i>Unfederated Malay States</i>
<i>UMNO</i>	<i>United Malays National Organisation</i>
<i>UNDP</i>	<i>United Nations Development Programme</i>
<i>UNEP</i>	<i>United Nations Environment Programme</i>
<i>UPEN</i>	<i>State Economic Planning Unit</i>
<i>USB</i>	<i>United Sabah Party (Parti Bersatu Sabah)</i>
<i>UN-REDD+</i>	<i>United Nations Programme on Reducing Emissions from Deforestation and Forest Degradation</i>
<i>TRAFFIC</i>	<i>Wildlife Trade Monitoring Network</i>
<i>WC</i>	<i>Working Committee</i>
<i>WWF</i>	<i>World Wildlife Fund for Nature</i>
<i>YDPA</i>	<i>Yang di-Pertuan Agong (King)</i>
<i>YSM</i>	<i>Yayasan Sultan Mizan</i>
<i>YB</i>	<i>Yang Berhormat</i>

CHAPTER 1: INTRODUCTION

“What we are doing to the forests of the world is but a mirror reflection of what we are doing to ourselves and to one another.”

(Chris Maser, 2001)

Malaysia is ranked the 12th most biodiverse country in the world by the Convention of Biological Diversity¹, and this ranking is solely based on ‘plant endemism, species richness, and political boundaries’ (Médail and Quézel, 1999, p. 1510). The country is a habitat to approximately 306 mammals, 742 birds, 567 reptiles, 242 amphibians, 1619 marine fishes, 449 freshwater fishes, 150000 invertebrates, 15000 vascular plants, 4000 fungi and 522 mosses (Ministry of Natural Resources and Environment, 2014). The wealth of Malaysia’s biodiversity also includes 612 species of coral reefs, which represents 77% of world’s species. Apart from that, four out of seven marine turtle species nests on Malaysia’s beaches – Leatherback, Green Turtle, Hawksbill and Olive Ridley.

Covered with tropical rainforests, which evolved more than 130 million years ago, Malaysia is home to two-thirds of all living species on the planet (Aiken & Leigh, 1985; Aiken & Leigh, 1988; Rush, 1991; Hammond, 1997; TRAFFIC International, 2004; Department of Wildlife and National Parks Peninsular Malaysia, 2008; Clements et al., 2010)². Losing Malaysia’s forests may result in an intense decrease in supply of goods and services, causing a disadvantage to the country as well as the global community. Rainforests are also the greatest terrestrial source of oxygen due to their ability to convert and absorb large quantities of carbon dioxide. The loss of these forests will also result in deterioration of ecosystem functions and associated dynamics. Despite the difficulty to estimate future costs of biodiversity loss, the benefits of biodiversity have proven its advantages.

In line with the importance of Malaysia’s biodiversity standing, forest and wildlife conservation policies in Malaysia have evolved and progressed since the country’s independence from the British in 1957. Legislation and a number of policies centred on forest, wildlife and endangered species conservation have progressed and increased since Malaysia’s pledge to the Convention on Biological Diversity in 1992, wherein Malaysia agreed to conserve and sustainably use all

¹ <https://www.cbd.int/countries/?country=my>

² Major forest types in Malaysia are lowland dipterocarp forest, hill dipterocarp forest, upper hill dipterocarp forest, oak-laurel forest, montane ericaceous forest, peat swamp forest and mangrove forest. In addition, there also smaller areas of freshwater swamp forest, heath forest, forest on limestone and forest on quartz ridges. The forests in Malaysia are mostly dominated by trees from the *Dipterocarpaceae* family, hence the term ‘dipterocarp forests’. The dipterocarp forest occurs on dry land just above sea level to an altitude of about 900 metres.

components of biodiversity. The signing of the convention also emerged as a policy window for environmental non-governmental groups (ENGOS) to lobby or push the Malaysian government to rebalance its policymaking activities to focus on conservation, reforestation and sustainable development. Some of the ENGOS have assisted with provision of data on forests and wildlife, and ideas to establish a mechanism that could be used for conservation through collaborative efforts³.

Regardless of the significance of Malaysia's biodiversity nationally and globally, and the efforts by various ENGOS to conserve and preserve it, loss of forest and wildlife have increased over time. In 2006, in response to the growing threat to this biodiversity, the Ministry of Housing and Local Governance (MHLG) at the federal level created the Central Forest Spine (CFS) policy to meet the requirements of Policy 19 of the National Physical Plan (NPP) 1, which states that a forest spine shall be established to form the backbone of the Environmentally Sensitive Area Network.

The Cabinet of Malaysia appointed the Ministry of Natural Resources and Environment (MNRE) as the main implementing body, assisted by two federal agencies: the Forestry Department Peninsular Malaysia (FDPM) and Department of Wildlife and National Parks Peninsular Malaysia (DWNP). The successful implementation of the CFS is adapted from the policy goal stated in the policy documents⁴: to re-establish, maintain and enhance links between major remaining forest complexes within the allocated area of Peninsular Malaysia (Department of Town and Country Planning Peninsular Malaysia, 2010). The implementation plan for the CFS is inclusive in that it engages NGOs, international bodies, research institutes and philanthropists as well as various federal and state government agencies. Despite the recognition of the precious nature of Malaysia's natural environment and the CFS being a comprehensive and seemingly inclusive federal policy, it has not been uniformly implemented.

A variation in implementation outcomes exist among states involved – some have successfully implemented the policy, while some have failed. Out of the eight states that are involved with this policy, only three (Perak, Selangor and Johor) have successfully implemented the CFS while the remaining states (Kedah, Pahang, Terengganu, Kelantan and Negeri Sembilan) have

³ Some of these organisations are the World Wildlife Fund for Nature (WWF), Malaysian Nature Society (MNS), TRAFFIC Wildlife Trade Monitoring Network, Sahabat Alam Malaysia (SAM), Global Environment Centre (GEC), and Malaysian Conservation Alliance for Tigers (MyCAT).

⁴ Stated on p. 1 in the CFS I Master Plan, and p. ii Executive Summary in the CFS II Master Plan.

failed to progress (Table 1). A standstill exists in the states of Kelantan and Terengganu, and the CFS policy is considered to be implemented on paper in Pahang, Kedah and Negeri Sembilan. The CFS policy in all the failed implementation states also faces an ideological conflict of development versus conservation in implementing the policy.

Table 1: Implementation status of the states involved in the CFS policy

Implementation Status	Successful Implementation			Failed Implementation				
				‘Paper implementation			Standstill	
States	Perak	Selangor	Johor	Kedah	Negeri Sembilan	Pahang	Terengganu	Kelantan

Source: Author

In addition to the complexities of environmental governance, policymaking process in Malaysia has its gaps. The Prime Minister’s Department is deemed to be directly involved in setting direction to new policies and its nature (Milne, 1986; Slater, 2003; Pepinsky, 2007a). The policymaking process in Malaysia is found to be much centralised, resulting in most policies being established through the top-down mechanism (Slater, 2003; Moten, 2008; Wong & Chin, 2011; Wong, 2013). As such, key policies are developed by the federal agencies and handed over to state or other implementing agencies for execution (Ansori, 2013). The Malaysian structure does not emphasize extensive consultation with stakeholders, unlike federations like the United States of America and Australia. The same has been for the CFS policy too. Most, if not all, of the state governments were not consulted when the policy was established. As such, many of the state governments view the CFS as a policy that was created in a centralised manner even though the policy process in Malaysia, just like other federations, depends on the scope, capacity, amplitude and limitations of policymaking between the different levels of governments outlined in the constitution (Birkland, 2015).

The work of Przeworski (2004) and Knoepfel et al. (2007) points to policy implementation success and failure to be influenced by institutions through its norms, beliefs and actions. In line with that, this thesis explores factors that influence the implementation outcome using the institutional lens, Malaysia’s federal structure. Considering the nature of environment that is transboundary and interdisciplinary, the CFS policy implementation success requires a coherent collaborative governance, which requires actions from several implementing agencies that form a network of implementers. Implementers often communicate with each other, and elements like structure, power and resources influence the position of actors in these interactions. Hence,

the institutional arrangements matter and contribute to the CFS policy implementation success or failure.

In exploring and identifying factors that influence the CFS policy implementation success or failure, I use the contextual interaction theory (CIT) inspired by policy network analysis to understand policy implementation outcomes. The CIT theory views policy processes as actor interaction processes. Factors such as power, motivation and information change the characteristics of actors involved. In turn, actors shape and gradually change the process. A comparative study, selection of case studies for this thesis ensures that a broad range of factors are covered to gain strong insights and provide policy-relevant reflections, conclusions and recommendations.

This introductory chapter consist of five sections. In the first section, I elaborate on the research puzzle and the hypotheses derived. Second, I introduce the CFS policy to provide the reader with an understanding of the significance and importance of the policy to Malaysia and the global community. Third, I discuss the importance of institutionalism to policy implementation through a wider discussion on research framework and paradigm. Fourth, I emphasize the importance of this research, especially for Malaysia, which currently lacks comprehensive environmental policy implementation research. The chapter ends with an outline of the thesis.

Research puzzle

The underpinning research puzzle of this thesis is why the CFS policy implementation has occurred in some states and not in others, and to what extent the federal nature of Malaysia plays a part in explaining policy success or failure. In drawing an answer to the main question, I identify who the veto players are, specifically those who are implementing officials/actors and target groups across federal and state levels who influence the implementation of the CFS. This research also aims to understand how Malaysia's federal structure allocates formal and informal powers to implementing agencies, and how principal factors of power vested in each implementing actor, availability and quality of information, and agencies' motivation determine the CFS policy outcomes in each chosen state. The main question and sub-questions of this research indicate that a preliminary assumption that institutional factors influencing the implementation of the CFS policy exist.

Literature points out that policy implementation success and failure are influenced by institutional mechanisms and structures (Przeworski, 2004; Knoepfel et al., 2007). According to Przeworski (2004), institutions including formal organizations such as political structures are key in influencing norms, belief and actions, which then influence outcomes. In this regard, the institutional perspective for the CFS case is Malaysia's federal system. However, like many other federalism, environmental policymaking and implementation remain a challenge due to the involvement of large number of stakeholders (Scheberle, 2004; Koontz and Newig, 2014).

Aspects of Malaysia's environmental policy implementation are found in two of the most prominent and comprehensive works on Malaysia's forest and wildlife by Aiken and Leigh (1992) and Kathirithamby-Wells (2005). Other notable studies on biodiversity and environmental policy implementation are Wong (2009), Hezri and Dovers (2013), Hezri (2014) and Kangayatkarasu (2018). These publications are conducted at a macro-sector level which draws broad and general conclusions, focusing on sustainable development and protected areas. Yet, there is a dearth of policy implementation research within the field of Malaysian studies, even more so in the subfield of environmental policy (Williamson, 2001; Abdul Razak et al., 2002; Hezri & Hasan, 2006; Periathamby et al., 2009; Ismail, 2012; Moh & Manaf, 2014). This standing on Malaysia's policymaking and implementation research is also quite the opposite with the growing number on studies of the same in other federalisms since 1970s (for example, Lowry & Okamura, 1983; Crotty, 1987; Welborn, 1988; Lester, 1995; Hays, Esler & Hays, 1996; Kraft & Scheberle, 1998; Scheberle, 2004; Reimer & Prokopy, 2014; Koontz and Newig, 2014; Steurer & Clar, 2015).

Based on the features of federalism, four hypotheses that might help to account for the variation of implementation for the CFS have been identified. First, formal powers with clear scope and authority to implement the CFS policy will result in success policy implementation. The division of powers stated in the Malaysian constitution grants authority over land, forestry and agriculture to the state governments, while finance and wildlife come under the jurisdiction of the federal government. Although the dynamics of this power division may have been altered over time, some of the core institutional principles and practices applied by state governments and agencies are still based on systems developed in the past, especially during the British colonial period. As state governments still hold autonomy in much of the environmental components, the introduction of the CFS policy impacts states decision on land use change, especially forested areas.

State governments rely highly on extraction of natural resources (for example, timber and tin) and lease of land to increase state funding resources; this demonstrates a path dependence on forest and wildlife policies and practices introduced by Malaysia's colonial masters (mainly the British and Japanese). The introduction of the CFS policy limits the states' dependency on exploitation of natural resources such as timber from forests, oil royalties, and sale or lease of lands (Anuar, 2000). State governments view this as a drawback, especially when they are pressured to manage their fiscal constraints by reducing expenditure, surrendering some tasks to the federal government, and turning to the federal government for additional loans and transfers, which often come at a cost of sacrificing a state's fiscal autonomy. Besides, state financing in Malaysia is established on a power asymmetry with more control on revenue sources held by the federal government (Narayanan et al., 2009). As such, the state governments view the CFS policy as a gain to the federal government through taxes raised via increased eco-tourism activities in the CFS area.

Furthermore, there is no clarity or indication to sources of funds for infrastructural implementation of CFS for all states by the federal government, except through the building of viaducts for which funds were channelled directly to contractors and road works agencies. Three building of viaducts in states governed by the National Front (*Barisan Nasional*) (Perak, Pahang and Terengganu) signals that the nature of the political party governing at a state level plays a role in fund allocations. Most of the other states were requested to utilise their own state funds for CFS infrastructural implementation. As for capacity-building initiatives, the Forestry Department Peninsular Malaysia (FDPM) secured US\$10.86 million from the United Nations Development Programme through its Global Environment Facility for the Improving Connectivity in the Central Forest Spine (IC-CFS) project⁵, which has firm regulations for expenditure.

In addition, stakeholder consultations prior to establishing the CFS policy did not identify current and ongoing projects or those that had already been assigned to various entities – which includes developers, businesses, farmers or agricultural companies. The exercise could have assisted the federal government in identifying economic corridors, *Orang Asli* settlements and private lands within the CFS area, including Malay Reserved Land and land owned by the

⁵ The IC-CFS project was terminated at the end of 2018 due to lack of progress, and is currently being reviewed by both parties, UNDP and the Ministry of Water, Land and Natural Resources at the federal level.

traditional rulers and royal families⁶. Yet, it is highly likely state governments may disagree with the exercise as their revenues are dependent on these income-generating activities. The federal government's decision to not seek state governments' feedback prior to formalising the policy, however, is seen to have stemmed from Article 94(1) of the Malaysian constitution, which allocates power to the federal government to educate, create awareness, offer advice, and supply technical aid as well as share research outcomes in any state prerogative. This provision of law is often translated as federal government is to provide directives to state governments and its agencies to implement policies it establishes.

Similarly, the support from royal families is predicted to influence the CFS implementation outcome, although not emphasised by all implementers. In the states of Perak and Selangor where the CFS has been implemented, it has gained strong support from its traditional rulers. The Duli Yang Maha Mulia Paduka Seri Sultan Perak Sultan Azlan Shah has been a patron to its Royal Belum State Park since 1993 (Loh, Kaur & Ong, n.d.). The Sultan of Selangor has assigned a forested area of 1300 hectares to the Forestry Faculty of Universiti Putra Malaysia for research purposes, and any development must be consented by the Sultan. In Johor, the Duli Yang Maha Mulia Sultan Ibrahim Ismail Ibni Almarhum Sultan Iskandar has pledged to be the patron to Johor Wildlife Conservation Project (JWCP) in 2009 (Ministry of Natural Resources and Environment, 2011). The benefactor's position of both Sultans has been adopted by their sons upon their passing. Both the Sultan and Sultanah from the royal family of Pahang are known for their contribution towards preservation and conservation of rainforests in their state through the Sultan Ahmad Shah Environment Trust (SASET) (Azrai, 2012). However, the question of whether the traditional leaders are veto players in the implementation of the CFS policy has not been explored prior to this research. As such, this research further investigates the role of the traditional rulers and implementers of forestry and wildlife management policies in the institutional context of Malaysia's federalism.

The second hypothesis is that the informal powers must balance the formal powers for the CFS policy to be implemented successfully. Informal powers, especially federal-state

⁶ According to Minority Rights Group International, Orang Asli is a term used to refer to the original inhabitants of the land. The Centre for Orang Asli Concerns (2003) estimated the population to be less than 150,000 in total (Reference: https://www.coac.org.my/main.php?section=about&article_id=4). Orang Asli are generally divided into three distinct groups – the Negrito, Senoi and Proto-Malay). They are comprised of 18 ethnicities – Temiar, Semai, Lanoh, Semnan, Sabum, Kensiu, Batek, Kentaq Bong, Jehai, Medrique, Tonga, Temuan, Jakun, Orang Kanaq, Orang Selitar, etc. The population of Orang Asli live in or close to forests and are usually involved in hill rice cultivation or traditional hunting and gathering activities – making any policies pertaining to forests and wildlife relevant to them as well. (Reference: <http://minorityrights.org/minorities/orang-asli/>)

intergovernmental relations, and availability of resources, such as finances and skills or expertise, plays a significant role in the CFS policy implementation outcome. Malaysia's single-party rule by the *Barisan Nasional* since it attained independence in 1956 indirectly influences inter- and intra-party affairs as well as federal-state relations (Wong & Chin, 2011). The *Barisan Nasional* government used suppression mechanisms to control state leaders, whereas in states ruled by opposition parties they are prejudiced against, reprimanded or disregarded – this includes in financial matters (Wong & Chin, 2011)⁷. As such, the basis to CFS implementation failure in some states has been due to lack of or no funding – failed implementation states allege that the federal government provided no fiscal allocations, did not consult the state entities prior to establishing the policy and had no clear direction as to how the required budget is to be generated.

Besides the sub-factors that have already been mentioned, a good working relationship among the various implementers is required for the policy to be implemented successfully, especially when facing overlapping roles or geographical areas. Implementers with a positive working relationship between each other are able to jointly plan and undertake the redundant tasks. Meanwhile, implementing agencies with poor working relationships between each other fail to achieve the set objectives. For example, the State Forestry Department (SFD) and the State Department of Wildlife and National Parks (PERHILITAN) are usually assigned to the same geographical area. Although the SFD focuses on forests and the PERHILITAN on wildlife, both agencies jointly undertake the task of managing illegal loggers or poachers in some states – reporting to each other through an agreed mechanism. Nevertheless, the question of what the recipe is for a good working relationship, and which incentives or motivations has led to success or failure of CFS implementation remains to be explored.

The third hypothesis is the availability and clarity of information is significant to the CFS policy implementation success (Murray, 2004; Saetren, 2005; Paudel, 2009; Wang, 2016). To date, state implementers find the CFS policy outlines to be unclear with no specific guidelines or outline to agency roles and compliance requirements. Hence, the CFS policy documents and directives lack clarity and practical knowledge – allowing for the existence of ambiguity, obscurity and opacity, which is deduced to be the reason for CFS implementation failure. In addition, the policy lacks a transparent process through which implementers are able to discuss

⁷ Malaysia has since had a historical change in the opposition political party coalition forming the ruling government in 2018 after the *Barisan Nasional* party was defeated in the 2018 general elections.

and clarify information stated in policy documents. Hence, correlation between extent of information available to state implementers and the implementation outcomes needs to be further understood.

The fourth hypothesis is related to the implementing agencies' motivation. Positive motivation among implementing agencies is important for a successful implementation of the CFS. At the time of writing, the motivation of state implementers remains to be profit from a resource-based economy. Thus, absence of an alternative income channel and/or an incentive repels implementing agencies from accepting and complying with CFS implementation goals and objectives. Furthermore, implementing agencies will be highly attracted to implement the CFS policy when the policy goals and objectives are aligned to their current roles and functions – allowing the relevant street-level bureaucrats to take on new tasks using methods and skills already known or acquired. In the case of a shift in their method or skill, these bureaucrats must be informed and provided with additional training. Provisions and arrangements for this form of upskilling must also be ensured to achieve a policy implementation success.

In testing these hypotheses, I observe three criteria among key actors involved in CFS policy implementation: power (both formal and informal), availability and clarity of information, and motivation. The analysis chapters in the later parts of this thesis, particularly in Chapters 5, 6 and 7, answer the main question and sub-questions stated at the beginning of this section. The contents of each analysis chapter are further elaborated in the final section of this chapter.

Introducing the Central Forest Spine

The Central Forest Spine (CFS) is an extensive policy and plan that marries concepts of sustainable development, land management, forest management, and wildlife conservation and preservation (Ministry of Natural Resources and Environment, 2009). It is one of 41 policies under National Physical Plans 1 and 2 that determine directions and trends of Malaysia's physical development which provides a spatial dimension to national socio-economic policies (*The Star*, 2012). The aim of the policy is to join forest islands in Peninsular Malaysia, to form a spine of an environmentally-sensitive area network by re-establishing, maintaining and enhancing the links between remaining forest islands. The CFS policy design includes identified linkages, which were classified into two categories based on significance and vitality in ensuring a connection. Primary Links (PL) are crucial to re-establish forest connectivity in

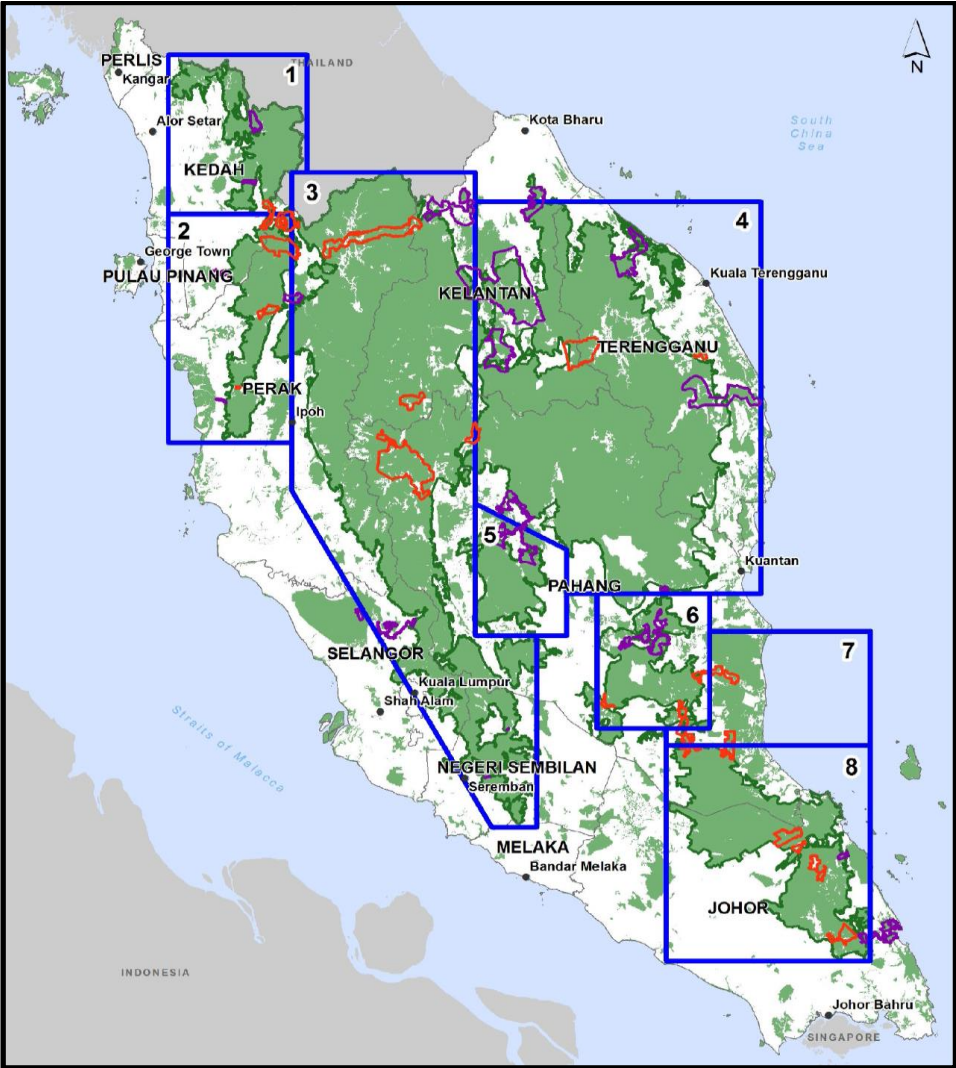
order to result in a forest spine, while Secondary Links (SL) are complementary to the primary linkages.

According to Fahrig (2003), the main cause for the emergence of forest islands in Malaysia is forest fragmentation due to development and economic activities. Forest fragmentation imposes a threat to biodiversity as habitats are destroyed, and the space and resources available on a particular forest patch may be unviable to support wildlife populations (especially of large mammals such as tigers and elephants). Forest islands are smaller patches of forest that are reduced from their original size and appear as a stand-alone isolated forest area, surrounded by natural open areas, farmland or other forms of development. This, eventually, results in species extinction. When links between forest patches are established to form a spine, they will form a larger connected space for wildlife populations to move in. Essentially, the function of a forest spine is alike to the human spine; and the CFS supports wildlife movement and ensures that the area has adequate food supply. This would ensure that the food chain and natural habitats that are maintained will enable flora and fauna to thrive.

The main reason for conserving and preserving wildlife is due to their important role in balancing the environment and providing stability to different natural processes. Malaysia serves as a natural habitat for two of the world's largest mammals: tigers and elephants. Sadly, the wild tigers in Malaysia were identified to be a new subspecies in 2004 and was subsequently assigned the scientific name *Panthera tigris jacksoni* (Kawanishi et al., 2010). These Malaysian tigers are genetically different from the alleged Indochinese tigers (*Panthera tigris corbetti*), resulting in increased conservation efforts to save them. Associated closely with strength and royal power, the tiger is a symbol of protection, which marks it as key to national identity and an important animal (Department of Wildlife and National Parks Peninsular Malaysia, 2008). Tigers constitute the apex of the food chain and are deemed as one of the top carnivores in the ecosystem, in which the loss of tigers could increase the abundance of herbivore species and affect the health of the ecosystem. Apart from this, Malaysia has two subspecies of Asian elephants. However, the one that populates forests on the Peninsular Malaysia are *Elephas maximus indicus*. The largest mammal in the country's ecosystem, elephants are classified as the most intelligent creatures, honoured by many cultures. Though the cultural and religious significance of elephants has reduced, their biological importance remains; as seed dispersers, spreading them through their dung.

Under the CFS, there are two key areas of implementation. However, some states are not required to do both. First, increasing forest cover through reforestation of degraded areas and gazettement more forested areas as Permanent Forest Reserves (PRF). One achievement under this key area is the forest gazetted in Perak. The Perak state government has gazetted 18,866 hectares of forest at the Primary Link 2 (PL2) ecological corridor, whereby the state land within the Belum Temenggor Forest was upgraded to Permanent Forest Reserve (PRF) status and named the Amanjaya Forest Reserve (*The Malaysian Times*, 2014) (Figure 1). In the state of Kedah, there had been an attempt to gazette a total of 8,119 hectares as Saiong Forest Reserve in Baling. Out of this, an area of 4,398 hectares fall in the Secondary Link ecological corridor of Ulu Muda Forest Reserve, Pedu Forest Reserve and Chebar Forest Reserve. But the incomplete preservation of the link has still led to deterioration of the link and area.

Figure 1. Area map for Central Forest Spine.



Source: Department of Town and Country Planning Peninsular Malaysia (2010).

Under the second area of implementation, wildlife movements are to be facilitated through the construction of viaducts to reduce human–wildlife conflicts and wildlife deaths, for which a total of US\$53 million was allocated (United Nations Development Programme, 2014). Three viaducts were constructed along the Sungai Deka Highway, Terengganu at Primary Link 7 (PL7) at the cost of US\$8 million. At the Primary Link 1 (PL1) in Sungai Yu, Pahang, three viaducts were built at the cost of US\$25 million. A total of US\$20 million was allocated for the building of a viaduct at PL2 in Gerik, Perak (United Nations Development Programme, 2014). However, there are no reports to indicate how much has been achieved by each state under the CFS policy overall, especially for broken or badly degraded links that cannot be re-established. So far, there has only been one report on degradation of a primary link nearby Kampung Punan in Johor due to a pre-approved timber-latex clone project (Maniam & Singaravelloo, 2015). Many implementers acknowledge a stand-off between the federal and state governments, blaming it on characteristics of federalism and its challenges of policy implementation.

Significance of the CFS for Biodiversity Conservation and Sustainable Development

To further comprehend the significance and importance of the CFS policy to Malaysia as well as the global community, one needs to possess fundamental knowledge on biodiversity and its relation to concepts such as nature conservation and sustainable development. In the absence of such cognizance, this section aims to provide a basic understanding. Apart from that, this segment also elaborates briefly on international agreements and guidelines that steer governments (especially the Malaysian government) to conserve biodiversity and nature. The Convention of Biological Diversity (CBD) defines biodiversity as “the variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems” (Bøhn & Amundsen, 2004). The term, believed to be created at the intersection of science, applied science and politics, emerged in the late 1980s (Haila & Kouki, 1994; Maclaurin & Sterelny, 2008; Kusmanoff, 2017).

Biodiversity plays a prominent role in shaping human civilisation and continuous supply of ecosystem services (Chapin et al., 1997; Sala et al., 2000; Hooper et al., 2005; Cardinale et al., 2012). Ecosystem services bring “benefits of nature to households, communities, and economies” (Boyd, 2007, pg. 616). Apart from its contribution to economic improvement, these services are also vital to human well-being, both directly and indirectly (Hooper et al., 2005; Balvanera et al. 2006; Gamfeldt et al., 2008). Besides ensuring production of food, fibre, fuel,

medicines, household items, building materials and fodder, biodiversity is often associated with maintaining other ecosystem services, allowing adaptation to changing conditions and sustaining livelihoods of rural people (Platts, 2011). Furthermore, the need for the environment to be conserved and preserved is to ensure future generations are able to live comfortably and safely (Bailey and Bryant, 2005; Eckersley, 2007).

Though biodiversity conservation may appear as an altruistic act, nature is rather to be construed as a global currency for ecosystems, and as genetic resources for biotechnology; which results in the existence of a new investment market for governments and businesses (McAfee, 1999; Ferraro & Kiss, 2002; Levitt, 2005; Bishop et al., 2009). As such, conserving biodiversity may generate income for a country if pursued wisely as anthropogenic benefits. For example, initiatives that reflect this concept is the carbon financing schemes for forest conservation, such as the UN-REDD+ programme and World Bank's Forest Carbon Partnership Facility (Miles & Kapos, 2008; Davis et al., 2009; Kanowski et al., 2011). These programmes are designed to reward countries with tropical forests with decreasing deforestation rate and emission of greenhouse gases (Gibbs, 2007). Participating countries avoid exhaustion of natural resources by conserving their forests, and this in return, generates funds to further protect environment. In parallel, it eliminates the fiscal burden from governments to manage these areas. Another instrument is the payment-for-ecosystem-services (PES), which ranges from transaction between providers of services and end-users or beneficiaries through a conditional market-based facility or a direct transaction.

Conserving biodiversity may also offset debts. Three international non-governmental organisations in the United States (Conservation International, World Wildlife Fund for Nature and Nature Conservancy) had initiated commercial debt-for-nature swaps in 19 developing countries by 2003, reducing a sum of USD 168 million of debt (Shandra et al., 2011). Governments can also obtain assistance from international non-governmental organisations to preserve environmental components in their countries. For example, in Africa, the Nature Conservancy and the African Wildlife Foundation activists were encouraged to 'adopt an acre' for USD 35 to protect wildlife heritage from deteriorating (Fairhead et al., 2012).

International pressures and momentum for biodiversity protection have increased post-1992. The concept of biodiversity conservation is linked closely with sustainable development. The U.N. Secretary-General Boutros-Ghali (1992-1996) described sustainable development as

meeting the needs of the present as long as resources are renewed or does not compromise the development of future generations (United Nations, 1992). The conference resulted in the coining of Agenda 21, which serves as an important guideline on sustainable development for governments, NGOs, the private sector and financial institutions. It is a non-binding voluntary action plan that promotes social, economic and environmental sustainability – stressing the importance of biodiversity. Chapter 15 of the agenda advocates for governments to integrate strategies for biodiversity conservation and sustainable use of biological and genetic resources into relevant sectoral or cross-sectoral plans, programmes and policies, in accordance with the Convention on Biological Diversity (CBD). One key activity suggested by the chapter is for governments to undertake in-situ and ex-situ practices across all ecosystems. The CBD is the first comprehensive global binding agreement to define biodiversity in context of social, economic, and other environmental issues, and outlines conservation and sustainable use of all biodiversity components (TRAFFIC International, 2004; Prip et al., 2010)⁸.

Alongside Agenda 21, two other international treaties steer environmental protection globally and serve to set a clear global direction for the world. The United Nations Framework Convention on Climate Change (UNFCCC) aims to “stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system” (United Nations Framework Convention on Climate Change, 2009), while the United Nations Convention to Combat Desertification (UNCCD) intends to “combat desertification and mitigate effects of drought through national action programs that incorporate long-term strategies” (United Nations Convention to Combat Desertification, 2018). The three conventions are fundamentally linked as all three are products of the Earth Summit 1992 held in Rio de Janeiro, which uphold principles of conservation and environmental protection.

A more over-arching direction is provided by the United Nations Environment Programme (UNEP), a leading global environmental authority that sets a global environmental agenda. It promotes coherent implementation of environmental dimensions of sustainable development within the United Nations system and serves as an authoritative advocate for the global environment. The programme strengthened the existence of the International Union for Conservation of Nature (IUCN) (set up in 1948) and its Red List of Threatened Species (established 1964) as a world standard and a rigorous scientific approach to determine risks of

⁸ In-situ conservation is the term used for protection of species in wild habitats, and ex-situ conservation refers to the preservation of species in captive breeding programs.

species extinction. The conception of UNEP further reinforced efforts by the World Wildlife Fund (WWF) created as a fundraising organisation in 1961 to complement the work of IUCN and the Conservation Foundation.

With the increasing pressure from the international arena, Malaysia strives to honour guidelines set by UNEP, Agenda 21, CBD, UNFCCC and UNCCD. The federal government also aspires to achieve targets committed by the Association of Southeast Asian Nation (ASEAN) in which the programmes are aligned to Agenda 21 and the CBD (TRAFFIC International, 2004). Some of the regional agreements are the ASEAN Common Forestry Policy, Intra-ASEAN Timber Trade and ASEAN Common Stand on International Issues on Forestry. Malaysia is also a member of the International Tropical Timber Agreement, UNFCCC, Kyoto Protocol and Cartagena Protocol (Thang, 2009). In keeping up with these international treaties and agreements, Malaysia has established a range of biodiversity conservation and preservation policies, which includes the CFS as the most comprehensive policy to date.

Institutionalism: Research Framework and Paradigm

Success or failure of the CFS policy implementation exhibit characteristics of institutionalism – that institutions and its actors play a fundamental role in determining policy outcomes (Hall & Taylor, 1996; Scott, 2008; Pierson, 2011; Peters, 2011; Scharpf, 2018). As institutions in Malaysia are embedded in its federal structure, this research observes how and why the Malaysian federalism structure influences the environmental policy implementation outcome. Malaysia's federal characteristics are significant to CFS policy implementation, reflecting the influence of institutionalism in implementation outcomes, like in studies undertaken by Linder and Peters (1990), Jennings and Zandbergen (1995), Forder (1996), Morris (1997), Gu and Sheate (2005), Breukers and Wolsink (2007), Erkuş-Öztürk (2011) and Arshed et al (2014). Formal organisations and institutions are central components to policy implementation, especially when the nature of institutions has expanded to become more complex and resourceful (North, 1990; Lowndes, 2010; March & Olsen, 2010). Institutions play a role in shaping power relations and influencing actors' engagement in policymaking process and political system. Yet, there is a co-constitutive factor in which actors and institutions may alter each other's roles. Institutions also remain the most important frame for effective implementation of policies, and the emphasis on the role of institutions is known as institutionalism.

This research utilises approaches of new institutionalism which recognises institutions to be both formal and informal. According to March and Olsen (2006), institutions may exist as formal structures or informal values and symbols possessed by those structures. The authors also presume that institutions continue to persist with the attempt to replicate their form by influencing new members to adapt to existing values. In the Malaysian federalism, the most important institution is its written constitution which is highly difficult to amend and is stable and persistent; it is also supported by a supreme court as a judicial review mechanism to protect the constitution. Adjunct to the role and functions of the constitution is the representation of state leaders and politicians in Malaysia's bicameral parliament, and intergovernmental platforms to facilitate collaboration in shared jurisdictions (Lijphart, 1999; Galligan, 2006; Watts, 2008). Though the constitution is deemed as the rulebook or bible to governing a country, administrative values and symbolic actions may influence or alter, although informally, the implementation of law, policies, procedures and processes.

Administrative values and symbolic actions are embedded in the administrative culture of an entity. Quoting Dwivedi et al. (2007), administrative culture, like any other culture, refers to 'the distinctiveness and complexity of the various regional, national, and local realities; their unique historical experiences; their forms of insertion (subordination or domination) into the system of regional and global relations; and their levels of development and fragmentation' (p. 163). Dwivedi et al. (2007) also highlights that such cultures are usually a 'historical product', which has been influenced by past experiences, traditions and myths, and conditioned by structures that exist. However, administrative cultures are 'dynamic and subject to change' (Dwivedi et. al, 2007). Since Malaya obtained its independence from the British in 1956, state governments have been focusing on an economy based on resource-extraction and revenue-generation policies and activities. In line with this, street-level bureaucrats employed by state forest and wildlife agencies would usually be required to abide by state directives, especially in meeting revenue targets. Hence, through the first approach, I aspire to understand the structure as well as administrative values and symbolic actions that prevail at the centre of administration for each state, as well as to discover how these state agencies align themselves to the state's political direction overall. Drawing an understanding to this may shed light to the CFS implementation conundrum in each of the chosen states.

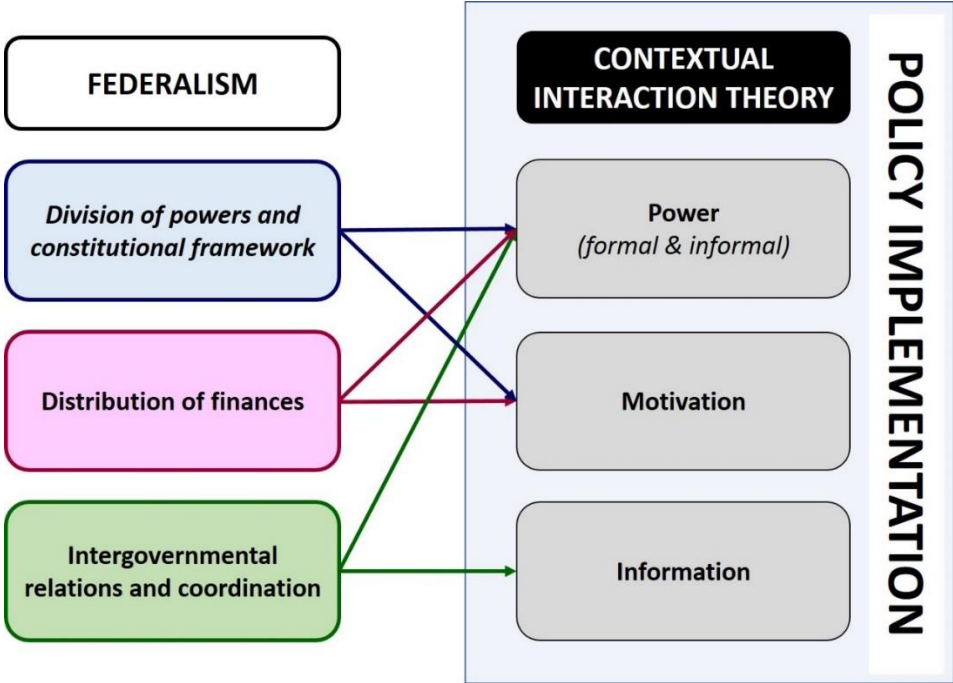
A sub-field of new institutionalism, the rational choice institutionalism particularly describes how actors use institutions to maximise their utility where they perform in response to a set of

rules and incentives already established (Allison, 1971; Weingast, 2002; Shepsle, 2006). The monarchs, for example, usually negotiate with the Chief Minister or *Menteri Besar* for land and forested areas aligned to the belief that they are sovereign. Although in a number of past incidents, the monarchs have disapproved state budgets and other initiatives to demonstrate dissatisfaction when their requests are turned down, little is known about the role of the *Menteri Besars*. A presumption among some bureaucrats is that a *Menteri Besar* could seek political support or even be part of a demand (of lands or forests) in exchange for honouring the monarch's requests. The same opportunity or window that is available to a *Menteri Besar* is also accessible to other state-level bureaucrats in strategic positions – such as the Directors who are leading agencies relating to land, forests, wildlife and national parks. The norm of endorsement from the state monarchs on the appointment of the Chief Minister, State Forestry Director and State Wildlife and National Parks Director further strengthen the significance of incorporating the rational choice institutionalism approach into this research. In line with this, I explore how various implementing actors maximise their utility in the structure in which their agency is embedded in.

In further exploring the variation of implementation outcomes facing the CFS policy, this research adopts comparative institutional analysis, an analytical approach that observes formal and informal structures in a relative manner between two or more entities. Through institutional analysis, I am able to draw attention to formal and informal rules that can be 'borrowed' from states that have successfully implemented the CFS policy and highlight challenges of institutional characteristics in failing states. Though comparative studies often involve a compare-and-contrast exercise between at least two countries, comparative studies between subunits in a single-country may provide the understanding to make informed decisions for specific or single-unit cases (DeLeon & Resnick-Terry, 1998; Geva-May, 2002; Landman, 2008; Gupta, 2012). The application of subnational comparative studies has increased especially in areas relating to federalism, decentralization and economic policy reform (Snyder, 2001). Comparative studies are also highly relevant to the environmental policy implementation field – particularly demonstrated in the research undertaken by Agrawal and Chhatre (2007), Schreurs (2008), Clarke-Sather et al. (2011), Steinberg & VanDeveer (2012), Guo (2014), Lee (2014), Eaton and Kostka (2014), Zhu et al. (2015), Vogel & Henstra (2015) and Cole & Grossman (2018).

The research approach is complemented by a framework that draws on theories of federalism and policy implementation, which are further discussed in the next two chapters: Chapter 2: Contextualising Policy Implementation and Chapter 3: Framing Federalism (Figure 2). The relationship between federalism and policy implementation is analysed through contextual interaction theory (CIT) developed by Bressers and Dinica (2003); this is also discussed in the next chapter. The CIT measures three components: power, information and motivation, which have all been found pertinent to policy implementation success. The fundamental role of the CIT theory is to analyse the policy implementation quandary through a lens that combines both top-down and bottom-up perspectives. To clarify the connection between the CIT and the federal characteristics, Figure 2 maps the link between each of the components.

Figure 2. Conceptualisation and theoretical framework of this research.



Source: Author.

The formal power division guided by the constitution complements or is complemented by informal powers like specialized roles, expertise and alliances or strong support by other relevant stakeholders. These formal and informal powers serve as external motivation. The distribution of finances is a characteristic which directly influences the power balance and intergovernmental relationship between the central government and its subunits. In the Malaysian federalism, the states retain autonomous powers geographically but do not hold the right to increase taxes or seek external funding on their own (Vejai, 2006). The federal government has authority over income and trade taxes while the states depend on the revenue

from natural resources, which causes an economic imbalance among states (Anuar, 2000). As such, most states rely on the federal government for finance allocations and it is found that federal funds are usually used as bait for states to adhere to federal government's directions (Omar, 2012).

Adequate financing is an important resource required to implement a new policy. Without appropriate and sufficient funding, it is highly likely a policy is set to fail. Implementing actors or agents are influenced by the availability of resources and expertise. Apart from that, in states that are ruled by the opposition political party, the informal power relations (intergovernmental relations) also poor federal-state relations subsequently led to a financial bias. As availability and provision of funds is a positive motivation to the implementers, lack of sufficient funds reduces their motivation to implement.

The third characteristic, intergovernmental relationships, include both horizontal (federal-state) and vertical (state-state) interactions. Intergovernmental relationships influence governments of different levels in how they operate and draw their scope apart from the delineation of powers mapped by the Constitution. The nature of a federal-state relationship could be competitive or collaborative, in which both type of interactions could yield two possible consequences: negative (destructive) or positive (constructive). This directly relates to the informal powers that I described earlier.

In the case of the CFS policy, it was found that when a collaborative relationship exists between agencies within a state, the policy was coordinated and implemented successfully. In its absence, the states failed to execute the policy. In observing federal-state relationships, the two successful states were collaborative due to the decisions of its veto players. In the failing states, a negative federal-state relationship exists. In states that have failed to implement the CFS, they were found to be competitive, in maintaining their rights to seek for income through the selling or trading of natural resources. Relationships among states are defined by inter- and intra-party politics.

Importance of This Research

This research contributes in a number of ways, especially in filling the gaps that exist in current literature. In the existing scholarly work, academics have extensively researched federalist structures in many Western countries, especially the United States, Canada and Australia.

However, there are limited studies on the Malaysian federalist structure, which is one of the four federal-parliamentary-constitutional-monarchies in the world. One outstanding difference between Australia, Canada and Belgium (the other three federal-parliamentary-constitutional-monarchies) compared to Malaysia is that the latter is the only federation still classified as a developing country. Hence, it is important to incorporate research on Malaysia to draw more conclusive lessons on the federalist structure of this nature and perhaps propose ways the Malaysian system may adopt best practices from developed countries.

Understanding policy implementation in Malaysia requires more scholarly work as it has not been studied extensively, more so environmental policy implementation. Policy implementation research undertaken previously are mostly of first-generation type where an explorative study that usually covers a single-case study is conducted, resulting in the listing of reasons for implementation failures (see Simandjuntak, 1969; Puthucheary, 1978; Elazar, 1987; Gomez & Jomo, 1997; Bhaskaran, 1999; Brown, Siti Hawa & Wan Manan, 2004; Johnson & Milner, 2005; Saleem, 2005; Fraser, Zhang, & Derashid, 2006; Vejai, 2006; Gill, 2006; Moten, 2008; Adham et al., 2012; Ismail, 2012; Wong, 2013). Even though these studies did acknowledge the federal structure, no studies were undertaken to draw conclusions on the influence of Malaysia's political structure on its policy implementation process. Malaysia also lacks second-generation implementation studies, which mainly consist of comparative and theoretical-deductive oriented research, and third-generation studies where theories are put to test different scenarios in a more systematic and scientific manner.

The study also aims to enrich the limited but expanding research on forest and wildlife conservation policies in developing countries. Much of the current research on forest and wildlife conservation are of a scientific nature, which consists of data collected during field research. Though the information is useful for policymakers, often it does not appear in shape and form that are easily understood. As these countries are highly embedded in their pursuit of advancement and economic prosperity, nature conservation remains the lowest in the priorities of its government. Furthermore, a small number of conservation policies in the region has resulted in limited studies on these policies too. As such, a study on the CFS is an opportunity to draw lessons for conservation policies in developing countries and its outcomes could be taken into consideration when establishing conservation policies in other developing countries. This study would also serve as one of the pioneer studies for environmental policies in Malaysia after a focus on landscape conservation is incorporated into its practice of resource-extraction.

Apart from this, only three out of eight states have successfully implemented the CFS policy in Malaysia: Perak, Selangor and Johor.

This study also contributes to the larger body of study on federalism and policy implementation, especially on the informal or unconstitutional powers and check-and-balances in federalism. Also, in line with the findings from scholars like Oates (1972) and Agrawal and Ostrom (2001) who have proposed decentralised environmental governance as a catchy solution to environmental problems, this research will enable scholars to assess if the decentralised environmental policy process in Malaysia is beneficial for its forest and wildlife conservation.

Better implementation of the CFS policy will also result in a reduction of biodiversity loss in Malaysia. Over the years, the extinction rate of wildlife species has increased, caused by the introduction of exotic species, overexploitation of species through hunting, habitat fragmentation and destruction, and pollution (Lemons & Morgan, 1995). An estimated number of species that needs to be conserved in Malaysia is around 15,000; in which 26% of tree species are endemic to the Peninsular region (Ministry of Natural Resources and Environment, 2014).

A number of other Malaysian wildlife species that face the danger of extinction include the Sumatran rhinoceros, dugong, proboscis monkey, mountain spiny rat, false serotine bat, bay cat, otter civet, dhole, banteng, Malayan round-leaf bat, Malayan tiger, Malayan tapir, Borneo pygmy elephant, Borneo water shrew and Sumatran serow. According to the Red List updated by the International Union for Conservation of Nature (IUCN) on 23rd June 2015, Malaysia faces the second highest extinction rate (at 1252 species) after Ecuador (2308 species)⁹. The declining forest covers, increasing species extinction rate and a keen interest to honour the international and regional agreements has pushed Malaysia's federal government to establish policies relating to biodiversity conservation and preservation.¹⁰

Organisation of Thesis

This thesis consists of eight chapters. There are two background chapters, Chapter 2 and Chapter 3, which provide and frame an understanding to two main concepts infused in this research: policy implementation and federalism. Chapter 2 (Contextualising Policy

⁹ The IUCN Red List is updated every 5 years and the next updated list will be published in December 2019.

¹⁰ Malaysia has signed to the UNCED Forest Principles and ASEAN Common Forestry Policy (TRAFFIC International, 2004). The Malaysian government has also committed to the Intra-ASEAN Timber Trade and ASEAN Common Stand on International Issues on Forestry and various other programmes aligned via Agenda 21. Malaysia is also a member of multiple international conventions that relate to forests and timber extraction (Thang, 2009).

Implementation) of this thesis includes a comprehensive review of policy implementation process and its importance to effective implementation. The chapter also informs the reader of the main ideas to successful policy implementation, by observing three components under the contextual interaction theory (CIT): power, information and motivation.

Chapter 3 (Framing Federalism) focuses on federalism and an existence of the structure in the Malaysian context. It draws on notable works by federalism scholars to formulate the main characteristics of federalism, which are power, fiscal federalism and intergovernmental relationships. The chapter also introduces institutions pertinent to Malaysia's political structure and environmental governance.

Chapter 4 (Research Methodology) elaborates on the measures and parameters used in this research as well as how this research is operationalised and executed. This chapter also includes a section of selection of cases, research methods used and the limitations to the study.

The first analysis chapter is Chapter 5 (Federal Institutions & CFS Policy Implementation). The main idea of this chapter is how Malaysia's federal characteristics (such as power division, distribution of funding and intergovernmental relationships) influence the CFS policy implementation success or failure. This chapter argues that the formal powers of politicians and bureaucrats (and state governments) and informal powers (of sultans and intergovernmental relations) may be balanced by strengthening the role of deliberative platforms in order for the CFS policy to be implemented. If formal powers are described extensively but informal powers are poor, then it is more likely that a policy will fail in its implementation stage.

The second analysis chapter, Chapter 6 (Information Sharing & CFS Policy Implementation), focuses on information being a key variable to policy implementation success; and elaborates on how the availability, clarity and transparency of information enables the Central Forest Spine (CFS) policy implementation success. In summary, the preliminary findings indicate the availability and clarity of information present among implementers in states that have successfully implemented the CFS policy, leading to the establishment of a strong information-sharing platform or network. In states that have failed to implement the policy, it is found that there is an absence of information and subsequently, poor or no information-sharing practice.

In the third analysis chapter, Chapter 7 (Motivation & CFS Policy Implementation), I aim to explore and understand what motivation factors shaped the implementation outcome for the CFS policy in various states chosen for this study. Motives stimulate or discourage the implementing agencies in undertaking the execution tasks in the field. The chapter examines motivations at three levels: the policy sector, and organisational and individual contexts, which consists of agency or entity goals, perceived costs and benefits for implementers, public service motivation, support among implementers, interest group participation and funding.

Finally, Chapter 8 (Conclusion and Recommendations) reiterates the main aim of this thesis, summarises and concludes the findings and discusses the contribution this research makes to two theoretical body of knowledge: federalism and policy implementation. This chapter affirms that Malaysia's federal structure influences the Central Forest Spine policy implementation. The formal and informal powers of federal and state implementers do play a key role in ensuring implementation success. Apart from this, Sultans have informal but visible powers in ensuring conservation and preservation activities are undertaken, championed or advocated for. The magnitude of power they hold and practice, despite the descriptions in the Constitution, is demonstrated through their lifestyle and demands. I also conclude that intergovernmental relations are highly dependent on inter-party relations.

CHAPTER 2: CONTEXTUALISING POLICY IMPLEMENTATION

“It’s important to have a sound idea, but the really important thing is the implementation.”

(Wilbur Ross, 2008)

Despite an increase in the efforts to save Malaysia’s biodiversity, forest and wildlife through the formulation of relevant policies such as the Central Forest Spine (CFS), implementation remains a challenge. According to Hezri and Hasan (2006), Malaysia’s struggles with environmental policy implementation is due to weak institutional capacity that has resulted from two choices – first, treatment of environmental issues as independent of development and planning; and second, the high reliance on certain government bodies to administer a policy across the various levels of governments and implementers involved. The dilemma facing CFS policy implementation is no different, shouldered by the Forestry Department of Peninsular Malaysia (FDPM) and the Department of Wildlife and National Parks Peninsular Malaysia (DWNP). Besides, according to Hezri and Hasan (2006), much of Malaysia’s limited performance in the environmental policy implementation arena stems from it being trapped in the logic of the first wave of environmental concerns that focuses on pollutants and water and air quality, which are usually localised.

Malaysia’s political structure is grounded on federalism, with a parliamentary democracy and a constitutional monarchy. The Malaysian Constitution divides authority into legislative, judicial, and executive arms, and states the doctrine of separation of powers, and check and balances. Theoretically, with these elements in place, effective coordination of public policy formulation and implementation should exist. The federal Constitution of Malaysia also clearly states that the policymaking and policy implementation activities come under the jurisdiction of the executive arm. However, creation and implementation of policies are relatively intertwined between its politics, policy and public administration. In Malaysia, public policies may be created through one of the following three ways. First, the political channel enables for a policy to be created through Cabinet orders or governing political parties. Second, the creation of a policy can be through the administrative processes at the ministerial level through high-level government platforms such as national councils and special committees. Third is the combination of both first and second.

Policies then transform in the implementation phase due to two reasons: first, a new policy is adapted by implementers through personalisation and second, implementers co-opt program

design to their current roles and functions (Van Meter and Van Horn, 1975; Pressman & Wildavsky, 1984; Hill & Hupe, 2014). Scholars find it beneficial to consider policy implementation as a point of analysis within the policy process to draw an overall understanding (Pressman & Wildavsky, 1984; Palumbo & Calista, 1990; Hill & Hupe, 2002; Bressers, 2004). Policy implementation, as Tummers & Bekkers (2014) explain, is a negotiation and interaction process between the policymakers who design policies and front-line civil servants who execute them.

Most federations, however, face dilemmas in formulating and implementing effective policies in their systems, which feature division of powers among different tiers of government (Holland et al., 1996; Galligan, 2006; Wälti, 2004; Nelson, 2012; Hueglin & Fenna, 2015; Carter et. al, 2017). Bureaucrats are still entangled in the challenges of translating a policy into action in the practical world (O'Toole, 2000; Conteh, 2013; Newig & Koontz, 2014; Lee & McGuire, 2017). In these cases, it was found that there is no direct link between those who design the policy, those who oversee the implementation and those who are actually involved with on-the-ground executional tasks. Scholars also claim that street-level implementers are the final policy makers, as they amend and adopt the policies, which directly influence their outcomes (Lipsky, 1980; Maynard-Moody et al., 1990; Evans & Harris, 2004; Evans, 2010; Kubo, 2010; Ellis, 2011; Hupe and Buffat, 2014; Evans, 2016).

Effective implementation in federalist states relies on good relations between all units involved in the policy including the implementers and policymakers. Existing literature suggests that this effectiveness depend on the number of veto points and agencies involved, as well as the strength and type of relationship between all units. Tsebelis (1995) defines veto players as 'individuals and collective actors whose agreement is required for a change of the status quo' (p. 289). The effectiveness of policy implementation decreases as the number of veto points and agencies involved increases, making it more difficult to interact with each other (Tsebelis, 2002; Winter, 2012; Koontz and Newig, 2014). Elements of institutionalism, such as structures, schemes, rules, norms, and routines then play the role of catalysts, in establishing authoritative guidelines for social behaviour. This forms the intergovernmental relations between the various units or stakeholders. Loose intergovernmental or inter-organisational relations is an underlying cause of implementation failure (Dredge & Jenkins, 2003; Fenna, 2007; Wanna et al., 2009; Bakvis & Brown, 2010; Gamkhar & Vickers, 2010; Collins, 2015; Abrams et al., 2018). Furthermore,

according to De Mesquita (2004), trustworthy commitments are more easily achieved between two actors engaged in repeated interactions than actors engaged in a single interaction.

Given that the overall focus of this thesis is about implementation in federal states, this chapter focuses on the most relevant aspects of implementation theory. It provides a review of the policy implementation process by focusing on the negotiation and interaction process between key federal and state actors. In doing so, I draw on literature relating to policy process, policy implementation, successful implementation and key variables that have emerged to be significant in the policy implementation arena in the first subsection of this chapter. I also expand further on existing themes in implementation research, the various theoretical approaches and issues faced with these implementation theories, as an insight to understand the possible implementation factors that could play a role in the Malaysian CFS case. Towards the end of the chapter, it covers two important sections that tie the contents of this chapter to the next chapter on federalism. These sections are on policy implementation in federalism and the contextual interaction theory.

Policy Implementation

Policy implementation is an ongoing and non-linear part of the broader policy process that needs to be constantly managed (Sumner & Tiwari, 2009). Implementation is crucial to the policymaking cycle as it contributes to the success or failure of a policy overall. According to Winter (2012), Hupe (2014) and May (2015), and as sighted in the case of the Central Forest Spine policy, even well-planned policies may or may not be implemented in their anticipated manner. Though the essence and concept of implementation has not changed much since the birth of implementation studies, implementation itself is found to vary according to cultural aspects and institutional context. The literature review contained in this section would assist in scoping and providing an understanding to implementation perspectives that may appear relevant to the institutional setting for the CFS policy.

The current understanding on implementation, however, has stemmed from Pressman and Wildavsky's (1984) scholarly findings through their study of implementation on job creation programs in Oakland, California. Often regarded as the pioneers and founding fathers of implementation research, Pressman and Wildavsky (1984) define implementation as 'the ability to forge subsequent links in the causal chain to obtain the desired results' (p. xv). Prior to that, Van Meter and Van Horn (1975) provided a more explicit term for 'policy implementation'. It

was defined as ‘actions by public or private individuals (or groups) that are directed at the achievement of objectives set forth in prior policy decisions’ (p. 447). The gist of Pressman and Wildavsky’s work is still reflected in the recent work of other scholars like Moss & Newig (2010); Hupe (2011); Jordan & Tosun (2012); Hupe (2014); Rykkja et al. (2014); Terman et. al (2016), in which policy implementation is regarded as a critical stage where policy decisions are transformed into actions by organising programs designed under various policies. Transformation of policies in the implementation phase is also linked to how the new policy is adapted after customising and co-opting the program design to their current roles and functions of implementers, and the inability of policy writers to be able to control the ‘meaning of their texts’ (Veiga & Amaral, 2011, pg. 266). Hence, policy implementation differs across sectors (Grindle, 2017).

Working with the definitions by the fathers of policy implementation studies, Schofield (2001) inserts scope for policy implementation. She believes policy implementation is ‘understanding who, how and why policy is put into effect’ (Schofield, 2001, p. 245). The author’s work is also aligned to Tummers & Bekkers’ (2014) account of policy implementation, which is a ‘negotiation and interaction process’ between the policymakers who design policies and front-line civil servants who execute them. In bringing a more definitive construction to the definition of policy implementation, Paudel (2009) states that policy implementation should be viewed in a broader perspective, as a ‘process, output or outcome’ (Paudel, 2009, p. 38). Process refers to the decisions made in order to have certain tasks carried out while output is associated with the actions taken. Outcome is the difference the policy implementation makes after the planned tasks were fulfilled.

To be precise, Paudel (2009) interprets implementation as ‘carrying out, accomplishing, fulfilling, producing or completing a given task’, which could be applied in any sector across any field (p. 36). House (2010) and Kim et al. (2016) find policy implementation to be primarily influenced by political structures, often by components like power division and intergovernmental relations. He also found external institutional factors to have very little influence on the success of policy implementation. In identifying key factors that are significant to policy implementation, the list compiled by O’Toole (1986) remains as the most extensive compilation. Some of the factors listed that relates to this research are organisational capacity and responsibility and competence of implementing officials.

Over the past decade, the policy implementation literature has grown to incorporate more sophisticated assessments (Schofield, 2001; DeLeon & DeLeon, 2002; O'Toole, 2000, 2004; Barrett, 2004; Schofield & Sausman, 2004; Winter, 2012; Hill & Hupe, 2014; Werts and Brewer, 2015; Grindle, 2017). However, forty years of policy implementation studies have not yielded scholarly agreement on the concept. Saetren (2014) finds that scholars are still divided in all three aspects of theoretical, conceptual and methodological aspects. A stronger emphasis was also prevalent in methodological approach rather than the theoretical concerns of policy implementation (Saetren, 2014).

Scholars debated sampling method, sample size, period of study and saturation points that are appropriate to draw conclusions for implementation studies. This division is caused by three flaws in the policy implementation literature. Firstly, the findings are often formulated in highly common expressions or generalisations, which resulted in some of the distinct or special features in case of successful implementation being missed. Secondly, most of the findings are recorded in a chronological manner. The third weakness is the absence of organized data to support the claims and deductions in the research findings. But some commendable works are O'Toole's (2000) in terms of specificity, and Saetren's (2005) comprehensive literature review.

In some cases, there is a possibility that these approaches are combined based on the policy sector. However, I must highlight that these general concepts are still aligned to the top-down or bottom-up divide, as it is often easier to determine parameters that operate within a certain domain. The connection or linkage between these general concepts to top-down and bottom-up divide demonstrate that it is risky to view policy implementation as either one of those perspectives, rather than in its entirety or at an overall level. Viewing policy implementation based on this divide may not provide realistic insights of all issues and challenges being faced.

Hjern and Hull (1982) classified implementation research as the 'link gone missing' between policy and institutional analysis. This notion becomes a stronger area in need of exploration when placed together with Schofield's (2001) finding, that implementation research restores politics into policy analysis. These two ideas are crucial to this study as it aims to understand the process of how decisions are translated as well as how policies and programs are implemented in an institutional setting, in this case, the Malaysian federalist structure.

The feasibility of policy implementation relies on compatibility of goals and aims between the policymakers and the implementing agents. The risk of policy implementation not being implemented increases when policies assigned are not aligned with implementing agency's goals and beliefs (Spillane, Reiser, & Reimer, 2002). In order for a certain actor to implement a specific policy, it is vital for the implementing actors to understand the goals and objectives of the policy. In determining the CFS policy success or failure, the understanding of implementing actors is key for a policy to be executed successfully.

Many of the contributions to implementation research are by political scientists or public administration scholars who focus on these disciplines in silos and as such, there exists a lack of cross-pollination between the two disciplines (Schofield, 2001). Exworthy and Powell (2004) suggest that policy implementation research must engage with 'today's context' (p. 264). This research aims to fulfil this aspect by bridging the gaps between forest and wildlife conservation and policy implementation. However, I would like to reiterate that although most of the scenarios that are investigated are still the jurisdiction of the public sector, the area of research has varied, comprising of policies in various sectors, such as those related to the following areas: environment, education, health, social and economic.

Implementation research analyses factors that contribute to realizing or not realizing established goals and objectives. Though policies can occur not only due to poor planning and due to weaknesses in the policy itself, this research focuses on the incompetence of actualizing the policy and not the failure of the policy itself (Van Meter & Van Horn, 1975; Pressman & Wildavsky, 1984). The incompetence of implementing the policy can occur due to either institutional structure or behavioural factors or both, such as institutional characteristics, structural components, organisational settings, change-resisting individuals and groups, and poor economic regulations (Pressman & Wildavsky, 1984).

Despite a few decades' worth of implementation research, this research discipline still appears to be vibrant and effervescent as many new sectors have emerged and requires further and real-life understanding (O'Toole, 2004; Saetren, 2014). In line with that, this research intends to explain the success or failure of CFS policy implementation in a federal setting where various stakeholders across several sectors are involved, like most implementation research. Many of the implementation studies aim to either explain the success or failure of policies, predict outcomes, establish policy recommendations, or institute a 'unifying approach' to study 'multi-

actor and inter-organisational activity within politics and administration' (Schofield, 2001, p.247). The CFS policy is a new policy sector for Malaysia as it is the pioneering policy that involves forest and wildlife conservation through landscape management.

Prior to understanding scholarly claims on policy implementation research, it is important to highlight two points made by Schofield (2001). First, the comprehensive literature on policy implementation lacks new paradigms. The latest development in this area of work is that recent scholars have fused or re-examined prior findings, for example, Palumbo and Calista (1990), Buck et al. (1993), Matland (1995), Ryan (1995), Tummers and Bekkers (2014), Grindle (2017). Secondly, most of the existing literature is established upon the findings or based on issues in the United States of America. There is considerable literature that originates from the United Kingdom and Europe such as Barrett and Fudge (1981), Marsh and Rhodes (1992), Younis and Davidson (1990), Knill & Lenschow (1998), Swenden (2006), Osborne (2010), Biesbroek (2010), Torriti (2010), Rodriguez at al. (2014), Koontz and Newig (2014) and Thomann and Sager (2017). However, when compared, these are not as extensive as the contributions by those from the United States.

Combining the two notions above, I argue that much of the work in policy implementation research is either a synthesis or a reassessment of previous ideas due to most findings being contributed by scholars in the United States. Thus, this emphasizes the importance of my research as a contribution to the broader academic discussion of implementation in developing countries and policy implementation processes in Southeast Asia. This study also contributes to federalism literature as it serves as an experiment to draw out theories, observe the structure and understand the institutional setting of Malaysian federalism, which is the only federal state in the Southeast Asian region.

Policy Implementation Success and Failure

In setting context to policy implementation success and failure, I review various scholarly definitions and interpretations of policy implementation success or failure. Success and failure of policy implementation is linked closely to the performance of a government and is usually measured through more than one indicator. Successful implementation depends on four main aspects (Elmore, 1978; Matland, 1995; Sabatier, 2015). First, the aims and duties must be identified clearly and accurately to reflect the objective of the policy. Second, subunits must be provided with a master plan outlining assigned responsibilities and standards. Third, variables

to measure the performance of each unit aligned to the goal of the policy is specified. Fourth, an accountability mechanism ensures subordinates are responsible for their performance. However, these early indicators were centred on policymakers as the starting point to policy implementation while the scholars in the 1990s focused it upon the street-level implementers.

Ingram and Schneider (1990) list another set of four indicators that can be used to measure successful policy implementation, which are agencies' compliance to the enacted policy, accountability of agencies in attaining explicit measures as stated in the policy, accomplishment of policy objectives and goals set for each subunit, or an improvement in political attitude and behaviour. According to Paudel (2009), successful policy implementation can be measured through two broadly analytical factors: motivation and will of implementers. Paudel's (2009) more inclusive framework is particularly useful as it incorporates both Elmore's (1978) and Ingram and Schneider's (1990) findings as evaluation of success or failure should be balanced between both policymakers and policy implementers. This leads to one of the hypotheses for this research: that positive motivation among implementing agencies is important for a successful implementation of the CFS policy.

Nevertheless, determining the success or failure of policy implementation is only more accurate if the indicators to measure are made specific to the policy area. For instance, the success measure of program implementation in Oregon and Colorado conducted by Maynard-Moody et al. (1990) was based on the advancement or declination of facilities or services that represent the primary outputs of the program. In the case of the CFS, I draw the idea of successful implementation from the government's goal stated in the policy document. Successful implementation of the CFS policy is demonstrated by the re-establishment, maintenance and enhancement of links between major remaining forest complexes within the allocated area of Peninsular Malaysia (Department of Town and Country Planning Peninsular Malaysia, 2010).

To re-establish the primary and secondary links, the commitments of both federal and state level governments are required. By connecting the existing forest islands through the restoration of both type of linkages, a backbone to support the Environmentally Sensitive Area (ESA) network will be formed (Kawanishi et al., 2010). This spine will link forests from the state of Johor (in the south of Peninsular Malaysia) to the borders of Thailand, ensuring the conservation of many wildlife species, especially the Malayan tiger (*Panthera tigris jacksoni*), Sumatran rhinoceros (*Dicerorhinus sumatrensis*) and Asian elephants (*Elephas maximus*).

Indirectly, the success of CFS policy implementation will result in viable land use and sustainable development.

The measure of implementation failure has an extremely broad definition. As failure is the opposite of success, failed policy implementation is when the success criteria are not fulfilled when evaluated. Instead, O'Toole (1986) categorises failure into three types. The first is when there is a standstill in policy implementation, in which the policy could be successfully established and enacted but there is no implementation at all. Second is 'paper implementation' in which documented implementation plan seems effective but is vice versa in reality, resulting in many challenges in program execution under the policy. The third type of implementation failure is when conflicts occur during the execution stage, which is usually resolved through transforming or changing the initial plan. The implementation of Malaysia's Central Forest Spine (CFS) policy appears to range between all three forms, hence making it more complex to be understood. In this thesis, I identify the type of policy implementation failure through each state's achievement of CFS goals and objectives until 2015, a time when the fieldwork and data collection for this research was carried out.

An array of policy implementation problems is attributed to the implementing actors (bureaucrats). O'Toole (2000) adds that bureaucrats are still entangled in the challenges of translating a policy into action in the practical world just as how scholars are trying to solve many policy implementation debates such as top-down against bottom-up approach, policy implementation against its design, quantitative against qualitative and many others. As such, it is important to ensure that there is availability and clarity of information on the CFS policy made available to implementing agencies. A transparent process must be present for these implementers to acquire further clarification when the need to obtain additional information arises. Hence, the second hypothesis for this research is the availability and clarity of information is significant to the CFS policy implementation success. Further examination of literature leads to two sub-factors that influence this trait: the behaviour and attitude of implementing agents, and availability of resources.

In the Malaysian federal system, state level implementers translate and adapt policies according to the constitutionally defined and narrowed scope of work in their state, occasionally after being consulted by the federal level-policymakers. Oftentimes, the federal government in exercising its power and motivation acts independently in relation to policymaking and policy

implementation in certain sectors, resulting in failure of implementation. Therefore, to make a connection between this chapter on policy implementation and the next chapter on federalism, it can be concluded that the characteristics of the federal structure are the independent variables in this study while policy implementation is the dependent variable. In line with that, the study will yield to understand how these components of federalism affect policy implementation of the Central Forest Spine (CFS) in Malaysia.

The CFS policy document becomes an important source to draw upon an understanding to successful and failed implementation. Based on Ingram and Schneider's (1990) view to measure success, policy objectives and goals must be achieved. All goals listed in the CFS policy document are aligned to its main objective, which is to re-establish, maintain and enhance the contiguity of forest cover within the Central Forest Spine of Peninsular Malaysia (Department of Town and Country Planning Peninsular Malaysia, 2010). The goals are also guided by four major principles of protection of existing forests and its wildlife: facilitation of wildlife movement; enrichment and monitoring in conservation of forests and wildlife; as well as sustainable and continuous financing to facilitate the Central Forest Spine.

As stated in the CFS policy document, implementation strategies for each state will differ according to the existence of primary and secondary linkages. A primary linkage is more crucial to be preserved or re-create connectivity by establishing linear corridors. Three variables will be used as a measurement to gauge the implementation of CFS in an area where primary linkage exists. First, establishment of the corridor as protected forest by gazetting land under State Land as Permanent Reserve Forest (under Section 10 of the National Forestry Act as Forest Sanctuaries for Wildlife). Second, acquisition of private land by state government and developing it as a reserve in the form of Forest Sanctuaries for Wildlife. Third, integrating roads (and railways) within the corridor by providing the necessary infrastructure to allow wildlife crossings such as viaducts, underpasses, tunnels, et cetera.

For states where a secondary linkage exists, the state is required to implement three actions. First, protect isolated forest islands (State Land Forests) by gazetting them as Permanent Forest Reserve under the National Forestry Act. Second, establish an ecological corridor along a river, which includes gazetting a river reserve under the National Land Code, encouraging a private owner to set aside riparian corridor/habitat after the river reserve through corporate social responsibility. Third, integrating roads (and railways) within the corridor by providing the

necessary infrastructure to allow wildlife crossings such as viaducts, underpasses, tunnels, et cetera. Even though secondary linkages are less crucial or feasible to be preserved or to be used to recreate forest connectivity, it is important for the state governments to ensure that the implementation tasks are undertaken.

When the links between forest islands are not regenerated through reforestation or when the State Forestry Department fails to manage and preserve the current linkages, the wildlife corridor cannot be established. Apart from this, implementing actors or agents are influenced by the availability of resources and expertise. Weaver (2010) emphasizes that limited resources and expertise often consumes time and makes policy implementation challenging. Sabatier and Mazmanian (1980) opine that ‘a threshold level of funding is necessary for there to be any possibility of achieving statutory objectives’ (p. 546). In summary, policy implementation success or failure correlates directly to the success or failure of a policy and literature points out to us that it is influenced by availability of information, capacity or power and motivation of each actor involved.

Policymaking and Policy Implementation in Malaysia

Malaysia draws on a relatively centralised policy style with an attempt to increase performance management tasks and have more close connections with non-state actors. The Malaysian Constitution clearly describes policymaking and policy implementation as prerogatives of the executive arm. However, these components are fairly entwined between its public administration, politics and policy.

A key literature on Malaysia’s policymaking process is the work of Ansori (2013), in which she compared the Australian and Malaysian policymaking activities. In the Malaysian political structure, the executive branch depends very much on the civil service, not only for identification, preliminary research, formulation and recommendation of issues but also mainly for implementation of government plans and programs (Ansori, 2013). The executive branch also plays a vital role in the forming of intergovernmental relationships and the parliamentary system (Johnson & Milner, 2005). The author also finds that the options and decisions made by the Malaysian government are embedded in its ‘values, experiences and orientation’ (p. 211). The policymaking process in Malaysia was found to be very much centralized, emulating its historical feudal structure where the English-educated civil servants of ‘Malay aristocracy’ established by the British officials remain in the highest ranks in the bureaucracy and this

traditional elite-ruling has seeped into Malaysia's current executive branch (Puthuchery, 1978; Moten, 2008). Policymakers also claimed to have 'borrowed, adopted and adapted from the post-war development experiences of Japan, Korea and Taiwan' (Bhaskaran, 1999, p. 32).

The agenda setting process in Malaysia is mainly influenced by interest groups that are closely connected to the ruling government (Ansori, 2013). The policy designing process is influenced directly by the Prime Minister's Department, in which key policies are developed by the federal agencies and handed over to state governments or implementing agencies at lower levels for execution. In addition, the capacity of civil service officers to propose policy issues is found to be low and this aligns with the federal government's control on the agenda setting process. In line with Lipsky's (1980) famous study on street-level bureaucrats, Malaysia's civil service officers are found to be involved in policy formulation as well as policy implementation (Ansori, 2013).

In achieving decisions on policies, once again it is found that the Prime Minister's Department has relatively large influence over policies that are enacted or passed (Ansori, 2013). The policy implementation stage had the most striking finding where there was no apparent execution method or approach found. In realising that, a Performance Management and Delivery Unit (PEMANDU) was set up in 2009 to oversee implementation and progress of government reforms and improve execution of policies (Siddiquee, 2014). Although this portrays the intention of the Malaysian government towards a more efficient and effective policy execution, two-thirds of the civil servants did not view the stakeholder consultation process to be important. Only about 40 per cent of civil servants opined that this process is 'important' or 'very important'. A low percentage of 26 per cent expressed that consultation was 'not at all important' or 'not important'. The considerably less emphasis on consultation of stakeholders is in itself a major challenge for successful policy implementation.

Apart from its internal structure, the resistance to 'international demands' portrayed by the Malaysian government in certain policy areas especially in inequality, human security and ethnicity adds strength to its centralized approach (Brown, Siti Hawa & Wan Manan, 2004). The authors' found that the opportunities for non-exclusive interest groups or lobbyists to frame a policy issue are extremely low in Malaysia (Brown, Siti Hawa & Wan Manan, 2004). In the economic policy sector, Gomez and Jomo (1997) conclude that the relationship between business, administrative and political branches of Malaysia is highly interlaced, and this often

becomes an underlying element for the formulation of economic policies. In line with this, Fraser, Zhang, and Derashid (2006) confirmed that this relationship also exists between the executive body and the corporate firms. This further strengthens Ansori's (2013) finding where close interest groups to the government play an important role in framing an issue.

As economic policies come under the purview of the Economic Planning Unit (EPU) in the Prime Minister's Department, the implementation is through a top-down approach where states are usually compelled/coerced to execute. The top-down implementation focuses on carrying out a policy decision through the means of a court decision, statute, law, or executive order, though the decisions are localised by actors who aim to execute and achieve anticipated outcomes (Matland, 1995). The risk facing the top-down approach is that implementers may not understand the policy requirements and its implementation may be inefficient and lacking strategy (DeLeon & DeLeon, 2002, p. 484). On the other hand, target groups and implementers initiate policies as they are the actual implementers of a policy.

Malaysia's Environmental Policy Making and Policy Implementation

Environmental policymaking and implementation in federalisms remain a challenge (Greenstone & Hanna, 2014). The implementation conundrum faced by federations impact the efficiency and effectiveness of environment protection policies (Reich & Bowonder, 1992; De Oliveira, 2002; Oates & Portney, 2003; Wälti, 2004; Watts, 2011; Jörgensen et al., 2015). This political failure could be explained through various aspects. One facet is the institutional approach, in which the institutional setting and political structure are found to be influencing the challenges faced with environmental policy making and policy implementation activities. For example, Malaysia faces the risk of biodiversity loss and wildlife extinction and has increased its efforts of forming forest corridors. However, it is a challenge to coordinate all federal and state agencies to implement the Central Forest Spine policy.

In Malaysia's federal setting, legislative rights over environmental resources, goods and services are divided between the federal and state governments, and the next chapter will elaborate further how this division is applied in the Malaysian setting. However, this section expands the idea of how the federal structure influences Malaysia's environmental policy implementation. Like most other federal states, Malaysia faces a set of problems that are linked closely to the allocation of authority to administer environmental policies across different levels

of government units (Percival, 1995; Oates, 1997; Engel, 2006; Glicksman, 2006; Sovacool, 2008).

Malaysia applies restricted fiscal federalism where the income channels for state governments are limited. Federal governments, as a check and balance to state's activities, control state actions to reduce over-exploitation of natural resources and environment; preserve land, and conserve an area; or in some cases, reap the profit of certain activities for itself. In such cases, the constitutional division of powers, the role of courts, intergovernmental relations, and environmental protection are most vital to environmental governance in a federal state (Memon, 2000; Hueglin and Fenna, 2015). In adopting and implementing environmental policies, state governments are not only influenced by the severity of the problem or the opportunity to increase revenue, but also by increased pressure from environmentalists and other interest groups. Further influences include pressure exerted by the federal government through grants and legislation; the preferences of policymakers regarding environmental policies; and professional standards of government (Konisky & Woods, 1996). Hence, states governments attempt to generate income or revenue through environmental taxes, licensing, timber concessions and the sale or lease of lands.

Frank, Longhofer & Schofer (2007) believe that the policies mapped in the environmental sector conform to a top-down approach where fundamental aims and objectives for policies are established due to pressure by global institutions and treaties (especially by the United Nations). The direction established globally is then adapted into national policies and transferred down to smaller units of the governmental system. However, this research explores if a top-down approach itself is adequate to ensure a policy is implemented.

Apart from the complexity of managing environmental problems in federations, which are usually transboundary, Malaysia's environmental policymaking and implementation processes adds to its labyrinth. The complexity to implement environmental protection policies increased when it is not explicitly listed in the Federal, State and Concurrent Lists (Saleem, 2005). Each list contains distinct sectors of the environment, but none includes a mandate for environmental protection, as this is a comparatively new branch in environmental governance (Saleem, 2005).

Hollander (2009) find overlaps in environmental policymaking to be a useful element even though overlaps and redundancies are viewed as a negative component in federalism. This can

allow federal agencies to establish platforms for deliberation between various government units across government levels, in order to seek cheaper and more effective solutions to environmental problems and further enhance policy implementation. In line with this, Newig and Fritsch (2009) argue that having few decision centres that are mostly independent permits higher adaptability of an environmental policy. As such, it is extremely important to establish a strong partnership between the federal and state government in order to facilitate the resolution of issues (McDowell, 2003). The thin line between highly coordinated government units and overlapping functions of various government units has led to many governments taking advantage of overlaps in the federal system to establish a cooperative intergovernmental relationship before implementing various environmental policies (Dredge & Jenkins, 2003; Bakvis & Brown, 2010; Abrams et al., 2018).

The challenges around the CFS policy implementation for Malaysia is no different than what has been anticipated in other federal states. However, this research aims to identify and understand the elements of what particularly influences the implementation of the CFS policy, which could contribute to larger studies on environmental policy implementation patterns in Malaysia and other similar federal countries. In a study on the implementation of biodiversity policies and its policy convergence by Ismail (2012), it was concluded that the Malaysian government is moving towards better implementation of its policies. However, the author observed laws and policies that were established by the federal government with a concluding notion that the state governments should 'be more proactive in internalizing the international environmental norms into its development plans and agenda' (p. 314). This demonstrates that the laws and programs established using the top-down approach usually faces problems during the internalization and implementation phase. Even though Ismail (2012) finds the execution of the policy can be enhanced with a more cooperative relationship between the state and federal government, the question remains as to which key actors who could contribute to this collaborative relationship.

Policy Implementation Analytical Models

In examining an implementation conundrum, it is important to determine the appropriate model. In determining a model, two elements come into play: generation of implementation research, and the nature of how the policy is established – whether top-down, bottom-up or a synthesized approach. Schofield (2001) argues that the scholarly findings in implementation research can be classified into three broad analytical models. First are the models used to examine various

implementation issues and problems, usually known as first, second and third-generation implementation studies. These terms and classifications were introduced by Goggin et al. (1990) in attempt of identifying third-generation models. The difference between these generational models are the scope and depth of the research conducted. Of all three models, the third-generation models set a standard for policy implementation studies with their meticulous research design (Goggin et al., 1990). This research utilises the third-generation model due the nature of this research which tests the relationships between two large concepts and is highly complex. Third-generation studies present a unified model to analyse policy implementation, filling the gaps in first- and second-generation studies of policy implementation (Matland, 1995; Ryan, 1995).

First-generation implementation studies were mainly based on single case studies (Pressman & Wildavsky, 1984; May, 2015). Though the models that were contributed in this phase could be deemed as the initiator to existing models, none of them were as comprehensive as the models available at present. O'Toole (1986), Lester et al. (1987), Goggin et al. (1990) criticised the first-generation studies for being too negative due to a constricted focus on policy failures. The first-generation studies aimed to discover factors that affected implementation process (Paudel, 2009; Sabatier & Mazmanian, 1981), in which policy implementation was presumed as a rational and straightforward process. According to Barrett (2004), the quasi-models established in this phase did not possess the capability to predict policy outcomes.

First-generation models commonly focused on actions in which governments put policy decision into action at one or multiple locations, as well as 'quasi-scientific' analysis of implementation (Goggin et al., 1990; Paudel, 2009). Schofield (2001) found these studies engaged the positivist approach, proposing an ideal solution. Schofield and Sausman (2004) add that most scholars in this generation pointed out that success or failure of policies were due to the bureaucrats' failure to comply and weak legislation. Some of the factors identified for policy implementation analysis in the first-generation studies are size, intra-organisational relationships, commitment, capacity and institutional complexities (Natesan & Marathe, 2015). Causal relationships between policy and its outcome of the policy also contributed to most of its analyses. First-generation implementation studies also contributed to the understanding of political behaviour as well as the complexity between policy and public administration.

Second-generation implementation studies developed to be more structural, largely focused on identifying variables, which influenced implementation (Ackermann & Steinmann, 1982; Barrett & Fugde, 1981; Browne & Wildavsky, 1984; Goggin et al., 1990; Majone & Wildavsky, 1978; Mazmanian & Sabatier, 1983; Montjoy & O'Toole, 1979; Nakamura & Smallwood, 1980; Lipsky, 1980; Hjern & Hull, 1982; O'Toole & Montjoy, 1984; Pressman & Wildavsky, 1984; Eliadis et al., 2004; Howlett, 2004; Hill & Hupe, 2014). The developments in organisational theory have been a feeder to second-generation implementation studies. Extensive analysis and findings of organisational theory research have led to the classification of positive and negative variables. Key contributions in the second-generation implementation studies were by Goggin et al. (1990), O'Toole (1986), Mazmanian and Sabatier (1983) and Barrett and Fudge (1981). Scholars like Goggin et al. (1990) aimed to classify these variables into broad divisions such as policy, institutions and human behaviour. Mazmanian and Sabatier (1983) listed sixteen variables, which if they were identified carefully and skilfully orchestrated, could result in successful policy implementation. Nevertheless, the second-generation of implementation studies were criticized for including a large number of case studies, for its failure to establish models that could it be replicated, and the failure to develop descriptive and verifiable theory (Goggin et al., 1990; Schofield, 2001).

Many third-generation studies focus on the dynamics of the implementation process itself by utilizing multiple observations, taking into account of numerous locations, using more than one case study, paying attention to research methods and carrying out the research over an extended period of time. The methods engaged in the third-generation studies vary widely, some of which are content analysis, network analysis, social experiments coupled with qualitative regression techniques, elite interviews as well as questionnaires (Goggin et al., 1990). Like the second-generation implementation research, the third-generation studies from progress in other areas of research, such as institutional theory (Bressers et al., 2011; Saetren, 2014). Although the relationship between agencies was a key component in many second-generation studies, it was only in the third-generation studies that this aspect was further explored, especially sub-components such as co-ordination and co-operation.

Saetren (2014) lists the characteristics of a third-generation research approach, compiling the works of Goggin (1986), Lester et al. (1987) and Goggin et al. (1990). These features may not exist in all third-generation research but have been found to be the underlying reason to its enhanced structure. Third-generation implementation research must evidently define the key

variables and ensure that its empirical analysis is based on hypotheses derived from theoretical constructs. Simply, this research approach allows for a theory to be put to test in different scenarios in a more systematic manner. However, this research paradigm may generally be over ambitious and demanding (Saetren, 2014).

The second element of implementation research is the nature of policy implementation: top-down, bottom-up or a synthesis (a combination of top-down and bottom-up) (O'Toole, 1986; Paudel, 2009; Schofield, 2001). Sabatier (1986) highlights that both the top-down and bottom-up models did not acknowledge issues involving practicalities and access to laymen's views by elected officials. The key assumption in the top-down approach is that implementation commences when a policy or legislation is established, and implementation tasks will flow downwards in a linear fashion. There were two underlying views to this presumption. The first is alike to the assumptions made in first-generation studies of policy implementation: that it is a rational and linear process. Policies are deemed to be translated as the specifications indicate and implemented as expected, with no loss of translation in between. However, there is a loop between policy formulation and policy implementation processes, during which policies are amended and improved to result in a more implementable version. The second is based on the public administration model, which considers the policymaking process and policy implementation as two distinct processes.

Top-down models were also criticised for their focus on the role played by the central government and laws established as representation of policy aims, as this fails to acknowledge political rhetoric used in the agenda-setting and formulation phases of the policy (Schofield, 2001). This approach assumes that successful policy implementation can be achieved with appropriate administrative structures and application of right procedures, while the absence of these elements is the underlying cause of implementation failure. As a rational approach, top-down models were also criticised for lacking the ability to consider the political realities such as inter- and intra-party politics and the disregard of the influence of street level bureaucrats (Lipsky, 1980).

In contrast, the bottom-up approach, introduced by Lipsky (1980), emphasizes the importance of front-line bureaucrats. Some other noteworthy scholars who have contributed to this approach are Elmore, Matland, Sabatier and DeLeon and DeLeon all of whom who expanded their ideas between the 1970s and 1980s. Generally, a bottom-up approach is concerned with

the intentions and actions of actors. In line with the findings of Wang (2010), Rice (2013) and Dimitrakopoulos (2018), policy implementation is seen as an interaction between the policy (macro) and micro components such as institutions, society and issues. The bottom-up approach finds implementation to be one that is dependent on skills and attitude of front-line implementers, especially to interpret and reinvent the policy when there is a need (Tummers & Bekkers, 2014). It focuses on local implementing actors and the nature of issues that the policies address and it also describes networks of implementation. The bottom-up approach aims to understand policy implementation through a reverse method by analysing factors that affects results and outcomes of the policy, opposite to the idea of focusing on its original goals. This is demonstrated by Elmore's (1979) backward-mapping technique.

The bottom-up models were criticised for two main reasons. Firstly, the explanations provided are very much based on a researcher's capacity and limitations as well as the norms that are being adhered to. Basically, it means descriptions provided in the research could lean towards a particular perspective or appear biased. As issues faced are often far more complex and confusing, it is tough for bottom-up researchers to report these events through a modest analysis. The second criticism stems from the failure to recognise contingencies, especially in the involvement of implementing actors and the content of the policy. Overall, it can be concluded that the bottom-up model functions based on the reverse logic of the top-down model. However, this model has also been found to be useful for state governments when funding for a policy is low or when the state is governed by an opposition political party. In the United States, the bottom-up model has enabled state governments 'to challenge federal policies in education, health care, environment, energy, immigration, and others by refusing federal grants, filing lawsuits and enacting and implementing policy at the state level to supplant federal policy' (Gamkhar & Pickerill, 2012, p 379).

In practice, it is difficult to distinguish the authority between an elected official and a senior civil servant. As such, implementation research scholars unified both approaches to close the gaps that were present in the top-down and bottom-up models. In its attempt, it took the efforts of many scholars who tried to marry both approaches (for example, see Mazmanian & Sabatier, 1983; Wittrock, 1985; Lester et al., 1987; Linder & Peters, 1987, Sabatier & Pelkey, 1987; Goggin et al., 1990; Linder & Peters, 1990; Stoker, 1991; Sabatier, 1991, 1993; Ostrom et al., 1994; Matland, 1995; Bressers & Ringeling, 1996; Ryan, 1996; Ostrom, 1999; Bressers and Dinica, 2003; O'Toole, 2004; Bressers, 2004; Paudel, 2009; Owens and Bressers, 2013;

Saetren, 2014). This approach is in line with Tummers & Bekkers' (2014) suggestion that policy implementation is a process of negotiation and interaction between policymakers who design policies and front-line civil servants who execute them. To unpack the CFS problem, this research aims to explore and understand the policy implementation of the CFS through a synthesised approach taking into account of the benefits.

Scholars like Matland (1995) and Paudel (2009) considered Elmore's (1979) work as the first attempt to synthesize both top-down and bottom-up models. In his work, Elmore suggested that the choosing of policy instruments should be based on motivation factors of target group. If the motivation of an actor is to meet policy objectives, provided that the objectives are clear, precise and detailed, the forward mapping mechanism should be used. In the case that there is a clear behavioural issue or a problem with an act during the implementation process, the backward-mapping tool can be used to prescribe a solution. However, Elmore's recommendation does not possess the ability to explain the forward and backwards mapping tools in greater depth. Hence, the CIT which is a rounded model is opted for the analysis of this research.

Other popular scholars who contributed to the synthesis of top-down and bottom-up approaches are Goggin et al. (1990), Matland (1995) and O'Toole (2004). Goggin et al. (1990) established the communications model by incorporating many variables from the top-down and bottom-up approaches. Hill and Hupe (2014) classified the work of Goggin and his colleagues as more sophisticated as they attempted to model the implementation process based on communication between government units or intergovernmental relationship. This model carries a more scientific approach to the study of policy implementation. Goggin et al.'s (1990) model stipulates policy implementation to be a combination of incentives and limitations faced by governments of various levels: federal, state, local. Though to this point, Goggin et al. (1990) may seem to present the best model to understand the issue of CFS policy implementation in Malaysian federalism.

The third analytical model focuses on key variables that have been found to affect policy implementation. Many scholars of implementation studies investigated various implementation scenarios and problems to identify the variables that were critical to successful policy implementation. This led to the findings of many variables that were claimed to be crucial to successful policy implementation. On the other hand, policy implementation failure is perceived to be influenced by the variables opposite to the ones that lead to its success. The

earlier studies were pessimistic in which causal factors to the failure of policy implementation were barely evaluated. As explained in the conceptualisation and operationalisation section, O'Toole (1986) grouped variables concluded in the work of other implementation scholars into three general themes. His work is one of the most valuable finds in the implementation research arena, as it provides a comprehensive list of discoveries and work undertaken by many previous scholars. O'Toole's list contains more than a hundred variables that influence policy implementation, however, it was extremely broad and repetitive.

Goggin (1986), in the same year, grouped variables into two broad categories: independent and dependent. The independent category had a further divide of two critical variables: the context and content of the policy itself and policy setting. Time and policy transformation were classified as dependent variables, which influence the style of implementation. Almost two decades later, Schofield's (2001) analysis reiterated the importance of these variables, arranging them into three wider perspectives of nature of policy, type of policy, and organisational structure. This is due to the interchangeable role of the variables – that it can be either independent or dependent. However, most scholars of third-generation research argue that these variables should be considered more seriously, and implementation research should be pursued in a more scientific manner (for example, see Goggin et al., 1990; O'Toole, 2000).

Combining the three analytical models of policy implementation, many past scholars established theories. Hence, policy implementation can be categorised into five main analytical theories: (a) institutional analysis, (b) governance, (c) network and network management, (d) formal and deductive approaches, and (e) policy design and instrument (Saetren, 2014). This research, however, focuses only on institutional analysis and governance. Much of Saetren's (2014) work was based on O'Toole's (2000) findings, however with some improvisations. Among the enhancements is the incorporation of 'political and policy regime theory' by Stoker (1989) into institutional analysis due to similar reference by both approaches to macro characteristics of subunits of the political and administrative structure.

Though some past models were not comprehensive enough to explain policy implementation, they were useful in understanding the different ways to tackle policy implementation issues. These are Etzioni's (1961) goal model versus systems approach model, Allison's (1971) rational-actor model, Majone and Wildavsky's (1978) planning-control model, organisation process model and governmental politics model, Sabatier and Jenkins-Smith (1999) advocacy

coalition framework, Lipsky's (1980) street-level bureaucrats and Ostrom's (1985) institutional analysis and development. This research did not use any of those models as the nature of the CFS policy case is complex.

In operationalizing the concept of policy implementation, this study uses the contextual interaction theory (CIT) to understand the outcome of policy implementation in a federal system. The CIT is a synthesized approach, which bridges the divide between both top-down and bottom-up models (like the studies undertaken by Ostrom et al. (1994) and Sabatier (1993)). The top-down models view implementation as a process that begins with policymakers while the bottom-up approach finds it to be initiated by bureaucrats or agencies at the end of the structure. As CFS is a comprehensive policy that requires the commitment of all agencies involved despite its existence in the federal or state levels, it is important to use a synthesized approach to observe its implementation. By using a synthesized model, I will be able to identify the gaps that exist which have led to some states successfully implementing the CFS policy and some otherwise.

Contextual Interaction Theory

Contextual interaction theory (CIT), as developed by Bressers and Dinica (2003) links the top-down and bottom-up approaches by linking the long list of variables suggested by O'Toole (1986) into a more realistic policy implementation model. CIT is used to understand how the characteristics of federalism (division of powers, distribution of finances, intergovernmental relations) influence policy implementation. Owens and Bressers (2013) find this theory to be 'a deductive and realistic approach that allows implementation to be effectively analyzed' (p. 206). The CIT investigates three variables that are central to the success or failure of policy implementation – motivation, information and capacity or power. These variables were selected due to their high analytical influence and existence at the centre of interaction process (Bressers, 2004). This theory enables the interaction processes among implementing actors to be analysed, whether a federal agency or a state bureaucrat.

The CIT is also opted for this research due to its synthesized approach, which is more applicable to a centralised federalist country like Malaysia. As this is a pioneer study on the policy implementation of the CFS, it is important to ensure that the theory applied to evaluate policy implementation is more inclusive of variables that influence implementing bodies at any level and for this case, both federal and state levels. Moreover, the aptness of the CIT in

environmental policy implementation studies is proven through a number of other scholarly works (see Bressers and Dinica, 2003; Bressers, 2004; Bressers & De Bruijn, 2005; Minang et al., 2007; Owens, 2008; Bressers, 2009; Kotzebue et al., 2010; De Boer, 2012; Hophmayer-Tokich, 2012; De Boer & Bressers, 2013; Owens & Bressers, 2013; Özerol, 2013).

To further understand how the CIT variables influence the CFS policy implementation in Malaysia's federalism structure, I map each variable to the characteristics of federalism. The first variable, power, can be linked to formal and informal powers in the federation. The formal power division guided by the constitution complements or is complemented by informal powers like specialized roles, expertise and alliances or strong media support. These formal and informal powers serve as external motivation. The intergovernmental relationships include both horizontal (federal-state) and vertical (state-state) interactions. Intergovernmental relationships influence governments of different levels in how they operate and draw their scope apart from the delineation of powers mapped by the Constitution. The nature of a federal-state relationship could be competitive or collaborative, in which both type of interactions could yield two possible consequences: negative (destructive) or positive (constructive). This directly relates to the informal powers described earlier.

The distribution of finances is a characteristic which directly influences the power balance and intergovernmental relationship between the central government and its subunits. In the Malaysian federalism, the states retain autonomous powers geographically but do not hold the right to increase taxes or seek external funding on their own (Vejai, 2006). The federal government has authority over income and trade taxes while the states depend on the revenue of their respective natural resources, which causes an imbalance among states (Anuar, 2000). As such, most states rely on the federal government for finance allocations (Omar, 2012). Federal funds are usually used as bait for states to adhere to federal government's directions (Omar, 2012).

Adequate financing is an important resource required to implement a new policy. Without appropriate and sufficient funding, it is highly likely a policy is set to fail. Implementing actors or agents are influenced by the availability of resources and expertise. Apart from that, in states that are ruled by the opposition political party, the informal power relations (intergovernmental relations) also poor federal-state relations subsequently led to a financial bias. As availability

and provision of funds is a positive motivation to the implementers, lack of sufficient funds reduces their motivation to implement the policy.

Motivation can be hypothesized as internal and external sources, which include agencies' motivation as well as exterior momentum, which includes adaptability to implementation goals, work-based inspiration, agency's character towards implementation objectives, attitude towards other implementers, and performance (Levin & Cross, 2004; Nakamura & Smallwood, 1980; Spillane, Reiser, & Reimer, 2002). Information includes clarity of basic outlines of the policy and its compliance, availability of further information, and existence of transparent processes (Schofield, 2001). The general outlines should include the specific roles of different agencies, an explanation of policy requirements and benefits, as well as information about other actors involved in policy implementation and their roles.

Transparent processes should offer actors involved and other interested stakeholders' access to the policy process and documentation and should ensure clarity and expediency of the knowledge provided. The third component, power, signifies capacity and control, especially with regard to resources such as finances, workforce and time (Ackermann & Steinmann, 1982; Browne & Wildavsky, 1984; Halkier, 2000; Hassenfeld & Brock, 1991; Levin & Cross, 2004). Formal powers can be assigned to agencies through laws or areas of responsibility, while specialized roles, expertise and alliances or strong media support could provide informal powers. It is important to note that the power of an actor increases proportionately with availability of resources.

To reiterate the concept, it is comprised of support among implementers (Murphy, 1976); perceived costs and benefits for implementers (Brodkin, 2011); agency goals (Smith & Mogro-Wilson, 2008) as well as interest group participation (McLanahan, 1980). Research undertaken in recent years by scholars such as Spillane, Reiser and Reimer (2002) as well as Levin and Cross (2004) also quoted similar interpretations to motivation. In discussing motivation further, Spillane, Reiser and Reimer (2002) recommend it be analysed at three levels – policy sector, organisation and individual.

Conclusion

In summary, environmental policymaking and implementation in federalisms remain a challenge. In Malaysia, the same issues have been identified with the CFS policy

implementation. In identifying the right analytical model or approach, it was found that a third-generation study using a combination of the top-down and bottom-up approach is the most appropriate as it systematically puts a theory to test in different scenarios. The following Chapter 3 (Framing Federalism) elaborates further on the Malaysian federal system and the actors involved in the CFS policy implementation.

In finding a theory that is most appropriate, the CIT has been identified as an analytical model that would gather rich and insightful data on the success and failure of the CFS policy implementation. The literature review has identified three main elements or variables that are significant to the success and failure of policy implementation from the combination of a top-down and bottom-up approach. The synthesized approach observes how the top-down structural components such as power division, distribution of finances and intergovernmental relationships as well as bottom-up components such as motivation, availability of information and knowledge influence policy implementation. The evaluation factors under the CIT are power, information and motivation. The selection of these variables is based on their high analytical influence and existence at the centre of the interaction process between implementing actors, whether a federal agency or a state bureaucrat.

CHAPTER 3: FRAMING FEDERALISM

“... fundamental argument for federalism ... [was] that a division of power between nations and states was desirable per se as a protection for the people.”

(Martha Derthick, 2001)

It is likely, given our understanding of the importance of institutions on policy implementation, that federalism will affect the likelihood of success or failure of the Central Forest Spine (CFS) policy implementation. However, there are still a number of unanswered questions, such as in what manner does Malaysia’s federal structure alter the implementation outcome and who are the key actors involved. By answering these questions, it will enable scholars to further understand and position Malaysia’s federal structure on the spectrum of arrangements that may exist. This chapter focuses on ‘breaking down’ the concept of federalism and outlining the characteristics or components that come into play in leading to successful or failed policy implementation.

The absence of a standard model of federalism disqualifies the ability to draw general conclusions to the influence of the structure on policy implementation outcomes or its variations. Federations appear in a wide range of forms, varying from fully federal to highly decentralized arrangements; resulting in broad challenges and opportunities, especially in complex collaborative systems that are transboundary, such as the environment. As such, policy implementation issues, problems and challenges that exist in a federal setting are of a wide range and solutions cannot be generalised.

Institutional mechanisms and structures influence the implementation of a policy – a stage in which decisions are translated into operations (Knoepfel et al., 2007). In managing an environmentally integrated policy such as the Central Forest Spine (CFS), the presence of accountable institutions with authority is crucial to a positive policy implementation outcome (Lafferty & Hovden, 2003). In the domain of public administration and governance, studying institutions enables us to understand how and why a government arm or unit performs in a particular manner. Institutions matter because ‘they influence norms, beliefs, and actions; therefore, they shape outcomes’, and ‘their form and their functioning depend on the conditions under which they emerge and endure (they are endogenous)’ (Przeworski, 2004, p. 527).

Though institutions shape power relations and influence actors' engagement in policy cycle and political system, there is a co-constitutive relationship between power and actor in which actors and institutions may alter each other's roles. Simply, it means that the creation of agencies (actors) may enable structure (institutions) simultaneously as structure constrains and empowers agencies. This feature, however, is highly dependent on varying degrees of formal and informal powers assigned to actors as they play significant roles in shaping policy outcomes (Hall & Taylor, 1996). Formal organisations and institutions are central to policy implementation success, especially when the nature of institutions has expanded to become more complex and resourceful (March et al., 1983; North, 1990; Lowndes, 2010). These institutions remain as platforms for informal rules and social behaviours.

In an article by Maidin (2005) written for the Malaysian Bar Council, the author explained that Malaysia's implementation of environmental protection measures, like many other countries, is highly politicised. The implementation of relevant policies has always been in fraught with other sensitive political issues at both the federal and state levels. The complexity of policy formulation and implementation is often linked to the conflicts between various actors and stakeholders interested in a major environmental policy decision, as most environmental related issues encompass multiple parties.

Prior to discussing relevant actors and stakeholders involved in the CFS policy implementation, this chapter provides an overarching understanding of Malaysia's political structure, by discussing federalism based on works of prominent scholars such as William Riker, Daniel Elazar and Ron Watts. The discussion on Malaysia's federal structure is weaved through the elaboration on three key characteristics of federalism: the division of powers, fiscal federalism and intergovernmental relationships. By exploring past and present literature on federalism, I aim to provide a conception of Malaysian federalism and its attributes.

This chapter ends with a discussion on institutions rooted in Malaysia's political structure and environmental governance, how and why they were formed, as well as how their roles and functions have evolved over time. Through this narrative, I aspire to narrow down themes relating to characteristics of federalism that appear to be significant to Malaysia's CFS policy implementation dilemma as well as two out of the four research hypotheses outlined in Chapter 1: (a) that the formal powers with a clear scope and authority to implement the CFS policy will

result in successful policy implementation, and (b) informal powers must balance the formal powers for the CFS policy to be successfully implemented.

Division of Powers

The institutional construct of federalism is defined as a political organisation that applies division of power between at least two tiers of governments, for which each government unit is assigned prerogatives or decision-making scope (Riker, 1964; Ostrom, 1985; Elazar, 1987; Cairns, 1992; Cameron & Falleti, 2005; Watts, 2008; Kincaid, 2011). The constitution is supreme to a federation and by far the most important tool used to regulate order (Tanchev, 1998; Cameron & Falleti, 2005; Watts, 2008). The formal power division guided by the constitution often complements the informal powers vested within the various entities in the system.

In serving its purpose, the constitution describes the power division between three main political branches of administrative, judicial and executive arms, as well as power allocation between the state and federal governments (Ostrom, 1985; Cameron & Falleti, 2005; Feeley & Rubin, 2009; Rector, 2009). It also outlines other aspects in the political structure such as distribution of finances, intergovernmental relations, symmetry and asymmetry in federations, and representative federal institutions (Watts, 2008). However, the settings in which powers are assigned exist in a broad spectrum between centralised and decentralised arrangements (Elazar, 1962; LeRoy & Saunders, 2006). These arrangements may also apply power-separation (self-rule) or power-sharing models (shared-rule).

Power separation in federal arrangements establishes a higher degree of institutional constraint for policymaking and is a barricade to autocracy (Schmidt, 1996; Feeley & Rubin, 2009; Birkland, 2015). In a federal setting, power is mainly divided across the three main branches – administrative, judicial and executive arms – as well as being based on geographical boundaries (Vejai, 2006; Birkland, 2015). However, the power separation model may impose a disadvantage to environmental protection due to mishandling or poor governance by a particular government unit.

A more common approach of the power-separation model constitutionally assigns power to different tiers of government. In this arrangement, power is distributed between the federal and constituent governments as well as its legislative, executive and judicial bodies. This is different

from the power-sharing model which assigns exclusive power over certain subject matter to one level of government and governs most other matters in a joint manner. Relating to this, Cameron and Faletti (2005) conclude that federations that apply power-separation usually are highly centralised and federal governments typically would hold the authority to regulate spending and collect revenue. Each government unit then delivers its services and programs based on its responsibility and jurisdiction stated in the constitution. In administering concurrent matters, the federal government will usually establish a framework for constituents to comply, subsequently leaving constituents with no room for non-compliance.

Most constituent governments are then assigned to implement policies established at the federal level, with or without the states' input. This arrangement may enhance efficiency, execution and reliability as well as provide a stable structure on who and how policymaking will be steered (Cameron & Faletti, 2005). In line with this, the power-sharing model requires a greater extent of inter-governmental relationships to coordinate between multiple decision-making points that exist within the structure. Effective coordination amongst government units to facilitate discussions and negotiations in policymaking would result in achieving national goals.

The existence of multiple decision-making points in the power-sharing model allows for more than one deliberation platform (Hollander, 2009). Interest groups, lobbyists and political parties utilise these venues to exert their beliefs and influences, making these multiple decision-making platforms an attractive feature for lobbying or rent-seeking activities (Olson, 1982; Braun, 2000). Positively, these actors are also able to approach an alternative venue when one seems hostile. Blich (2008) regards multiple decision-making points as an overlap that signals a pressured system that requires additional cost and time to achieve a decision. However, there are areas that may benefit from this overlap. For example, the finance sector may eliminate allocation of funds for the same cause at various levels – ensuring and improving fiscal health as well as enabling sustainable federal and state budgets (Rivlin, 2012). A general pattern of power distribution or separation among federal and constituent governments exists as per Table 1 (Anderson, 2008)¹¹.

¹¹ These countries were observed to draw a general pattern of power distribution or separation: Argentina, Austria, Australia, Belau, Belgium, Bosnia-Herzegovina, Brazil, Canada, Comoros, Democratic Republic of Congo, Ethiopia, Germany, India, Iraq, Malaysia, Mexico, Micronesia, Nigeria, Pakistan, Russia, St Kitts and Nevis, South Africa, Spain, Sudan, Switzerland, United Arab Emirates, the United States of America and Venezuela.

Table 2: Pattern of Power Distribution/Separation Between Federal and Constituent Governments

Subject matter	Power distribution
Finance	Always federal
Treaty ratification	Almost always federal, sometimes constituents
Major physical infrastructure	Usually federal, sometimes concurrent/joint/shared
Mineral resources	No clear pattern
Agriculture	No clear pattern
Environment	Usually concurrent or joint, rarely constituent
Court system*	Usually joint or concurrent, occasionally federal, rarely constituent
Customs/exercise tax	Almost always federal, sometimes concurrent
Corporate and personal taxes	Usually joint/shared/concurrent, sometimes federal
<p><i>*Supreme and constitutional courts are almost always established in the constitution and are thus not a head of power. In some federations, municipal or local government are also constitutionally established, though the federal or constituent governments may have some powers over them.</i></p>	

Source: Anderson (2008).

To date, the Federation of Malaysia has 13 states and 3 federal territories with a population reaching 32 million since its establishment in 1963. Malaysia applies principles of federalism and parliamentary democracy with constitutional monarchy. As Malaysia replicates the Westminster parliamentary system based on its colonial history, only a partial separation of power exists between executive, legislative and judiciary branches (Johnson & Milner, 2005; Rhodes & Weller, 2005). The Constitution describes division of powers between the three arms as well as provisions for the monarchs and federal and state governments through three important lists (Table 2) (Anuar, 2000). These lists are not vastly different from lists that exists in other federal states.

Malaysia's structure applies dual federalism. The House of Representatives, consisting of Ministers from the executive arm, is the main legislative body in Parliament. When breach of parliamentary privileges or contempt of parliament occurs, the legislative body is able to regulate its own arrangement and processes. This phenomenon leads to redundancy or overlapping known as the 'marble cake' structure where there is more than one venue for deliberation (Hollander, 2009). Overlaps and redundancies are taken advantage of by interest groups and lobbyists to exert their beliefs and influences (Braun, 2000). This is an attractive feature for lobbying or rent-seeking activities by interest groups and parties (Olson, 1982;

Braun, 2000). However, these actors may not always be at the advantageous end as they have to compete to influence an agenda setting process, which serves as a platform to shortlist issues or problems that the government would like to achieve a decision on. Even though overlaps, duplications and redundancies of powers are common instruments to retain elasticity and increase reliability in a multi-government structure, these elements may be symptoms of a pressured system where overlaps occupy more cost and time in decision-making processes (Bligh, 2008).

The Malaysian Constitution assigns power over finance and wildlife to the federal government, while the state governments are responsible for land, forestry and agriculture (Woon & Norini, 2002). The area of jurisdiction is made clear for both federal and states governments through Article 74 and the Ninth Schedule of the Constitution.¹² Although the dynamics of this power division may have been significantly altered over time, some of the core institutional principles and practices applied by the state governments and agencies are still based on systems developed during the colonial period. State governments still rely highly on extraction of natural resources (for example, timber and tin) and lease of land to increase state funding resources; this demonstrates a path dependence on forest and wildlife policies and practices introduced by Malaysia's colonial masters (mainly the British and Japanese). The introduction of the CFS policy is seen as exerting control or influence over states' decision on land use change, especially forested areas.

The federal government, however, has authority through Article 76 to legislate laws with the aim 'of ensuring uniformity of law and policy' among the states and this provision was used to introduce the National Land Code 1965 (Aiken & Leigh, 1986). The broader aim or function of the code strengthens the state's position by granting the rights to reserve or dispose all unowned land to the state government. The federal government is to apply to the state government if it desires to obtain a piece of land for federal use at any point in time. If the federal government intends to obtain land that is owned privately, it has to purchase it. In the case where the land is of some importance to the nation, the federal government could request the state purchase it. Therefore, most forested or protected land belongs to the state (Hezri & Hasan, 2006).

¹² Article 74 and the Ninth Schedule of the Constitution mentions distribution of legislative authority between federal government and its constituents, and provides for federal, states and concurrent Lists (Constitution of Malaysia, 1998). According to these lists, land, agriculture and forestry belong as a state matter where federal government cannot enact laws over them.

Table 3: The Federal List, State List and Shared List

Federal List	State List	Concurrent List
1. External affairs	1. Islamic customs and law	1. Social welfare
2. Defence	2. Land	2. Scholarships
3. Internal security	3. Agriculture and forestry	3. Protection of birds and wild animals
4. Civil and criminal law and administration of justice	4. Local government	4. Animal husbandry
5. Federal citizenship and naturalisation, liens	5. Local public services – boarding houses, burial grounds, pounds and cattle trespass, markets and fairs and licensing of theatres and cinemas	5. Town and country planning
6. Federal government machinery	6. State government machinery	6. Vagrancy and itinerant hawkers
7. Finance	7. State works and water	7. Public health
8. Trade, commerce and industry	8. State holidays	8. Drainage and irrigation
9. Shipping, navigation and fisheries	9. Inquiries for State purposes	9. Rehabilitation of mining lands and land, which have suffered soil erosion
10. Communication and transport	10. Creation of offences and indemnities related to State matters	10. Fire safety measures
11. Federal works and power	11. Turtles and riverine fishing	11. Culture and sports
12. Surveys, inquiries and research		12. Housing and provisions for housing accommodation
13. Education		
14. Medicine and health		
15. Labour and social security		
16. Welfare of the aborigines		
17. Professional licensing		
18. Federal holidays		
19. Unincorporated societies		
20. Agriculture pest controls		
21. Publications		
22. Censorship		
23. Theatres and cinemas		
24. Federal housing and improvement trusts		
25. Co-operative societies		
26. Prevention and extinguishment of fire		
	Additional Responsibilities for the States of Sabah and Sarawak	Additional Shared Responsibilities for the States of Sabah and Sarawak
	1. Native law and custom	1. Personal law
	2. Incorporation of State authorities and other bodies	2. Adulterations of foodstuff and other goods
	3. Ports and harbours other than those declared Federal	3. Shipping under fifteen tons
	4. Cadastral land surveys	4. Water power
	5. Libraries and museums	5. Agricultural and forestry research
	6. In Sabah, the Sabah Railway	6. Charities and charitable trusts
		7. Theatres, cinemas and places of amusements

Source: Constitution of Malaysia (1998)

In familiarising oneself with Malaysia's political structure, it is also equally important to be aware of the historical narrative of the country's formation and its political system. The historical underpinning will provide a rationale to the formation of various institutions prior-

and post-Malaysia. In short, Malaysia's ruling structure is the unification of state alliances, which was a result of an institutional metamorphosis during the British colonial period – specifically, the Straits Settlement (SS), Federated Malay States (FMS), Unfederated Malay States (UFMS), Sabah and Sarawak. The FMS was established in 1895, uniting the states of Perak, Selangor, Pahang and Negeri Sembilan; meanwhile, the UFMS consists of Johor, Kedah, Perlis, Kelantan and Terengganu (Jayum, 2008). The states of Penang, Malacca and Singapore formed the SS instituted in 1826. A Resident was appointed in each state to advise in all matters except for those related to the Malay religion and customs (Purcell, 1964). The British implemented their policies through the resident system, supplemented by the role of Sultans (Mohammad Noordin Sopiee, 2005). As the CFS policy is only applicable to the Peninsular Malaysia region, I omit elaborating on government institutions set up in Sabah and Sarawak.

The principal structure of Malaysia's federalism was adapted from FMS, as it was almost a full-bodied federation,¹³ as its name suggests. A Resident-General, supported by the Federal Council, led the FMS. The Resident-General and state Residents exercised executive powers while the Sultans maintained their authority over constitutional powers and traditional and religious ceremonies (Yeo, 1980; Awang, 1998). The Federal Council consisted of the High Commissioner of Straits Settlement, the Resident-General, Sultans, four state Residents and four nominated unofficial members. The Resident-General was later known as the Chief Secretary of Federation in 1911. Conversely, the UFMS did not have common institutions but were ruled as individual states by the British officials with a similar ruling mechanism. The SS was treated as the Crown Colony – territories that belonged to the Federal Council and its administration.

In 1948, post the Second World War, the British proposed its intention of granting independence to its constituents in the Malay peninsular by forming the Federation of Malaya (Lau, 1989; Vejai, 2006). The federation will join the Straits Settlement of Penang, Malacca, FMS and UFMS. The structure not only pacified the protest to common citizenship that was proposed through the Malayan Union, but it also restored symbolic powers of Sultans and the position of the monarchy in the system. Malaya officially gained independence from the British on 31 August 1957 and took several years until 1963 for the weaker states to stabilise (Omar,

¹³ The FMS had most of the structural form set in stone with the British playing an executive role. The United Kingdom was responsible for foreign affairs and defence of the federation, whilst the states continued to be responsible for their domestic policies. Even so, the British Resident General would give advice on domestic issues, and the states were bound by treaty to follow that advice. The federation had Kuala Lumpur, which was then part of Selangor, as its capital. The first FMS Resident General was Frank Swettenham.

2012). Rothchild (1966) believes that Malaysia opted for federalism to balance its competition and conflicts in demanding self-rule and harmony. Wu (1997) contended this notion, presenting the idea that the British introduced the federal system due to its failed efforts of a unitary system through the Malayan Union, proposed in 1946.

Later in 1963, Malaysia was formed as an asymmetrical federation by incorporating Sabah, Sarawak and Singapore into the federation (Bari, 2008). The Bornean states were provided with greater assurance of state autonomy in subjects of local administration, linguistic, federal grants and corporate job openings compared to states in Peninsular Malaysia (Vejai, 2006; Thio & Tan, 2010). The model adopted was highly centralised where states were not allowed to disaffiliate from the federation (Faruqi, 2008; Watts, 2008). However, Singapore was asked to leave the federation in 1965 due to political differences; yet, the arrangement remained for the rest of the states.

Omar (2012), in her historical perspective of federalism in Malaysia, finds the federal government in Malaysia had always retained more power especially in a number of important prerogatives compared to the state governments. The powers that originally lay with the state and its Malay rulers were diluted to add power to the federal government. The continuous absorption of powers by the federal government is on reverse to the current trend of decentralisation by many governments. Mokhtar (2002) believes that this scenario was enhanced by the lack of constitutional protection over states' powers. One good example would be the regulation of local governments. Being subunits to states, the local government should be subjected to state authority. However, the federal government interfered by establishing the Ministry of Housing and Local Government with the authority to advise these local governments (Phang, 2008; Ng, 2012).

The power to elect local councillors was stripped when the Local Government Elections Act was abolished in 1969. The National Front (*Barisan Nasional*) government viewed the local government elections as a channel that would facilitate the rise of little Napoleons and hence by eliminating it, they would have a more coordinated system to rule. Furthermore, the Sedition Act 1948 was amended to suppress the freedom of states and individuals to voice their opinions (Yusoff, 2006). The Sedition Act 1971 forbids any discussion on: 'the Bahasa Malaysia language policy, special rights granted to the Malays under the Second Malaysia Plan, the special roles of sultans and other royalty, and the citizenship policy regarding non-Malays'

(Lent, 1979, p. 57). This statute restricted all state governments as well as any individual from openly campaigning or speaking against the ruling government's actions.

Two schools of opposing thought emerged from the literature on power division in the Malaysian federalism: firstly, that the power dilution and continuous absorption/confiscation of states' power inhibit its activities and performance, especially in policy implementation (Wong and Chin, 2011; Wong, 2013). States find that the magnitude of powers vested are limited in practice although in theory, they seem to have an extensive prerogative. This is in contrast to negative implications of power absorption/complication, wherein the characteristic of power division allows for a more coordinated ruling system that ensures consistency and integration across states (Schmidt, 1996; Feeley & Rubin, 2009; Birkland, 2015). Also, in theory, the judicial body in accordance with the Constitution is able to declare the action of federal or state government illegal from the perspective of law.

However, a counter-argument to the first points out that the appointment of the judicial body in Malaysia is dependent on the executive arm and the King, resulting in a federation that is fuelled more strongly by informal institutions such as administrative culture, values and practices rather than the formal constitution alone. Other avenues are also altered or re-constructed to match these components. These arguments lend credence to two hypotheses explored by this research: (a) that formal powers with clear scope and authority to implement the CFS policy will result in successful policy implementation, and (b) informal powers must balance the formal powers for the CFS policy to be successfully implemented.

As such, despite institutional strengthening at the federal level, we can expect variations at the level of implementation at the state-level as state governments are strongly guided by powers stated in the Constitution. As forest is a state matter, the state governments act as one of the veto players in ensuring the CFS policy is implemented or not.

Distribution of Finances in Federalism

Equally important to power division in federalism is fiscal federalism or in a more explanatory term – the distribution of finances. Fiscal federalism allocates financial roles to all units of governments, outlining tools and mechanisms that can be utilised to generate income, such as taxes, grants and revenue sharing (Oates, 1972, 1999). Often, the role of stabilizing the macro-economy and redistributing finances are deemed to be the federal government's prerogative.

Yet, this phenomenon is typically caused by the absence of liberal financial rights, imposing a constraint on constituent governments' capacity to generate revenue, resulting in the latter having limited control over their economies (Oates, 1999).

In overcoming lack of fiscal control by constituent governments, federations may practice fiscal decentralisation (Rodden, 2002). But, if a constituent government is unable to manage expenditure optimally, it may lead to untenable deficits, pressuring the federal government to bail out or provide additional finances (Gramlich, 1987; Rodden, 2002). Though fiscal decentralisation requires federal governments to identify the strength of a constituent government before applying decentralisation, a spectrum of financing arrangements exists for federations, depending on the strength of both federal and constituent governments. First, constituent governments may act through a sovereign lens. Second, a decentralised fiscal arrangement may be applied, in which constituents have more prerogatives to generate revenue while they occasionally rely on the federal government to be bailed out when required. Third, a 'co-financing' option is established whereby a limit is set for constituent governments by the federal government (Lowry et al., 1999).

Malaysia's federalism model confiscated the states' right to increase taxes or seek external funding on their own, leaving the states to be highly reliant on the federal government even though they retain autonomous powers geographically (Vejai, 2006). This arrangement, however, is not applicable for the states of Sabah and Sarawak as they hold added autonomy. In the current system, the Peninsular Malaysian states rely on the federal government for finance allocations and federal funds are usually used as bait for states to adhere to federal government's directions (Omar, 2012).

The federal government has authority over income and trade taxes while the states depend on the revenue of their respective natural resources, which causes an imbalance among states (Anuar, 2000). A state with a higher need may not obtain higher revenue to meet its demand. As such, they manage their fiscal constraints by shrinking expenditure, surrendering some tasks to the federal government and depending on the federal government for loans and transfers; this often comes at a cost of sacrificing a state's fiscal autonomy. Nevertheless, transfers may vary according to states while fiscal decentralisation usually comes with bargains on regional development projects (Anuar, 2000). To date, there have been no changes or modification to this fiscal system adopted by Malaysia. Wong (2013) finds that Malaysia has remained with

this path since independence as they fear structural changes and modification would result in failure and disloyalty. However, literature discussed in Chapter 2 indicated how these characteristics of enable successful implementation of the CFS policy, especially availability of resources such as finances, skills or expertise.

Furthermore, the distribution of finances applied in the Malaysian federal system is claimed to impose subtle political bias. Wong and Chin (2011) find that states ruled by opposition political parties are prejudiced against, reprimanded or disregarded. After 1990's elections, the National Front (*Barisan Nasional*) government lost its foothold to the opposition coalition in Kelantan and Sabah during the 8th General Elections. As a consequence, the *Menteri Besar* of Kelantan and Chief Minister of Sabah were not invited to the discussion of Malaysian Development Plan although it is clear that the platform is a mechanism for states to put forth their ideas on development and revenue generation. Also, the Constitution recommends all states to be included in discussions relevant to development plans. Though federal funds were not totally cut off from these states, they were channelled with stricter control (Wong & Chin, 2011). Likewise, when the United Sabah Party (*Parti Bersatu Sabah*) (an opposition political party)¹⁴ won the 1990's elections, Sabahans felt that they were being punished and deprived of development funds (Ongkili, 1992). Hence, if the assumption of political bias is true, states that are governed by the ruling party (*Barisan Nasional*) should have implemented the CFS policy successfully as they would have received funding. Yet, states like Pahang did not implement the CFS policy despite being ruled by the *Barisan Nasional* government. This thesis also aims to understand if the political bias for funding still exist.

Intergovernmental Relationships

The third characteristic of federalism is intergovernmental relationship, which include both horizontal (federal–state) and vertical (state–state) interactions. Intergovernmental relationships influence governments of different levels in how they operate and draw their scope apart from the delineation of powers mapped by the Constitution. The nature of a federal–state relationship could be competitive or collaborative, in which both type of interactions could yield two possible consequences: negative (destructive) or positive (constructive) (Cameron & Simeon, 2002; Gerlak, 2006; Johns et al., 2006; Simmons & Graefe, 2013). The relationship

¹⁴ The United Sabah Party (*Parti Bersatu Sabah*) was formed in 1985 as an independent political party and had progressed to win elections held in the same year. Its winning had led to the formation of the state government in 1985. However, following a riot in 1986, the United Sabah Party had joined the National Front (*Barisan Nasional*) coalition after winning the 1986 state elections. The political party pulled out of the coalition in 1990 but had only rejoined in 2002.

between states is an important check and balance to the federal–state relationship (Elazar, 1972; Zimmerman, 1996; Fenna, 2006; Fenna, 2007).

Yet, problems arise due to the existence of a thin line between positive and negative outcomes of the nature of a relationship, which strongly relies on the policymaking sector, such as environmental protection. In some sectors, a competitive approach yields the best results while in others, it may end in conflict or responsive action. On the other hand, although most sectors are found to be working at their optimum through collaboration, government units face risk of conspiracy or coordinated action. Government units that are jeopardised in this manner then encounter the tendency to have their power hijacked by federal government or to succumb to lack of resources to implement a policy. In worst cases, policymaking and policy implementation problems emerge due to restricted government capacity, which functions with very minimum administrative role, where they do not compete nor collaborate. The reasons that governments act in any such manner (collaborate, compete or appear neutral), in terms of their political motivation, will be further explored in the next chapter.

The interaction between governmental units is crucial in designing and implementing policies especially when there is more than one unit proclaiming control over resources, for example forests products (Amarcher, 2000). Over the past decades, two major issues could have been resolved if the federal–state relationships had been based on a collaborative mode. Firstly, state governments face difficulties in managing their responsibilities as demands soar higher and resources diminish, requiring intervention from the federal government. As such, the federal government could have absorbed state responsibilities through partnership. Secondly, a strong federal–state partnership would have hindered the rise of autocratic leaders centralising and nationalising subnational responsibilities with justifications of better control and management. On the contrary, Volden (2007) argues that a cooperative venture is only beneficial if the federal government is superior in revenue earning activities while the states are greater in policy implementation.

The political party power at each level may affect intergovernmental relationships. In the Malaysian federal system, elections are held every five years to determine federal and state rulers (Vejai, 2006). Albeit Malaysia's claim to be a democratic federalist state, issues such as politically controlled media, influence of money politics, government controlled electoral mechanisms, 'gerrymandering' and a 'first-past-the-post electoral system' has emerged over

the years to contest its claims (Vejai, 2006). As *Barisan Nasional* has always been in power ever since independence, it is more appropriate to classify Malaysia as a single party rule state with elections rather than a full democracy (Wong & Chin, 2011)¹⁵. The main party component in the *Barisan Nasional* coalition, United Malays National Organisation (UMNO), uses the suppression mechanism to control the leaders at state levels (Wong & Chin, 2011).

The accusation of money politics as well as corruption did not hinder the BN government from winning comfortably with 64 per cent popular vote in the 2004 elections (Pepinsky, 2007b). According to Suaram (2008), this could only be possible because of electoral systems manipulation and human rights violations, which the BN government is allegedly known for. The BN administration is accused of using abusive tactics such as ‘phantom voters’, ‘*kepala sepuluh*’ and ‘*anak angkat*’ (Pepinsky, 2007b). The coalition was also blamed for its reluctance to embrace a free and fair election. However, Tun Abdullah Ahmad Badawi’s rule (2003–2009) was viewed as a sign of transformation as the latter is known for his image of a clean politician and being less aggressive compared to the former Tun Mahathir (Pepinsky, 2007b). This opened the door for the opposition coalition to press forward. In 2008, the opposition coalition had won five states and until 2018, four states remain in the opposition’s ruling since the 2013 elections. Prior to this, in 2008 BN’s win in at least 11 states in all elections exerted major influence on intergovernmental relations in Malaysia’s federal structure, in which interparty and intraparty affairs dominate federal–state relations (Wong & Chin, 2011). The focus of this thesis is to observe if these still holds true in the case of the CFS policy implementation.

Federal and regional stakeholders involved in Policy Implementation

Since the early 1990s, there has been a global push for environmental policies to be viewed as a multi-disciplined policy domain. This idea consists of co-shared responsibility among various actors through coordinated and integrated mechanisms (Leroy & Arts, 2006). Cahn (2013) defines policy actors as ‘individuals and groups both formal and informal, which seek to influence the creation and implementation of ... public solutions’ (p. 199). Thus, a further piece of the implementation puzzle for this research is the range of policy implementation actors beyond the formal national and state bodies: how much and what types of power are embedded in them, their motivations, and what knowledge elements are required for CFS policy implementation.

¹⁵ There has been a historical change in 2018 when the opposition political party coalition formed the ruling government after defeating *Barisan Nasional*.

This subsection introduces and describes various implementation actors related to forests and wildlife policies in Malaysia; as well as how their powers have evolved. Major policy actors include traditional Malay rulers, federal and state government actors and bureaucrats, non-governmental organisations, as well as interest groups and philanthropists. Furthermore, multi-actor implementation studies are also important for adding knowledge to the development of empirical theory of implementation (O'Toole, 1986). The following subsections describe stakeholders who are significant to the implementation of the CFS, and how their roles have evolved from pre-colonial era to the current system.

Traditional Malay rulers

Malaysia is unique compared to most federations as it is strongly supported by a monarchy, where the King, *Yang Di-Pertuan Agong* (YDPA), is chosen via rotation from the Conference of Rulers. An exclusive association where Sultans from the nine 'Malay' states meet, the Conference of Rulers is an essential deliberative platform whereby the YDPA, Sultans, Prime Minister, Governors and Chief Ministers participate (Wong & Chin, 2011). Though theoretically the role of the King is of utmost importance and vital in appointing senior judges, dissolving Parliament, proclaiming emergency and appointing the election commission board, in reality, these acts are advised by the Prime Minister. The Sultans, who are the head of states, have jurisdiction over Islamic affairs and Malay customary matters in their respective states while the YDPA himself carries out these duties in the federal territories. In the non-Malay states, Governors head the state and they do not qualify to be elected as a King. Wong and Chin (2011) opine that YDPA and the Sultans are more than any standard constitutional monarch, as they garner more respect as a symbol of Islam and Malay supremacy.

The Malay rulers were supreme and sovereign, ruling over a geographical area. Malaya (Malaysia since 1963) inherited and chose to retain the system when it was formed in 1957. To date, 9 out of 12 Malaysian states have traditional Malay rulers – namely Perlis (known as *Raja*), Kedah, Perak, Pahang, Negeri Sembilan (known as *Yang di-Pertuan Besar*), Terengganu, Kelantan and Johor. Out of these nine states, eight are involved with implementing the CFS policy. The mention of Malay rulers is traced back to the days of *Seri Teri Buana* in the *Malay Annals* (Husin Ali, 2013). According to Kheng (1994), British writers in the nineteenth century observed similar characteristics between England and the Malay states. In

Our Tropical Possessions in Malayan India, Cameron (1965) described the existence of an independent state as one that has:

a sultan, who is all powerful; under him there are datuhs, or governors, selected from among the men of rank, and under these again there are pangulus, or magistrates, all standing very much in their relation to the people as our own nobility stood in feudal times to the people of England. (p. 127)

The traditional rulers' (often known as Sultan or Raja) motivation was found to be the 'desire to retain [their] subjects and seldom for avarice, wealth or even power' and the subjects are drawn to the ruler due to his ceremonial significance as the head of Malay culture (Saravanamuttu, 1984, p. 131). Though the form of control has become subtle and they have assumed a modernised lifestyle, these traditional rulers still hold on to their powers as heads of states. The Malay people often believed that their steadfast service to the Sultan or Raja often yielded social and spiritual advancement (Milner, 1982). Winstedt's (1947) *Kingship and Enthronement in Malaya* termed the traditional rulers' powers as divine, describing the King (of Malaya, later Malaysia) as a celestial avatar who is also the reincarnation of God, the shaman and the caliph. Although not uniform across all Malay states, Sultans are supported by their own army, amplifying their strength and power (Husin Ali, 2013). Being at the apex of administration, these traditional rulers also had laws and rules in ensuring order of the geographical region they ruled in (Husin Ali, 2013).

Prior to the arrival of British in Malaya, the traditional Malay rulers collected levies and taxes, especially at important river confluences, supported by local territorial chiefs at taxing points or in the village (Jomo et al., 2004). Apart from this, Sultans also benefitted from tributes from various diverse groups (Husin Ali, 2013). Officials who were in charge of administration and security reinforced the influence and power of these traditional rulers' peacekeeping, navy and economic matters (Husin Ali, 2013).

Upon the arrival of the British, most states received a Resident or Advisor; state boundaries were demarcated, and the powers vested in Sultans were slowly reduced (Husin Ali, 2013). The traditional rulers lost their powers to collect taxes and revenue, maintain their army and act as an adjudicator. Administrative departments were set up to report to the Residents. In recuperating from Japanese occupation of Malaya, the British introduced the Malayan Union –

a federation that combined all Malay states. The Malay people opposed the idea as it was thought to threaten their political dominance when non-Malays were to be granted with citizenship and Malay rights would be revoked (Noh, 2014). People's movements such as the United Malay National Organisation (UMNO) and Putera- All Malaya Council of Joint Action (Putera- AMCJA) emerged to actively resist the Malayan Union and demand the institution of traditional rulers to be restored as a symbol of sovereignty.

In 1992, the Code of Ethics for Rulers was introduced to reduce the powers of Sultans due to a series of issues caused by the monarchy component. Prior to this, many cases involving Sultans' criminal conduct were not disputable, especially the assault case of Douglas Gomez who was Johor's state hockey coach. Although there was a huge public outcry, the Sultan of Johor could not be convicted as he was protected by the traditional rulers' immunity. In some other cases, the Sultans had also demanded timber concessions. The Sultans also often misused their position to demand finances to renovate, repair and even build bigger and more expensive palaces. Furthermore, there were no restrictions in them participating in businesses.

In 1993, the Sultans' 'immunity' was nullified (Yusoff, 1995). Sultans can now be tried in *Mahkamah Khas Raja-raja* (Special Court for Traditional Rulers). However, the Attorney General must provide his consent if any traditional ruler is to undergo a trial in this court. This leads to a complicated scenario akin to a symbiosis as the YDPA appoints the Attorney General. Though many may view the BN government as one that is hungry for power, the nullifying of Sultans' immunity was seen as a vital move for the country's development. Yet, this did not alter much of the powers that were already vested in the Sultans. These traditional rulers only resorted to continuing with their usual activities in a subtle manner. The Sultans have also challenged the underlying principle to the Code of Ethics for Rulers established for them, stating that most of the restricted activities listed for them are also being pursued by the ruling Ministers and officials, such as businesses and timber concessions (Husin Ali, 1993). Hence, in trying to answer the CFS policy implementation puzzle, it is important to explore how much of the power over timber and logging concessions that are obtained via the power of the monarchs influence its success or failure.

The relevance of the Malay Rulers in the current setting has been described extensively in the work of Husin Ali (1993), including the Sultans evolving informal powers over forests and wildlife. The author describes incidences in which Sultans have demanded timber concessions,

timber royalties and land ownership even though they lost their formal and constitutional power over forests. Between the 1970s and 1980s, Sultan Pahang hijacked the ownership of 30,000 acres of forested land for timber logging and sold it to a Chinese businessman for RM 21 million. His Royal Highness then forced the Chief Minister of that time, Datuk Abdul Rahim Bakar, to resign when approached (Husin Ali, 1993). In the state of Terengganu, a similar incident occurred. Sultan Ismail penalised the Chief Minister of that time, Datuk Nik Hassan Wan Abdul Rahman, for refusing the Sultan's request for allocation of land for timber logging.

Furthermore, the works of Ahmat (1984) and Zahir (1989) imply that the Sultans own all land. Historical evidence of Sultans hunting for wildlife, especially tigers and elephants, has been mentioned in the works of Lim and Wong (2000), Van der Putten and Cody (2009) and Khan (2014). Though the hunting of tigers may have started as a noble pastime in impeding tigers from harming people and crops, the tradition had continued. The traditional rulers were also always groomed to take up hunting activities and the royalties enjoyed keeping wildlife as pets. In covering the Sultan of Johor's coronation in, *The Star* (2015a) newspaper reported that their visit to the palace for an interview was greeted with "several huge cages on both sides of the road, with tigers, panthers and cats inside them". Furthermore, the royal family enjoys immunity, which shields them from any charges made against them for their offences. Besides, Sultans, together with their ruling class, usually commanded land clearance, infrastructure building and agricultural activities (Jomo et al., 2004; Aziz, 2011). As such, the institution of traditional rulers is likely to be an important and notable component to the implementation of the CFS policy. The significance of the formal and informal powers of the monarchs over forest and wildlife in the federal arrangement will be explored in the chapters to follow.

Government actors and bureaucrats

Malaysia's government actors and bureaucrats, whether at the federal or state level, are important stakeholders in policy implementation. The administrative arm of Malaya is rooted in the creation of Malay Administrative Service, an elite group of Malay civil servants who were motivated by a sense of obligation and economic improvement (Johan, 1984). The author also finds that the creation of such service was aimed at diluting and re-balancing powers located in the traditional Malay rulers, as well as to pacify them. Upon the agreement of the Federation of Malaya in early 1948, two councils were set up at the central level – Executive and Legislative. The composition of these councils demonstrates the importance of natural resources and policies surrounding it. Out of 50 unofficial members of the Legislative council,

four were allocated for mining, six for planting (rubber and oil palms) and eight for agriculture and husbandry (Jones, 1953).

Unofficial members were then appointed officially as departmental heads in 1951, resulting in the formation of Malaysia's public administration arm (Jones, 1953). As the principles of forestry were still embedded in clearing land for agriculture and logging timber for exports and/or use, forests and wildlife were assigned to the Member for Agriculture and Forestry. Indeed, the official is responsible for a large number of portfolios that include agriculture, drainage and irrigation, forestry, veterinary, fisheries and wild game (or wildlife hunting) (Jones, 1953). Similar development also occurred at the state levels.

Though ministries were established following Malaya's independence in 1957 and the formation of Malaysia in 1963, the focus of the portfolios for agriculture and forestry departments remained to be economic growth and expansion. In line with this, the public service was reformed and remodelled to focus on institution building and transformed into a development-oriented administration (Siddiquee, 2002). As a result, the public service implemented plans and programs that were aimed at economic development; this included the New Economic Policy (NEP) introduced in 1970 – a 20-year-old plan to overcome challenges faced due to economic imbalance (Siddiquee, 2002).

Subsequently, bureaucratic roles were altered and based upon action-oriented goals consisting of four tenets: maintaining law and regulations, formulating development policies, managing development in marginalized areas and developing industries. In line with implementation of the NEP, the public service was instilled with pro-market values of efficiency, cost-effectiveness and productivity, leading to a fundamental behavioural and attitude change among public servants and their operations (Siddiquee, 2002; Triantafillou, 2002). In the 1980s, initiatives for a more ethical public service was introduced, including a code of ethics and concepts of trustworthy and efficiency. However, many of these agencies juggle to balance the two aims – revenue generation and control of resources. For example, the state forestry departments had to (and must still) achieve an income target set based on timber logging and sale of other non-timber forest products, and at the same time control and manage forest resources.

In a report for the World Bank, Calister (1999) describes the influence of institutional capacity in corruption and illegal activities in the forestry sector. When capacity is low, bureaucrats are found to be incompetent and lack ability to monitor use of funds, while if capacity is high, bureaucrats will be competent but may be dishonest. The author also discusses other scenarios that are conducive for corruption and illegal logging, consisting of low financial accountability (as only few checks on use of funds will be conducted usually), low performance accountability (no evaluation on whether funds have been used to achieve stated objectives) and high trust. Malaysia faces the same predicament with illegal logging, for which the Forestry Department Peninsular Malaysia (FDPM) established a National Action Plan for Combating Illegal Logging for the period 2011–2015 to combat it (Transparency International Malaysia, 2011; Hoare, 2015).

Interest groups and non-governmental organisations

Interest groups, philanthropists and non-governmental organisations in the Malaysian context play a supporting role central in ensuring environmental policies are implemented. Boyle (1998) discovered that public interest groups or local communities alter development interests in the environmental impact assessment conducted in Malaysia. Interest groups have a tendency to reflect opposite views compared to perspectives of established policy, may emphasize goals of the minority rather than majority, and could be motivated by ‘self-righteousness’ (Berry, 2015). Two main interest groups are linked to CFS implementation – the first is timber and agricultural companies that require forests for logging or land for cultivation. The second group consists of contractors or developers who see a need for roads, buildings and housing. To date, there have been no reports to demonstrate the direct link between these interest groups and how much they influence land-use change in forested areas in Malaysia. As for philanthropists during the colonial period, most of them were British administrators who were naturalists. The scenario was altered by businessmen and royalties whose interest in environment or nature grew, and it remains at present.

The second group whose motivation is equally important as interest groups are the environmental non-governmental organisations (NGOs). According to Besley and Ghatak (2017), NGOs can be defined as motivated agents who pursue goals because they perceive intrinsic benefits from doing so. Simultaneously, NGOs are able to perform diverse roles, ranging from designing and implementing projects to advocating and defending a particular cause. Major environmental NGOs in Malaysia, such as the Worldwide Wildlife Fund for

Nature (WWF), Malaysian Nature Society (MNS), Malaysian Conservation Alliance for Tigers (MYCAT), Wildlife Conservation Society (WCS) and Sahabat Alam Malaysia (SAM), usually raise public awareness and influence government actors and bureaucrats at both national and local levels. As such, it is proven that NGOs have a comparative advantage as effective agents in environmental management and conservation due to their proximity to the grassroots and ability to identify needs of people and environment. However, Kaneko (2002) finds NGOs in Malaysia have limited space for activities and are subjected to strict supervision and regulation. Some local NGOs that support efforts of major NGOs and have been working on the CFS implementation projects are Rimba, Tropical Rainforest Conservation and Research Centre (TRCRC), Global Environment Centre (GEC), *Pertubuhan Pelindung Khazanah Alam Malaysia* (PEKA), *Yayasan Sultan Mizan* and Sultan Ahmad Shah Environmental Trust (SASET).

Conclusion

Collectively, it appears that the first two features of federalism (division of powers and distribution of finances) could significantly influence the power, information and motivation factor in determining the success or failure of the CFS policy as it maps scope and authority of each government unit apart from functioning as the arbiter to conflicts and contradictions. Malaysia has always faced a dilemma between protection of nature and development of resources (Aiken & Leigh, 1986). The federal, state and concurrent lists contain distinct sectors of the environment in each of the lists, but none includes environmental protection as it is comparatively a new branch in environmental governance (Saleem, 2005). Conflicts occur in federations like Malaysia as they relate to authority over environment and natural resources, especially forests, which come under the jurisdiction of state governments (Saleem, 2005). The distribution of responsibilities and authority is often difficult to establish as the management of environmental problems involves a range of policy agencies. This has been the case in terms of the Malaysian government enacting the CFS policy in 2006 to link, preserve and conserve the existing forest islands in Peninsular Malaysia.

As environmental problems involve stakeholders of multi-disciplines, the dispersion of responsibilities and authority constantly reaches crossroads and are often argued. One example is the proposed idea to preserve and conserve the Endau-Rompin forests, which exist over the two states of Pahang and Johor. The efforts failed due to the lack of commitment by the Pahang state government who continued to issue timber-logging licences on its segment of the area

(Aiken & Leigh, 1986). This form of dispute seems to be reoccurring again as states have issued logging licenses and development projects in areas that now fall under the CFS area. Also, some parts of the forested land are owned by the monarchs and permission needs to be granted before any activity, such as collecting forest produce and honey, is to be carried out (Bees for Development, 2007).

Frank et al. (2000) believe that the policies mapped in the environmental sectors conform to a top-down approach where fundamental aims and objectives for policies, and to some extent, even certain policies, are established by global institutions and treaties (especially by the United Nations) before they are diffused to various countries. The policies are then incorporated into national policies and transferred down to smaller units of the governmental system. Besides the continuous nature of an environment that does not adhere to geographical borders, which is a common challenge for most federations, and the absence of jurisdiction for environmental protection in the Constitution, Malaysia also faces the problem of intertwined politics and bureaucracy (Ansori, 2013).

Though the political structure is the backbone to every country, the policy making process applied is equally important, which is considerably centralised in Malaysia despite its federalism structure. Malaysia continuously emulates its historical feudal structure, in which the English-educated civil servants who were trained by the British colonists remain in the highest ranks of bureaucracy (Puthuchear, 1978). Many scholars argue that Malaysia's policy process can be classified as a top-down model, and that its tradition of elite rule has seeped into Malaysia's current executive branch (Slater, 2003; Moten, 2008; Wong & Chin, 2011; Wong, 2013). Hezri's (2004) work reaffirms that this is due to Malaysia's meta-policy approach, which focuses on the macro-scale and interprets problem according to its structural nature. However, Ansori (2013) contends that it is not the case entirely. She argues Malaysia's civil service does play a role in policymaking processes, by identifying and channelling issues faced at the ground level upward to policymakers. She thus suggests that this represents a form of synthesis between both top-down and bottom-up approaches (Ansori, 2013). This re-emphasizes the importance of choosing a synthesized model to analyse the policy implementation.

Taking into consideration the transformation in the political components, the rise of opposition coalitions and the recent findings of Ansori's study, I would like to reiterate that the policy implementation process in Malaysia is influenced by informal institutions, such as

administrative culture, values and practices, rather than the formal constitution alone. There is also no clear link between provision of funds and the same ruling party at the state level. The complexity of CFS policy implementation is also linked to the relationship between the various actors and stakeholders. To further understand the influence of these factors on CFS implementation and which specific actors at federal and state level contribute to this, I explore and compare the success and failure of CFS implementation in five chosen states; explained further in the next chapter.

CHAPTER 4: RESEARCH METHODOLOGY

“Research is to see what everybody has seen and think what nobody has thought.”

(Albert Szent-Györgyi, 1957)

This research occupies both deductive and inductive approaches. This approach maximises the benefits of this research as a large amount of literature on both federalism and policy implementation already exists. The deductive approach is used to understand existing theory and contextualise the conditions relevant to the research problem, followed by an inductive approach through interviews to triangulate the understanding.

The deductive approach uses propositions of existing theory to develop a hypothesis before testing it through a designed research strategy (Beiske, 2007; Pelissier, 2008; Snieder & Larner, 2009; Babbie, 2013). Babbie (2013) finds the deductive approach to be useful to test a causal relationship or link implied by a theory in another condition. As such, the findings yielded by this approach move from general to specific conclusions (Burns & Grove, 2005). The different theoretical propositions are extracted to be tested. Hence, a set of hypotheses is formulated from federalism and policy implementation theories developed by past and existing scholars (Table 4). These hypotheses are then tested using the inductive approach.

Table 4: Overview of Hypotheses

H1: Formal powers with a clear scope and authority to implement the CFS policy will result in successful policy implementation.
H2: Informal powers must balance the formal powers for the CFS policy to be successfully implemented.
H3: Availability and clarity of information is significant to the CFS policy implementation success.
H4: Positive motivation among implementing agencies is important for a successful implementation of the CFS policy.

Source: Author

The inductive approach is commonly used in qualitative data analyses (Miles & Huberman, 1994; Punch, 1998; Marshall & Rossman, 2016). Broad tasks of qualitative data analysis include data reduction and display as well as drawing conclusion or verifying data (Miles & Huberman, 1994). The approach is intended to clarify the data developed through a literature

review. The inductive process would then result in a summary of themes or categories that will be used to make conclusions and recommendations. In measuring, operationalizing and executing my research, the literature review in Chapters 2 and 3 points us to a number of indicators that signals the presence or absence of concepts that are being observed and maximizes the validity of measurements (King et al., 1994; Babbie, 2013).

Federal systems are internally dynamic and varied. There is no standard model or structure, resulting in federations varying from fully federal to decentralized states. Elazar (1987) defines federalism as ‘a polity compounded of strong constituent entities and a strong general government, each possessing powers delegated to it by the people and empowered to deal directly with the citizenry in the exercise of those powers’ (p. 7). This definition points us to the first characteristic, constitutional supremacy and division of powers (Ostrom, 1985; Elazar, 2000; Cameron & Falleti, 2005; Feeley & Rubin, 2009; Rector, 2009; Hueglin & Fenna, 2015). Although power is an important component in policy implementation, funds also play a major role in for successful policy implementation, emphasizing the second characteristic: distribution of finances. The third feature of federalism, intergovernmental relations and coordination, is a crucial component in understanding the differing outcomes among the CFS implementing states. Therefore, the three indicators that I have narrowed down for my research are the most basic characteristics of federalism, which influences all other systems and structures of Malaysia.

As for Malaysia, any amendments to the constitution (which also means to allocation of powers, etc) or the structure require thorough deliberation and support from 2/3 majority of its Parliamentary members. Much of Malaysia’s federalism is of the dual federalism in nature, but the structure also allows for overlaps in membership and functions in some sectors, emulating a ‘marble cake’ structure and making the process even more tedious and longer. This makes the characteristics of federalism the independent variables in my research. However, the use of CIT also comes into play here. As mentioned previously, CIT has allowed me to observe informal powers and motivation factors within the system. As such, the independent variable is a diverse system.

The term ‘policy implementation’ in my research depicts ‘processes that concern the application of relevant policy instruments’ (Bressers, 2004, p. 284). In simple terms, it is a process of transforming input into output, although the input may be focused (one policy) and the output is diffused (many outcomes) (Bressers, Klok, & O’Toole, 2000). According to Goggin (1986),

there are several categories and degrees of implementation success and failure. The most successful type of implementation is coordinated implementation where it allows the target groups to formulate the best way to implement a policy; meanwhile standstill is the least successful (or failing) kind of implementation as nothing occurs at the execution stage. Other types of policy implementation failures are ‘paper implementation’ and emergence of conflicts during the implementation phase. As such, it is very likely that federalism has played a significant role, but this research aims to explore exactly how it influences the implementation of the CFS policy and if its findings could further enhance the understanding of federalism and policy implementation.

Operationalization of Research

According to Marsh and Stoker (2002), operationalization is a process of translating a theory into a hypothesis that can be tested. Typically, indicators are used to achieve this purpose. In testing a concept, the maximum possible amount of validity can be obtained only if a theoretical proposition is translated into measurable data (Mitchell & Bernauer 1998, p. 18). To accept or disapprove a developed hypothesis, the range of values serve as an important guide, so that hypotheses ‘can be shown to be wrong as easily and quickly as possible’ (King et al., 1994, p. 100). However, I am aware that it is highly unlikely to obtain a definite ‘yes’ or ‘no’ but instead a continuum scale between the two extremes. In cases where these values appear ambiguous, it is my duty as the researcher to establish informed interpretations and assessments.

Synthesizing from the policy document, successful implementation of the CFS is demonstrated by the restoration, conservation and enhancement of links between major remaining forests complexes assigned to state agencies. When a state fails to establish the primary and secondary linkages outlined in the 5-year implementation plan, they are considered as unsuccessful. I am aware that the range of success and failure is quite large, and it could be analysed as an ordinal variable. However, dichotomizing the policy implementation outcome variable enabled the researcher to study the complex problem of federalism’s influence on the CFS policy implementation. As such, a categorical variable (successful versus failed) is applied rather than an ordinal variable. Also, it would not have been possible to use the CIT to observe how much of Malaysia’s informal powers or motivation factors are in play for a policy to be successfully implemented or otherwise.

Apart from that, my interest was not just in failure, but also in success and the difference between success and failure. It would have been a different thesis to analyse why different states who have failed have experienced a particular kind of failure, or even success. Besides, policy success literature is thin (Marsh and McConnell, 2010). The policy studies literature for a long time worked a lot on policy failure but only recently has begun to ask questions about what leads to success and this research speaks to that. Nevertheless, a future study on the ordinal variable of varied failure is a possibility.

There are two steps in this research. First, I have revisited the various academic works on policy implementation and federalism in Chapters 2 and 3, to draw out hypotheses that could be relevant to the CFS case. Following that, I conducted interviews with implementing officials identified across federal and state agencies or entities. As most of the interviews required participation of human subjects, I was required to obtain an ethical approval from the University of Auckland Human Ethics Committee. In submission of this application, various documents such as information sheets, consent forms and list of interview questions that were used in this research had undergone scrutiny and alteration to ensure that the contents were fit and purposeful, in accordance with the University's ethical requirements (Appendix 2). The responses from the interviews were analysed to draw conclusions that may appear to be parallel to the findings from the literature review, or entirely different.

In this research, the CIT is used to measure the influence of federalism on policy implementation. Tables 4, 5 and 6 outline types of variable, specific variables used, range of values for each variable and the source of data, although it does not encapsulate the full conceptual wealth of these variables. Based on the research framework presented in Chapter 1, I have classified the variables into three categories: evaluation factors (linked to the factors listed by the CIT), independent variables (characteristics of federalism) and policy outcome (CFS policy implementation status).

The CIT theory is used to ascertain the influence of federalism on policy implementation, where indicators such as power, motivation and information are measured (Table 5). Formal powers are assigned to agencies through laws or areas of responsibility, while specialized roles, expertise and alliances or strong media support could provide informal powers. Hence, I observe the constitutional power that allows both implementers and target groups to implement the CFS policy.

Table 5: Overview of Evaluation Factors of CIT

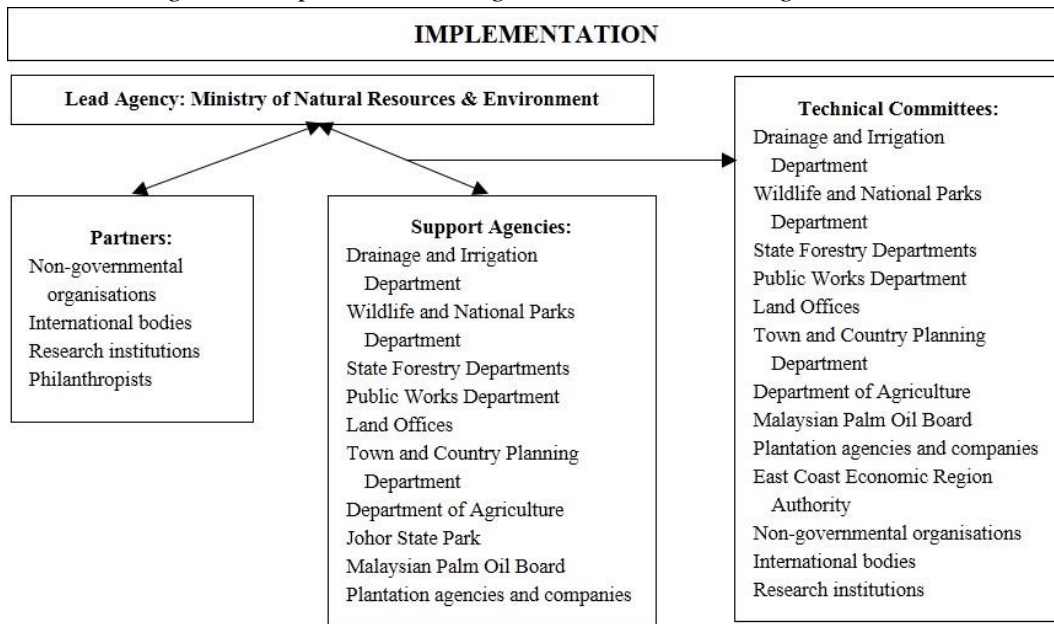
<i>Evaluation factors</i>	<i>Contextual interaction theory</i>		
	Power	<ul style="list-style-type: none"> • Constitutional powers • Resources: finance, workforce, time 	Malaysian Constitution, policy implementation reports, documents, annual reports, interviews
	Motivation (agency's position towards implementation measures)	<p>Internal motivation:</p> <ul style="list-style-type: none"> • positive / negative adaptability to implementation goals • positive / negative work-based inspiration, • positive / negative character towards implementation objectives • positive / negative attitude towards other implementers • positive / negative performance <p>External motivation:</p> <ul style="list-style-type: none"> • availability of incentives or existence of penalties 	Interviews
	Information	<ul style="list-style-type: none"> • clarity of basic outlines of the policy and its compliance: • explanation of specific roles of different agencies and policy requirements • availability of information about other actors involved in policy implementation and their roles • availability of further information • existence of transparent processes 	Policy implementation reports, documents, annual reports, interviews

The availability of resources such as finances, workforce and time is also an important point to understand how power correlates with the success of policy implementation. Interviews were conducted to understand the motivation of each entity, both internal and external. Internal motivation consists of adaptability to implementation goals, work-based inspiration, character towards implementation objectives, attitude towards other implementers, and performance. External motivation includes all exterior stimulus. The third sub-variable tests if clarity of basic outlines of policy and its compliance exist. It also looks out for explanation of specific roles of different agencies and policy requirements and benefits, availability of information about other actors involved in policy implementation and their roles, accessibility of further information and presence of transparent processes. Transparent processes should offer actors involved and other interested stakeholders' access to the policy process and documentation and should ensure lucidity and expediency of the knowledge provided.

The coding themes were identified through the inductive approach where interviews were conducted to triangulate understanding to the CFS policy implementation. The inductive process would then result in a summary of themes or categories that was used to make conclusions and recommendations. The approach is intended to verify the themes identified through the literature review exercise. Some major themes are power division, distribution of finances, intergovernmental relationship, motivation, information as well as skills and knowledge. From these major themes, minor themes were shortlisted (Appendix 1). Through literature reading on CIT, I also compiled a list of major themes associated with each of the factors (Table 5). Key literatures used to establish this are Bressers et al (2000), Bressers and Dinica (2003), Watts (2008) and Owens and Bressers (2013).

The use of in-depth interviews results in deeply-rooted information and understanding (Legard, Keegan & Ward, 2003). In-depth interviews were conducted with officials from various implementing agencies to elicit their impressions of how characteristics of federalism, such as constitutional division of powers, distribution of finances and intergovernmental relations, affect implementation of the CFS. The questions asked during the interviews covered the following: aspects of policy implementation; issues faced during implementation and how various characteristics of Malaysian federalism structure the interaction between key actors; and, the capacity for subnational governments to successfully undertake policy implementation of CFS. The agencies, organisations and NGOs interviewed were identified from the policy document (Department of Town and Country Planning Peninsular Malaysia, 2010) (Figure 3).

Figure 3. Implementation agencies, bodies and organisations.



Source: Department of Town and Country Planning Peninsular Malaysia, 2010.

Interviews were carried out in either English or Malay with federal policymakers and implementers at both federal and state level agencies. In particular, these included the Ministry of Housing and Local Government (MHLG); Ministry of Natural Resources and Environment (MNRE); Forest Department of Peninsular Malaysia (FDPM) and Department of Wildlife and National Parks Peninsular Malaysia (DWNP). At the state level, nine state agencies were identified, and they are: State Forest Department (SFD); State Department of Wildlife and National Parks (PERHILITAN); State Public Works Department (JKR); Land and Mining Offices (PTG); Town and Country Planning Department (JPBD); State Department of Agriculture (DOA); State Drainage and Irrigation Department (DID); State National Parks Corporation (NPC); and State Development Corporation (SDC). However, not all agencies were interviewed in each chosen state (case study) as some had insisted that they were not involved in the implementation process. Some agencies had also revealed that they have no knowledge of the policy. Where appropriate, I also sought interviews with non-governmental organisations like the United Nations Development Programme (UNDP), Worldwide Fund for Nature (WWF), Malaysian Conservation Alliance for Tigers (MYCAT), Malaysian Ecology and Management of Elephants (MEME) and Regional Environment Awareness Cameron Highlands (REACH), whose protest and conservation activities as well as awareness programs have been important. However, I did not interview other development-focused interest groups who are involved in businesses and construction projects as I found them to be unaware of the

policy and were not involved at the point the fieldwork was carried out, although they did not deny the possibility of being involved in future.

The mechanism used to recruitment participants can be divided into three categories. The first, potential participants whose names and titles are publicly available on either government or institutional websites, in official documents prepared by government, or in secondary sources prepared by academic or nongovernmental research were approached directly through email¹⁶. In Malaysia, it is an acceptable practice to invite officials whose names and job descriptions are available in the public domain to participate in a research. This also assisted the researcher in bypassing many gatekeepers. However, in some cases where the topic of the research was deemed a delicate issue, the potential officials had requested that the invitation goes through the Heads or Directors, especially the state forestry and wildlife departments.

Secondly, for the officials who request that the invitation goes through the Heads or Directors as well as officials who are non-identifiable, I sent an invitation email to the respective Head or Director. The Head or Director then made a directive to an official to participate in the study. Once an official was identified, the official was invited to participate in the study. In cases where a publicly identifiable official claimed that he or she is not the right fit to participate in the project when approached and does not request that the invitation goes through the Head or Director, then he or she was asked to forward the invitation to his or her colleagues. However, in all three methods, the main requirement in inviting an official to participate is his or her involvement in the implementation works on the ground.

The interviews were audio recorded while the information gathered were transcribed and translated by the researcher. The participants were provided with a copy of their transcript upon request. The qualitative software NVivo was used to analyse the data and establish a conclusion. The answers provided to the in-depth interview questions were coded into the major themes, such as power division, distribution of finances, inter-governmental relationship, motivation, as well as skills and knowledge. From these major themes, minor themes were identified. Data from other primary sources, such as official government documents, government reports, newspaper articles, and periodical publications available in libraries and archives, were used to complement the interviews. A close reading and textual analysis of these primary documents was triangulated against the interview data. This process is important to validate the data and

¹⁶ Email is commonly used in formal communication in Malaysia.

to ensure that the information provided is not only a formal response to an agreed interview. For this, similar key literatures that guided the coding of themes were used to guide the textual analysis. As part of the interview process, I had also sought written consent to provide access to unpublished documents, plans and reports that are not in the public domain. I visited various private libraries and resource centres situated at the premises of the government agencies, non-governmental bodies and other-development groups to access to these documents.

As the CIT is being used to test the influence of federalism on the CFS policy, the characteristics of federalism are identified as independent variables. These characteristics are universal to the concept of federalism, although the strength and intensity of each characteristic may vary, resulting in no standard model or structure. The constitution and informal federal arrangements under the Malaysian federalism provides a landscape to the CFS problem. The three characteristics of federalism identified are constitutional supremacy and division of powers, division of finances and intergovernmental relations (Table 6).

In observing the constitutional supremacy and division of powers, I looked to identify if Malaysian practices centralised or decentralised federalism, whether overlaps exist, or powers are totally separated. I also observed for the existence of sufficient laws to advocate or resolve environmental issues, nature of judicial body and courts as well as the significance of the monarchy's power over forest and wildlife. The second sub-variable of division of finances was used to observe the adequacy of funds channelled to states irrespective of state ruling party and availability of alternative sources of income. To support these findings, I also use the socio-economic data from federal and states' financial reports. In identifying the nature of Malaysia's intergovernmental relations, I observe all federal-state as well as inter- and intra-party relations.

The third set of variables are the policy implementation outcome that could range from an implementation success or failure. The failure to implement the CFS policy may appear to be at one of the following: implementation on paper, a standstill or emergence of conflicts during the implementation phase (Table 7). Drawing from the literature review in chapters 2 and 3, the link between CIT and federalism variables may explain for the varying outcomes at the state level.

Table 6: Overview of Independent Variables – Characteristics of Federalism

Type	Specific variable	Values	Data sources
<i>Independent variable</i>	Federalism		
	Division of powers and constitutional supremacy	<ul style="list-style-type: none"> • centralised / decentralised / deconcentration / devolution • total separation / overlaps • sufficient/insufficient law to advocate / resolve environmental issues • dependent (biased) / independent (unbiased) judicial body and courts • Sultans have significant / insignificant power over forest and wildlife 	Malaysian Constitution, documents, reports, books, journal articles, secondary documents, interviews
	Distribution of finances	<ul style="list-style-type: none"> • adequate / inadequate development funds regardless of state ruling party • absence / presence of alternative ways for states to generate funds to administer environment 	Malaysian Constitution, documents, reports, books, journal articles, secondary documents, interviews
	Intergovernmental relations	<ul style="list-style-type: none"> • federal-state relationship is affected / not affected by inter- and intra-party relations 	Malaysian Constitution, documents, reports, books, journal articles, secondary documents, interviews

Source: Author

Table 7: Overview of Policy Implementation Outcome

Policy outcome	Policy implementation outcome		
	Success	<ul style="list-style-type: none"> • existence of compliance mechanism • high accountability in attaining measures • high accomplishment of policy objectives • unbiased political attitude and behaviour 	Policy implementation reports, documents, annual reports, interviews
	Paper implementation	<ul style="list-style-type: none"> • absence of compliance mechanism • low accountability in attaining measures • no accomplishment of policy objectives • unbiased / biased political attitude and behaviour 	Policy implementation reports, documents, annual reports, interviews
	Emergence of conflicts during the implementation phase	<ul style="list-style-type: none"> • existence / absence of compliance mechanism • low accountability in attaining measures • low accomplishment of policy objectives • unbiased / biased political attitude and behaviour 	Policy implementation reports, documents, annual reports, interviews
	Standstill	<ul style="list-style-type: none"> • absence of compliance mechanism • no accountability in attaining measures • no accomplishment of policy objectives • unbiased / biased political attitude and behaviour 	Interviews

Source: Author

Selection of Case Studies

The case study approach helps to answer the main question of why implementation of the CFS has occurred in some states and not others, and to what extent the federal nature of Malaysia plays a part in explaining policy success or failure. Policy implementers are comprised of government bureaucrats, political actors, non-governmental organisations and interest groups. Parallel to conditions for case study use suggested by Yin (2011), the case study design generates answers to the ‘how’ and ‘why’ questions that have emerged in the CFS policy implementation arena where I cannot interpret the behaviour of my participants. Plus, I am able to focus on contextual conditions relevant to the implementation phenomenon as boundaries between phenomenon and context are unclear.

This context-dependent characteristic of case study research provides ‘concrete and practical knowledge’ (Flyvbjerg, 2006), through which subsequent deconstruction or reconstruction of a phenomenon takes place (Baxter & Jack, 2008). A qualitative case study method also allows a researcher to explore the various components in a particular system such as organisations, communities, individuals, programs, relationships as well as any form of interventions (Yin, 2011), in line with a comparative institutional perspective. The strength of this design is also the ability to observe a range of different contextual and resource related points that shape success or failure. It is also fundamental for analysing organisations and their relationships (Easton, 2010), in order to establish frameworks for future analysis.

The case study method evidently dominates implementation research in the environmental politics and policy arena (see Wichelman, 1976; Mann, 1982; Molnar & Rogers, 1982; Ramakrishna, 1984; McLaughlin, 1987; Desai, 1989; Brinkerhoff, 1996; Hills & Man, 1998; Jordan, 1999; Swanson et al., 2001; Juntti & Potter, 2002; Morris, 2004; Kaljonen, 2006; Urdal, 2008; Zobel, 2008; De Oliveira, 2009). Implementation research benefits from case studies as policy execution is influenced by local environments, organisational cultures and political structures (O’Toole, 1986; Zhan et al., 2013). Case studies draw out theoretical understanding and this type of study is still required to date (Zhan et al., 2013). Eckstein (2000) also finds the case study technique presents a strong usefulness in comparative politics, which observes party networks or political structures such as federalism. According to Abadie, Diamond and Hainmueller (2010), comparative case studies are often used to assess the outcomes of one unit affected by an event compared to a unit that is unaffected. Therefore, case study is a suitable method to observe the inconsistency of the CFS policy implementation.

In choosing cases, Gupta (2012) suggests the use of Mill's method of difference, whereby to establish a reasoning for divergence between two cases with dissimilar dependent variables, a small number of differences is to be observed¹⁷. In doing so, the variation in outcomes and the causal variables can be scrutinized. As for choosing an appropriate number of samples, Eisenhardt (1989) recommends a case study to have at least four to ten samples to sufficiently draw empirical findings and theoretical conclusions. Following her advice and taking into consideration availability of resources (especially time and finances), this research involves five states, which were chosen based on a set of criteria discussed under the next subtopic. Nevertheless, there is no substantial impact in excluding the other states.

To identify and compare factors that influence CFS policy implementation at the state level, I interviewed federal and state implementers that are involved while data was also gathered from government documents available in public domains, local archives and libraries. The universe of cases in this research consists of all the states that are involved with the CFS policy implementation. The empirical focus is to observe a pattern of how Malaysian federalism influences environmental policy implementation. A single-country comparative study, its aim is to identify variations among cases by testing hypotheses that are established based on theoretical propositions, which will depict the research puzzle in itself.

Due to the absence of an implementation or progress report at both national and subnational levels, I had to triangulate the data on implementation status among all implementing actors. First, I consulted the officer-in-charge of the CFS policy in the Ministry of Natural Resources and Environment at the federal level to determine implementation outcome of each of the 8 states involved (p. 78). To ensure that it is in line with literature on policy implementation success and failure, I used the works of Van Meter and Van Horn (1975), Pressman and Wildavsky (1984) and O'Toole (1986). The findings of these scholars are still relevant today and are reflected in recent works.

The implementation outcome status is then verified with other federal officers and political actors as well as the state officers during the interview phase. I also ask for supporting evidence to their mentions, especially if they claim that the policy has been implemented, for example

¹⁷ Mill's 'method of difference' suggests that cases are compared based on the presence of a presumed causal factor present in one and absent in another. However, it is important to ensure that both cases are similar in other aspects to construct a high validity (Mill, 2002).

state policy plan/document, official gazette document, official state map, et cetera. Verifying and confirming these statuses from all implementing agencies served as the inter-coder reliability in ensuring that each state is appropriately classified of its implementation status.

Successful implementation of the CFS is demonstrated by the restoration, conservation and enhancement of links between major remaining forests complexes assigned to state agencies, even in part. In that regard, only three out of eight states have successfully implemented the CFS: Perak, Selangor and Johor (Table 8). In the remaining states, the implementation is either at a standstill, has documented implementation plans but no substantial execution is being carried out in the field due to lack of resources, and/or faces an ideological conflict of development versus conservation in implementing the policy.

Table 8: Implementation status of the states involved in the CFS policy

Implementation Status	Successful Implementation			Failed Implementation				
				‘Paper implementation			Standstill	
States	Perak	Selangor	Johor	Kedah	Negeri Sembilan	Pahang	Terengganu	Kelantan

Source: Author

Drawing from the literature review in Chapter 2 and Chapter 3, political, economic and socio-cultural factors influence the success of policy implementation. Thus, the cases selected vary in terms of state ruling party, intergovernmental relationship including inter- and intra- party politics, economic conditions, availability of finances, land management system, state’s biodiversity value, as well as role, practices and influence of traditional Malay Rulers (Sultans). The remaining part of this section elaborates on why the listed variables were selected. With the absence of implementation or progress report at both national and subnational levels, I have based the status of CFS policy implementation in each state by consulting an officer in the Ministry of Natural Resources and Environment who is in charge of the CFS policy.

An influential component in Malaysia’s political system, which relates closely to the success or failure of implementing a policy at the state level, is the ruling party. The state’s power resides over land and forests, making it the most vital component to forest and wildlife policy implementation. The opposition party rules two states among the eight involved with the CFS policy. The Kelantan state has long been under the ruling of the Pan-Malaysian Islamic Party (*Parti Islam Se-Malaysia*), which is a long-time opponent to the party that has ruled Malaysia since its independence – the National Front (*Barisan Nasional*). Another opposition state is

Selangor, which has been under the ruling of the People's Justice Party (*Parti Keadilan Rakyat*) since 2008 (Figure 4). As literature suggests that the allocation of finances corresponds to the political coalition that governs the states in Malaysia (Ongkili, 1992; Wong & Chin, 2011), I use the availability of funds as an outcome to the ruling party instead of a criterion. Closely related to this variable is the federal-state intergovernmental relations that exist, in which the intergovernmental relations influence allocation of finances and knowledge transfer between these entities.

Linked to the success of policy implementation, a state's income is a key variable, as finances remain an integral part of policy implementation. Literature finds that only when a state has a stable income and allocation of finances for the policy can policies be executed effectively. In the current Malaysian financial system, the federal government administers income and trade taxes, leaving states to depend on allocations provided by the federal government besides revenue from natural resources. However, there is a possibility that states are deprived of funds although it may have a higher need. In addition, historically states ruled by the opposition party have always been deprived of finances and development although allocation of finances correlates to the success of policy implementation.

The presence of *Orang Asli* (indigenous people) communities within the CFS area may create a conflict between environmental importance versus its economic, social and cultural significance. Aspiring to conserve and preserve an area occupied by the *Orang Asli* affects their livelihoods, adding to the complexity of policy implementation. As there are very little aspects of community forests incorporated into the CFS policy implementation plan, the indigenous people often feel that activities are implemented without identifying substantial benefits to them (Wook, 2015). The implementing actors have to be highly cautious and sensitive towards provisions listed under Aboriginal Peoples Act 1954 (Act 134). According to the Act, the *Orang Asli* can reside in the reserves gazetted by the state. However, the *Orang Asli* have the freedom to roam in forests, which in some cases, leads to them inhabiting more areas. These areas, although never gazetted as *Orang Asli* reserves, is then automatically considered *Orang Asli* areas. Under the provisions for *Orang Asli* reserve, lawfully, no forested area or land can be declared as a forest reserve, whereas under the provisions for *Orang Asli* area, "no land shall be declared a sanctuary or reserve under any written law relating to the protection of wild animals and birds". Even so, an *Orang Asli* area can be turned into an *Orang Asli* reserve if permitted by the state. This remains a conflict for the implementation of CFS policy.

The existence of an economic corridor signals that there will be additional infrastructure development and clearing of land to enable investors to set up their businesses. To date, all states except for Selangor and Negeri Sembilan are located near an economic corridor (Figure 5). As a spatial policy, the CFS policy implementation becomes more complex in states with a larger area of coverage, a greater number of districts and involvement of more elements, as coordination involves higher number of agencies and more resources. In order to test the influence of this factor, the number of districts involved in the CFS policy is also taken into consideration for each state. Moreover, effective policy implementation has an inverse relationship with the number of agencies and veto points required in its execution, where effectiveness decreases in proportion with increase in number of agencies involved (O’Toole & Montjoy, 1984). I have also taken into account the importance of the area for wildlife in each state as stated in the policy document, based on scientific research undertaken by the Ministry of Natural Resource and Environment (MNRE) and various wildlife NGOs. The policy becomes more important for wildlife conservation when the score is higher.

Figure 4. State ruling governments in Peninsular Malaysia.



Source: Author.

As discussed in the previous chapter, the nebulous nature of Sultans' powers and their lifestyle and practices are key points to understand the Sultans' influence on the CFS policy implementation. The kingship in Malaysia is the one of most unique systems globally as its king is elected every five years among 9 hereditary Malay Rulers of various states who are the members of the Conference of Rulers. Although Malaysia has 13 states in total, only 9 have a hereditary Malay Ruler and they are from Perlis, Kedah, Perak, Selangor, Pahang, Negeri Sembilan, Johor, Terengganu and Kelantan. Eight of out these nine states are involved in the CFS policy.

Figure 5. Economic corridors in Peninsular Malaysia.



Source: Author.

In this research, I test the criteria listed in Table 9. The states of Perak, Selangor and Pahang are chosen to represent successful implementation while the states of Terengganu and Kelantan will represent failed implementation. Some states are ruled by the National Front (*Barisan Nasional*) while some are ruled by the federal opposition coalition. Two other failed states that are administered by the National Front (*Barisan Nasional*) were not selected as they did not meet other criteria that will be elaborated on further. The chosen states vary in terms of area of CFS coverage and number of districts involved. The selection of case studies has also taken into account the existence of economic corridors and importance for wildlife. The state of Pahang has the widest area of coverage and highest number of districts at 11; conversely, CFS

implementation in Selangor only involves 3 districts. All states chosen except for Selangor have a distinct economic corridor. However, Selangor is the most developed and the richest state in Malaysia. The five states also vary in terms of importance for wildlife. The state of Perak is the most important for wildlife conservation while the state of Selangor is the least important.

Hence, the states that were chosen for this comparative study are Perak, Selangor, Pahang, Kelantan and Terengganu. The first two states (Perak and Selangor) had successfully implemented the CFS policy, although one is administered by the National Front (*Barisan Nasional*) and the other by an opposition political party. The three other states (Pahang, Kelantan and Terengganu) have all failed to implement the policy so far and they are also ruled by differing political parties.

Three states were not included in this research due to limitation of resources. They are Johor (a success story), and Kedah and Negeri Sembilan (failed implementation states - 'paper implementation'). However, these respective categories are represented in the chosen subset. This is also in line with Eisenhardt's (1989) recommendation for a case study research to have at least four to ten samples to sufficiently draw empirical findings and theoretical conclusions. Besides, both 'standstill' cases (Kelantan and Terengganu) were chosen due to the ruling party at the state level. The state of Terengganu was governed by BN (same as federal) and Kelantan by an opposition political party (PAS). The Kelantan states is also the only failed state with a different political party compared to the rest. Observing the criteria for these states listed on Table 9, the findings would not be drastically different, but it is worth exploring in a future research.

Table 9: Criteria for Choosing Cases

	Kedah	Perak	Selangor	Negeri Sembilan	Pahang	Kelantan	Terengganu	Johor
<i>Current implementation status</i>	Failed	Successful	Successful	Failed	Failed	Failed	Failed	Successful
<i>Ruling Party</i>	BN	BN	PKR	BN	BN	PAS	BN	BN
<i>Existence of economic development corridors</i>	NCER	NCER	Industrialised state	-	ECER	ECER	ECER	IRDA
<i>Existence of Orang Asli</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Area of coverage</i>	CFS 1	CFS 1	CFS 2	CFS 2	CFS 1 & CFS 2	CFS 1	CFS 1	CFS 2
<i>No. of districts involved</i>	6	6	3	6	11	6	5	4
<i>Importance for wildlife</i>	3	3	1	1	2	2	2	2
<i>Sultan as the Chief of State</i>	✓	✓	✓	✓	✓	✓	✓	✓
<i>Case study chosen</i>	X	✓	✓	X	✓	✓	✓	X

Limitations and conclusions

Three major limitations to my research that I identified were related to the lack of formal reports and difficulties faced during the interview process. Due to the absence of a formal interim report or any form of formal document on how much has been implemented in each state, I had to rely on interviews with the officials and documentation compiled by each state department or agency. The hectic schedule of officers as well their possible apprehension in disclosing the real situation due to Malaysia's bureaucratic culture resulted in a restriction related to government officers and private policy documents. However, a number of officers from the agencies at the federal level were open to discussing the policy execution overall.

While carrying out the interviews, I faced the typical challenges of this technique. First, some interviews were cancelled at the last minute with no lead to any substitute. In the event an interview was cancelled last minute, I requested for another appointment or to speak to another officer of the same rank and file. If the candidate identified originally is the most suitable participant for the interview, I rescheduled the interview. Second, some officials were unequipped with sufficient knowledge of the CFS policy and some were not willing to provide meaningful or prudent answers to my questions. A couple of federal government officials expressed their inability to reveal information on CFS due to the highly sensitive and confidential negotiations of the Trans-Pacific Partnership Agreement. A number of officers at the state level were even found to lack the ability to differentiate ecological linkages and the forest spine as a whole, which is an important understanding in executing the policy.

Third, discrepancy of information was present between information obtained during interviews and factual data from official documents published by department. In overcoming or minimising this limitation, I used the triangulation method to speak to relevant participants to verify the information. It was found that the origin of contrariety is caused by misinformed officers or different methods of data interpretation. An important feature of the interview method is the ability for interviewees to explain statistics and data.

More broadly, an obvious limitation of the case study design is the degree to which the findings of the research may be generalizable outside Malaysia. Though the CIT can be utilised to understand the role of federalism, this study is unable to provide an analysis of federalism beyond Malaysia's environmental policy implementation space or how federalism has influenced the overall performance of the CFS policy.

It is evident that a combination of inductive and deductive approaches works best for this research to analyse and triangulate the data collected. The data operationalization of this research has also been detailed to provide a methodological understanding to how this research is undertaken. The research methodology employed has also selectively chosen the case studies. As the role of history is important in the policy-making process as it provides lessons of the past, which feeds into policy discussion, the following chapter will be the first analysis chapter focusing on policy history and an account of institutions that have governed its development.

CHAPTER 5: FEDERAL INSTITUTIONS & CFS POLICY IMPLEMENTATION

“The biggest problem with implementation is political will.”

(P3, 2015)

Power division, distribution of finances and intergovernmental relationships are characteristics of federalism that have impact on the success and failure of the Central Forest Spine (CFS) policy implementation. The focus of this chapter is on the influence of the first CIT element on the CFS policy implementation outcome: power division in the Malaysian federalism. The division of power in a federal setting maps the scope and authority of each government unit and functions as the arbiter to conflicts and contradictions (Feeley & Rubin, 2009; Birkland, 2015). The formal and informal powers are both important in determining the magnitude of powers that resides within an entity. This chapter argues that the formal powers of politicians and bureaucrats (and state governments) and informal powers may be balanced by strengthening the role of deliberative platforms for the CFS policy to be implemented. If formal powers are described extensively but informal powers are poor, then it is more likely that a policy will fail in its implementation stage.

The formal power division is determined by the Constitution, which describes power vested in the three main political branches of administrative, judicial and executive arms, as well as power allocation between the state and federal governments (Ostrom, 1985; Cameron & Falleti, 2005; Feeley & Rubin, 2009; Rector, 2009). In the Malaysian federalism setting, the Constitution assigns power over finance and wildlife to the federal government, while the state governments are responsible for land, forestry and agriculture. The power vested in the federal and state governments in Malaysia are in accordance to the separation of powers stated in its Constitution, especially in the domain of environmental policymaking process. Implementers may approve or resist a new policy based on how the policy will make a difference to its current power and resource accumulation strategy (Bakir & Jarvis, 2018).

Though deliberative platforms exist to challenge, discuss, argue and mediate matters and issues faced by both levels of government pertaining to the environment and use of natural resources, the powers of all these entities are preserved in view of the constitution. In this chapter, I also compare power relations that exist in the states that have successfully implemented the Central Forest Spine (CFS) to states that have failed. I find that Malaysia's dual federalism preserves states' power to govern the forest and wildlife sector although there are overlaps and

redundancies in the system, which may appear as marble cake federalism. Though deliberative platforms exist to coordinate and facilitate negotiations as well as reduce overlaps, they are functioning poorly. The weak national deliberative platforms led to poor implementation of environmental policies at the state level, leading to failed implementation.

Formal powers that are described in the Malaysian constitution are complemented by informal powers such as intergovernmental relations, state's political will and informal powers of Sultans. Rose and Greeley (2006) define political will as 'sustained commitment of politicians and administrators to invest political resources to achieve specific objectives'. Van Tatenhove et al. (2006) find that inter-play of formal and informal practices exists, and the link between the two may help us to better understand the variation in the CFS policy implementation. As such, in my discussion of formal powers held by the state governments, state's political will has emerged as a significant factor in ensuring the CFS implementation success or failure.

Intergovernmental relationships are central and key to power division in federal structures, as they influence governments of different levels in how they operate and draw their policy scope according to the delineation of powers mapped by the constitution. The nature of a federal-state relationship could be competitive or collaborative, and both type of interactions could yield two possible consequences: negative (destructive) or positive (constructive) (Cameron & Simeon, 2002; Johns et al., 2006; Simmons & Graefe, 2013). In the case of the CFS policy implementation, as the federal government established the policy, a positive working relationship between the federal and state governments is required to result in a higher possibility of the policy being implemented. Similarly, the relationship between states too could be constructive or destructive.

The relationship between states may act as a check and balance to the federal-state relationship (Elazar, 1972; Zimmerman, 1996; Fenna, 2006; Fenna, 2007). A constructive state-state relationship acts as a strong prevention to abuse of power by the federal government and as a restriction to the power vested in the federal government. If a destructive state-state relationship exists, there is a possibility of power abuse and consolidation of power by the federal government. The success of the CFS implementation is also influenced by the monarchs. This research finds informal but visible powers that are vested in the monarchs at state level to be influencing the decisions made to implement the policy.

Marble Cake Environmental Federalism and National Deliberative Councils

Countries that apply marble cake federalism in the environmental domain, such as Malaysia, share responsibilities within different levels of governments and these various units tend to cooperate (Watts, 2015). This demonstrates many overlapping responsibilities between the federal and state governments, aiming to ensure a check and balance mechanism. In this setting, public policies are established and governed in the same manner – usually with the federal government providing the funding and state governments administering the policies. In ensuring that the marble cake federalism setting functions to its optimum, positive and collaborative intergovernmental relations play a central role (Conlan, 2006; Nicholson-Crotty & Theobald, 2010; Shockley, 2014). In the case these working relations are negative or destructive, it will lead to poor service delivery and low productivity (Kapucu et al., 2010; Happaerts et al., 2012).

In the case of the Malaysian federalism, power is shared between the federal and state governments, complemented by deliberative platforms that enable these entities to express dissent, discuss, debate ideas and issues, and propose alternative policies. Deliberative platforms in the form of national councils are one of three decision-making points that exist within the Malaysian political structure. They ensure opportunities for both federal and state governments to present issues or concerns on mining, agriculture, forestry, development or any other matters that have multiple decision-making points – especially when there are conflicting interests or disputes between the federal and state governments. Almost all of the national councils have formal powers but appear to be weaker than the legislative powers set out for them and weaker than the powers assigned to federal and state governments. The primary aim of these councils is to serve as an institutional framework for policymaking and implementation. These councils also provide a platform for collaborative policymaking exercise between the federal and state governments.

Among the national councils that exist in Malaysia, those that are related to management and administration of natural resources are the National Land Council, National Forestry Council, National Physical Planning Council, National Biodiversity Council, National Mineral Council and National Water Resources Council. The composition of members for these councils are similar, usually chaired by the Prime Minister or/and Deputy Prime Minister, attended by Chief Ministers of each state (known as *Menteri Besar* or *Ketua Menteri*), and relevant federal and state Ministers and representatives. Functioning as supreme bodies that align planning and

implementation across the country, the decisions made by these councils are to be implemented. However, an argument between the federal and state governments on the obligation imposed by these councils exists, stemming from the formal and informal powers vested in each of the councils. These councils are also central to the success of CFS policy implementation.

The National Land Council (NLC) is the oldest (established in 1958) and one of the two councils that has formal or constitutional powers described in the Malaysian Constitution. Under Article 91 of the Malaysian Constitution, the NLC gathers to formulate a national policy for the promotion and utilisation of land for mining, agriculture, forestry or other uses throughout the country in consultation with the National Finance Council. In its discussions, it emphasizes the importance of sustainable land use, and adherence of laws pertaining to both federal and state governments. The Article also advocates that the federal and state governments shall follow the formulated land-use policies.

The NLC also formed the National Forestry Council (NFC) in 1971 to unite forest administration in all three regions (Federated Malay States, Unfederated Malay States and Straits Settlement). The reason for this formation was issues and challenges faced with managing forest resources and the forestry sector, which needed streamlining to ensure that it could generate the income needed by the nation for development and poverty eradication. Also, the focus and scope of this council is towards planting, sustainable logging and harvesting and managing forest resources in accordance to the National Forest Policy 1977 (and later in accordance with CBD post-1992).

Established in 2003, the National Physical Planning Council (NPPC) is another national council that plays a supporting role to the NLC. The NPPC is responsible for ameliorating Malaysia's physical environment and achieving sustainable development using effective and efficient planning tools. It also advises both federal and state governments on planning matters in accordance to the Town and Country Planning Act. Formal powers are conferred to the NPPC through Section 2A of Act 172 in the Town and Country Planning Act 1976. This enables the council to have more influence on its demands and allows for more opportunities to achieve a desired outcome.

All other environmental and natural resources related to national councils in Malaysia were only instituted post Malaysia's signing on the Convention of Biological Diversity in 1992,

which pushes governments to conserve and sustainably use all components of biodiversity. A national council that is directly related to the policy formulation and policy implementation of the CFS policy is the National Biodiversity Council, formed in 2001, which plays a role in streamlining all matters related to biodiversity, conservation and sustainable use of biological resources between the federal and state governments. Two other relevant and related councils, the National Water Resources Council and the National Mineral Council, have indirect influence on the success of the CFS policy implementation. The National Water Resources Council was set up in 1998 to pursue effective water management including inter-state supply of water and management of river basins (Mokhtar & Tan, 2004; Raja Dato' Zaharaton Raja Zainal Abidin, 2004). In 2000, the National Mineral Council was established to ensure an integrated development of the minerals industry to support the passing of the Federal Minerals Act 525 in 1994 (Wu, 2000; Hisamuddin et al., 2009).

Though the establishment of these national councils or deliberative platforms is of a formal nature, the powers bestowed upon them varies. The National Land Council (NLC), National Forest Council (NFC) and National Physical Planning Council (NPPC) have formal powers but appear to be weaker than the legislative powers set out for the federal and state governments, listed under the Articles 73 to 79 of the Malaysian Constitution (federal, state and concurrent lists). Under the federal, state and concurrent lists, land and forests are a state matter whilst wildlife is administered by the federal government. Both the federal and state governments administer protection over birds and wild animals in a joint manner. A provision of formal powers for councils other than the NLC will contradict the power division stated in the Malaysian Constitution. State governments also deem that they will be deprived of their autonomy to make decisions about matters already assigned to them through the Constitution. As such, the councils could only aim ambitiously that all states will understand, agree and implement the decisions made and the reasonings provided, which often is a rare scenario. Alternatively, the NFC and NPPC could bring unresolved conflicts to the NLC and the Parliament for further deliberation, but it may not be resolved and may end up as a stand-off (Table 10).

In examining the influence of Malaysia's marble cake environmental federalism on the CFS policy implementation, federal and state implementers were asked to describe their understanding of these deliberative platforms and their influence on the success of CFS policy implementation. The officers identified two weaknesses, with the first being lack of in-depth

consultations and debates. The nature of discussion and debates in these deliberative platforms are highly focused on states and inter-state issues or challenges, and less on cross-cutting issues across various aspects of the environment. For example, the National Forest Council aims to streamline forestry practices across all states, without an overarching view that forests consist of flora, fauna and other components such as biodiversity, minerals, rivers, soil, et cetera. The sectoral feature of the deliberative platforms (land, forestry, minerals, biodiversity) narrows the perspectives in viewing the matter deliberated, although most issues are cross-cutting. For example, challenges faced in implementing the CFS is linked to problems of prior land use conversion, land acquisition, state land forests, alienated forests, de-gazettement of PRFs, illegal logging, lack of research on wildlife movement and so on, which require expert opinions from members of all deliberative councils. Secondly, these platforms lack a time frame for policy execution and with no penalty or incentive involved, it makes no difference to the state whether the policy is implemented or not. A number of interviewees illustrate this point:

There isn't any penalty but if all the states agree, and one state did not adhere to the decision, we report back to the council and they will look into the matter. (MNRE (P1, 2015))

... they can only strongly urge the states to implement the decision, but they cannot take any action against them. (DWNP (P2, 2015))

But under the federal constitution, it does not indicate that any decision made through these councils shall be implemented. Shall. That means explicitly in superlative term, they must implement. It is as though it is mandatory. But the question is whether it is time bound. But there is no time frame. If the state government agree to accept the decision made by the Land Council but plan to implement it later, in 10- or 20-years' time, they can. That is one of the weakness. There is no time bound. (FDPM (P3, 2015))

Although the NLC, NFC and NPPC may impose timelines, states that are not keen on implementing the CFS policy will justify their lack of commitment with the argument of land and forests being states' prerogative. As such, it can be summarised that deliberative platforms relevant to environmental policymaking in Malaysia do not yield positive and collaborative

outcomes but rather negative ones that have led to poor service delivery and low productivity, although they are viable for resolving challenges and problems faced.

Table 10: Strengths and Weaknesses of National Deliberative Councils

Council	Strengths	Weakness
National Land Council (NLC)	<ul style="list-style-type: none"> • has formal or constitutional powers described under Article 91 of the Malaysian Constitution • formulates national policy for the promotion and utilisation of land for mining, agriculture, forestry or other uses throughout the country in consultation with the National Finance Council • advocates that the federal and state governments shall follow the formulated land-use policies 	<ul style="list-style-type: none"> • appear to be weaker than the legislative powers set out for the federal and state governments, listed under the Articles 73 to 79 of the Malaysian Constitution (federal, state and concurrent lists) • state governments also deem that they will be deprived of their autonomy to make decisions about matters already assigned to them through the Constitution • these councils could only aim ambitiously that all states will understand, agree and implement the decisions made and the reasoning provided
National Forest Council (NFC)	<ul style="list-style-type: none"> • streamlining forest administration to ensure that it could contribute the income needed by the nation for development and poverty eradication • focus and scope of this council is more towards planting, sustainable logging and harvesting and managing forest resources in accordance to the National Forest Policy 1977 (and later in accordance with CBD post-1992). 	
National Physical Planning Council (NPPC)	<ul style="list-style-type: none"> • formal powers are conferred to the NPPC through Section 2A of Act 172 in the Town and Country Planning Act 1976 • responsible for ameliorating Malaysia’s physical environment and achieving sustainable development through the use of effective and efficient planning tools • advises both federal and state governments on planning matters in accordance to the Town and Country Planning Act 	

Though Malaysia’s constitutional division of powers and setting portray a dual federalism where there is a clear delineation of powers, scholars have classified Malaysia’s policymaking

process to be centralised in some policy domains such as fiscal management, resulting in financial policies being established through the top-down approach (Slater, 2003; Moten, 2008; Loh, 2010; Wong & Chin, 2011; Puetter, 2012; Wong, 2013). Besides, as described in earlier chapters, Malaysia's environmental policy domain exhibits the nature of a marble cake federalism. Through the interviews held with the federal and state government officials, the CFS policy can also be classified as one that was established through this approach. According to P13 (2015), the state deems to have no benefit from its economic point of view as not all state governments understand the importance of the policy as well the advantage of conservation and preservation of flora and fauna. However, the federal implementers appear to have a clear objective and aim for the policy, but most of its specifications require collaboration from state governments to be implemented. A state forestry officer said:

... if we implement this, the cost involved with acquiring of land, especially alienated land, it will cost more than (MYR) 2 billion. The Chief of Department of Town Planning said the focus is more on animals, and then he asked me if the state government is willing to do it. But the policy has no clear benefits to the state government as the state looks at it from other perspectives. The state government would not finance it, and unless the federal government can come up with the money... (Terengganu-SFD (P13, 2015))

National councils may become useful avenues for coordination between federal and state government as well as effective policymaking and deliberative platforms only if these weaknesses are rectified (P3, 2015). The federal officer suggested that a time frame for policy implementation must be introduced when decisions are made, especially by the National Land Council, along with a penalty system to enable policies like the CFS to be implemented. Apart from this, the nature of the deliberative platforms should transition to become a more convergent one, which will include factual input and expert advice from multiple agencies to find solutions and resolve critical issues. The current divergent nature of these councils has led to prescription of simple solutions to complex issues, which had resulted in only a temporary solution to the problem.

The implementation plan for the CFS involves many agencies across different environmental components and across the federal and state levels. The Ministry of Natural Resources and Environment (MNRE) is the main agency that steers all implementation related tasks and

activities. The federal government entity principally manages all the natural resources across Malaysia and is headed by a Minister who reports all progress to the Parliament when required and discusses any matters that arises. The Minister is assisted by a Secretary-General who steers both daily executive tasks including a key subunit, the Biodiversity Management and Forestry Division. The subunit is responsible for managing forests and wildlife in Peninsular Malaysia through two long-leading agencies, the Forestry Department Peninsular Malaysia (FDPM) and Department of Wildlife and National Parks Peninsular Malaysia (DWNP).

In showing its commitment to steer the CFS policy implementation, the Ministry has established three committees at the federal level. The National Steering Committee is headed by the Secretary-General of MNRE to discuss matters related to policy direction, while the Director-General of the FDPM chairs the Technical Committee, which deliberates on technical issues faced by agencies involved. The composition of members for both committees are similar although the focus of issues and challenges discussed differ. The third committee is the Improving Connectivity-CFS Committee (IC-CFS) chaired by the Deputy Secretary-General of MNRE involving only three states: Perak, Pahang and Johor. The IC-CFS committee functions as a project committee and it is led by a National Project Director and National Project Manager, semi-funded by the United Nations Development Programme and supported in-kind by the MNRE.¹⁸ Although all three committees are dynamic, the National Steering Committee and Technical Committee are focused on pushing the state governments to participate more actively in executing CFS strategies while the IC-CFS is aimed at empowering the state level implementers through training and workshops. However, the MNRE, FDPM and DWNP still face difficulties in convincing all states of the importance of CFS and its benefits (P8, 2015). According to the official representing the United Nations Development Programme in Malaysia:

When referring to resource economics, it takes a long time to benefit from conservation as opposed to now. Infrastructural development and building of factories yield profit in a short period of time. (UNDP (P8, 2015))

In investigating further why state officers are not convinced of the importance of the CFS policy, I found that the two leading key implementers at the state level serve different political masters. This factor influences the decisions and actions of bureaucrats involved in frontline

¹⁸ Supporting in-kind refers to any other form of support other than finances such as office space, personnel and equipment.

policy delivery as they are significantly influenced by their political masters, as mentioned by Canes-Wrone (2003) and Flanigan (2013) in their respective works. In the case of the CFS policy, the State Forestry Department (SFD) officers are hired by state governments while all State Department of Wildlife and National Parks (PERHILITAN) staff as well as state directors for both agencies are employed by the federal government. All state-level agencies report to their respective Director-Generals and implement policies according to the directives by their paymasters¹⁹ – the federal or state government. The influence of paymasters is viewed to have a strong influence as it takes precedence over the agency they are affiliated to.

Striving to make the CFS policy implementation a success, each state had been persuaded to set up a Working Committee (WC) to coordinate the tasks involved across various and relevant agencies at the state level. The committee is chaired by the Economic Planning Unit of each state and is formed with membership mirroring the Technical Committee established by the federal government. The WC functions in a manner that appears to be parallel to the national deliberative councils, ensuring a working platform exists between the federal and state agencies involved, aiming to achieve better policy coordination. Though this committee may appear to be redundant in light of the national deliberative council, it is different in the nature of discussions held – which is more technical and involves the localised strategies to implement the CFS policy in each state. This signals a decentralisation in land, forest and wildlife administration even if Malaysia is often categorised as a centralised federalism (Loh, 2010; Puetter, 2012). In this setting, the deliberative platforms are important as platforms to negotiate and achieve consensus and decisions to implement policies relevant to its sector.

In summary, deliberative platforms exist through elements of Malaysia's 'marble-cake' federalism to coordinate and facilitate negotiations and reduce overlaps. However, they appear to be functioning poorly. The platforms have a lack of in-depth consultations or debates as they do not pay attention to cross-cutting issues across various aspects of environments. Also, measures recommended or advocated by the platforms or councils do not impose any penalty or provide any incentive if a state fails to adhere to recommendations. As such, the function of the deliberative councils may be reviewed to further improve its effectiveness. If deliberative platforms at national levels are weak, the influence on the implementation of a certain policy will be poor – leading to failed implementation. Deliberative platforms are useful tools for

¹⁹ This term is used to refer to an official of a government, business, et cetera, responsible for the payment of wages and salaries.

policy coordination but because they are poor, they are ineffective, causing other entities such as the state governments to act as the determinant.

Preservation of States' Institutional Power and Sovereignty

The success or failure of the CFS policy implementation is directly influenced by the power vested in state governments as described in the Malaysian Constitution. According to Przeworski (2004) and Knoepfel et al. (2007), institutional structures and mechanisms shape outcomes of policy implementation through their influence on norms, beliefs and actions. Although Malaysia is often classified as a centralised federalism through observations made in other sectors or aspects such as finances and infrastructure development (for example, see Slater, 2003; Moten, 2008; Loh, 2010; Wong & Chin, 2011; Puetter, 2012; Wong, 2013). Loh (2010) and Puetter (2012) find the administration of Malaysia's land, forests and wildlife decentralised. State governments may agree to implement a particular policy at the national deliberative council meetings but are still able to alter the implementation plan whilst in the field due to absence of a penalty and timeframe as discussed in the previous section. Hence, the power devolved to state governments and various agencies in a number of states appears to impede the implementation of the CFS policy. In line with that, this section argues that Malaysian federalism preserves the power and sovereignty of states in accordance to the division of powers described in the Federal, State and Concurrent Lists (Article 73 to 79 of the Constitution). A state's decision to implement or not implement the CFS policy is based on its political intention and desire, or political will.

Williamson (2001) has proposed a solution for a decentralised land management system, which is to unite all relevant land administration activities into one government agency, especially to bring together the tasks of mapping, land information, valuation and land registration. Despite the fact that objectives and direction of implementing agencies at the state level determines its political will to implement a policy, the aims of an agency are influenced by its political paymasters²⁰, resulting in varying outcomes to the policy. States that have successfully executed the CFS policy have positive political intention or desire (political will) towards conservation and preservation of flora, fauna and consequently, biodiversity. On the other hand, states that have failed to realise the CFS policy have negative political will and focus on

²⁰ According to the Cambridge Dictionary, a 'paymaster' is a person or an organization that pays for something to happen and therefore has or expects to have some control over it or a person whose job is to pay wages or salaries in certain organizations.

infrastructure and economic development, disregarding the importance of sustainable use of biodiversity.

To date, there are two states that have successfully implemented the CFS policy set out for the first phase for the period 2011 to 2015. Apart from working collaboratively with the federal government, the Perak and Selangor state governments' supportive actions are primarily influenced by their political will. The fact that both states are governed by two opposing parties, Perak by the National Front or *Barisan Nasional* and Selangor by People's Justice Party or *Parti Keadilan Rakyat*, demonstrates that the need for political will to implement the CFS policy supersedes inter- and intra-party politics. In these states, its government encouraged, motivated and challenged implementing agencies to undertake efforts of tree replanting, reforestation and imposed stricter controls on wildlife hunting, aligned to the goals and objectives of the CFS policy. However, the sources of this political will are still unclear and could be further explored in future research. A number of interviewees illustrate these points:

The biggest problem with implementation is political will. If they commit, within that one term, we are certain and work hard to get a second term, and third term and fourth term... Do you know what the Perak state government did? They reviewed the plan, gazetted it and compensated those who owned land within that complex. The government took over and created the Amanjaya Forest Reserve. A new forest reserve. To connect the two forest [Royal Belum and Temenggor]. All these were alienated land in the past. This is a good example. (FDPM (P3, 2015))

From my experience, you must explain to them about the value of the forest, and what we can achieve in return if we conserve. The state government of Perak has been very supportive, unlike some other difficult states. (Perak-SFD (P14, 2015)).

A standstill exists in the states of Kelantan and Terengganu, and in Pahang the CFS policy is considered to be implemented on paper. Like the successful cases, no link between state ruling party and failure to implement the CFS policy could be established. The state of Kelantan is under the ruling of the Pan-Malaysian Islamic Party or *Parti Islam Se-Malaysia* while the states of Pahang and Terengganu are ruled by the National Front or *Barisan Nasional*.

The federal bureaucrats attributed the success of the CFS implementation in Perak to the state government's political will and support towards conservation and preservation (P3, 2015). The Perak state government is not only committed to re-establishing the required primary and secondary links to form the forest spine in Peninsular Malaysia but is also active in greening other pockets of land within their territory that are important for biodiversity. The Perak State Forestry Department (Perak-SFD) official reaffirms that the state government's approval of the CFS is firm and that the government values forests and sees its importance (P14, 2015). Since 2013, the state government challenged the Perak-SFD to plant 1 million trees throughout the state's land. In 2014, the state government's challenge to plant more trees increased to 2 million and the state's forestry department exceeded the target to plant 5 million trees. Taking on the challenge, a million 'chengal' (*Neobalanocarpus heimii*) trees were planted through vigorous tree replanting activities in areas that were deforested or degraded (P14, 2015).

Along with the increase in tree planting and re-planting activities, more forests have been gazetted as reserves, especially the mangrove forest areas. One that has great significance or value is the Matang Mangrove Forest, which is a habitat to fireflies (*Pteroptyx tener*) (P14, 2015). Now a forest reserve, previously it was a state land that could have been sold or used for other development purposes. On 9 May 2013, a total of 18,866 hectares of forest were gazetted as the Amanjaya Forest Reserve (Gazette No. 786), turning the degraded land along the Gerik-Jeli Highway (3 kilometres in width, 1.5 kilometres on each side) into a Permanent Forest Reserve (*The Malaysian Times*, 2014). The Amanjaya Forest Reserve is reported to be one of the two places in Malaysia where all 10 species of hornbills can be sighted (*The Star*, 2013). Additionally, five areas were gazetted as PRFs on 31 October 2014 (Table 11). Quoting a Perak state forestry officer:

The current state government aspires to pursue conservation and replanting of trees. During my presence here, a few of the state lands have been turned into Permanent Forest Reserve, example in the mangrove areas. Three areas have been gazetted as Forest Reserves. The best part is the fireflies. From the mangrove [Matang Mangrove Forest], you know where the fireflies are, last time it was state land. But we managed to turn it into a Permanent Forest Reserve. The state government, especially with the new the *Menteri Besar* gives us more importance. So, a lot of new Forest Reserves have been established. (Perak-SFD (P14, 2015)).

In ensuring that the reforestation activities yield positive outcomes towards conservation and preservation, the state government is extremely cautious and concern in approving land clearing and development projects. Strict control is imposed over land openings and establishment of the latex-timber-clone (LTC) plantations within forests, a rubberwood that produces latex, which can be harvested for timber. The National Land Council has allowed for each state to establish 100,000 hectares of LTC plantations within its forests. However, the state government of Perak only approved 56 per cent of that amount, out of which the Perak-SFD has established a plantation of only 9,000 hectares. This totals to 16 per cent of the amount approved by the state government and 9 per cent of amount allowed by the federal government. The state of Perak currently ranks as the state with the highest percentage of forested area at almost 50 per cent.

Table 11: Permanent Forest Reserves Approved in 2014

Date of Gazettement	Permanent Forest Reserve	Hectares
9 th May 2013	Amanjaya Forest Reserve	18,866.00
31 st October 2014	Lekir Forest Reserve	616.00
31 st October 2014	Kelip-kelip Forest Reserve	152.98
31 st October 2014	Piah Forest Reserve	2362.00
31 st October 2014	Teluk Muroh Forest Reserve	116.60
31 st October 2014	Teluk Rubiah Forest Reserve	1502.00

Source: *The Star* (2014b).

Similar to the outcome in Perak, the Central Forest Spine (CFS) policy was a success in the state of Selangor, owing to the willingness of the state government to collaborate with the federal government in implementing the CFS policy. The richest state in Peninsular Malaysia, the opposition political party *Parti Keadilan Rakyat* (PKR) (People’s Justice Party) won the 2008 elections and has been in office since. Aligned to the current state government’s commitment to the environment, a moratorium of 25 years on logging was imposed in 2008 (Gan, 2011). The decision was made considering the state’s economic status, which is a highly developed state with sound fiscal standing (P18, 2015). This led to the issuing of a stop-work-order to loggers who had been granted logging permits by the previous state government (led by the National Front or *Barisan Nasional*). Most loggers who are dissatisfied with the enforced order have filed a case for the hearing of the court. The state government have also amended Section 11 of the State Forestry Enactment by inserting a public hearing process for de-gazettement of Permanent Forest Reserves, to reverse the lenient granting of logging permits

exercised by the previous state government in the past. According to the Selangor state forestry official:

Selangor currently applies a no-logging policy [moratorium] for a duration of 10 years. The state has decided that it is already a rich state and there is no point of generating income through logging. Due to that, stop-work orders have been issued. Some companies had to stop right away after three to four years of logging. (Selangor-SFD (P18, 2015))

The Selangor state government had also introduced a hunting moratorium for Bornean bearded pig, large flying fox and small flying fox in addition to the 2-year moratorium on hunting sambar and barking deer introduced by the Selangor State Department of Wildlife and National Parks (Selangor-PERHILITAN) (Clements et al., 2010; Maniam, 2015). The state government has also demonstrated high commitment to the implementation of the CFS when the State Secretary officiated a symposium organised by the Selangor State Forestry Department (Selangor-SFD). All agencies involved were present, indicating their support to the implementation of the CFS policy.

Despite being successfully implemented in the states of Perak and Selangor, the CFS policy is at a standstill in the states of Kelantan and Terengganu and considered to be only “implemented on paper” in Pahang. Being the main implementing agency at the state level, both the Kelantan State Forestry Department (Kelantan-SFD) and Terengganu State Forestry Department (Terengganu-SFD) officials stated that their agencies are open to implementing the CFS policy if the benefits are proven for the state:

But the policy has no clear benefits to the state government as the state looks at it from other perspectives. The state government would not finance it. Unless the federal government can come up with the money... (Terengganu-SFD (P13, 2015))

The problem with CFS ever since I was in the Ministry until now is that there are no concrete points convince the state that the identified links are important for wildlife. They have no figures and no incidents data because the Wildlife Department did not supply them. How can we then fight for this policy at the state

level and convince the state government the importance of wildlife compared to development. (Kelantan-SFD (P17, 2015))

The officials found the CFS policy's advantage as vague and unclear. However, a further investigation indicates that the failure of the CFS implementation stems from the negative or poor political will that is influenced by the historical dimensions of poor working relationship between these state governments and the federal government (P3, 2015). As indicated by the theories of marble cake federalism, it is apparent that the CFS policy is not implemented in states that have poor working relations between the federal and state governments. According to the officer at the federal forestry agency:

But government agencies like us, we implement the policy regardless of who the ruling government is. At the end of the day, we serve the government of the day. Some states involved in the Central Forest Spine are governed by the opposition political party. In terms of good management or governance, political parties must set aside political differences. That is what it should be. Nothing much can happen unless the federal and state government, and all public administrators know that they are pressed for conservation. (FDPM (P3, 2015))

In Kelantan, the negative federal-state working relationship dates back to 1959 when an opposition political party had formed the state government after its win in the general elections (Omar, 2012). Due to the state being predominantly ruled by the opposition political party, the state had been deprived of many fiscal and development benefits. Among them are failure to launch land development schemes post Malaysia's independence from the British, preventing private firms from investing in the state and halting the construction of the Kuala Krai-Kota Bharu Highway (Omar, 2012). The author also finds that the lack of cooperation increased particularly after the general elections in 2008 as the Kelantan state government strived to uphold its autonomy as guaranteed under the Malaysian Constitution. The officers at the Kelantan state level opine that they are treated differently due to being ruled by an opposition political party, the Islamic Party of Malaysia (*Parti Islam Se-Malaysia*). Citing the defaulted oil royalty revenue as an example, the federal government is claimed to have failed to pay payments that are rightful to Kelantan and is currently owing an amount between RM 850 million to RM 1 billion to the state. In resolving the shortage of revenue, the Kelantan state government assigned the Director of Kelantan-SFD a target revenue of 120 million from the

state forestry sector as part of the officer's Key Performance Index (KPI) (P17, 2015). Quoting the Kelantan state forestry officer:

The dependence of state to the Forestry Department is extremely high in Kelantan. We, the Forestry Department must manage how to administer that and the Director's KPI is based on how much revenue to be generated [for the state], in millions. The figure will be set in the yearly budget meeting during the State Assembly. For example, the revenue for this year [2015] is set at 120 million. So, we have to think of ways of finding this amount of money for the state. (Kelantan-SFD (P17, 2015))

Denying the claim of biased treatment for Kelantan due to the ruling of the opposition political party, P1 (2015) who is a representative from the Ministry of Environment and Natural Resources (MNRE) commented that all state governments are treated equally in administering environmental matters and natural resources. Another federal officer, P3 (2015), argues that challenges exist in all states involved with the CFS policy despite being ruled by the national or opposition political parties. This is due to the fact that natural resources, especially timber logging and land leases, are attached to revenue and tax bases that states are entitled to. Quoting the example of Cameron Highlands, P3 (2015) cited that politicians and bureaucrats in the highland area in the state of Pahang were unable to comply with decisions made at the deliberative councils on land use or land conversion. That has led to the floods that occurred in 2014, which were classified as the worst in Malaysia's history. Furthermore, the intra-party relations seem to have no influence on federal-state relations. This is attributed to the striving for personal gains by politicians, irrespective of political parties, which has led to having no political commitment (P3, 2015). However, the federal officer (P3, 2015) did agree that it is easier to resolve issues facing a state that is ruled by a national political party based on its intra-party relations compared to one that is governed by an opposition political party. A number of interviewees illustrate this point.

The federal government is always transparent, especially with funding. No matter which political party governs the state, in terms of funding for environmental purposes, all states are funded in the same manner. (MNRE (P1, 2015))

Of course, different [political] parties have issues. But same [political] party [also have issues]. Take for example Cameron Highlands, it is a classic example under

Barisan Nasional. Ruling party at the federal level is Barisan Nasional. Why the land development cannot convene to the national commitment? It is the matter of duration for implementation. States can differ, and there is no priority. The priority is only to have states to commit. (FDPM (P3, 2015))

If state governments and agencies are aware and have the political will, they will be with us. If they are not, they will say why must I care, it is our [state's] land. We will decide. (FDPM (P3, 2015))

Intergovernmental relations influence governments of different levels in how they operate and draw scope apart from the delineation of powers mapped by the Constitution, in which the nature of a federal-state relationship could be competitive or collaborative (Cameron Simeon &, 2002; Johns et al., 2006; Simmons & Graefe, 2013). However, the effectiveness of the type of relationship depends on the policy sector. According to Nicholson-Crotty & Theobald (2010), federal-state relations are crucial in implementing policies that involve numerous agencies – such as the CFS. The environmental sector in federal states has benefitted from collaborative federal-state relationships, especially in managing a sector in which the demands and responsibilities are increasing (Conlan, 2006; Nicholson-Crotty & Theobald, 2010; Shockley, 2014). However, Volden (2007) argues that a collaborative relationship is only beneficial if the federal government is more skilled in generating revenue while the states have the expertise to implement the policy. Secondary to the availability of different skillsets in the federal and state-level governments is a positive intergovernmental relationship that also influences the funding provision for states. This explains the implementation success in Perak, and the failure in Terengganu, although both states are ruled by the same political party as the federal government. In the states of Perak, its achievements can be attributed to the federal government being more superior in providing funds for the construction of viaducts and implementation workshops. However, in Terengganu, the state has failed to implement the CFS policy due to absence of funds and weak intergovernmental relationship in the early years of the CFS policy inception, even though the state is governed by the same ruling political party, *Barisan Nasional*.

Similar to the state of Kelantan, the state of Terengganu has also not implemented the CFS policy due to poor political will. The two main steering agencies for CFS implementation at the Terengganu state level (Terengganu-SFD and Terengganu-PERHILITAN) claim that they do

not know much about the policy, although they are open to further discussions. The state finds the policy almost impossible to be implemented as it requires acquiring land and a substantial amount of funding. P7 (2015) from the Terengganu Town and Country Planning Department (Terengganu-TCPD) postulates that the state could have been turned off by the mismatch of the map used in establishing the policy and the current land-use of the state. As much of the land has been assigned for development and other land-use, implementation of the CFS policy requires acquiring of land and reforestation. Instead of communicating their findings to the national committees and councils for the CFS policy revision for the state of Terengganu, the state government has decided to not action its implementation at all. The chair of the CFS policy implementation at the state level, Terengganu State Economic Planning Unit (Terengganu-UPEN), had organised only one meeting in 2014 and the status remained the same until the end of my fieldwork period. Being a federal agency, the Terengganu-TCPD then decided to initiate a remapping of land-use and emphasize the importance of the CFS policy to the Terengganu-SFD so that the state's CFS policy implementation plan can be revisited and revised. The findings will then be presented to the state government for evaluation and approval. According to a Terengganu state official:

State [government] have other plans that they are pursuing. The old boundaries are not valid anymore, so they are not interested on the Central Forest Spine although it closely relates to our nature, mammals, tigers and elephants and all of that. So, we are remapping the boundaries again so that the state government will find it attractive. We are now redesigning it based on the current land use in order for [State] Forestry [Department] to implement. (Terengganu-JPBD (P7, 2015))

In Pahang, the CFS policy is considered to be implemented on paper as the state government appears to be supportive of the policy and appears to be expressing the right statements and opinion, but their actions demonstrate otherwise. Officers from the relevant implementing agencies and NGO representatives find the state government's commitment and support as vague and 'disingenuous' (P5, 2015; P20, 2015; P21, 2015; P24, 2015). The state government, represented by the Pahang Economic Planning Unit (Pahang-UPEN), acknowledged its role as a coordinator or a 'middleman' between various agencies that are involved in the CFS policy implementation. A few interviewees illustrate this point:

Personally, I am keen, and I think the state should be too, but the ‘big boss’ may not be. The problem with Pahang stems from its commitment issues with the top management. This is another personal opinion: I see that we just take advantage of federal's policies, but on the other side we try to find loopholes and we manipulate on that. If it contradicts, still we have the say because the power is on us [state]. Maybe I can say that we do not follow [the] federal [government’s guidelines, like this, if is good, we implement it but not whole heartedly. (Pahang-UPEN, (P20, 2015))

Land matter is a state matter. The state government knows, it is not that they don't know. But they have their personal interests. The personal interest of the *Menteri Besar*. The District Officer is chosen by the *Menteri Besar*. It is all to guard the interests of the state. (REACH (P21, 2015))

As the Forestry Department, if we are given the finances, we will implement it because we are the implementers. We must be committed anyhow whether we want it or not, we have to implement it. But with no support from the State Secretary, and no support from the state government, we cannot implement. (Pahang-SFD (P24, 2015))

The Pahang-UPEN has assigned the task of steering the implementation of CFS to the Pahang State Forestry Department (Pahang-SFD) and the Pahang Wildlife Department (Pahang-PERHILITAN). This is aligned to the role of the FDPM and DWNP at the federal level. However, the Pahang-UPEN does not propel both steering agencies and does not demand for progress updates. The official representing the Pahang-UPEN also stated that ‘the problem with Pahang is its commitment issues with the top management’ (P20, 2015). The Pahang-SFD has agreed that it plays the role of a Secretariat as well as the agency, which ensures that the link between forests fragments are reconnected. The Pahang-PERHILITAN confirms to be working closely with the Pahang-SFD, but only to relocate wildlife that exist in a certain area that is to be logged, not for the relinking forests connections. This is, yet again, due to forests being a state prerogative and wildlife being a joint administration of both state and federal powers.

Our role is basically to coordinate. Once we know that, we pass it to the relevant agency at the state level... [As for] CFS, we have assigned it to the Forestry

Department and the Wildlife Department. I can say that we portray the scenario of state-government-must-be-in-the-know. So, when our bosses ask, the state Excos asks, we are able to answer. But then we also counter back by saying if you want to know more details, you can ask so and so. Like that, what else can we do. But if there are any issues or cases, it will go through UPEN first. Meaning, UPEN is in the middle. (Pahang-UPEN (P20, 2015))

The approval to gazette a state land as a forest reserve and de-gazette forests reserves for logging are decisions made by the State Executive Council (SEC). While the Pahang-SFD has the jurisdiction to advise, they however must adhere to the directions set by the SEC. Furthermore, the Pahang-PERHILITAN official expresses his opinion on the approval timeframe, that it takes a long time to obtain consent from the Pahang state government in endorsing an area for the establishment of a corridor. Though the *Menteri Besar* of Pahang, Dato' Seri Haji Adnan bin Haji Yaakob, has stated that his government is fully supportive of the CFS, the Lesong Forest Reserve, which is an important area for the CFS policy and tiger conservation, had been granted permission to be logged by the State Executive Council (*The Star*, 2014a). As a result, a many valuable wildlife species have been threatened.

To date, according to the Pahang-SFD, only one linkage has been re-established. It is the Sungai Yu-Main Range linkage where a viaduct had been constructed as one of the pioneer projects for the CFS (Image 1), utilising funds and resources from the United Nations Development Programme (UNDP) and the federal government. The linkage connected the Greater Taman Negara National Park and the Sungai Yu Forest Reserve and was found to be an important crossing for the Malayan tiger. If the federal government, along with the pressure by various ENGOs, had not initiated the relinking of the Sungai Yu-Main Range linkage, there would have not been any progress in the implementation of CFS in the Pahang state. Also, the Sungai Yu wildlife corridor would have been lost entirely as it was facing the threat of conversion to alienated land.

The variation in the CFS policy implementation among the states of Perak, Selangor, Pahang, Kelantan and Terengganu affirms that the Malaysian federalism preserves the power and sovereignty of states through the supremacy of Malaysia's Constitution and the power division stated in it. The power and sovereignty vested in the state governments for environmental governance is autonomous despite having deliberative platforms established. A positive

political will is key in determining the CFS policy implementation success. In the absence of such will, positive collaborative working relations between the federal and state governments in the environmental sector may influence the successful implementation CFS policy. However, there appears to be no strong or solid connection between the two elements, which means state government's political will is not determined or influenced by positive collaborative working relationship with the federal government. Also, the presence of a collaborative working relationship between the federal and state government in other policy domains do not influence the state's political will or decision to implement the CFS policy.

For example, the tension present in Kelantan's federal-state intergovernmental relation is reflected in the CFS policy non-implementation decision made by the state government. However, the tension that exists in federal-state relations in Selangor does not affect the decision to implement the CFS policy at the state level. In line with this, it can also be concluded that the inter- and intra-political party relations do not influence a state's decision to implement the policy as there are states that have or have not implemented the CFS regardless of being ruled by the same political party, which forms the federal government. Though Malaysia's marble cake environmental federalism provides some explanation to the success or failure of the CFS policy implementation, other factors are to be observed to obtain a better understanding.

Power Vested in the Traditional Malay Rulers

A political component that is often missed when discussing issues or challenges in the environmental and natural resources management sector is the role of Malaysia's monarchs. Political reforms through the latter part of the 20th century have weakened the formal power of the traditional Malay rulers, but not their influence or interest in land and timber concessions. The Sultans in Malaysia are a great symbol of long-standing tradition and a check-and-balance mechanism. Constitutionally, Sultans are the supreme head of their respective states and they take precedence over every other person in the state. The Sultan of each state functions as the head of the Islam religion and has powers in relation to Malay traditions. The traditional rulers are also responsible for appointing their heir, consort, Regent and Council of Regency as well as to grant Malay customary ranks and titles. Their role also relates to the regulation of royal courts and palaces. Apart from that, Sultans have the discretionary powers to influence the appointment of the *Menteri Besar* and are capable of withholding consent to a request for premature dissolution of state assembly (Faruqi, 2007). These powers of Sultans are often

deemed as limited, but the findings of this research prove otherwise, especially in influencing the implementation of the CFS policy.

The underlying reason for this could be that Article 71 (1) of the Malaysian Constitution guarantees ‘the right of a Ruler of a State to succeed and to hold, enjoy and exercise the constitutional rights and privileges as Ruler of that State in accordance with the Constitution of that State’ (Constitution of Malaysia, 1998). The Constitution also states that ‘any dispute as to the right to succeed has to be determined in accordance with the Constitution of that state and the federal government cannot interfere’. After the racial riots in 1969, the inclusion of matters related to the position and prerogatives of the traditional rulers under the Sedition Act 1948 further strengthened the powers of Rulers’ institution. Post-1969, Sultans were found to have misused their powers in many incidents, which led to three political vicissitudes to the institution of rulers in 1983, 1993 and 1994 (Faruqi, 2007; Husin Ali, 2013).

In 1983, an amendment was proposed to bypass the King’s consent to the approval of bills passed by the Parliament. The issue is believed to have stemmed from the Sultan of Pahang’s disapproval to the state financial bill when his demand for timber concession was denied (Husin Ali, 2013). Although it was strongly opposed and disagreed by the traditional rulers, an amendment made in 1994 to Article 66 (4A) for the King to provide his approval or disapproval within 30 days resolved the issue. Another step taken to weaken the institution of traditional rulers is the abolishment of Rulers’ immunity from civil and criminal proceedings and the institution of a special court to try cases involving them (Husin Ali, 2013).

When federal and state officers were questioned on the significance of a Sultan’s power to the success of CFS implementation, interviewees were split on their assessment of this factor. But, a link cannot be established between the level of government (whether federal or state) to the belief in Sultan’s role being an influencing factor to the CFS policy implementation, as the split is prevalent on both levels. The federal officers at the Ministry of Natural Resources and Environment (MNRE) and Department of Wildlife and National Parks Peninsular Malaysia (DWNP) find the traditional rulers a crucial factor to the success of CFS implementation (P2, 2015; P12, 2015). This is due to the formal discretionary powers of Sultans in appointing Chief Ministers (*Menteri Besar*), and their informal powers in appointing Directors of the State Forestry Departments and District Land Officers (P2, 2015; P12, 2015). It is a norm and practice for the Forestry Department to suggest a few candidates for the approval of the Sultan.

Usually, the Sultans will approve a candidate that he can ‘work’ with, creating a channel for the traditional ruler and his royal family to request or demand for land, forests and timber concessions. In some cases, the Sultans have also rewarded those who have carried out ‘favours’ for the Sultans or the royal family through allocation of land and forests and awarded consent to log timber to loggers and business owners. A couple of interviewees raised this point:

The Sultans is significant as... forests come under the state. They see it as land and land comes under the state. (DWNP (P2, 2015))

Yes, the monarchs have significant power over forest and wildlife. Well, it is goes back to state. As you know, *Menteri Besars* are appointed by the Sultans, even the Forest Department heads are appointed after getting consent from the Sultan. (MNRE, (P12, 2015))

The Sultans’ endorsement and informal approval of state directors for the forestry and land agencies has increased the bureaucratic power allocated to them (P2, 2015; P21, 2015). In the past, the MNRE received numerous complaints from companies and individuals who were deemed to have been consented land by the Sultans or other royal family members through a ‘*surat kuning*’²¹ (palace decree). The letter serves as the Sultan’s order for the bearer to be granted of what it states. The recipient would then approach the relevant state agency, such as the forest or land department to claim his or her reward only to find that the agencies do not have resources to be allocated. When turned away, the individuals will then bring the matter to MNRE to seek for assistance or justice. However, the federal government is unable to assist as land and forests are state matters. A number of interviewees cited incidences relating to the Sultans and their powers:

Some traffickers smuggled ivory and were caught. The smuggler was advised by some friends in his circle to meet the Sultan and ask for his pardon. In return, the Sultan was offered a business venture and the Sultan agreed. The Sultan asked for the tusks to be sent to the palace. When the Ministry’s Secretary General went to see him to explain about CITES, our responsibility as signatories and the state of our wildlife, he told the Secretary General that he does not want to hear any more

²¹ A ‘*surat kuning*’ is a royal letter used by the monarchs and their royal families to assign a land to an individual or company or any other parties.

about it. He also has a zoo without proper permits, licenses and documentation. (DWNP (P2, 2015))

Sultan will give consent for a candidate to be appointed as the Forest Department head only if he can work with that person. But indirectly, when he can work with that appointed person, it is easier for him to get forest lands. But this is informal. For example, in the state of Pahang, a lot of '*surat kuning*' had been issued. Now, there are even companies coming to us. Sometimes they come to us to complaint that they did not get this land or someone else is already occupying the same land, and they show us the '*surat kuning*' issued to them. But we, at the federal level, are unable to do anything. We tell them to go back to the state. (MNRE, (P12, 2015))

The Director of Forestry Department Peninsular Malaysia (FDPM) linked the significance of traditional rulers for policy success to their awareness and knowledge on the benefits of the policy to the state (P3, 2015). Attributing the success of CFS implementation in the state of Perak to Sultan Nazrin Shah, P3 (2015) and P6 (2015) re-emphasized that it is actuated by the Ruler's awareness on the importance of conservation and his knowledge on forests, wildlife and habitat cycle. Sultan Nazrin is also classified as the best conservator among the royal family and he is fully supportive of conservation programs organised by the World Wildlife Fund (P8, 2015). The increase in awareness and knowledge is reflected through reduced greediness and P3 (2015) believes this was stimulated by the revoking of Rulers' immunity. Though the efficiency of the special court is questionable, the institution of traditional rulers is becoming a more apt check-and-balance component in Malaysia's political system:

The royalties are [now] aware. Awareness, [and] without immunity. For example, [The current Sultan of] Pahang, his greediness is not the same as his father's' (FDPM, (P3, 2015)).

Sultan Nazrin [of Perak] is very proactive as the Royal Belum is under Tuanku. That is why it is termed as 'royal'. The royal family in Perak is educated and progressive. (Perak-PERHILITAN (P6, 2015))

Sultan Nazrin is one of the best conservators we have among the royalties. He is not only supportive of the conservation programs but also assists financially and

helps to raise funds. You will be surprised with his involvement, especially those that the media does not report on. There was once when he dialled up companies to ask them to participate in a fundraising dinner organised by WWF. The negative ones, based on my experience, is with some royal families who issue game letters, royal letters to ask their subjects to hunt endangered species for them. When you apprehend the hunter or poacher who is in possession of animals that are endangered species, they will show you the letter. At one time, the casualty was a game warden. He was then transferred out of state in 24 hours. (UNDP (P8, 2015))

The Pahang-SFD officer believes that the absence of royal lands within the mapped CFS area has led to the traditional ruler having no connections to the CFS policy altogether (P24, 2015). The areas under the CFS policy in Pahang mostly consist of corporate plantations, alienated land and state land. However, when probed further, P24 (2015) agreed that the Sultan of Pahang may have indirect influence based on the logging quota negotiated in high confidentiality with the State Executive Council. The officer representing the Pahang State Economic Planning Unit (Pahang-UPEN) also agrees that the Sultan influences the implementation of the CFS policy through demanding land and timber concessions, although these demands have reduced late 2014 due to the occurrence of major floods and discovery of bauxite for mining (P20, 2015). The percentage of acreage requested by the Sultan of Pahang is not a constant figure and it changes yearly depending on the logging quota set for a particular year. The lack of transparency in this process demonstrates that the Sultans' powers are far wider than what is claimed constitutionally. The Pahang-SFD officer also denied answering if the demands of the Sultan are just granted or if the allocation is decided upon after a discussion. Quoting two of the state officers:

In Rompin, there is none. Most of the areas do not overlap with the royal land. There are only companies' plantation, alienated land and state land. According to the reports from the District Forest Officer, there is no land which belongs to the Sultan for now. The Sultan does not have a direct influence but maybe indirectly because there are logging quota on state land... some of the quota is under the Sultan. (Pahang-SFD (P24 (2015))

But as for Pahang, the only major source is land. We don't have oil but now we have [discovered] bauxite and iron ore. Pahang is lucky because it is in the middle of Peninsular Malaysia. The denotational function of Pahang is to provide raw materials for the factories. We cannot become a developed state in ten years. We do not have that capacity. (Pahang-UPEN (P20, 2015))

However, the royal family of Pahang attempts to signal their commitment to environment and sustainability through the setting up of an environmental trust, Sultan Ahmad Shah Environment Trust (SASET). Deemed to be a 'gimmick', the Sultanah had requested 5000 acres of forested land to be planted with oil palm in order to generate funds for the trust, which requires an initial step of felling the existing timber (P20, 2015). Similarly, Yayasan Sultan Mizan, a non-governmental organisation patronised by the Sultan of Terengganu has an environmental arm focusing on wildlife poachers and enforcement (P25, 2015). The NGO focuses on Setiu Wetlands, which is the Sultan's favourite spot to ensure that it is conserved well and the people who live around the area are aware of this spot being conserved, only because it is a royal favourite (P7, 2015; P13, 2015). The Sultan is also classified as an environmentalist (P13, 2015). However, the Pahang-TCPD officer claims that the Sultan is not aware of the CFS, just like the state's *Menteri Besar*. A number of interviewees illustrate how the royal families are linked to the CFS and conservation of forests and wildlife:

SASET was established 2 years ago, to be managed by the Sultanah actually. The Sultanah wants to operate SASET, and for that she requested for 5000 acres of land to be planted with oil palm which would then generate revenue and meet the financial requirements of SASET. To have that land, they must cut down the timber that exists on that land first. It is all just a tactic, but it is dangerous to say these things. (Pahang-UPEN (P20, 2015))

Yayasan Sultan Mizan is an NGO. They have presented their idea to Sultan Mizan which involved the state government as well. For now, they are focusing on enforcement on wildlife conservation and poachers. (Terengganu-PERHILITAN (P25, 2015))

The Sultan [of Terengganu] is also interested in conservation of the environment. For instance, in Setiu, we have this area called Setiu Wetlands. Setiu Wetlands has

been assigned to Yayasan Sultan Mizan. They conducted a research and proposed to protect the area, and they are trying to increase awareness to keep this area away from the development. We have now included the area as our secondary linkage. (Terengganu-JPBD (P7, 2015))

The Sultan is supportive, and he is very interested in Setiu Wetlands, which is part of the CFS. If you follow closely, there are corridors that they are trying to link. Basically, the Sultan is an environmentalist because he is very concerned about environment. He also frequently goes to Setiu Wetlands. He indeed wants to make the area a state park. This Sultan has also approved the establishment of Yayasan Sultan Mizan. The Yayasan Sultan Mizan is the one which moves to implement what the Sultan requests. (Terengganu-SFD (P13, 2015))

Being the patron of the Ayer Hitam Forest Reserve, the Sultan of Selangor plays a positive role in ensuring the forests in Selangor are conserved well. In his jurisdiction, a forested area of 1300 hectares has been assigned to the Forestry Faculty of Universiti Putra Malaysia for research purposes. Any development must be consented by the Sultan. In a recent state event, the Sultan of Selangor decreed that the State Forestry Department expand the forest areas by identifying alienated land or state land that can be converted to Permanent Forest Reserves (P18, 2015). The same has occurred with the Sultan of Kelantan – in his speech to the State Assembly about the recent flood disasters, he stated '*bersahabatlah dengan alam, jangan bermusuhan dengan alam*' (translation: make friends with nature, do not make nature your enemy). Yet, both traditional rulers still obtain land for business ventures or personal motives although they adhere to the legal procedures (P17, 2015). A couple of state implementers were quoted saying:

The Sultan is the patron to Ayer Hitam Forest Reserve, and it has been assigned to the University of Putra Malaysia. He really takes care of the forest there of about 1300 hectares, that means if there is anything at all, any development, or any disturbance, we must get his consent. Apart from that, he recently commanded us to expand the forested areas in the state. That command transcended to our *Menteri Besar* and State Secretariat, whom then instructed me to look for forested areas or state land that is suitable to be converted into Permanent Forests Reserve. (Selangor-SFD (P18, 2015))

During the recent floods, the Sultan of Kelantan decreed "*bersahabatlah dengan alam, jangan bermusuhan dengan alam*" (be friends with nature, do not make nature your enemy) (Kelantan-SFD (P17, 2015))

The traditional ruler of Kelantan holds the right to request land under the Sultanate Lands Kelantan Enactment No. 5/1934 (Kelantan Land and Mines Department, 2018) while the Sultanate Lands Federated Malay States Cap 221 applies to Sultan of Selangor. The requests from the traditional Malay ruler and the royalties cannot be denied but the traditional rulers are willing to compromise and negotiate based on the importance of the area for conservation and environmental sustainability overall (P16, 2015; P17, 2015). The State Forestry Director of Kelantan also finds the exercise of power by the royal figures to be based upon their personal character – the current Crown Prince, Tengku Muhammad Faiz Petra is more concerned about conservation compared to Sultan Ismail Petra (P17, 2015). If he wants to have a certain area logged, he will consult the State Forestry Department to understand procedures to mitigate the environmental impact.

There are times when the Sultan has requested for land, but not always. We would then discover in meetings, when there is a difference between the land-use presentation by us and by the Forestry Department. We would usually then request for the latest data from the Forestry Department. (Selangor-JPBD (P16, 2015))

The Sultan still must undergo the normal process to request for land for logging. He must submit an application through his company, and the State Forestry Department may give him some priority in terms of processing time. But he will still have to follow the procedure. He cannot overrule. The rulers have the power. Even for forestry, it is the rulers. If you look at the State Assembly, [it appears as] the [traditional Malay] rulers give them powers. But the [Forest Enactment] supports the rulers. He has powers over his own land. (Kelantan-SFD (P17, 2015))

In Kelantan, the Tengku Mahkota is more concerned about conservation. If he wants to log an area, he will consult us. He will ask us what the procedures are for mitigation. There is also no problem with the Tuanku. If we explain well, he will

avoid that area. But we must also provide an alternative. (Kelantan-SFD (P17, 2015))

Those who believe that the Sultan's role is not (entirely) crucial view the position of the Sultan as one that protects the Constitution and the people – acting as a neutral entity for power balance (P5, 2015; P16, 2015; P18, 2015; P19, 2015; P29, 2015). These officers also find policy implementation as a bureaucratic process, which involves the state government, agencies and public service personnel. The Sultan's support and advocacy gestures are viewed as complementary to the work that is required to be undertaken by state officials. In some cases, the neutral approach of Sultans is used as an excuse for state agency directors to refuse to implement a certain policy, citing a Sultan's opinions, decrees and demands as excuses (P2, 2015; P21, 2015). The practice has also induced many corrupt practices such as obtaining bribes from timber contractors as a commission to allow illegal logging (*Bernama*, 2015).

In short, it can be summarised that the Sultans do have an influence in the implementation of the CFS policy, although some believe it to be trivial. The Sultans do have informal but visible powers in ensuring conservation and preservation activities are undertaken, championed or advocated for. It can also be concluded that the magnitude of power they hold and practice, despite the descriptions in the Constitution, is demonstrated through their lifestyle and demands.

As such, the Sultans together with the state governments emerge as veto players. The state government is highly dependent on a state's economic policy or direction. As for the Sultans, the formal discretionary powers in appointing Chief Ministers (Menteri Besar), and their informal powers in appointing Directors of the State Forestry Departments and District Land Officers projects their importance as an explanatory factor to implementation success or failure.

The Rule of Politicians and Bureaucrats

Politicians and bureaucrats play a great influence in the policy implementation stage, as their conflictual or co-operative working relationships may yield positive or negative outcomes to policy implementation. Lipsky's (1980) influential study suggested that a deviation between policy components and actions of street-level bureaucrats occur in the implementation stage. Street-level implementers are found to be influenced by a signal from political superiors (May & Winter, 2007; Stensöta, 2011). Combining the findings of Lipsky (1980), May and Winter

(2007) and Stensöta, (2011), I observed the role of politicians and bureaucrats at both federal and state levels prior to studying the working relationships between the two entities at both levels. I explored possible relationships that exist and find these relationships to be central to the successful implementation of the CFS policy. They are relationships between the federal-state politicians, federal-state bureaucrats, federal politicians-bureaucrats, and state politicians–bureaucrats.

The findings of May and Winter (2007) hold true in the case of Malaysia – politicians at both federal and state levels are viewed as political superiors who provide direction and leadership in ensuring a policy is implemented. A key figure for the implementation of the CFS policy is the Minister of Natural Resources and Environment (MNRE), who is deemed to be the highest hierarchy in the domain of environmental governance and administration. However, a federal representative from the Department of Wildlife and National Parks Peninsular Malaysia (DWNP) stated that the commitment by the Minister was extremely low although the federal officers at the MNRE and the state agencies worked hard to ensure the CFS is implemented (P2, 2015). Datuk Seri Palanivel Govindasamy (the Minister at the point of the interview) was labelled as a Minister who spent most of his time sorting his political foothold as the President of the Malaysian Indian Congress when his position was threatened due to internal party disputes. According to a federal agent:

I do not know what his capability is of handling the Natural Resources Ministry. I do not know how he was appointed as the Minister for Natural Resources and Environment. Based on my experience, he doesn't even know the difference between the Wildlife Department and the Forest Department. He doesn't want to handle the real issues. He thinks if he is the Minister, he would just have to deal with the higher-level bureaucrats, and he has no time, especially with his MIC [party] politics. That takes 99 per cent of his time. (DWNP (P2, 2015))

An important figure in the national deliberative platforms' discussions, the Minister is said to have always been underprepared and unfamiliar with the CFS policy objectives and updates. This created an opportunity for state leaders and politicians (such as *Menteri Besar* and Chief Ministers) to easily disregard or disagree to implement the CFS policy. According to Langbein (2009), the nature of each prime player in a political structure is to act as an effective veto to

one another, which in this case, the Minister failed to exercise. As such, the Minister's poor knowledge on the environment resulted in power vested being under-utilised (P2, 2015).

In studying the implementation of the CFS policy at the state level, I discovered that there is a strong, collaborative and positive working relationship between politicians and street-level bureaucrats in states that have implemented the CFS policy, Perak and Selangor. The politicians in the states of Perak and Selangor are better educated with regards to the environment (P6, 2015; P18, 2015). The knowledge and understanding attained by these politicians strengthen their powers in advocating and ensuring the CFS policy is implemented. For example, the State Executive Council Member YB Elizabeth Wong, who holds the state Tourism, Consumer Affairs and Environment portfolio, is also an environmental activist herself. This enables her to feed forward information provided by various non-governmental organisations and community groups after analysing the information, and consequently assisting the State Executive Council in making factual-based decisions supported by facts and figures. Apart from this, the spread of 'clientelist benefits' fuelled 'money politics' during the era of Mahathir as the leader of *Barisan Nasional*. Delegates of the party were enticed with business deals and government licences in return for their vote (Case, 2004). With a clear and strong direction from the state politicians in Selangor, the Selangor state implementing agencies are able to demonstrate decisions and actions that led to the successful implementation of the CFS at the state level.

Comparatively, conflictual working relations exist between politicians and street-level bureaucrats in Pahang and Terengganu. This is exacerbated by the poor or low levels of environmental knowledge among state officers, which results in a challenge to educate state politicians who are the catalysts to efficient policy implementation, especially when they rely on local people's support for political sustainability (P4, 2015; P22, 2015). Long ruled by the opposition political party *Parti Se-islam Malaysia*, the state's environmental domain is not part of the determinants for Kelantan's political survival, as environmental interest and demands of Kelantanese are poor, particularly when relating to land and land conversions (P17, 2015). State politicians form most of the State Executive Council, which decides on various state administrative issues, including the implementation of policies. The bureaucrats in these three states also have poor knowledge of environmental issues. However, the officers in Pahang, Kelantan and Terengganu acknowledge the slow addition of educated politicians, which will eventually progress to focus on various environmental issues and its sustainability.

The Technical Committee (TC) at the state level functions as a platform for collaborative work between the federal and state bureaucrats, though it is not positive for all states. In states that have successfully implemented the CFS policy, the TC appears to have positive working relations among most of its key members, while in states that have failed to implement the policy, members tend to be in conflict. The composition of members in this committee consists of street-level bureaucrats who are working in their respective domains within the wider environmental governance and administration sector. Three main agencies play a significant role in the TC. First, the UPEN of each involved state acts as the chair in gathering all other agencies required to carry out CFS measures, supported by SFD as the secretariat while state PERHILITAN provides input on wildlife. Yet, the formation and structure of UPEN at state levels are based on the historical coalitions of states, which then determines who their political paymaster is. The state UPEN in states that were formerly part of the Federated Malay States (Selangor, Perak, Pahang and Negeri Sembilan) usually coordinates with the EPU under the Prime Minister's Department at the federal level, creating a more dynamic platform in getting the state governments to adhere to the federal government's ambitions (P20, 2015). But the UPEN in states that were historically part of the Unfederated Malay States (Perlis, Kedah, Kelantan, Terengganu and Johor) are entirely a state agency, working to achieve the state governments' goals and objectives.

The UPEN officers employed in the Federated Malay States (FMS) are on an open scheme through which they can be relocated or apply for transfers to other FMS states, while the UPEN officers employed at the Unfederated Malay States (UFMS) can only work for their respective states. The state UPEN in Federated Malay States (FMS) (Selangor, Perak, Pahang and Negeri Sembilan) usually coordinate with the EPU under the Prime Minister's Department at the federal level, creating a more dynamic platform in getting the state governments to adhere to the federal government's ambitions. Besides, the UPEN officers employed in the FMS are on an open scheme through which they can be relocated or apply for transfers to other FMS states. This means when a policy is successfully implemented in one of its FMS states, the officers who have relevant and appropriate skills and knowledge may be transferred to ensure successful implementation of the same policy in another FMS state. However, one weakness of this system is that the UPEN officers employed in the FMS states become merely coordinators of the CFS policy instead of strategic implementers due to limited workforce and their dependency on the federal government for employing additional manpower. Hence, the formal system indicates

that CFS policy is more likely to be implemented in the FMS states, demonstrated by the success in the state of Perak and Selangor. Albeit being a disadvantage in having to serve their respective political chief, this system is advantageous to the UFMS (Perlis, Kedah, Kelantan, Terengganu and Johor) states as it allows flexibility in hiring additional manpower if required.

As for the SFD, although the state officers are to report to the Director-General of the FDPM, technically they are serving the state government under which the SFD officers are employed. The Pahang-SFD official acknowledged that the agency is committed to implementing CFS measures and it was already being carried out in PRFs involved; but as for the non-PRF areas, it is still in the midst of identifying the land status albeit the Director-General of FDPM is pushing all states towards implementing the policy (P24, 2015). When probed about the Pahang state government's commitment in executing CFS, the Pahang-SFD official did not respond. An officer from a presiding agency representing the Pahang state government, UPEN, finds the top management, especially the *Menteri Besar* of Pahang, disinterested in gaining long-termed revenue through eco-tourism, but would rather have short-term income via timber logging (P20, 2015). The political chiefs in Pahang are open to any policy that benefits the state government, hence, federal government's policies are implemented but through manipulating any existing loopholes. For instance, the state government has allowed for the viaduct to be built in Sungai Yu but has not approved other areas that form critical links in the CFS.

I see that we just take advantage of federal's policies, but on the other [hand], we try to find loopholes and we manipulate ... [them for our own advantage]. If it contradicts, [we decide] as the power is [with] us. [We] do not follow the federal government's direction [unless if the policy] is good. [Like the CFS], we implement it but not fully. (Pahang-UPEN (P20, 2015))

In Kelantan, the state government depends highly on the SFD for revenue through timber logging. Annually, the Kelantan-UPEN assigns a Key Performance Index (KPI) to the Director of Kelantan-SFD based on the amount of revenue the agency is expected to generate, endorsed by the State Assembly (P17, 2015). The director of the SFD will then have to plan, manage and administer generating revenue that has been set at RM 120 million for 2015. Apart from this, most non-PRF within the most crucial Lojing-Sungai Brok linkage had already been assigned to private agricultural companies. The Kelantan-SFD Director is positive in regaining some of

the land to establish the connectivity but anticipates that it is impossible to match the required link as per the CFS policy map (P17, 2015).

In summary, a strong link exists between the street-level bureaucrats having sound knowledge on environment and natural resources, and successful implementation of the CFS policy. Politicians and bureaucrats in states that have successfully implemented the CFS policy (Perak and Selangor) have demonstrated innovative solutions to environmental issues and/or generating alternative revenue (for the loss incurred from the profits from natural resources) they face and have demonstrated policy decisions that backed up by science, facts and data. Comparatively, states that have failed to implement the CFS policy are found to exhibit poor understanding of environmental and natural resources. The scenario faced by the states that have failed to implement the policy could be transformed by politicians and bureaucrats at the federal level, provided that they have greater knowledge of the environment. However, the failure of the Minister of Environment and Natural Resources to exercise his powers due to poor knowledge levels on his portfolio has further resulted in the policy being at a standstill or a failure in the states of Kelantan, Terengganu and Pahang.

Conclusion

This chapter has elaborated on how characteristics of federalism of power division, intergovernmental relations and allocation of finances have influenced the CFS policy implementation. The formal powers consist of constitutional powers allocated to federal and state level governments – powers that are vested in the politicians at both federal and state levels as well as powers vested in the traditional rulers. In states that have successfully implemented the CFS policy, it is found that the traditional rulers are highly educated with a high level of awareness pertaining to wildlife, forests, and environmental and natural resources. The monarchs in these states have also been extremely supportive of wildlife conservation and are either the patron to environmental initiatives or have decreed in their official speeches to the state government on the importance of wildlife in the ecosystem. In contrast, the traditional rulers in states that have failed to implement the policy have a lower level of environmental awareness and still have a share in timber logging activities.

The federal government advises both successful and failed implementation states of matters pertaining to wildlife and forestry. The federal level bureaucrats have demonstrated a high level of commitment in enticing both successful and failed states to implement the CFS policy.

However, the Minister in power during this research was found to be weak in persuading states to implement CFS. The poor performance of the Minister coupled with the absence or lack of political will/commitment has led to the states of Kelantan and Terengganu failing to execute the policy. One of the two veto players in ensuring that the CFS policy is implemented is the state government, highly dependent on a state's economic policy or direction (Table 12). If a state has economic policies that are highly reliant on timber logging and lease of land, it is highly unlikely that the CFS policy will be implemented, such as in Kelantan, Terengganu and Pahang.

The Sultans and royalties complement the state governments as a veto player. Table 12 also demonstrates that preservation of power and sovereignty of states and traditional Malay rulers exist in accordance to the powers described in the Malaysia's federal Constitution. The national deliberative platform proves to some extent to be an effective channel to discuss issues and challenges, but clearly requires a timeframe and a penalty or reward to decisions agreed on.

Formal powers of politicians and bureaucrats (and state governments) and informal powers (of Sultans and intergovernmental relations) may be balanced by strengthening the role of deliberative platforms in order for the CFS policy to be implemented. If formal powers are described extensively but informal powers are poor, then it is more likely that a policy will fail in its implementation stage. I also conclude that the intergovernmental relations are highly dependent on inter-party relations, while the same political parties find a way to resolve their differences.

Table 12: Summary of Findings – Successful and Failed Implementation

Perak and Selangor	States	Pahang, Terengganu and Kelantan
Successful implementation	Implementation Outcome	Failed implementation
<i>Formal power</i>		
Ability to advise the state government in matters pertaining to forest and wildlife.	Federal government	Ability to advise the state government in matters pertaining to forest and wildlife.
Highly committed federal bureaucrat officers.	Federal politicians and bureaucrats	Highly committed federal bureaucrat officers. Chief Ministers disregard poorly performing Minister.
Both state and federal government use it as a mechanism to negotiate and achieve consensus.	National deliberative platforms	National deliberative platforms viewed to be weak as there is no penalty or timeframe for policy implementation.
Economic policy focus is independent of timber logging.	State government	Economic policy focus is highly reliant on timber logging/resource rent.
Highly educated with high level of environmental awareness.	State politicians and bureaucrats	Absence/lack of political will/commitment.
Highly educated with high level of environmental awareness. Have been a patron to environmental initiatives/have decreed in formal speech to state leadership.	Traditional rulers	Perceived low level of environmental awareness. May have been a patron to environmental initiatives but still has a share in timber logging activities.
<i>Informal Powers</i>		
Provided by the federal or state government, solely or collaboratively.	Funding	Tendency of being financially biased towards them.
Good inter- and intra-party relations.	Inter- and intra-party relations	Poor intergovernmental relations with states ruled by the opposition political party.

Source: Author

CHAPTER 6: INFORMATION SHARING & CFS POLICY IMPLEMENTATION

“We need to detail it out, discuss and negotiate with the state governments, especially on who is going to fund and undertake the activities, and what will the mechanisms be. All these needs to be detailed out, only then we can arrive at the implementing stage.”

(P1, 2015)

This chapter analyses the second element in the contextual interaction theory (CIT). Information is a key variable that is substantively influential to success or failure of policy implementation. The level of information accessible to implementers determines how well they understand the Central Forest Spine (CFS) policy requirements, as well as challenges faced in order to set feasible goals to policy execution. The focus of this chapter is on how the availability, clarity and transparency of information enables policy implementation success. In short, the preliminary findings indicate availability and clarity of information to be present among implementers in states that have successfully implemented the CFS policy, leading to establishing a strong information sharing platform or network. In states that have failed to implement the policy, it is found that there is an absence of information and subsequently, poor or no information sharing practice altogether.

The main challenge facing the CFS policy is the limitations of the implementation plan provided in the policy documents, although it was established through a process of research, analysis and stakeholder consultation. For the policy to be successfully executed, implementing agencies at both levels rely on the CFS policy documents, which hold policy information and general implementation specifications. The implementation plan was included in the CFS Master Plan documents by two groups of environmental consultants who were engaged by the Town and Country Planning Department to gather, compile and analyse data and information relating to the policy. Their scope was assigned based on a geographical divide. Their findings were reviewed and triangulated by researchers, non-governmental organisations, government officers and officials from various key environmental agencies, mostly at the federal level. The implementation progress for the CFS policy is monitored by the systems and mechanisms used by the Town and Country Planning Department through periodical field visits. Though the CFS is parallel to spatial plans such as the National Physical Plan, State Structural Plan and Local Plan, which provide an overall understanding to Malaysia’s land-use and development strategies, implementers on the ground, especially the state level agencies and bodies find the implementation plan to have many gaps.

There are two main policy documents for the CFS details the master plans for ecological linkages based on a geographical divide. The CFS I Final Report contains policy information for states in northern Peninsular Malaysia, covering states of Kedah, Perak, Kelantan, Terengganu and Pahang (Lipis, Cameron Highlands and Jerantut districts only); while the CFS II Final Report includes plans for Johor, Selangor, Negeri Sembilan and districts of Pahang that are not covered in CFS I. Both documents mirror the same topics and similar content, which each includes an implementation plan. The implementation plan stated in the master plans are thorough, outlining steps that are required to be undertaken by respective agencies. Being another top-down policy from the federal government, the implementation plan has no indication of agencies involved at the state level. The lack of depth has allowed for both federal and state parties to assume of each other's role. Many of the state governments are of the opinion that implementation tasks will be coordinated and executed by the federal agencies, and the federal agencies are of the belief that the baton has been passed to the state agencies for execution. A federal government agency officer finds the information in the policy document is highly general and lacks details specific to each state agency:

... this policy is quite general, especially when it comes to details. So, we must discuss. We need to detail it out, discuss and negotiate with the state governments, especially on who is going to fund and undertake the activities, and what will the mechanisms be. All these needs to be detailed out, only then we can arrive at the implementing stage. (MNRE (P1, 2015))

Apart from the lack of depth of the information presented in policy documents, implementers in some states seem to be put off by the inaccurate information in the policy document, especially pertaining to geographical data and mapping boundaries. The data contained in the policy documents were found to be outdated as many land-use changes have been approved or sanctioned by state governments in the period when the policy was being developed, written and finalised. According to P1 (2015), the lack of specific implementation details also underlines the possibility of poor consultations with stakeholders at a state level prior to formalising the policy, resulting in a mismatch of information stated in the policy document. According to a federal bureaucrat:

At the implementing stage, discussions and consultation with all states are key. Not only the states but also the other stakeholders, such as the local community and

NGOs, whether the tasks and activities outlining in the CFS plan can or cannot be done. (MNRE (P1, 2015))

However, the federal agency officer also mentioned that the cause of poor consultations could be the reluctance of the state entities, as they may not have disclosed land-use plans and negotiations that they deem were confidential. The officer also mentioned that a stakeholders' consultation is an interim evaluation to gauge the feasibility of the idea and opinions of others involved, and the relevant state bodies should have been allowed to view the policy and plan before it was approved by the Parliament.

The lack of details in the policy document requires the implementing agencies at both federal and state levels to utilise an alternative mechanism to obtain required information. An information sharing platform is central to ensure that the CFS policy implementation is realised. The Working Committee at the state level is identified as the appropriate platform to share information due to its extensive membership, consisting of all relevant implementing agencies. The Ministry of Environment and Natural Resources (MNRE) proposed the establishment of the Working Committee at the state levels to coordinate the various agencies involved. For the committee to be established, it required federal agencies and institutions such as the FDPM, DWNP and National Land Council to hold further negotiations with the state governments, prior to discussing implementation specifications (P1, 2015). Though a pattern for information sharing has been observed in states, it is still not clear as to whether it is working in some states and not others – implicitly suggesting that information sharing is problematic across the federal and state divide.

Drawing on the two major problems relating to the information components of the CFS policy, there are two subsections in this chapter. In identifying how information sharing enabled the CFS policy to be successfully implemented, I review the work of the successful states before discussing the poor information sharing processes in the failed states. In the first, I discuss quality and availability of information and how it has led to successful implementation of the CFS policy in states like Perak and Selangor. The second focuses on the absence of information and it had resulted in the failure of the CFS policy implementation.

Quality and Availability of Information

Sabatier's (1988) prominent work on policy implementation research proposes that the availability of information may stimulate active interests and consecutively alter the balance of power within subsystems. According to Owens and Bressers (2013), the concept of information broadly comprises two components, (a) general knowledge on a policy and the specifications to comply, and (b) accessibility and transparency of information that is available for implementers. Knowledge on a policy can also be described as an implementer's awareness and understanding of a policy, its requirements and benefits, as well as knowledge on other implementers and their roles. Accessibility and transparency of information can be elaborated as ease of obtaining information, and depth and usefulness of information made available to implementers (Owens & Bressers, 2013). The possibility for policy implementation success is higher when implementers are open and able to exchange reliable information based on trust, and practise shared problem solving (Bressers & De Bruijn, 2005). The authors also find that actual cost of implementation and compliance may be lower due to technological improvements and new internalised business practices with the increase of accessibility and availability of relevant information. Hence, availability and accessibility to a wide range of data led by factual and scientific findings, historical knowledge and statistics is key to successful implementation of the CFS policy.

In Perak and Selangor, state agencies responded positively to the negotiation meetings. The Working Committee was set up and discussions were held to ascertain whether proposed activities could be undertaken or if the proposed strategy for an area needs to be revised. States that responded positively to engage in negotiations are states where its key implementers find fundamental information on the CFS policy provided by the federal government aligned to their organisational beliefs. The availability of data is also accompanied by transparency among key implementing agencies at the state level, demonstrated by the establishment of geographical information systems as well as research and development events such as conferences, symposia and workshops. A professional yet friendly working relationship between key implementing agencies further enhances the availability and accessibility of data in these states. The states of Perak and Selangor have also launched various good relationships with other stakeholders such as local communities, non-governmental organisations (NGOs) and local universities (P18, 2015). A state official mentioned:

Orang Asli also help us take care of forests in Ayer Hitam and they are also part of the community forestry. The other one is near Taman Botani in Bukit Cahaya, Seri Alam, surrounding that is community forestry. They work closely with us. They can come and see us at any time. Now through email and all that, what happens there and all the details, it reaches us very quickly. (Selangor-SFD, (P18, 2015))

The CFS policy has been successfully implemented in the state of Perak, attributable to the accessibility of factual and scientifically proven data on the importance of re-establishing the broken link between Royal Belum State Park and Temenggor Forest for wildlife movement (Rayan et al., 2012). Deemed to be at least a 130 million years old and older than the Amazon Rainforests or the Congo Basin, the entire block of forests was divided into two parts: Royal Belum and Belum Forest Reserve in the north and Temenggor Forest Reserve in the south (Figure 6) (*The Star*, 2015b). Establishment of the link emphasized the idea of conserving and preserving an area for environmental value does not inevitably correlate to hindering the state's development or growth (Naidoo & Adamowicz, 2005).

The division was caused by the building of East–West Highway from Gerik (in the Perak state) to Jeli (in the Kelantan state) from 1970 to 1982 (Yeap, Krishnasamy, & Loh, 2009; P14, 2015). During the construction of the highway, an additional 1.5 kilometres width of forests at both sides of the road were cleared, aimed at cutting off Communist terrorists' access to refuge or security in southern Thailand (Kheng, 2009; P14, 2015). The existence of the road also increased accessibility to forests and further encouraged commercial logging (Yeap, Krishnasamy, & Loh, 2009). The end of the Communists Insurgency War in 1989 led to the signing of the Hat Yai Peace Accord and consequent granting of cleared land to the Perak State Agricultural Department. Years after the signing of the agreement, the traffic on the East–West Highway increased, especially being a cheaper route for lorry transport. During the period 1990 to 2012, number of wildlife deaths increased due to road accidents and illegal wildlife poaching and trading activities (P6, 2015; P14, 2015). The accessibility to historical information assisted the state implementers to strengthen their argument in proposing that the area is conserved and preserved. A couple of interviewees illustrate this point:

This road from Gerik to Jeli was built and a further 1.5 kilometres on the right and 1.5 kilometres on the left was cleared. This was to break the connectivity for the communists. That is the line of thought in the past. But after the peace agreement,

the cleared land on the left and right were assigned for agricultural activities. (Perak-SFD, (P14, 2015))

The Amanjaya Forest Reserve is a very good effort from the state. The starting points is before the monument, straight for a few hundred kilometres. However, there are activities in the lower part of that area, which is a production forest, where wildlife is affected. The temporary timber storage area in open allows for people to enter the forests, and our cameras have recorded footage of villagers and even government servants entering the forests. (Perak-PERHILITAN (P6, 2015))

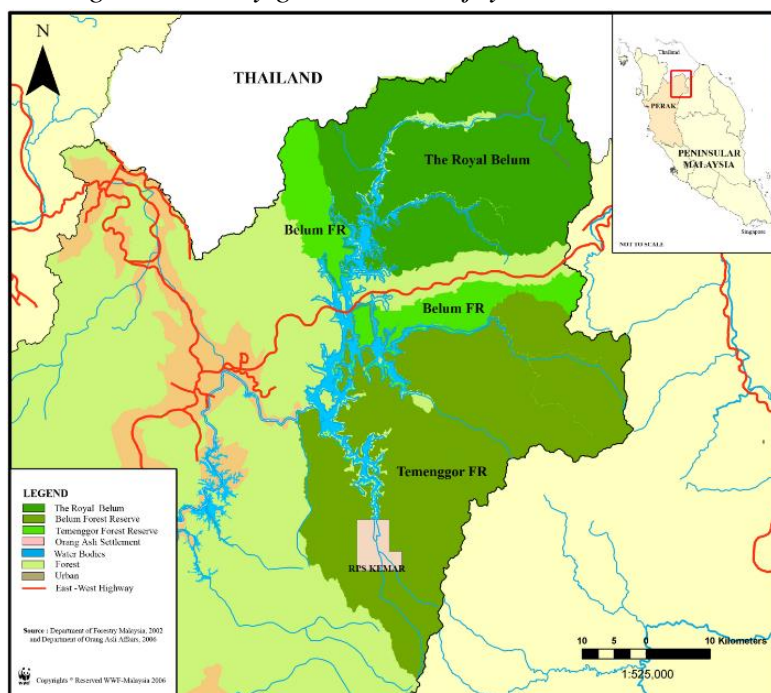
Unlike states that have failed to implement the CFS policy, the availability of most data and statistics were not based only on the efforts of main state agencies such as Perak State Forestry Department (Perak-SFD) and the Perak State Wildlife Department (Perak-PERHILITAN). The collation of data was made available by two major non-governmental organisations (NGO) – the Worldwide Wildlife Fund for Nature (WWF) and the Malaysian Nature Society (MNS). Through their collaborative projects with the DWNP, many scientific studies were and are being conducted in the Belum-Temenggor area (Chye, 2010; Clements et al., 2010; Kaur et al., 2011). The forest complex is believed to be the home to the Malayan tiger, leopard, Malayan sun bear, Asian tapir, as well as many endemic flora species (Ching & Leong, 2011). Both NGOs had also organised petitions between 2006 and 2010 to ensure that Belum-Temenggor rainforests were saved from legal and illegal logging activities. They campaigned for the area to be preserved and conserved due to its richness in biodiversity and proposed that the state consider ecotourism as a way forward (Abdullah, Weng, & Som, 2011).

Abdullah, Weng and Mohamed (2013) suggest that the Orang Asli community who are highly dependent on hunting and forests resources can be employed in the ecotourism industry in order to elevate socio-economic levels. The Perak state government were convinced and agreed to allow for the gazettelement of 18,886 hectares of land along the East–West Highway, forming the new Amanjaya Forest Reserve (P14, 2015) (Figure 6). Upon the state government being convinced of benefits and importance of the CFS policy backed by scientifically proven data, statistics and information, the state adopted the implementation. As a Perak state official said:

When the CFS was established, the Forestry Department of Perak presented [the idea] to the State Legislative Council members, held a few briefings and informed

them of the importance for the area to be connected – so that the wildlife can move. Hence, when the CFS was introduced, the Forestry Department of Perak made a few presentations to the Excos, held a few briefings and informed them of the importance that the area needs to be reforested and to be connected for wildlife movement. We also cited the elephant and tiger crossing incidents. The Perak state government was convinced buy the idea. With a series of explanation to Exco members, we submitted a paper to the state government to gazette this area. It is how the 18,866 hectares had been turned into a forest reserve. (Perak-SFD, (P14, 2015))

Figure 6. Newly gazetted Amanjaya Forest Reserve.



Source: http://awsassets.wwf.org.my/downloads/belum_temenggor070806.jpg

In implementing the CFS policy in Perak, P6 (2015) finds that there is a good understanding between key agencies, especially Perak-SFD and Perak-PERHILITAN. The working relationship between Perak-PERHILITAN and Perak-SFD provides a functional information sharing platform and is regarded as cordial as working with a friend. The platform deliberates on professional and important issues and challenges, occasionally even beyond the CFS policy as part of its aim of being proactive. The state implementers also attend meetings organised by the state's steering agency, the Perak State Economic Planning Unit, in which implementing agencies and officers share further information and knowledge on CFS policy

execution (P6, 2015). However, P6 (2015) does not deny the challenge of obtaining information from agencies such as the Department of Director of Land and Mines (JKPTG), District Land Offices and the Public Works Department. According to the state officer:

... my communication with the Director of Forestry [for the state of Perak] is important. When we become friends, it is easy to work. When they do not agree with my suggestion, we discuss professionally. It is very important to communicate as both agencies have their own responsibilities and way of carrying out our work. The Department of Land and Mines usually remains silent during these meeting. Maybe they have achieved a decision on the status of the land and have already coordinated with the federal and state governments. So, they just attend for the sake of attending. Just like the Public Works Department, they keep sending different officers each time. (Perak-PERHILITAN, (P6, 2015))

With access to a wide range of data and information, it also allows for states to improvise and innovate their implementation activities. In the state of Perak, the state implementing agencies have now embarked on greater issues that are related to the goals of the CFS policy, such as smuggling and illegal wildlife trade activities. In curbing illegal wildlife poaching and trading, it requires commitment and cooperation of various other federal and state agencies. However, the state government still faces challenges with communication between agencies involved in this expanded scope of implementation (P6, 2015). In terms of research and development to support the implementation of the CFS policy and management of Belum-Temenggor forest complex, the state implementers co-organised the first conference in 2014 with a local university, Universiti Teknologi Malaysia. Consecutively, there have been many symposia, conferences and workshops through which information is gathered and channelled into improving and strategizing the CFS policy execution.

There are many agencies involved and there are communication problems from a wider perspective. If all these agencies worked together, we would not be facing the issue of illegal immigrants entering our country. It starts with the border and then the trend they enter into our forests from Padang Besar in Perlis and then they make way to Gerik, Ipoh, Kota Bharu and then they enter into Thailand... We know of so many such cases. (Perak-PERHILITAN (P6, 2015))

The state of Selangor had also successfully adopted and implemented the CFS policy, after consulting all relevant implementers. The Selangor State Forestry Department (Selangor-SFD) works closely with the Selangor Town and Country Planning Department (Selangor-TCPD) in translating the policy at the state level. In the process of doing so, the state government had requested the Selangor-TCPD to make available all maps through the geographical information system (P16, 2015). Geographical information systems have proven to enhance planning and management for a conservation area as the key information required is the spatial data of an area (Phua & Minowa, 2005). The introduction of technology enabled all Selangor state CFS implementers to track overall progress of the CFS implementation and monitor land conversion, which is a significant achievement for the state government. Moreover, the GIS maps are also made available to the general public via its website and a smart phone application. The accessibility of such information also enables residents of the state of Selangor, who participate actively in environmental decision-making at the state level, to utilise the data in filing complaints or raising petitions and concerns (P16, 2015). The state official confirmed saying:

We now update everything using the GIS maps online. You can go to our website now if you want, sismaps.jpbdselangor.gov.my, and you can scroll the land-use for the whole of Selangor. You can get information even without coming here. (Selangor-JPBD (P16, 2015))

Despite the accessibility of most basic data required for the CFS policy implementation, the Selangor-TCPD acknowledges that hiccups existed due to validity of land-use data provided (P16, 2015). The data made available was based on information submitted by various agencies, such as the state forestry and wildlife departments. Most of the data collected by both federal and state government entities are still not widely available on public databases, allowing for ownership and guardianship of data by respective agencies. As such, the Selangor-TCPD does not have the authority to dispute data submitted to the entity. In cases where the Selangor-TCPD finds an inconsistency between data provided and land-use at a particular location, the government inter-agency reporting system is utilised to verify Selangor-TCPD's findings (P16, 2015). The Selangor-TCPD officer also admitted that some sensitive information such as the ownership of Sultanate land is being gathered through smart partnership with the State Land Office, but the data will not be made available to the public but to the state's decision-making council. According to the state official:

We would then discover in meetings, when there is a difference between the land-use presentation by us and by the Forestry Department. We then request for the latest data from the Forestry Department. But now we are cooperating through a smart partnership to integrate these data, but we would not make that available to the public. This would probably be for the decision-makers, for example let's say the Menteri Besar wants to see it, we would then have the information already. So that is why we are working on the smart partnership. (Selangor-JPBD (P16, 2015))

Like the Perak state government, the Selangor state government has undertaken policy innovation to improvise CFS policy planning and implementation based on the accessibility of data. The Selangor-SFD organised a symposium in 2015 specifically on the CFS, for which they have compiled the proceedings to be shared to all implementing agencies (P18, 2015). The findings from the symposium enabled the implementers to utilise information compiled for further research and development. For example, the implementation strategy proposed for Selangor was redrawn by the state forestry department based on the information gathered. The initial boundaries set were shifted, and a new map was proposed to the federal government.

The information sharing practices in the states of Perak and Selangor were demonstrated to be a success factor in the CFS policy being implemented. The knowledge and awareness about environmental issues among monarchs, key state government officers and state implementers are vital to ensure that all required tasks are undertaken and supported. Also, information sharing has enabled improvisation and improvements to be introduced to their implementation strategies. A collective approach among the state implementers has also increased the efforts to conserve and preserve biodiversity and wildlife.

In summary, the availability and accessibility of information has proven to be key to successful implementation of the CFS policy, which is only possible with a functional information-sharing mechanism. Implementers are found to share information if they believe that the policy is in line with the agency's objectives, goals and aims. When the policy aligns to the agency's internal values, they project transparency in providing relevant and required information which resulted in successful implementation of the CFS policy.

Absence of Information: Impetus to Poor Implementation

The absence of availability and accessibility of information, unlike states that have successfully implemented the CFS policy, has resulted in the policy not being implemented in the states of Pahang, Kelantan and Terengganu. These states that have failed to implement the policy, on the other hand, claimed that there is lack information and the data presented to them are of low quality. According to Nohrstedt (2005), implementers may resist any information and utilise formal policy processes to justify their actions if the objectives of a newly introduced policy is found to be deviating from their core principles. This is also reflected in the case of the CFS policy implementation. State governments who are yet to respond to the negotiations by federal agencies are reluctant to obtain further clarification or information on the CFS policy as the policy objectives do not match their current organisational goal or aim (P6, 2015).

According to the Kelantan state governments' perspective, its commitment towards implementing the CFS policy is poor due to the lack of scientific information leading to its inability to convince the state government to approve the CFS policy implementation. The Kelantan-SFD official quoted the federal government as inept in establishing evidence-based policies leading to its failure in convincing state governments to implement the CFS policy. The CFS policy does not prove how conclusions were made as there were no statistics provided on human-wildlife conflicts and a decrease of wildlife population by states (P17, 2015). This has become a major hurdle for both departments to convince their state governments to approve the gazettelement of identified areas for the CFS policy. However, there appears to be a wide consensus on the Kelantan-SFD being ignorant to numerous data sources available and provided to them.

Conversely, an official statement from the Menteri Besar of Kelantan's Office expressed that the state government has successfully implemented all components outlined in the CFS according to the 'Sustainable Forest Management' guidelines and has obtained the Malaysian Criteria and Indicators for Forest Management Certification under the Malaysian Timber Certification Scheme. This certification, however, only applies to forests that are classified as permanent forest reserves (PRFs) and is inapplicable to non-PRFs such timber plantations, mining and other land use. When I analysed secondary data that has been made, it was anticipated that Kelantan's failure to implement the CFS policy could have stemmed from most of the areas mapped under the CFS in Kelantan to have been logged or converted to other land use.

The Kelantan state's Chief Minister's Office communicated that the state government has initiated steps to freeze the acquisition of logging licenses for timber since 2006, especially in the Lojing Highlands, which is part of the Primary Link 3 that aims to link the Lojing Forest Reserve and Sungai Brok Forest Reserve in the Main Range. Sahabat Alam Malaysia (SAM), a local NGO, had challenged this statement based on their findings of 41 logging concession licenses approved in 2014 for the Permanent Forest Reserves in South Kelantan Forest District that covers the Gua Musang and Lojing Kecil territories (*Malaysiakini*, 2015) (Appendix 2). The Chief Minister's Office was contacted to verify this information published by the local NGO, but there has been no response until the end of this research period in 2017. In comparing the evidence from the local NGO and the information provided by the Chief Minister's Office, it can be concluded that officials in the Chief Minister's Office too are oblivious to the occurrences in the field.

Both the Kelantan State Forestry Department (Kelantan-SFD) and Kelantan Wildlife Department (Kelantan-PERHILITAN) find the quality of information available for the agencies to be poor. The representatives of both agencies in Kelantan opined that the information provided by the Ministry of Natural Resources and Environment (MNRE) lacks scientific justification as it had not been supported by any factual data or statistics and some data are extremely outdated (P4, 2015; P17, 2015). In overcoming this hurdle, P17 (2015) suggested that the Ministry establish a database based on information collected through geographical information systems and the wildlife departments should be made to provide substantial data and statistics. The information provided should include types of species prevalent at a location, number of incidents and any other relevant data. Only with significant information will the state government be able to decide as to whether land is to be acquired, compensation to be paid or new technical measures to be established (P4, 2015).

For example, at the Primary Linkage, the bridge which had already been built earlier is referred to as viaduct. The viaduct is not really a viaduct; it is a bridge. But, the [policymakers] consider it as viaduct. If the bridge is considered a viaduct, then that was built some twenty or thirty years ago. Now the [environment there] is degraded. (Kelantan-PERHILITAN (P4, 2015))

The problem with CFS ever since I was in the Ministry until now is how do you convince the state government that this link is important for wildlife? They have no figures, no incidents because the Wildlife Department did not supply these figures. So how can we fight for this policy at the state level and convince the state government the importance of wildlife compared to development. (Kelantan-Forestry (P17, 2015))

The federal agencies and NGO representatives counter-argue that the claim indicates that the Kelantan and Terengganu state governments are oblivious to data presented in ample of studies on the importance of these links for wildlife movement (P1, 2015; P9, 2015; P11, 2015, P12, 2015). Moreover, when a primary or secondary link is already degraded or disconnected, data on how much wildlife movement is involved may not be accurate. However, the importance of the link can still be gauged through the wildlife population in the surrounding forests and through the cases of human–wildlife conflict reported in the neighbouring housing area/human settlements. Through the interviews conducted, it can be concluded that officials for both states appeared uninterested and oblivious of the CFS policy overall. A number of interviewees illustrate this point:

Before they come up with this idea, studies were conducted, and it was found that our forest is fragmented. Then they proposed this idea, the Central Forest Spine to reconnect and create a corridor for the movement of mammals especially. (MNRE (P1, 2015))

... this whole concept of Central Forest Spine and then the linkages... I think all the agencies find the linkages to be important. So that is how the concept of CFS came about and a consultant was hired to look at the whole thing because it takes... a huge study. (WWF-Malaysia (P9,2015))

We have done some surveys with farmers to look at how their perception for the human-elephant conflict... (MEME (P11, 2015)).

They did a study on the biodiversity there before the viaduct was built. On this side and on the other side, because it is separated by road. Once the viaduct is built, they

will do an after study. Of course, on the fauna, small mammals, and big mammals.
(MNRE (P12, 2015))

Three factors were identified in contributing to failure of CFS policy implementation when the fieldwork for this research was conducted in 2015. First, misconception about the basic concepts and principles of the policy based on the assumption and fear that land-use will be limited or confined to conservation and preservation, and revenue from lease or sale of land will be lost. Second, implementing agencies involved in these states fail to clarify details, resulting misunderstandings and assumptions, especially on the roles of each agency and tasks that needed to be undertaken. Also, a number of basic definitions and nomenclature used in the policy document had not been clarified. Third, a lack of transparency exists between implementing agencies, which hinders sharing of information, and absence of factual and scientific data.

The unavailability and inaccessibility of information, statistics and data in states that have failed to implement the CFS policy has resulted in poor progress overall. With its main function of economic planning for the state, the respective state's Economic Planning Unit (UPEN) demonstrated a narrow understanding towards the CFS policy. Officials from UPEN, representing the State Executive Councils, voiced their concerns of revenue loss if CFS is implemented – that the state will have to preserve the entire designated area and lose its profits from mining, logging, agriculture, lease of land, et cetera (P13, 2015; P17, 2015; P20, 2015). Therefore, the unavailability of data is caused by the state implementing agencies' reluctance in enquiring about further information from the federal level implementers and various other state agencies. Furthermore, the state economic planning units have been turned off by the federal government's lack of clarity on compensation or benefits the states will receive if the CFS is adhered to. The three states also find lack of transparency in the information on obtaining funds to implement the CFS policy (P13, 2015). A number of interviewees illustrate this point:

First, when [the federal government] does the planning, [they] should have asked more information. Now they have identified the ecological corridors for the Central Forest Spine. Following that, they will ask for more land [surrounding it]. Later, the land status will be changed. I think the Terengganu state government is not willing to let go. The Forestry Department HQ's long-term goal is for this area to become

a forest reserve eventually. But the state is not willing give up these lands. They have their development projects. (Terengganu-SFD (P13, 2015))

Every state they have their respective Structural Plan. We want to include CFS in our Structural Plan but the CFS was approved in Parliament after that. The Master Plan for Kelantan was approved first. The projects were approved before. Sometimes the consultants are unable to see this. (Kelantan-SFD (P17, 2015))

The official from Pahang-UPEN agreed that the state government had decided not to provide land-use data to be incorporated into the national geographical information system due to the fear that the federal government would utilise the data to demand currently vacant land for various other federal development projects (P20, 2015). As the state of Pahang relies highly on the income from timber logging, the federal government must be able to provide remuneration especially in terms of monetary compensation as the state's income relies on sale or lease of land (P20, 2015). The officer also explained that the Pahang state government tries its best to take advantage of the federal government's policies, for which if it contradicts these, the state entity will attempt to find policy and legal loopholes to manipulate the scenario to benefit the state. As the authority over land lies with the state government, the Pahang state government agreed to implement the policy but has not attempted to actively execute it (P20, 2015). According to the state official:

The federal government has imposed a lot of policies that affects land matters. One is this [the CFS], but another is the one on the GIS data. We are reluctant to even provide the GIS data that the federal government requested for because we are afraid that they would know how much land is still available. We still have those sentiments. I am providing more information than most other officers. Usually when federal [government] wants to impose a certain policy, we have no problem with it, but they should give the state something in return. The power over land, or the state's income relies on the land. We don't have control over most taxes and all that. So as for this case, if you want to reserve an area of 10,000 hectares for the federal to turn it into a reserve or to do some projects, we want a compensation. (Pahang-UPEN (P20, 2015))

Based on lack of guidance and direction from the State Economic Planning Unit as the main steering unit at the state level, the Pahang State Forestry Department (Pahang-SFD) has poorly undertaken the CFS policy implementation tasks. Until March 2015, the Pahang-SFD had not counter-checked the CFS policy Master Plan provided by the federal government against the land-use change that has occurred in the respective locations. In projecting a false impression that the state entities are implementing the CFS policy, the Pahang-SFD had set up an informal reporting channel it monitors. If an application is made for timber to be logged in the CFS linkages, the District Forest Officer will report it to the state headquarters for a decision to be deliberated (P24, 2015). However, a lodged report and decision made will not be officially reported to mask the trail of contradicting outcomes achieved (P24, 2015). Moreover, miscommunication exists between the Pahang-UPEN and Pahang-SFD over the eligibility for the CFS area to be logged. Though the Pahang-UPEN believes that adopting the CFS policy is equivalent to no logging, the Pahang-SFD expressed that the designated area can still be logged using the sustainable felling method, which incorporates selected felling (P24, 2015).

The areas under CFS can still serve as production forests, which means that it still can be logged using the sustainable felling method by considering the felling direction, use selected felling, and a production limit. So, in terms of production, there is no problem in the CFS area – it can still have an output (Pahang-SFD (P24))

Transparency in availability of information is a challenge for the Pahang state implementers. The Pahang-TCPD indicated that it faces difficulty in incorporating the CFS boundaries into its Local Plan as Pahang-SFD and Pahang-PERHILITAN have yet to provide a finalised map of areas involved. When Pahang-PERHILITAN was consulted with regards to availability of data on forested areas to monitor wildlife movement, the agency's representative indicated that it has no access to current data as the agency has not been updating the data for a few years (P22, 2015). The official elaborated further on the confidentiality of such data and its exclusivity to the Pahang-SFD. The Pahang-PERHILITAN is also concerned about the allocation of logging concessions but seems to have no solution in seeking for the required data (P22, 2015). Furthermore, lack of enforcement indicates poor transparency and corrupt practices within the state's civil service. P20 (2015) revealed that parties who are arrested for illegal logging are usually released quite quickly due to high political influence.

In Terengganu, the Terengganu Town and Country Planning Department (Terengganu-TCPD) discovered that the agencies were reluctant to implement the CFS policy due to mismatched boundaries. As a solution to overcoming this, the Terengganu-TCPD had embarked on a boundary redesigning or remapping stint, to make available most updated data to other state implementers (P7, 2015). Apart from this, Terengganu State Forestry Department (Terengganu-SFD), which is supposed to be the lead agency, stated that the CFS policy implementation should be led by the wildlife agency instead (P13, 2015). In P13's (2015) opinion, there is no clear indication or assigning of roles within the implementation plan. The MNRE should instead list clearly what the scope and jurisdiction of each agency are and tasks each agency has to undertake to provide a holistic view on implementation overall (P13, 2015). Furthermore, the Chief Minister and Director of the Terengganu State Economic Planning Unit (Terengganu-UPEN) are both newly appointed by the state, resulting in almost zero knowledge on the CFS policy at the state leadership level (P7, 2015). The Terengganu-SFD emphasized that a number of terminologies used are not clarified or stated in the policy document:

I do not know how successful will CFS be because for Terengganu, even in terms of the corridor, [implementers] are not clear about the corridor. What kind of corridor do you want? How far are the corridors? The length and the width. Of course, the intention is to connect between forests... This Central Forest Spine is good. But it is just that there are many grey areas. Even the definition is also unclear. (Terengganu-SFD (P13, 2015))

A general problem that has been identified in all the failed states is poor and uncooperative attitude amongst implementers (P1, 2015; P12, 2015). State level officers are found to lack information about location of links and its importance, which has led to a number of dysfunctional alignment meetings between federal and state agencies (P1, 2015; P12, 2015). In many instances, officers from state agencies have admitted to not have read the policy documents or reports provided to them (P1, 2015). The level of ignorance among state officers is also fuelled by a language barrier as policy documents were available only in English in the initial years of policy conception (P1, 2015). Lack of knowledge among state officers has resulted in no outcome to discussions on challenges faced and/or implementation strategies that need to be undertaken. According to P1 (2015), state implementing officers are unaware of the importance of the CFS policy as they do not familiarise themselves with the information and knowledge that is provided by the policy document. However, P2 (2015) finds that the scenario

is not vastly different amongst a number of federal officers. There are federal agency officers who lack knowledge and understanding of the CFS policy, resulting in a weak steering and coordination of the CFS policy implementation at the federal level. However, federal agencies appear to be placing the blame on the state implementers for poor or no progress with the execution of the policy.

The poor acquisition of knowledge and information by the state government officers is linked closely to substandard knowledge management practices in government entities (P2, 2015). In managing the vast information gathered over a period of time, government agencies must pay attention to institutional memory. It is important to retain crucial and relevant information required for an agency to carry out tasks assigned optimally, whereby a loss of institutional memory may impact an organisation's ability to advance its mission successfully, avoid mistakes made in the past and leverage accomplishments of outgoing staff (Coffey & Hoffman, 2003). This is made worse by transfer of public service officers imposed by the Malaysian public administration system (Davis, 2004).

The current staff transfer system applied by the Malaysia's Public Service Department has a wide range of time period that an officer has to work with a particular agency prior to a transfer, but usually it would be between 1 to 5 years (P2, 2015). Transfers may be requested by line managers if an officer is found to be unfit for the role based on outcomes of an open audit, staff's period of service for a particular agency, agency's performance and financial standing. Staff may also apply for a transfer due to their personal reasons, such as a spouse being transferred to another state or relocating to another state to care for their ill parents, et cetera. However, the current system is inefficient as the reshuffling of officers is usually accompanied by no official and proper handover of data or information between the outgoing and incoming staff (P2, 2015).

The current system has created poor institutional memory, especially in dealing with tangible and intangible information that has been gathered throughout a certain period of time. The gathering of information is a gradual process through which relevant data is collected throughout policy adoption stage to the current implementation phase. An incoming staff member appointed to oversee the CFS policy execution will discover that required data are missing only after they are officially on the job. Hence, when a new officer attends important technical and alignment meetings (especially the Working Committee meeting at state level),

he or she would have no records to previous meeting outcomes and may reinvent the wheel in deliberating issues that may have been discussed before – leaving these important committee meetings with no progress (P1, 2015). Furthermore, state implementers have demonstrated their ignorance and lacking data in a number of technical meetings where state development plans were presented, for which highways and residential areas were intended at the location of CFS' primary and secondary linkages (P1, 2015). As such, the challenge for both federal and state government officers lie in ensuring collated data are transmitted to appropriate officers or new officers who are assigned to implementing the CFS policy (P1, 2015; P2, 2015). Alternatively, this obstacle may be overcome with the presence of a strong and functional information sharing platform, such as an active Working Committee.

Hence, in order for states like Pahang, Kelantan and Terengganu to implement the CFS policy, the key implementers at the state level must be more proactive and push to acquire factual, scientific and historical information to establish understanding about environmental issues and create feasible goals. The assumptions that exist within all state implementing agencies must be elucidated and made clear in order to provide clarity as to what each agency is expected to achieve. In doing so, definition and terms used in the policy document must also be explained through a comprehensive 'Terms of Reference' list. If state agencies are empowered with basic knowledge on environment and economic profits of conservation, there will be a higher possibility for the CFS policy to be implemented in these states. In determining success of policy implementation, state governments should undertake the initiative of data consolidation to ensure data and statistics of implementing agencies are available for other agencies too.

Conclusion

Returning to the hypothesis or question posed at the beginning of this study, I can conclude that the states that have successfully implemented the CFS policy have the required information and data consisting of factual, scientific and historical knowledge. The availability and accessibility of data is made possible by positive attitudes among key implementers (especially the State Executive Council, State Forestry Departments and State Wildlife and National Parks Department) who believe that the goal of the CFS policy matches their respective organisational values. However, I must reiterate that the availability and accessibility of information is also made possible by strong political will and commitment that the respective state governments hold.

The presence of actor networks and platforms for information sharing has been a key determinant in ensuring the CFS policy is implemented. An interactive role also exists between power, networks and information. In both states of Perak and Selangor, I have identified effective platforms and mechanisms for information dissemination, such as stakeholder meetings, data websites and geographical information systems. These elements enable transparency between agencies although they may take ownership of the data provided or published. A professional but friendly working relationship between key implementers provides an opportunity for information and knowledge sharing and transfer. Apart from that, strong networking with researchers and philanthropists also exists via the organising of conferences, symposia and workshops. The states of Perak and Selangor have also launched various good relationships with other stakeholders such as non-governmental organisations (NGOs) and local universities.

In ensuring the CFS implementation success, it is extremely important to have accurate and specific planning documents that carries detailed information. Also, poor availability and quality of information is embedded in the issue of poor institutional memory. States that have failed to implement the CFS policy such Pahang, Kelantan and Terengganu have very limited information about the environment and forests due to poor attitude and knowledge levels among implementers. The absence of vital data and statistics has led to a policy execution failure led by misconceptions of implementation concepts, principles and requirements, which are most often based on assumptions of revenue loss and land confiscation by the federal government. Poor information levels among implementing agencies has resulted in a negative attitude among implementers in clarifying details and assumptions, especially relating to roles of each agency, tasks assigned, and concepts, definitions and terminology used. An extensive 'Terms of Reference' list can also be created listing all technical terminologies and definitions involved in the CFS policy. Lack of transparency also hinders knowledge sharing and transfer between agencies involved.

The states of Pahang, Kelantan and Terengganu should adopt the practices in Perak and Selangor. Key implementers in the failing state should undertake the effort to acquire and consolidate factual, scientific and historical data from all implementing agencies involved. The implementing officers must also equip themselves with knowledge on environmental and economic profits of conservation. The knowledge acquired will assist them with understanding the importance of the CFS policy and biodiversity to the well-being of the nation overall. If the

conditions in the states that have successfully implemented the CFS policy can be emulated in states that have failed to do so, the possibility for the CFS policy to achieve success overall is high.

Table 13: Summary of Findings – Significance of Information on Implementation Success and Failure

Perak and Selangor	States	Pahang, Terengganu and Kelantan
Successful implementation	Criteria Related to Policy Information	Failed implementation
<ul style="list-style-type: none"> • Federal implementers are able to negotiate with state implementers on policy details and specifications. • State implementers share and transfer knowledge via meeting platforms and technology such as data websites, smart phone applications and geographical information systems. • Information, data and statistics are available easily either on a public domain or on agencies' websites. • A variety of information exist including factual, scientific and historical data, which assist state implementers set feasible goals in achieving implementation. 	Availability and accessibility	<ul style="list-style-type: none"> • State implementers attend meetings but are usually unequipped with information, resulting in failed outcome to setting policy details and specifications. • There is no clear platform for knowledge share or transfer. Furthermore, the use of technology is poor in these states. • Ownership and confidentiality of data is high in these states, hence information and data are usually unavailable in, even for other implementers. • If information are available, it is usually limited to very basic outlines.
Clarity of information exists as state implementers clarify details through the platform established and via a friendly but professional working relationship.	Clarity	State implementers hold assumptions to implementation requirements due to lack of information.
Research symposiums, conferences and workshops are organised for all implementers at state level to provide valid data based on science, facts and history.	Validity	<ul style="list-style-type: none"> • No active research is undertaken in these states.

Source: Author

CHAPTER 7: MOTIVATION & CFS POLICY IMPLEMENTATION

“Motives stimulate or discourage the implementing agencies in undertaking policy execution in the field.”

(Author, 2015)

The two previous analytical chapters established the significance and importance of the first two elements of the contextual interaction theory (CIT) – power and information. The third element that could be used to further understand the variation to the Central Forest Spine (CFS) policy implementation outcome is the motivation of state implementers, which was hypothesized to be profit from a resource-based economy. As individuals are usually motivated mainly by their self-interests, organisations, institutions and incentives must be designed to take advantage of such motivations (Perry & Wise, 1990; Ritz, 2011). In the public sector, the study of motivation is a sub-discipline on its own, which flourished especially after the coining of the term Public Service Motivation (PSM) by Perry and Wise in 1990. The public service motivation theory finds that public sector employees have a unique motivation – they are found to hold a certain motivation to perform meaningful tasks that would serve the community (Perry & Wise, 1990; Brewer & Selden, 1998; Rainey & Steinbauer, 1999; Vandenabeele, 2008). This chapter explores what the motivation factors were that influenced the CFS implementation outcome in the states chosen for this study.

According to Perry and Wise (1990), a bureaucrat with greater public service motivation is found to work better for a public entity and depend less on utilitarian benefits. Being a policy that focuses on forests and wildlife conservation and preservation, the street-level bureaucrats must have high public service motivations in order for the CFS policy to be implemented. Based on this theory, I attempt to ascertain motivations that exist in state level implementers, and if it correlates with success or failure of CFS implementation. The idea of motivation in this research is a combination of theories gathered from literature of policy implementation and public service motivation (as most agencies involved consist of public service entities). This literature indicates that motivation can be conceptualised as arising from both internal and external sources. Internal motivation is identified as an agency’s or public service personnel’s adaptability to implementation goals, work-based aspirations, character towards implementation objectives, attitude towards other implementers, and performance (Spillane, Reiser & Reimer, 2002; Levin & Cross, 2004). The authors also describe external motivation as availability of incentives or existence of penalties. As incentives and penalties in terms of

monetary benefits have proven to be attractive, I will also discuss funding, which is a crucial component to any policy implementation task.

Implementing actors or agents are influenced by the availability of resources and expertise. Weaver (2010) emphasizes that limited resources and expertise often consumes time and makes policy implementation challenging. Availability of funds to implement a policy plays an important role in ensuring its success (Marsh et al., 2010; Eaton & Kostka, 2014). In failed implementation states, absence of funding led to lack of resources, expertise and skills in achieving the intended outcome. The states that have failed to implement the CFS policy are also found to have no funding mechanism to generate financial support to administer the policy. In states that are ruled by the opposition political party, the poor federal–state relations subsequently led to a financial bias in allocating finances for policy implementation. The availability and provision of funds is a positive motivation to the implementers, which results in successful policy implementation.

The two previous chapters identified power balance and information sharing as factors that enabled the CFS policy to be successfully implemented in some states. However, political will plays a huge role in ensuring that entities or agencies are drawn to implement the policy and bureaucrats must hold a certain kind of ambition to make information and allow for its sharing. These findings also relate closely to the importance of public service motivation. In gauging the presence of public service motivation for CFS implementers, I examine motives through five elements of measure described by Perry and Wise (1990).

Perry and Wise (1990) find that salary and promotions may function as effective motivating factors in the situation in which internal motivation is absent. Though the motive of self-sacrifice appears distinctive to the public sector, there were no differences between the public and private employees in perceived need for salary or job security (Gabris & Simo, 1995; Vandenabeele, 2008). In relation, this research focuses on understanding the influence of salaries and incentives provided to state level individual actors, especially forestry and wildlife departments, as part of their perceived cost and benefit. Research undertaken in recent years by scholars such as Spillane, Reiser and Reimer (2002) and Levin and Cross (2004) also quoted similar interpretation to motivation. The authors recommend for motivation to be analysed at three levels – individual, organisational and policy sector. Table 14 maps the elements and level of motivations to literature and the conditions it exist in.

Table 14: Elements of Motivation

<i>Elements of Motivation</i>	<i>Literature</i>	<i>Condition</i>	<i>Motivation Level</i>
Entity/agency goals	O'Toole (1983) O'Toole & Montjoy (1984) Smith & Mogro-Wilson (2008) Carter & Carter (2009)	Internal	<ul style="list-style-type: none"> • Policy sector • Organisational
Perceived costs and benefits for implementers	Bullock & Rodgers (1976) Brodkin (2011)	Internal	<ul style="list-style-type: none"> • Policy sector • Organisational • Individual
Public service motivation	Perry & Wise (1990)	Internal	<ul style="list-style-type: none"> • Individual
Support among implementers	Murphy (1976)	External	<ul style="list-style-type: none"> • Organisational • Individual
Interest group participation	McLanahan (1980)	External	<ul style="list-style-type: none"> • Policy sector • Organisational
Funding	Sabatier & Mazmanian (1980) Marsh et al. (2010) Eaton & Kostka (2014)	External and Internal	<ul style="list-style-type: none"> • Policy sector • Organisational

Source: Author

At the first level, individuals tend to be influenced by three elements (one internal and two external). Motivation at an individual level focuses on the smallest unit of the system. Individuals exist at the end of the line of policy delivery, for which they are known as 'street-level bureaucrats' (Tummers & Bekkers, 2014). Understanding motivation of individual actors may provide better insights to collective formal and informal decisions made by an organisation. Individual motivation correlates highly with job performance level (Zhang & Bartol, 2010; Coelho & Augusto, 2010), signalling its importance for the CFS policy implementation. Though there are numerous motivation factors identified by existing literature for individuals employed in the public sector, motives for individual actors in this research are limited to characteristics that have emerged from interviews with bureaucrats such as public service motivation, perceived cost and benefit and support from fellow implementers.

In analysing this broad and subjective factor of motivation, this chapter is divided into four subsections. In the first, I discuss individual actor's internal motivation by analysing the influence of salary, incentives and benefits and the support they receive from their colleagues or fellow implementers. The second subsection elaborates on the internal motivation that is present at the agency level. For this, I observe if the aims of the CFS policy aligns with the goals and objectives of the implementing actor and its state government's direction. The third

subsection emphasizes on funding as an external motivation to implementers. In the fourth subsection, I unpack the idea of internal and external motivations that exist at the federal level, although it appears to be disarrayed.

The second level of motivation is present at an organisational level, which are the implementing agencies. These agencies could be either federal or state agencies, but they are equally important in ensuring the success of the CFS policy implementation. At this level, four elements of motivation have been identified to influence the CFS policy implementation outcome. The two internal motives analysed are entity or agency goals, and perceived costs and benefits for implementers. Support among implementers and interest group participation are observed as external motives. The agency goals dispense directives to individual actors within an entity. At this level, organisational motivation is highly influenced by deviation between aims of the new policy and the goal or purpose of a particular implementing agency. If the organisational function, objective, aims or desired outcomes align with those of the CFS policy, the configuration will exert a positive organisational motivation for the agency to adopt the newly established policy. The scenario will also enable actors to cope with the policy shift, whilst a gap or misalignment between goals of a particular implementing agency and objective of the CFS policy will lead to a demotivation, resulting in the entity failing to execute the policy.

The alleged cost and benefit to state agencies appears to be vague, as most of them have been expected to win funds from their respective state governments or utilize finances from their annual budget. In the states of Perak and Selangor that have implemented the CFS, a positive cost and benefit has motivated the execution; meanwhile, a negative cost and benefit had discouraged states like Pahang, Terengganu and Kelantan into not implementing the policy. Elements of cost and benefit also correlates closely with support received from fellow implementers. If a state has advantages in implementing the policy, the inter-relations between implementers at a state level appears to be closer compared to states that have decided not to execute the CFS. Furthermore, a combination of interest groups also serves as a noteworthy external pressure.

The third level of analysis will be at the policy sector level, which observes the domain in which the policy is contained. At the policy sector level, there are three elements that have an impact on the success or failure of the CFS policy – consisting of two internal motives and an external one. The internal elements are entity or agency goals, and perceived costs and benefits for

implementers, while the external element is interest group participation. A determining element for implementation is the goal of the entity or agency. It is highly unlikely for a new policy (such as the CFS) to be implemented if the policy objective diverges from overall aim or overarching policies of its policy sector. The overarching policies and aim set a guideline or direction for all other subsequent policies and must align to ensure that resources and efforts are coordinated. In line with this, I explore goals and aims of the environment and natural resources sector in Malaysia represented by the Ministry of Environment and Natural Resources (MNRE) and compare this against the periodical national plans that serve as a blueprint for all sectors.

This comparative exercise enables us to understand whether the policy aligns to the policy sector or a deviation exists. If a policy appears to be deviating from its sectoral objective, it is highly likely that the policy will not be implemented. Perceived cost and benefits for the sector is core to understanding the underlying motive of Malaysia's federal government in establishing the CFS policy, which required a shift of focus towards conservation and preservation efforts. Two early assumptions I identified are – first, to respond to global pressure or to honour Malaysia's intentions to gain monetary benefits, recognition from the international community or obtaining favourable outcomes in establishing trade relations; and second, to exert a form of control on land-use conversion by state governments and environmental hazards or disasters faced annually. A third element, which is interest group participation, analyses pressure from international and local environmental non-governmental organisations as interest groups play an important role in pushing for a policy to be implemented.

Individual Actor's Internal Motivation for CFS Implementation

In this subsection, I examine types of motives that exist at individual actors' level in key implementing agencies, especially state forestry and wildlife departments. To comprehend these motives, I observe three main components – first, the presence of public service motivation that may lead to the success of implementing the CFS; second, the influence of salary, incentives and benefits on front-line implementers in motivating them to execute the CFS policy; and third, the support they receive from their colleagues or fellow implementers. However, the motives on salary, incentives and benefits will not be discussed for the federal individual actors as they are part of the team that leads the policy, not the street-level bureaucrats.

Public service motivation (PSM) theory is useful for analysing motives of individual actors in agencies that are to implement the CFS policy, as most entities are public service units. The theory explains a unique motive that exists within public service employees and that which is noble in nature. Selfless motives, described by Knoke and Wright-Isak (1982) and adopted by Perry and Wise (1990), can further be categorised into three groups. First, rational public service motives are actions that are embedded in utility maximization of individuals, which include participation of a public service employee in policy formulation process, commitment to a certain public program aligned to individual beliefs, and advocacy for a particular interest (distinct or private) – all aligned with the spirit of public service (Perry & Wise, 1990).

In the CFS implementation scenario, these motives are found to exist within states that have successfully implemented the CFS policy. The federal officers that have been involved directly with establishing the policy are committed to goals and targets promised by the Ministers in the international arena although they face significant challenges, especially with regard to dilemmas of resource exploration (P1, 2015; P3, 2015; P12, 2015; P26, 2015). Rational motives had guided the Selangor-SFD to remap the area for the CFS policy when the agency found an area mapped in the original plan to be no longer forested (P18, 2015). A strong believer of forest conservation, P18 (2015) believes that it is very fortunate that such a policy was established, although later than it should have been, and that forests must be guarded and protected as much as the agency can. A representative of the Selangor-PERHILITAN, P19 (2015), agrees that the agency focuses more on species protection and the move to remapping of CFS area is aligned to that. The officer supported his point with an example on Bukit Cherakah in Selangor, which has human–wildlife conflicts with tapirs almost annually, but it was not included in the initial CFS map for Selangor. A similar initiative was carried out by the Perak-SFD when an area of degraded land along the sides of the Gerik-Jeli Highway had been gazetted as the Amanjaya Forest Reserve although it was not included in the original CFS map (P14, 2015). According to the state officials:

Certain [plans] were in the document, but we modified it. What we came up with is innovative. We don't want to follow blindly. Then if we must acquire individual lands, where are the funds going to come from? Then how to materialise our dream of these corridors. So, we must think of an alternative in an innovative way. (Selangor-SFD (P18, 2015))

For us the Wildlife Department [in Selangor], we focus more on species protection. For example, our case is not the same as in Pahang and Perak. The biggest mammals that we have in Selangor are tapirs. (Selangor-PERHILITAN (P19, 2015))

In Pahang, a state that has not fully implemented the CFS policy, officers from Pahang-SFD and Pahang-PERHILITAN expressed that they are committed to the policy but believe that their actions must take into account the decisions made by the state government as they work in the scope of the state. In the states of Terengganu and Kelantan, its state level implementers lack commitment to the policy and did not see themselves involved in the policy formulation process (P13, 2015; P17, 2015). However, the apparent difference between individual actors in states that have implemented the CFS and those which have not is their belief in the role of being an advocate for conservation and preservation initiatives. Individual actors from Selangor and Perak tend to see themselves as wardens and guardians of forests and wildlife compared to those in Pahang, Terengganu and Kelantan.

The second factor described by public service motivation theory is the norm-based motive. This stimulus is grounded in the normative foundation of a desire to serve the public interest that propels the public service sector. The drive is considered to be altruistic in nature with a striving for social equity and an allegiance to the government and duties assigned (Perry & Wise, 1990). Norm-based motives are found to be the strong set of reasons to understand choices made by front-line bureaucrats in all states despite the CFS implementation outcome – whether at federal or state level, successfully executed or otherwise. At the federal level, the officers consider themselves as representatives of the people and agents for the country when facing the international community (P1, 2015). As such, federal officers see a need to prudently devise a plan to manage and control the utilisation of environmental components (especially land) and natural resources in attempt to reduce natural disasters and environmental impacts, for example the floods in Cameron Highlands in late 2014 (P2, 2015). Officers at the federal level also see a need to accomplish assurances made to the international community (P1, 2015).

Among the states, Selangor records one of the highest GDP and its population is highly educated. This exerts a pressure on its public service employees for transparency in most of the tasks undertaken – especially those pertaining to the environment, forests and wildlife (P16, 2015). A representative of the Selangor Town and Country Planning Department, P16 (2015) agreed that the state of Selangor is proactive in conservation and preservation initiatives as they

are pressured by the educated population and presence of a high number of non-governmental organisations within the state. Contrariwise, in the states of Kelantan and Terengganu, expanding socio-economic needs of the growing middle-income class supersedes the need for conservation and preservation activities (P17, 2015). These states are also among the ones with high poverty rates in Malaysia (Department of Statistics Malaysia, 2012).

The third set of PSM motives, affective motivations, refers to behaviour that are of emotional reactions to a range of social contexts such as commitment to a program due to genuine belief towards a specific social aspect and devotion to goodwill (Perry & Wise, 1990). Officers at the federal level are driven to ensure that they altruistically manage natural resources for future generations (P1, 2015; P2, 2015; P3, 2015; P8, 2015; P12, 2015; P26, 2015). This sentiment is also shared by forestry and wildlife officers in all states. When probed further as to why the CFS policy had not been implemented in their states, bureaucrats from Pahang, Terengganu and Kelantan argue that the goodness of the policy can only be translated into reality with allocation of resources; this has been discussed in analysis Chapters 6 and 7.

Complementing the public service motivation is the influence of salary, incentives and benefits. Perry and Wise (1990) find salary and promotions as effective motivating factors in the absence of internal motivation. History of public service employment indicates that 80 to 90 per cent of employees for the forestry and wildlife agencies at state levels are labourers and had no understanding of nature or science as the state governments could not afford to pay higher salaries (P2, 2015). Also, the number of forest rangers hired were far less compared to the size of area that needs to be patrolled – and the tradition still continues until today (P2, 2015). This has led to the state governments also lacking manpower for implementation and enforcement of the CFS policy (P1, 2015). A couple of bureaucrats illustrate this point:

The [origin of] employees for state government and the Forest Department were basically 80 to 90 per cent of the labourers. [It is because] the state government don't want to pay a very high salary. So, the possible number of low-paid government servants they can have were previously labourers and they were unable to enforce the law. They must have a Ranger. Hence, the state will say one Ranger for one state is enough. Why do we want to employ more than that? For every Ranger we employ, we can employ two or three labourers. (DWNP (P2, 2015))

Strengthening of the enforcement unit or the division requires manpower. When manpower is involved, the government has additional burden. It involves salary and imposes a constraint, especially in terms of financial implication. (MNRE (P1, 2015))

According to the Malaysian Public Service Department portal, a Forest Guard (*Pengawas Hutan*) may start his career at the grade G11 with a starting pay of RM 1246.15 with an education requirement of mid-secondary education (*Penilaian Menengah Rendah*), coupled with a Forestry Department's Certificate of Forest Guard. To be employed as a Forest Ranger, one is required to complete higher secondary education (*Sijil Pelajaran Malaysia*) and may start at grade G19 with an initial salary of RM 1413.40. As for the federal employees at the wildlife department, the salary brackets are slightly better. A Wildlife Assistant is usually hired at grade G11 with a starting salary of RM 1200.00 and a Wildlife Assistant at grade G17 is paid RM 1357.00 (Public Services Commission, 2018). The mid-term review of the 8th Malaysia Plan indicated that the incidence of poverty was highest among the agricultural, hunting and forestry workers at 14.5 per cent (Economic Planning Unit, 2003, p. 60). In exploring further to see if there are major difference between states, I find that the salary range for forest and wildlife rangers is quite streamlined across all states.

The salaries of forest and wildlife officers employed at lower grades are close to the national minimum wage set at RM 900 per month although these officers are required to be stationed in the forest for weeks at times. Besides, these officers also risk their safety and wellbeing as they tend to face professional poachers and illegal collectors of forest resources who are armed. Both forest and wildlife officers in Malaysia have no provisions to be armed and are required to work with the police and soldiers instead. In the past, there have been cases where a Wildlife Officer was attacked by poachers and sandalwood collectors (*Sinar Harian*, 2016a). In 2012, the Minister of Environment and Natural Resource at that point in time announced that Wildlife Assistants and Officer would undergo transfers every three years to prevent them from colluding with wildlife smugglers following the case of international wildlife trader Anson Wong who allegedly conspired with PERHILITAN officials (Yuen, 2012). A number of wildlife officers have also been charged for receiving bribes from offenders (*Sinar Harian*, 2016b). Hence, if the salaries of Malaysia's forest and wildlife officers are not matched to the increasing complexity in the work carried out by these public sector officers, their motivation to adapt and implement the CFS policy will remain poor in the absence of altruistic reasons.

The final element of motivation for individual actors to implement the CFS policy is the support from fellow implementers. Since the CFS policy stemmed from the efforts of federal agencies, the support between various officers in a particular organisation is often strong. The officers are mostly coordinated, especially in obtaining data and mapping out strategies. As an example, the Chairman of the National Steering Committee who is the Secretary-General of the Ministry of Environment and Natural Resources is well supported by the Chairman of the Technical Committee, the Director-General of the Forestry Department Peninsular Malaysia (FDPM). The two chairpersons are also supported by the Head of the Improving Connectivity for CFS Committee. The close working relationships between these important leaders and navigators of the policy indicate that a concerted support yields better outcome.

The same scenario is reflected by states that have successfully implemented the CFS policy. Though these individuals across several agencies may face disagreements, P6 (2015) from Perak stated that they usually resolve their issues and differences through communication and diplomacy skills. The CFS implementing agencies in Selangor have initiated a symposium to forge better relationship among them and to provide support to each other when required (P18, 2015). Yet, in states that have not executed the policy, the working connection between implementers is poor with limited interaction and meetings (P4, 2015; P7, 2015, P13, 2015; P17, 2015; P22, 2015; P24, 2015).

Table 15: Motivation at Individual Level

<i>Level</i>	<i>Elements of Motivation</i>	<i>Successful Implementation</i>	<i>Failed Implementation</i>
Individual	Perceived costs and benefits for implementers	<ul style="list-style-type: none"> When front-line implementers are compensated accordingly for the work they carry out, the motivation level for the CFS policy implementation is high. 	<ul style="list-style-type: none"> When front-line implementers are not remunerated accordingly, the motivation level for the CFS policy implementation will be low, eventually resulting in the policy not being implemented.
	Public service motivation	<ul style="list-style-type: none"> Positive lead to front-line implementers' eagerness in striving to implement the policy. 	<ul style="list-style-type: none"> Negative motives lead to front-line implementers carrying out their standard operation tasks.

Source: Author

Taken together, it can be summarised that an individual actor will be moved to implement the CFS policy if motives under the public service motivation are positive (Table 15). Also, when salaries and incentives are compensated accordingly, the motivation level of front-line implementers may lead to CFS implementation. Building on the theory coined by Perry and Wise (1990), the public service motivation theory also appears to portray a link to the concept of political will discussed in Chapter 5 (p. 114). The case of Malaysia's CFS implementation demonstrates a combination of the two concepts, public service motivation and political will. State bureaucrats are found to have a unique motivation to invest their resources in achieving specific objectives if they find the tasks would serve the community in a meaningful way.

Streamlining Internal Motivation at State Level

The second level of motivation for policy execution that influences CFS implementation success is at the organisational level – the federal or state agencies that are assigned to implement the policy. Though direct and indirect benefits are evident (as discussed in Chapter 1), the decision to implement the policy depends on the internal motivation of perceived benefits and costs. An agency's goals and directions guide its individual actors. In understanding these motivations, I study whether the aims of the CFS policy lines up with state governments' plans, and secondly, if the CFS objective aligns to the goal or purpose of key implementing agencies at state level. In doing so, I also observe perceived cost and benefit of each agency as well as support from other implementers and participation of non-governmental organisations or interest groups. However, the main agencies whose goals and objectives I analyse are limited to forestry, wildlife and town and country planning departments, due to the importance of these agencies in leading the implementation tasks.

The main objective of the CFS policy is to '*restore the connectivity of the forest complexes in the CFS, to formulate viable land use and management guidelines for sustainable development in and adjacent to the Ecological Corridors identified, and to propose an effective implementation mechanism to execute the programmes set out*' (Department of Town and Country Planning Peninsular Malaysia, 2010). The programs that had been listed under the policy include land-use control, acquisition of land, gazettelement of forests, forest management, reforestation, creating riparian corridors, fixing signages to indicate wildlife habitat and speed limits, establishing wildlife crossings and infrastructure development (Department of Town and Country Planning, 2009). One measure of success of the CFS policy implementation is whether the policy objectives match aspirations of the state or if the policy would benefit the state. The

CFS policy is also highly likely to be executed if the goals and objectives of a particular agency is aligned with conservation and/or preservation tasks, or if adopting a newly established policy may add value to the organisation.

State governments, through their representatives in the State Executive Committee, play an important role in attempting to streamline all agencies involved with the CFS implementation at the state level (through state economic planning units and state financial offices), especially forestry and wildlife departments. Ergo, if a particular state government is pro-CFS, implementing agencies will feel supported and driven towards executing CFS and a probability for the policy to be implemented is higher. The working relationship between implementing agencies will also be stronger as the state government acts as a moderator. For example, the Chief Minister of Selangor, in his speech on the state's budget for 2015, declared that:

The state government fully supports Selangor Forestry Department in its efforts to manage permanent forest reserves in line with Sustainable Forest Management principles. Any activities that could damage flora and fauna will not be granted approval by state authorities to ensure conservation of ecosystems and wildlife in Selangor. The State Government also guarantees to maintain the total area of 70 permanent forest reserves in Selangor with an area of 250.129 hectares, which is 31.54% of the state's land area. (Selangor State Government, 2015)

The Perak state, which is another state that has successfully implemented the CFS policy, also received positive support from its state authorities. The state government aspires to maintain a high percentage of Permanent Forest Reserves of 1,022,511 hectares, which accounts for 48.61 per cent of total land area of the state (Perak Darul Ridzuan Financial Office, 2016). The support from the state government has motivated the relevant states agencies that are involved with the CFS policy implementation to adapt to goals set by the policy and align them with their organisational aims and aspirations. In the recent budget announcement for 2017, the Perak state government had allocated RM6 million to accelerate forestry developments covering management of forest resources, natural forest development and ecotourism.

In states that have failed to implement the policy, the state government does not keep track of the policy or streamline expectations from agencies involved. In the states of Pahang, Terengganu and Kelantan, which have failed to implement the CFS policy, technical meetings

at state level have been held only once (P4, 2015; P7, 2015, P13, 2015; P17, 2015; P22, 2015; P24, 2015). The lack of interest by the state authorities signals an attitude of disdain towards the CFS policy. The state also appears to be demotivated and unconvinced by the information, data and rationale provided by the federal government. The Kelantan state government finds the information and data provided has no clarity of the benefits to the state or holds no value. Furthermore, these states are highly reliant on the revenue that is generated from the lease or sale of lands or other forms of agribusiness, which has resulted in the state's government being not-CFS-friendly. Even if the federal government provides funding to implement the policy, the amount of the funding must supersede the revenue or profits that a particular area would generate through development projects compared to the amount provided for implementation.

Apart from the major benefits such as biodiversity protection and ecosystem services, the CFS policy will also lower the occurrence of natural disasters, as discussed in Chapter 5. The possibility of disasters such as floods and landslides that have occurred in states like Pahang, Terengganu and Kelantan could be reduced if natural water catchment areas such as forests are preserved and conserved (*Berita Harian*, 2014, 2016). Biodiversity preservation and conservation may also lead to generation of income through carbon credits, collaborative research and development as well as sustenance of livelihoods of local and indigenous people. Though direct and indirect benefits are evident (as discussed in Chapter 1), the decision to implement the policy depends on the internal motivation of perceived benefits and costs. The federal government expects the state government to execute the policy at the expense of the state, and the decision of the state government relies greatly on its revenue and expenses. The state of Selangor is one of the largest contributors to Malaysia's GDP, recording a 22.6 per cent in 2015 (Department of Statistics Malaysia, 2016). Considered the richest state in Peninsular Malaysia, implementing agencies in Selangor are able to use its current funds under its department for CFS implementation (P18, 2015). The state of Perak was able to successfully execute the CFS policy as many NGOs channelled funds and sponsored projects within their vicinity, especially the Tropical Rainforest Conservation and Research Centre, Worldwide Fund for Nature and Malaysian Nature Society (P9, 2015; Schwabe et al., 2015; Tropical Rainforest Conservation and Research Centre, 2018). The state government of Perak also aspires to boost ecotourism activities through conservation and preservation efforts. Yet, states like Pahang, Terengganu and Kelantan struggle to assign funds for CFS to be implemented (P13, 2015; P17, 2015; P24, 2015).

The leading agency that heads the technical meetings is the Forestry Department Peninsular Malaysia (FDPM). Its mission is to manage and develop forest resources and optimize its contribution to socio-economic development of the country by managing, planning, protecting and developing Permanent Reserved Forests (PRF) in accordance with the National Forestry Policy (NFP) and National Forestry Act (NFA). The NFA was intended to establish uniformity of forestry laws among the Malaysian states by addressing issues pertaining to forestry administration, management, conservation and development of forests. The NFP provides guidelines and direction to 'manage PRF in order to maximize social, economic and environmental benefits for the nation and its people in accordance with the principles of sustainable management'. Though both NFA and NFP aspire to ensure a uniformity between federal and state approaches as well as between states, there is an absence at the state levels due to the prerogative residing with state authorities. The state government holds the right to appoint relevant officers to design forest management and restoration plans, manage annual budgets and handle annual forest development reports.

For states that have implemented the CFS policy, the state forestry departments clearly have objectives that have included goals for conservation and preservation of forests guided by sustainable management and production strategies. One of the objectives of the Perak State Forestry Department is to 'preserve and protect the biodiversity of forests, water, land and sustainable use' (Perak State Forestry Department, 2018). The agency also aims to 'raise public awareness on the role of forests for the environment and conservation through education and dissemination of information'. The Selangor State Forestry Department had clearly declared that its long-term strategy was to shift from forest resources being the main source of income for the state to ensuring preservation and conservation of state forest resources, which include forests biological diversity, water and soil, and their sustainable utilisation (Selangor State Forestry Department, 2018). These statements in their organisational goals and objectives reflect the achievements that they have attained through implementing the CFS policy.

By contrast, the objectives or function of state forestry departments in Pahang and Kelantan are highly focused on advising their state governments on aspects of administration and management of forest resources to ensure maximum benefits to the socio-economic development of the state (Pahang State Forestry Department, 2018; Kelantan State Forestry Department, 2018). As for the state of Terengganu, the agency listed two objectives that are aligned to the goal of the CFS policy – which is to preserve, protect and sustainably use forest

biodiversity, water, land, and to raise public awareness on the role of the environment and preservation through education and dissemination of information (Terengganu State Forestry Department, 2018). Yet, the agency envisions to manage and develop forest resources and optimize its contribution to state's socio-economic development. As has already been discussed in Chapter 6, the Terengganu State Forestry Department does not see the benefits of the CFS policy, which echoes its decision to not implement the policy but to list protection of biodiversity and sustainable management of forest resources as part of the agency's objective. Hence, it can be concluded that conservation and preservation activities are secondary to profit generation for the Terengganu State Forestry Department.

A partner federal agency to the FDPM, the Department of Wildlife and National Parks Peninsular Malaysia (DWNP), is guided by the Wildlife Conservation Act 2010 (Act 716) introduced in 2010, which supersedes all prior established laws. The amended law is considered to bear stricter punishment including reprimanding those consuming protected species and increasing penalties for crime against wildlife, covering a wider area of enforcement (*New Straits Times*, 2015). The role of this agency can be described as a leading co-partner to the FDPM as the thriving wildlife in its habitat relies highly on the availability of forested land and natural ecosystems. The vision of the agency at the federal level is to lead wildlife conservation efforts for the prosperity of the people. This supports the vision is its mission to being committed to conservation of wildlife and its habitat for the future. Among objectives listed, DWNP aims to enrich wildlife conservation programs through management, enforcement and wildlife research as well as to maintain the integrity of protected areas for the benefit of research, education, economy, aesthetics, recreational and ecological functions (Department of Wildlife and National Parks Peninsular Malaysia, 2018). The agency also aspires to increase knowledge, awareness and involvement of the community towards conservation of wildlife.

As PERHILITAN is a federal agency, the state agencies are highly aligned to this vision, mission and objectives. Relating to this, the CFS policy objectives are highly relevant, parallel and have the most aligned match to overall goals and aims of PERHILITAN. Nonetheless, revenue generated by state PERHILITAN officers through application of hunting permits and licences are channelled to respective state governments as wildlife is still considered a state resource although the state authorities have no legislative powers over it (P19, 2015). For this reason, state governments do not set targets for revenue generation for state PERHILITAN agencies or force the agency to generate additional income. Nevertheless, state agencies face

dilemmas relating to their job scope, especially when the traditional Malay rulers interfere with their demands for forests and land, or when the state PERHILITAN officers are required to assist monarchs with providing care and consultation for their living wildlife collection. The Terengganu-PERHILITAN subtly mentioned that their work is influenced by the powers of the palace and that every state faces the same predicament (P25, 2015). Even so, these demands from the monarchs are very minimal or are receding due to increasing environmental knowledge and awareness levels, as discussed in Chapter 6. Apart from this, both forestry and wildlife departments are also guided by the National Policy on Biological Diversity, which includes strategies for effective management of biological diversity.

Another key agency, the Town and Country Planning Department (TCPD), emulates the structure of DWNP. Its dual role appears to be a struggle as the motivations of the agency mirrors the motives at the federal level – which is to implement the policy as the benefits are higher than the cost. The federal agency that works for the state government is committed to the implementation of the CFS policy, in line with one of its objectives, which is ‘to plan, control and co-ordinate development, land use and land conservation through effective implementation of the Town and Country Planning Act (Act 172) and related acts’. The TCPD exists at both the federal and state level with a slightly different scope of work. At the federal level, it plays a crucial role in advising the federal government on all planning matters related to the use and development of land as well as translating national socioeconomic policies into physical and spatial strategies based on land-use formulae and settlement programmes (Department of Town and Country Planning Peninsular Malaysia, 2018). However, at the state level, the agency acts as the main advisor to the state government in all planning matters, including the use and development of land and regulating development in the states, including approvals and monitoring of development-plan implementation. Nevertheless, all TCPD entities are guided by Act 172, which ensures uniformity between outcomes prescribed at both federal and state levels. However, the CFS policy implementation reaches a static point in some states as it relies on the approval of the state government and support from other agencies. For example, in a state where the policy has already been executed, the TCPD plays a strong supportive role, such as in Selangor. The agency complemented the CFS policy with its GIS mapping and a mobile phone application that includes all of its district and local plans as well as the state’s overall plan (P16, 2015). The TCPD in Terengganu strives to convince the state government and agencies to implement the policy (P7, 2015). The entity initiated a remapping exercise as the state government and agencies complained that the initial map was irrelevant

and invalid. On the contrary, the Kelantan-TCPD struggles to be noticed as the state government is not concerned about the CFS policy while the TCPD in Pahang works according to directions set by the State Economic Planning Unit (P5, 2015).

Table 16: Motivation at Organisation Level

<i>Level</i>	<i>Elements of Motivation</i>	<i>Successful Implementation</i>	<i>Failed Implementation</i>
State / Organisation	Entity / agency goals	<ul style="list-style-type: none"> The goals and objectives of a particular state or organisation aligned to the CFS policy. 	<ul style="list-style-type: none"> The goals and objectives of a particular state or organisation does not align to the CFS policy.
	Perceived costs and benefits for implementers	<ul style="list-style-type: none"> State or organisation understand the benefits of the CFS policy and finds it to be higher than the costs its implementation requires. 	<ul style="list-style-type: none"> State or organisation understand the benefits of the CFS policy, but the cost required for implementation surpasses the benefits it would contribute.
	Support among implementers	<ul style="list-style-type: none"> A state that is pro-CFS would usually play the role of a mediator to streamline the expectations from all implementing agencies at state level. 	<ul style="list-style-type: none"> A state that is not keen to implement the CFS does not keep track of the policy or streamline expectations from agencies involved.
	Interest group participation	<ul style="list-style-type: none"> State agencies welcome and are open to NGOs' ideas, contributions and support, working as partners or in collaboration. 	<ul style="list-style-type: none"> State agencies are open to NGOs' contributions, but limit these when they contradict their objectives.

Source: Author

Analysing motivation at a state level, it is found that a motivational element for a particular state may appear as a demotivation to another state (Table 16). A common characteristic between states that have successfully implemented the policy is that the aspiration of the state governments aligns to the objective of the CFS policy. These states are also aware of the benefits of conserving and preserving forests, especially revenue generation through ecotourism and selling of carbon credits. The states that have implemented the policy are able to source their own funds either by using their own budget, obtaining funds from NGOs and

other interest groups or by getting a certain entity to undertake projects within its forest complex. On the contrary, in states that have failed to implement the policy, there is almost no match between an objective of the state and the goal of the CFS policy goal. Furthermore, the objective is deemed to be conflicting, especially when the state government strives to generate revenue, focus on economic development and improve social aspects. In line with these aims, states that are yet to implement the CFS find that the cost is higher than the benefits the policy may contribute. Though NGOs still push for an increase in conservation and preservation efforts, the opportunities made available by states are limited. State governments' support influences the outcome for key implementers in each state. The objectives of all main implementing agencies at the state level – forestry, wildlife and town and country planning departments – are aligned to the aims of the state.

Funding as Implementing State's External Motivation

In this section I analyse how funding played a role in influencing the Central Forest Spine (CFS) policy implementation success or failure. Funding is an external motivation factor that drives motivation in ways that could ensure policy implementation success. The financial component in the CFS policy implementation has a direct causality to its success as insufficient funds would lead to lack of manpower and technical expertise resulting in an ineffective environmental management (Sani, 1993; P12, 2015).

To date, the funds for CFS policy implementation have been trickling in through the United Nations Development Programme (UNDP) fund and stand-alone projects²² funded by various federal ministries and agencies (P4, 2015). The Environment and Natural Resource Economic Section (SEASSA) under the federal Economic Planning Unit works hand-in-hand with the Ministry of Natural Resources and Environment (MNRE) in providing policy directions and coordinating funding for the environmental sector under the Malaysia Plans (P12, 2015). The unit is responsible to gather all inputs and proposals that require funding before setting forward a direction for the Malaysia Plans. Other federal ministries and agencies that have been involved in projects related to the CFS are Ministry of Public Works in building of viaducts and the Department of Town and Country Planning in mapping and zoning areas.

²² Stand-alone projects include building of viaducts, setting up wildlife sanctuaries, et cetera.

A total of 10.86 million USD has been awarded to the federal government by the UNDP via the Global Environment Facility (GEF), which is an interagency²³ entity coordinating technical assistance and funding for programs on biodiversity, climate change, water, and the ozone. Nevertheless, the GEF fund which targets 23 outputs under three components imposes a restriction. The components are (a) biological studies and law enforcement; (b) capacity building and management plans in the areas outside the protected areas, including rehabilitation and gazette of areas for protection and ecotourism; and (c) sustainable financing and payment for ecosystem services (P8, 2015).

The GEF fund is directly channelled to Improving Connectivity-CFS project based on the imposed limitation of funding scope, which focuses only on empowering the personnel involved in executing the policy and research to further equip them. This leaves some states with the complexity of dealing with forest lands and corridors that are not gazetted for conservation due to the decisions made by state government, which in some cases, the land belongs to private individuals or companies. With access to the GEF funds but inability to use it for key and crucial activities such as infrastructure building and various other implementing strategies stated in the policy document, the state agencies remain in a dilemma. Other key strategies not covered are acquiring private land in corridors and reserving it for public purpose, purchasing land and securing state land as ecological corridors, integrating roads and railways within an ecological crossing, establishing ecological corridors on private land, establishing corridor as protected lands, and establishing ecological corridors along riparian reserves (Department of Town and Country Planning Peninsular Malaysia, 2010).

The Director of the Forestry Department Peninsular Malaysia (FDPM) believes that ‘the state government must be able to provide the [funds] because the fragmented forests [are] in their home’ (P3, 2015). According to most of the state governments involved with the CFS policy, the limited revenue accrued by states through income from lands, mines and forests had been impeding their ability to fund the policy (Constitution of Malaysia, 1998). State governments fear that the obligation to implementing CFS would impose a financial loss to their respective

²³ The GEF’s 18 implementing partners are: Asian Development Bank (ADB), African Development Bank (AFDB), Development Bank of Latin America (CAF), Conservation International (CI), Development Bank of Southern Africa (DBSA), European Bank for Reconstruction and Development (EBRD), Foreign Economic Cooperation Office – Ministry of Environmental Protection of China (FECO), Food and Agriculture Organization of the United Nations (FAO), Fundo Brasileiro para a Biodiversidade (FUNBIO), Inter-American Development Bank (IDB), International Fund for Agricultural Development (IFAD), International Union for Conservation of Nature (IUCN), United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), United Nations Industrial Development Organization (UNIDO), West African Development Bank (BOAD), World Bank Group (WBG), World Wildlife Fund U.S. (WWF).

states when logging is restricted or taxed at a much higher rate. Much of the states' policies do not focus on environmental aspects, but on economic development, including policies related to the forests (Saleem, 2005). States also uses the harvested timber for its own consumption and use. Apart from this, the income through timber sale provides a tangible outcome as it is usually channelled for further development projects and state expenditures, disregarding the intangible conservational value of forests (Saleem, 2005).

Though the states constantly counter-argue this, stating sufficient revenue as a challenge, Noh (1991) has suggested that state governments could yield more revenue if tax bases were managed more efficiently (p. 334). The forestry sector in Malaysia was identified by the World Bank as one of such bases that faces inefficient management (Wilson, 1996). However, state governments and agencies expressed that it is only fair that the federal government provides funds or sets up a mechanism for the states to generate revenue that can be channelled to the CFS to be implemented because it is a policy mandated by the federal government. Despite the disagreement, the three states of Perak, Pahang and Johor have pledged their commitment to assist the IC-CFS project manager in implementing the CFS (P8, 2015). The IC-CFS team has now brain stormed numerous ways to create bases of funds to finance the building of infrastructure and other expenditures not covered by the initiative. The Selangor state government is also keen in funding its own programs and initiatives under the CFS policy.

An official from Selangor cited good state financial standing as a stimulus for the state to adapt the CFS policy, in which its financial resources are independent of logging and natural resources. One of the richer states in Malaysia, Selangor's total GDP contributed 22.6 per cent to Malaysia's overall GDP in 2015 (Department of Statistics Malaysia, 2016). The state government has been emphasizing sustainable economy and development since 1999 and has recently shifted its focus towards knowledge based as well as green industries (Hashim & Shuib, 2012; Ali, 2015). Late 2015, the Selangor state government also amplified its initiative in empowering the local and district councils to attain low carbon city status by 2030. With the options of generating revenue from sources other than natural resources and in line with the low carbon city program, all funds to implement the CFS was contributed by the state government although the amount needed for CFS implementation in Selangor is small (P16, 2015). The allocation of funds demonstrates the Selangor state leadership's determination to retain 30 per cent of its remaining forested areas (P16, 2015).

In Perak, there has been some funding allocated for the implementation of CFS policy since it was enacted in 2006 (P14, 2015). A state government representative opined that *'the CFS has been implemented easily [with] the financial allocation [that has been] provided by the federal [government] and the location of the project approved by the state, [with] both the federal and state government working closely in all affairs'* (P28, 2015). Yet, the scenario in Perak is an exception as the federal government provided funds for the building of a viaduct (funded by the Public Works Department²⁴) by considering the importance of the Royal Belum Forest Reserve being the largest reserved forest in Peninsular Malaysia. The state of Perak is also one of the three states involved in the IC-CFS project, which entitles them to participate in many personnel empowering workshops. Though there were progressing on those two fronts, the state government was faced with a dilemma to fund other programs under the policy. The state government officer's predicament, however, came to an end as the state government agreed to provide funds moving forward. The Perak state government has also proposed to MNRE for alternative solutions such as carbon credit, crowdfunding and establishing a closer working relationship with NGOs, which could contribute to funding CFS programs (P14, 2015). Similarly, a viaduct has been built in Sungai Yu, Pahang²⁵ with funds channelled to the Public Works Department. The state implementing agencies are also involved with the workshops organised by the IC-CFS team. But there have been no other funds allocated for the CFS implementation by the federal or state governments (P24, 2015).

Elaborating further on funding available for the CFS in Perak, P6 (2015) does not classify finances as a hurdle but claims that the challenge lies with the mechanism of how finances are channelled according to which government tier an implementing agency is affiliated with. This is directly influenced by land status of an area that is crucial for conservation. For example, the Perak-PERHILITAN had negotiated for an area of land to be converted into an elephant sanctuary (P6, 2015). The building of such facility requires the state government to provide funding or to convert the land into a federal land to allow the federal government to provide funding. If the land remains a state land, the federal government is unable to provide funding under the 11th Malaysia Plan. Though the Chief Minister was keen to approve the project, the plan was rejected due to disagreement by the state's executive committee.

²⁴ The Public Works Department funded the building of the viaduct in Gerik as the viaduct was incorporated as a feature in the East–West Highway (also known as Gerik–Jeli Highway).

²⁵ This area is an important crossing for elephants and tigers in search for food. Inability to restore the link, which had separated two areas of forests through the building of road, would cause a decrease in food source and loss of population due to human–wildlife conflict.

It is key to note that the failure to implement the CFS policy in states of Kelantan and Terengganu is largely blamed on the lack of any substantial amount of funding as the presence of financial resources motivates implementation. The officer from Kelantan-PERHILITAN detailed that the only funding that has been provided so far is for putting up signage for wildlife crossings (P4, 2015). The Kelantan state officers also believe that the federal government is biased in providing them with sufficient funds for development, especially in the ecotourism sector (P4, 2015; P17, 2015). Although Lojing is geographically close to Cameron Highlands and is famous for rafflesia sightings, no funds had been approved to develop ecotourism activities in the area. Cameron Highlands, on the other hand, had been developed as a holiday destination under various schemes of the Malaysia Plan. The Kelantan-SFD reapplied for the funds in mid-2015 but is yet to receive a response (P17, 2015). The Terengganu-SFD Director predicts that the policy will not be implemented successfully as the state government is uninterested in providing financial support, while the federal government is deemed as unable to provide the entire funds (P4, 2015; P13, 2015).

In summary, availability of funds is pertinent to the success of CFS implementation, which manifests in states that have successfully implemented the CFS policy having funds while the ones that failed have limited or none. Yet, the availability of funds for states that have successfully implemented the policy were propelled by different rationales. The first rationale is based on the policy's benefit for the state, for example the state of Selangor. The aims and objectives of the CFS policy aligns closely to the aspirations of the Selangor state government in wanting to become a sustainable state with numerous low carbon cities. A unique case of an opposition state government, Selangor is classified as being progressive compared to other states ruled by the opposition. Being a high-income state, taking into account CFS' benefits for its environment and aligning its aspiration of being a sustainable state has pushed the state governments to make funds available. Secondly, it is based on whether the state will gain benefits in terms of revenue through tourism or building of infrastructure funded by the federal or other external source. The preservation of Royal Belum Forest Reserve in Perak and the Greater National Park area in Pahang will yield higher revenue through tourism and international recognition, especially when the tiger and elephant populations are well managed. These factors have led to the success of the CFS implementation.

Muddled Internal and External Motives at Federal Level

The direction set for a particular sector or field is an important stimulus for policy implementation, for if the policy goals and objectives match the policy sector's, a newly established policy has higher chances of being implemented (O'Toole & Montjoy, 1984). The Central Forest Spine (CFS) policy has two elements that drives its implementation at the policy sector level: higher benefits compared to costs, and support from environmental non-governmental organisations (ENGOs). Yet, it remains a challenge for the CFS to be implemented as planned due to lack of clarity in the over-arching goal set for the sector – a dilemma exists between the current direction for the sector compared to the shift it is required to undertake. Natural resources remain an important revenue generator and significant export commodity for Malaysia as well as a source of supply of raw materials. The Ministry of Natural Resources and Environment (MNRE) is the main government branch that administers natural resources management focusing on a wide range of environmental components; which includes land management (inclusive of surveying and mapping processing), forests, wildlife, marine parks, minerals, environmental conservation, conservation shelters as well as drainage and irrigation. The wide scope of its responsibilities imposes a challenge to ensuring all components receive adequate funds. The Ministry is also the main steering body for the implementation of the CFS policy. The MNRE aims to 'lead in sustainable management of natural resources and conservation of environment towards achieving national vision' (Ministry of Natural Resources and Environment, 2018).

Malaysia's national visions and periodical plans are regarded as the Malaysia Plan (MP) and each MP is usually set for a period of five years. The signing of the Convention of Biological Diversity (CBD) in 1994, which is a precursor to establishing the CFS, signals that Malaysia is committed to global environmental stewardship. Since then, the country had transitioned through four national visions (known as the Malaysia Plan or MP). However, all four MPs (7th, 8th, 9th and 10th) are highly focused on economic development in achieving the status of a developed nation, with a primary focus on only two (out of three) components of sustainable development, specifically economic and social progress. The third component, environment, had taken a back seat in most of these plans. For example, in the 7th MP, the Malaysian government pledged that it will continue to balance economic growth objectives and environmental interests, but by taking into account a need to formulate sectorial policies for social and economic development. The statement itself implies that the main focus is on improving economic and social aspects, with environmental importance being secondary.

Forest-related sectors (such as land-use change, tourism, agriculture, fisheries and mining) appear to have been observed in silos. The disconnection reflects the general pattern that occurs in most other administrations. Policy issues and solutions are increasingly complex and multi-sectoral, requiring multi-agency effort, and solutions or decisions by the whole of government. In Malaysia, the segregated decision-making process is due to other Ministries handling portfolios that overlap with components under MNRE, accompanied by extremely poor communication between these Ministries, for example Ministry of Agriculture and Agro-based Industry (for agriculture); Ministry of Energy, Green Technology and Water (for oil and gas); Ministry of Urban Wellbeing, Housing and Local Government (for national mapping and delineation of boundaries) and Ministry of Rural and Regional Development (for well-being of the indigenous people, *Orang Asli*).

In reality, many of these visions impact the forests, wildlife and biodiversity as environmental and natural resources components overlap – and eventually affect the implementation of the CFS policy. In particular, the mid-term review of the 7th MP recorded an increase of 8.3 per cent for palm oil production for the period 1996 to 1998 compared to the estimated 3.2 per cent (Economic Planning Unit, 1998, p. 38). Between 2001 and 2003, the private sector had been actively encouraged to develop forest plantations with fast-growing trees of quality wood, especially latex timber clones to be supplied to the timber industry (Economic Planning Unit, 2003, p. 50). For the period 2006 to 2010, palm oil still remained a major contributor, with an average increase of 6.2 per cent annually accounting for 36.7 per cent of total agriculture sector value (Economic Planning Unit, 2006, p. 80).

Though the mid-term review for the 9th MP projected a glimmer of hope as it discussed protection of biodiversity, actions for conservation and preservation of flora and fauna and relevant initiatives including the CFS (Economic Planning Unit, 2008, p. 84). However, the idea was still masked by economic aims projected by the original plan. In an article by the Consumer Association of Penang (2002), the non-governmental organisation contends that *‘while paying lip service to pursuing environmentally sustainable development..., the [national vision’s] main goals are industrialisation, economic growth, increased productivity and production of wealth’* (p. 128). It appears that the federal government aspires for the MNRE to concentrate on accomplishing the national vision rather than achieving sustainable use of natural resources. Therefore, it can be concluded that motivation for the sector is still highly

based on principles of extraction and profit compared to principles of conservation embedded in the Central Forest Spine policy. The reason for this could be explained further by a scenario of path dependence that is prevalent in Malaysia's forest and wildlife administration sectors. The current forest and wildlife policies in Malaysia are a synthesis of policies created under the colonial coalition settings: Straits Settlement, Federated Malay States and Unfederated Malay States. Colonial powers in the past have heavily influenced what has become the guideline or fundamental framework for Malaysia's forests and wildlife policies. Although past policies for forests and wildlife were developed in silos of their respective sectors and did evolve over time, it can be construed that the purpose and aim of these policies was mainly resource extraction.

In spite of the lack of clarity in the direction of the sector (whether it is based on resource-extraction or conservation/protection focused), the CFS policy has greater benefits from the economics of biodiversity compared to the initial cost at the federal level. The establishment of the CFS policy and its endorsement demonstrates the internal motivation held by the federal government, in adapting to global environmental trends and goals. The direct benefits of the policy include biodiversity protection and ecosystem services. In aiming to achieve this, critical linkages between forest complexes are to be conserved and rehabilitated (United Nations Development Programme Malaysia, 2018). The policy will also enable conservation of mammals such as the Malayan tiger, Asian elephant, Sumatran rhino, Sunda pangolin, Borneo bay cat, banteng, Malayan tapir, proboscis monkey and flat-headed cat (*The Star*, 2015a). The federal government may also exert an indirect control in ensuring that the land-use conversion by states do not result in environmental hazards or disasters. Indirectly, the federal government will be able to meet global standards set, honour international agreements, gain recognition, attain monetary benefits (through carbon trade and obtaining of funds and grants from international bodies) or win trade relations from the international community (relating to timber trade).

Strong support from international and local non-governmental organisations (NGO) stimulates the implementation of the CFS policy. The support signifies a positive character towards the successful implementation of the policy, which is an important internal motivational factor. Post-Rio Declaration, many Malaysian NGOs (especially those that are affiliated with international NGO bodies) pressured the government to increase its forest and wildlife conservation and preservation efforts, especially the World-Wide Fund for Nature-Malaysia

(WWF-Malaysia), Wildlife Conservation Society (WCS) and the Malaysian Conservation Alliance for Tigers (MYCAT) (Clements et al., 2010).

An alliance known as Malaysian Environmental NGOs (MENGO) was also established, with all groups contributing in various aspects such as advocacy, policy analysis, raising awareness, fundraising, capacity building, field research, community development and others (Ministry of Natural Resources and Environment, 2006). Accompanied by environmental statistics of biodiversity loss, the ENGOS were able to further convince federal agencies. According to the Malaysian Nature Society (MNS), Malaysia has lost almost 60,000 species of flora and fauna due to forest lands being converted for development, logging, plantation and housing (*News Straits Times*, 2016). The total number of threatened species for Malaysia recorded under IUCN Red List is 1,257 species inclusive of mammals, birds, reptiles, amphibians, fishes, molluscs, plants and fungi (International Union for Conservation of Nature, 2018). In parallel, the Ministry of Natural Resources and Environment (MNRE) and the Ministry of Housing and Local Government jointly tabled the Central Forest Spine (CFS) Master Plan to the Cabinet in 2011. Hence, the push from ENGOS is an external motivation factor that has driven the Malaysian government to establish policies to meet the CBD targets, one of these being the Central Forest Spine (CFS) policy under the National Physical Plans 1 and 2.

Organisational control by the political paymasters also influence the actions of implementers who are the bureaucratic officers (Hill & Hupe, 2006). The federal officers are committed to ensuring that the CFS measures are being implemented in all eight states. Still, many of the officers who are assigned to handling the administrative tasks at MNRE consist of Diplomatic and Administrative Officers (PTD). Being responsible for the formulation, planning, monitoring and implementation of various public policies and communications, the knowledge and capacity of PTD officers are crucial for the viability of a policy (Masrek et al., 2014). In line with their responsibility, they perform a wide range of duties, including human resource and organisational management, financial management, economic resources management, and regional development and administration at both federal and state levels (Yaacob, 1998).

The poor leadership of the Minister of MNRE (refer to p. 123), coupled with the practice of job rotation among PTD officers has led to loss of institutional memory and expertise; leaving officers to be unequipped to perform their respective organisational job scope. In cases where officers are trained long enough for them to perform their tasks, their expertise is lost when

they are transferred to other roles or agencies. Sanali, Bahron and Dousin (2013) concluded that job rotation increased employees' motivation levels, equipped employees with wide range of skills and enhanced organisational capacity by providing them with different tasks to complete. Despite that, knowledge transfer among the PTD officers is poor. In a study conducted by Syed-Ikhsan and Rowland (2004), it was found that the public sector lacks a well-defined knowledge transfer strategy resulting in poor maintenance and managing of data and restricted sharing of knowledge.

Table 17: Motivation at Policy Sector Level

Level	Elements of Motivation	Condition	Overall
Policy sector	Entity/agency goals	Internal motivation	<ul style="list-style-type: none"> • Lack of clarity in the overarching purpose of the Malaysian environment and natural resources sector serves as a demotivating factor.
	Perceived costs and benefits for implementers	Internal motivation	<ul style="list-style-type: none"> • A motivation as the benefits of the CFS policy implementation outweigh its costs.
	Interest group participation	External motivation	<ul style="list-style-type: none"> • NGOs motivated for the CFS to be initiated and implemented. • These organisations contributed through advocacy, policy analysis, raising awareness, fundraising, capacity building, field research, community development and others.

To summarise the motives of the Ministry of Natural Resources and Environment (MNRE) at the federal level, the agency is keen to implement the policy as there are proven benefits projected by the policy such as international recognition and the possibility of receiving international funding, and the low cost of managing it (as most states are expected to bear the costs). The MNRE's motivation remains the same across states that have implemented or have not implemented the policy (Table 17). Yet, the lack of certainty in the direction for the sector overall has resulted in a stand-off for part of the policy implementation, especially when the state entities are also expected to meet the national target for timber production. As a solution,

clarity in the overarching policy goals for the sector, in terms of explicit targets for timber production and conservation may improve in future the internal motivation within the entity.

Conclusion

Motives stimulate or discourage the implementing agencies in undertaking policy execution in the field. Despite the fact that bureaucrats at the federal level face two conflicting directions: to honour the Malaysian Plan by ensuring revenue targets such as sufficient timber production are met and at the same time undertake conservation and preservation efforts, these officers are motivated by higher benefits projected by the policy and a low cost. The federal officers also tend to obtain strong support from environmental non-governmental organisations. Nevertheless, state agencies will be able to implement the CFS policy if two conditions are fulfilled. First, the definition of goals for the sector is clarified by the federal government through provisions of clear definition and targets on sustainable management. Second, alternative fund sources or funding mechanisms are described, and actions plans are amalgamated into all sectors that are related to the forests and wildlife divisions.

At the state level, a motivational element for a particular state or agency may appear as a demotivation for another entity. In states that have successfully implemented the policy, the aim of the state governments matches the objective of the CFS policy; this is accompanied by high awareness of the benefits of conservation and preservation of forests. The successful states are also found to have knowledge on alternative revenue generation through ecotourism and selling of carbon credits and are able to source their own funds either by utilising their own budget, obtaining funds from NGOs and other interest groups or by getting a certain entity to undertake projects within their forest complexes. However, states that have failed to implement the policy have no match between its objective and CFS policy goals. Apart from conflicting objectives, these state governments strive to generate revenue, which results in their focus on economic development and improvement of social aspects. The states yet to implement CFS also find the cost to implement the policy higher than benefits the policy may contribute. Though NGOs still push for an increase in conservation and preservation efforts, the opportunities made available by these states are limited.

The support from state governments influences the outcome for the main implementing agencies in each state. The forestry, wildlife and town and country planning departments in all states are found to have objectives that are aligned to the objectives of the state. If a state is pro-

CFS, the state's forestry, wildlife and town and country planning departments appear to align themselves to undertake conservation and preservation tasks. However, in states where the CFS policy is not implemented, the same agencies focus on acquiring resource rents, adhering to the objective set by the state government. At the individual level, individual actors are found to be moved to implement the CFS policy if public service motivation is positive. Also, when salaries and incentives are compensated accordingly, the motivation level of front-line implementers may lead to successful CFS implementation. The findings from this chapter are summarised in Table 18.

Table 18: Motivation & Policy Implementation

Perak and Selangor	States	Pahang, Terengganu and Kelantan
Successful implementation	Criteria Related to Motivation	Failed implementation
<ul style="list-style-type: none"> • Street-level bureaucrats perceive the benefits to be larger than the costs of implementation • Positive public service motivation 	Individual Motivation (Internal, state level)	<ul style="list-style-type: none"> • Street-level bureaucrats perceive the costs to be larger than the benefits of implementation • Negative public service motivation
<ul style="list-style-type: none"> • Policy goals is aligned with entity/agency goals • Organisational benefits are perceived to be higher than the costs of implementation • Strong or integrated support among implementers • Interest group participation is present 	State/organisational level Motivation (Internal, state level)	<ul style="list-style-type: none"> • Policy goals is not aligned with /are very different to entity/agency goals • Organisational costs are perceived to be higher than the benefits of implementation • Poor or loose support among implementers • Interest group participation is absent
<ul style="list-style-type: none"> • States allocate funds based on the positive individual and organisational motivation. • For states that are governed by the same political party as the federal government, there appears to be a collaborative effort between state and federal governments in identifying and allocating funds. 	Funding (External, state level)	<ul style="list-style-type: none"> • No provision of funds by the federal or state governments. • State government are not keen to allocate funds in line with on their negative individual and organisational motivation.
<ul style="list-style-type: none"> • Lack of clarity in the over-arching purpose of the Malaysian environment and natural resources sector serves as a demotivating factor. • International recognition and benefits of the CFS policy implementation outweigh its costs. • NGOs are motivated for the CFS to be initiated and implemented. They contribute to advocacy, policy analysis, raising awareness, fundraising, capacity building, field research, community development and others. 	Policy Sector (Internal and External, federal level)	<ul style="list-style-type: none"> • Lack of clarity in the over-arching purpose of the Malaysian environment and natural resources sector serves as a demotivating factor. • International recognition and benefits of the CFS policy implementation outweigh its costs. • NGOs are motivated for the CFS to be initiated and implemented. They contribute to advocacy, policy analysis, raising awareness, fundraising, capacity building, field research, community development and others.

CHAPTER 8: CONCLUSION & RECOMMENDATIONS

“The CFS implementation puzzle in the Malaysian federalism is complex but solving the challenges relating to it will enable for Malaysia’s biodiversity to be conserved and preserved.”

(Author, 2015)

This concluding chapter aims to answer the main question and sub-question through the analysis undertaken in Chapters 5, 6 and 7. Following this, I discuss the contributions and limitations of this research, and future research that could further enhance the literature on Malaysian environmental federalism and policy implementation research, especially with the historical change of the federal ruling party in the recent 2018 general elections.

Revisiting the aim of this thesis, it sought to understand why the Central Forest Spine (CFS) policy implementation has occurred in some states and not in others, even considering its importance to biodiversity conservation for Malaysia and the global community. Ranked as the 12th mega-biodiverse country in the world by Convention on Biological Diversity, Malaysia’s federal government is determined to implement the CFS policy. Despite having an inclusive implementation plan, the CFS policy has not been uniformly implemented. A variation in implementation outcomes exists among states involved. Some have successfully implemented the policy and in some states, it has led to a policy standoff between the federal and state governments. Various NGOs have also projected concerted efforts to conserve and preserve this biodiversity.

Given this backdrop, it was found that the problem may be related to Malaysia’s political structure. The research started with a preliminary assumption that institutional factors influence the CFS implementation. In addition, literature indicated that the understanding of Malaysia’s environmental policy implementation required more scholarly work as it has not been studied extensively. I then used a framework that linked the characteristics of federalism and the contextual interaction theory (CIT), which is a policy network analysis inspired policy implementation theory.

Through the analysis conducted and in conclusion, Malaysia’s federal nature highly influences the outcome of the CFS policy implementation, particularly through the powers vested within the federal and state stakeholders and implementing actors. The CFS policy implementation

outcome is also subjective to information that is made available to the implementers and internal and external motivation that influences them to implement or not implement the policy. In understanding the implementation conundrum, it is important to identify veto players, specifically those who are implementing officials/actors and target groups across federal and state levels who influence the implementation of the CFS, and how Malaysia's federal structure allocates formal and informal powers to implementing agencies. Out of the five states that were investigated, the states of Perak and Selangor were found to have successfully implemented the CFS policy while the states of Pahang, Terengganu and Kelantan have not implemented the policy.

Summary of Findings

In states that have successfully implemented the CFS policy, such as Perak and Selangor, there is an increase in forest reserves along with effective tree planting and re-planting activities to connect or link forest islands. A clear implementation plan is set in place and state implementing actors appear to be coordinated through a platform at the state-level. On the other hand, states that have failed to implement the policy (Pahang, Terengganu and Kelantan) have implemented almost no activities that are relevant to the tasks and activities stated in the CFS policy implementation plan.

In answering the second sub-question on actors involved with the CFS implementation, this research has identified these implementing officials or actors that are responsible for the CFS implementation – federal government, federal politicians, national deliberative platforms, state governments, state politicians and bureaucrats, and traditional Malay rulers (Sultans). The formal powers vested in these implementing actors are in accordance with Malaysia's Federal Constitution.

Most of the implementing actors at the federal level appear to be playing the same role and contribute in the same manner to all states regardless of the policy implementation outcome. Their roles and functions are highly aligned with the powers described in Malaysia's Federal Constitution, as advisors to states on forest and wildlife. Though, fundamentally, the constitutional powers vested in them governs and provides direction to all implementing officials and actors involved with the CFS implementation, informal powers do play a role. In answering the second sub-question, I discussed how the formal and informal powers vested in

these implementing actors contribute to the CFS policy implementation success or failure, which is part of the second sub-question.

Officials from all states have also identified federal bureaucrats to be highly committed in seeing the policy being implemented. However, there are leadership issues with one minister particularly who was in office at the point the CFS policy implementation took shape. Chief Ministers from the states that have failed to implement the CFS find the Minister for Natural Resources and Environment to be poorly performing and does not really champion the policy. The poor performance of the federal minister signals that the policy has flaws, which makes it not worth implementing.

The national deliberative platforms such as the National Land Council (NLC), National Forestry Council, National Physical Planning Council, National Biodiversity Council, National Mineral Council and National Water Resources Council are platforms that both state and federal governments use to negotiate and achieve consensus. However, the councils do not impose a penalty or timeframe to ensure the policy is implemented, leaving the states that have not implemented the policy with no clarity as to its implementation. The powers vested in the NLC is found to be weaker than the state government's; and the power of other national deliberative councils are weaker than the NLC.

More significant factors to the outcome of the CFS policy implementation appear to be at the state level. The main difference between states that have successfully implemented the policy (like Perak and Selangor) and states like Pahang, Terengganu and Kelantan is the focus of their economic policy or direction. The successful states have established an economic policy that is independent of timber logging while the states that have failed to implement the policy are still largely reliant on timber for resources. The economic direction makes a huge difference to the acceptance and adaptation of the policy at the state level as the fundamental principles of the CFS policy include conservation and linking of forest islands.

State politicians and bureaucrats are the most significant implementation actors as they are the catalyst to the policy being implemented or altered. In the successful states, politicians and bureaucrats are found to be highly educated with a high level of environmental awareness, while in states that are yet to implement the CFS policy, there is an absence or lack of political will or commitment among the state politicians and bureaucrats. The monarchs are identified

as a common veto player at the state level. The Sultans in states that have implemented the CFS policy implementation are found to be highly educated with high levels of environmental awareness. They also serve as patrons to environmental initiatives. At some events, they have decreed for the state officials to protect and guard mother nature in formal speech to state leadership. In states that are yet to implement the policy, the Sultan is deemed to have poor understanding of environmental awareness, though they may serve as a patron to environmental initiatives. A number of these Sultans still hold a share in timber logging activities.

This research also explored the informal powers of these implementing actors. This key finding of this research is that informal powers in the Malaysian federalism influence the CFS policy implementation, particularly intergovernmental relations, state's political will, Sultan's informal powers, and availability of funding resources, skills and expertise. Apart from the role played by federal and state implementers, funding and inter- and intra-party relations are extremely significant to the implementation of the CFS policy. In Perak and Selangor (successful implementation), funding is provided by the federal or state government, solely or collaboratively while in states of Pahang, Terengganu and Kelantan (failed implementation), there is an absence or lack of funding and funding mechanism. The successful states also had good inter- and intra-party relations compared to states that have failed to implement the policy. These failed CFS states are found to have poor intergovernmental relations in states ruled by the opposition political party with a tendency of being financially biased towards them.

For example, in the Selangor state where it is ruled by an opposition political party, unless the state government is willing and is supportive of the CFS policy, it could not have been implemented successfully. It is also similar with the Sultans. As veto players, unless they are supportive of the policy along with the state governments, the policy is set to fail. In the absence of funding and required skills and expertise, the policy was found to have failed to be implemented. Hence, extensive formal powers alone are not enough for implementation success, but it takes a recipe formal and informal powers to come together. The formal and informal powers both determine the magnitude of powers that resides within an entity. Apart from that, the state-state relationship which is a check-and-balance in a federalism is found to be absent. This reinforces states high reliance on the federal government.

In exploring how availability and quality of information determines the CFS policy outcomes in the chosen state, both states of Perak and Selangor that have successfully implemented the

CFS policy have been found to have the required information and data consisting of factual, scientific and historical knowledge. Information, data and statistics are easily available either on a public domain or in agencies' websites. These data set also hold a variety of information, which includes factual, scientific and historical data to assist state implementers to set feasible goals in implementing the policy. States implementers may also share and transfer knowledge via meeting platforms and technology (data websites, smart phone applications and geographical information systems).

The availability and accessibility of data is made possible by a positive attitude among key implementers (such as the State Executive Council, State Forestry Departments and State Wildlife and National Parks Department) who believe that the goal of the CFS policy matches their respective organisational values. The availability and accessibility of information is also made possible by strong political will and commitment that the respective state governments hold. The federal implementers also find it feasible to negotiate with state implementers on policy details and specifications.

The states that have successfully implemented the CFS policy have constructed effective platforms or mechanisms for information dissemination. These states hold stakeholder meetings and have data websites and geographical information systems. The platform enables transparency between agencies although they may take ownership of the data provided or published. Clarity of information also exists as state implementers clarify details through the established platform and via a friendly but professional working relationship. Apart from this, strong networking with researchers and philanthropists also exists via the organising of conferences, symposia and workshops. The states of Perak and Selangor have also launched various good relationships with other stakeholders such as non-governmental organisations (NGOs) and local universities.

In contrast, states that have failed to implement the CFS policy such Pahang, Kelantan and Terengganu have very limited information on the environment and forests due to poor attitude and knowledge levels among implementers. The absence of vital data and statistics has led to a policy execution failure led by misconceptions of implementation concepts, principles and requirements, which are most often based on assumptions of revenue loss and land confiscation by the federal government. Poor information levels among implementing agencies has resulted in a negative attitude among implementers in clarifying details and assumptions, especially

relating to roles of each agency, tasks assigned, and concepts, definitions and terminologies used. An extensive Terms of Reference list can also be created listing all technical terminologies and definitions involved in the CFS policy. Lack of transparency also hinders the knowledge sharing and transfer between agencies involved.

The states of Pahang, Kelantan and Terengganu should adopt the practices in Perak and Selangor. Key implementers in the failing state should undertake the effort to acquire and consolidate factual, scientific and historical data from all implementing agencies involved. The implementing officers must also equip themselves with knowledge about the environment and economic profits of conservation, which will assist them with understanding the importance of the CFS policy and biodiversity to the overall well-being of the nation. If the conditions in the states that have successfully implemented the CFS policy can be emulated in states that have failed, the possibility for the CFS policy to achieve success overall is high.

Motivation is key to the CFS policy implementation success or failure. Motives stimulate or discourage the implementing agencies in undertaking the execution in the field. Despite the fact that bureaucrats at the federal level face two conflicting directions – honour the Malaysian Plan by ensuring revenue targets such as sufficient timber production are met and at the same time undertake conservation and preservation efforts – these officers are motivated by higher benefits projected by the policy and a low cost. The federal officers also tend to obtain strong support from environmental non-governmental organisations. The state agencies will be able to implement the CFS policy under three conditions. First, the goals for the sector must be clarified by the federal government through provisions of clear definitions and targets on sustainable management. Second, alternative funding sources or mechanisms must be present. Third, action plans for all implementers related to the forests and wildlife divisions must be integrated.

At the state level, a motivational element for a particular state or agency may appear as a demotivation for another entity. In states that have successfully implemented the policy, the aim of the state governments matches the objective of the CFS policy, accompanied by high awareness of benefits of conservation and preservation of forests. The successful states are also found to have knowledge of alternative revenue generation through ecotourism and selling of carbon credits and are able to source their own funds either by utilising their own budget, obtaining funds from NGOs and other interest groups or by getting a certain entity to undertake projects within their forest complex. However, states that have failed to implement the policy

have no match between state objectives and CFS policy goals. Apart from conflicting objectives, state governments strive to generate revenue, which results in their focus on economic development and improvement of social aspects. The states that are yet to implement the CFS also find the cost of implementing the CFS is higher than benefits the policy may contribute. Though NGOs still push for an increase in conservation and preservation efforts, the opportunities made available by these states are limited.

The support from state governments influences the outcome for the main implementing agencies in each state. The forestry, wildlife and town and country planning departments in all states are found to have objectives that are aligned to the objectives of the state. If a state is pro-CFS, the state's forestry, wildlife and town and country planning departments also align themselves to undertake conservation and preservation tasks. But, if these agencies focus on acquiring resource rents aligned to aims of states, it results in a failure to implement the CFS policy. At the individual level, individual actors are found to be moved to implement the CFS policy if public service motivation is positive. Also, when salaries and incentives are compensated accordingly, the motivation level of front-line implementers may lead to CFS implementation.

Contribution to the Theoretical Body

This research makes noteworthy contributions to two theoretical bodies of knowledge: federalism and policy implementation. I will first discuss all the contributions of the study to the concept of federalism before discussing the additions made to the policy implementation literature. One of the four federal-parliamentary-constitutional-monarchies in the world and still a developing country, Malaysian federalism exhibits the general characteristics of the political structure or concept of federalism. The Malaysian Constitution describes the power division between three main political branches of administrative, judicial and executive arms, as well as power allocation between the state and federal governments.

Despite a separation of powers stated in the Malaysian Constitution, there are overlaps in the forestry, wildlife and environmental protection domain even though powers over these areas are retained with the states. In line with the findings from literature, interest groups and lobbyists have taken advantage of these overlaps and redundancies to exert their beliefs and influences. There appears to be a shift in the role of NGOs and their previously constrained scope. In addition to this, the environmental governance and policy sector indicates a

decentralisation in spite of literature indicating a centralisation or consolidation of powers for other domains, especially finances.

Like many other countries, environmental protection measures implemented in Malaysia are highly politicised. This study further re-emphasizes this position, especially with the influence of Sultans and federal–state political disputes. The federal–state relationships are found to influence the policy implementation, but inter- and intra-party relations do not affect these intergovernmental relations. This is demonstrated by the implementation dilemma in the state of Pahang that was governed by the same ruling party as the federal government during the time fieldwork was conducted for this research.

Malaysian federalism also demonstrates provisions for unconstitutional power, especially that pertaining to the traditional Malay rulers. The political structure of Malaysia is unique for its position on the role of its Sultans. These traditional Malay rulers are found to hold informal powers that are beyond the prerogative stated in the Constitution and the magnitude of their powers plays a significant role in determining the implementation success or failure of forest, wildlife and environmental protection policies. Article 71 (1) of the Malaysian Constitution guarantees “the right of a Ruler of a State to succeed and to hold, enjoy and exercise the constitutional rights and privileges of Ruler of that State in accordance with the Constitution of that State” (Malaysian Constitution, 2010). However, the study finds that Sultans still have an influence in decisions made in the state land, forestry and wildlife sectors.

As for contributions of this research to the policy implementation literature, it is found that the practices in Malaysia are still largely top-down despite the policies requiring active participation from front line implementers to ensure success, especially in the environmental policy area. These implementation activities are mostly steered by the federal government and its agencies. Unlike the Western representation in the literature on how the role of street-level bureaucrats is significant to the success or failure of policy implementation, the actors involved in the environmental policy sector in Malaysia do not play an extensive role. Rather, the failure or success of policy implementation lies with the political pay masters of the implementers involved. As such, there is no neat distinction between policy and administration, or between political decisions on a government policy, and the administrative task of implementing those policies. Malaysia’s fiscal federalism also directly influences the CFS policy implementation,

especially when most states rely on federal government for funding and have no autonomy in seeking external aid.

This study also contributes to the larger body of study on federalism and policy implementation, especially on informal or unconstitutional powers and check-and-balances in federalism. Also, the decentralised environmental policy process in Malaysia does not yield a positive overall outcome for forest and wildlife conservation. This is different from the findings of scholars like Oates (1972) and Agrawal and Ostrom (2001) who have proposed decentralised environmental governance as a catchy solution to environmental problems. Apart from that, findings from this study enriches the limited but expanding research on forest and wildlife policy and governance in developing countries. As development versus nature conservation is a hot topic for achieving sustainable development goals, this research provides an insight to informal powers and motivation of the various actors in implementing an environmental policy such as the CFS.

Future Research Questions

From this current research project, I have identified a few remaining puzzles for future research. Firstly, to study the formal and informal power bases of actors in the Malaysian federalism using French and Raven's model. To date, six types of powers have been classified; they are coercive power, reward power, legitimate power, referent power, expert power and informational power. This will provide further understanding to where and how the unconstitutional powers come into play, especially relating to the role of Sultans.

Second, a study to explore types and nature of informal powers in federalisms would complement the vast studies on federalism as there is a lot of bargaining and negotiations in this setting. A subset of this research could also focus on federal-parliamentary-constitutional-monarchies in the world (there are only four – Malaysia, Australia, Belgium and Canada). The proposed study will enable scholar to review the spectrum of federalisms in the world as well as the requirement of constitutional supremacy which guides federations.

Third, to explore each CIT factors further to map the subfactors and perhaps establish a spectrum. This may enhance the recipe for successful implementation in federalisms. Fourth, investigate further on how much of the decisions of the national deliberative councils, especially the National Land Council, have been implemented or incorporated by the states for a selected period of time. To complement it, the members of the council could also be

interviewed to obtain their view of the council. However, this would require a high-level research as the council members consist of the Prime Minister, and all executive head of states such as Chief Ministers and *Menteri Besars*.

Finally, as the CFS policy implementation research may yield a different set of results if repeated due to the win of the *Pakatan Harapan* coalition (the Alliance of Hope) (PH) in the general elections held in 2018. This is the first time an opposition political party has won the general elections in Malaysia since its independence. The newly formed PH government has proposed more specific policies to address environmental issues in its manifesto (*The Star*, 2018). The coalition has pledged to govern the country in accordance to principles of Sustainable Development Goals outlined by the United Nations and increase renewable energy to 20 per cent by 2025 from the current 2 per cent. The government has also proposed to implement stricter logging quotas to ensure that forests are conserved, strengthen wildlife and marine life protection laws and further enforce penalties or punishment against illegal loggers and poachers. These suggested initiatives will improve the landscape for the CFS policy implementation. As such, research on the CFS policy implementation in a few years may yield a different set of results.

Apart from that, research on path dependence in forest and wildlife administration in Malaysia and Southeast Asia is much needed. To date, there is little, or no work carried out in this regard although many of the issues and challenges faced with environmental policy implementation stem from a decision made in the formative years of Malaysia, especially when development and resource exploitation was viewed to be a synonym of growth. Most of the institutions and agencies along with their goals and aims have also been dormant for years since the inception or establishment of these agencies during the colonial rule. A study on path dependence and the cost it may require for a shift of path may project a better stock take as to what it takes to really implement an environmental protection policy such as the CFS.

It will also be beneficial to explore the type of rewards and penalties, and timeline for decisions made by national deliberative platforms in Malaysia. One of the findings of this research is that the national deliberative platforms were found to be weak due to the absence of rewards, penalties and timeframe to implement a decision made. Hence, research to explore what rewards and penalties may appear to be the push or pull factor to the implement or stall a required action would improve the role and function of the deliberative platform and maximise

its potential. Undertaking such research would further help to prioritise successful implementation of environmental policies and conservation as important issues in Malaysia and Southeast Asia. The listed research would also provide useful practical suggestions.

Concluding Statements

Malaysia's federal structure significantly influences the Central Forest Spine policy implementation. The formal and informal powers of federal and state implementers do play a significant role in ensuring implementation success. Apart from this, Sultans have informal but visible powers in ensuring conservation and preservation activities are undertaken, championed or advocated for. The magnitude of power they hold and practice, despite the descriptions in the Constitution, is demonstrated through their lifestyle and demands. I also conclude that intergovernmental relations are highly dependent on inter-party relations, as the same political parties at the federal and state levels find a way to resolve their differences.

To increase the success of the CFS implementation, I propose five recommendations to the federal and states implementers to undertake, better if jointly or cooperatively. First, for the CFS policy to be implemented, the formal powers (of federal and state bureaucrats and politicians) and informal powers (of Sultans and intergovernmental relations) may be balanced by strengthening the role of deliberative platforms. If formal powers are described extensively but informal powers are poor, then it is more likely that a policy will fail in its implementation stage.

Secondly, it is important to win the interests of the Sultans as they appear to be a significant catalyst in ensuring conservation and conservation-related activities occur at the state level through their decree or actions and lifestyle. An official order from Sultans will encourage the state's leadership to shift their direction towards the CFS implementation. In states where Sultans are a hindrance to the implementation of the policy, a change in behaviour may result in a trickling effect to the state implementers. However, I acknowledge that it is a challenge and a perhaps tedious process to attain a change in behaviour, but with ample awareness activities, this could be achieved. A positive start may be with a presentation of this idea at the Conference of Rulers.

Thirdly, educating the state bureaucrats and public service officers so that they understand their role and requirements to ensure that the policy is implemented is critical. The analysis in this research has indicated that most state-level bureaucrats in states that have failed to implement the policy appear to work in a narrow scope and in silos, with very poor understanding of the environment and the domino effects of one element on another. Increasing their awareness and knowledge through training and practical work may lead to better-equipped bureaucrats. Efforts

to retrain state bureaucrats and public service officers must also be considered as much of their work styles and attitudes are still embedded in the old systems although their scope has expanded.

The third recommendation also goes hand-in-hand with the fourth – to increase the motivation of the state-level implementers in states that have failed to implement the CFS policy, especially through better remuneration and pay schemes and opportunities to participate in the feedback mechanism.

Fifth, strengthen information sharing platforms to enable both federal and state implementers to be able to access required information. Though there is a fear that these important data may be misused for the wrong reasons, with the increase in data security and protection, this should be addressed. Accessibility may also be granted based on the role and seniority of officers working on the relevant projects.

Finally, the CFS implementation puzzle in the Malaysian federalism is complex but solving the challenges relating to it will enable for Malaysia's biodiversity to be conserved and preserved, which will result in various benefits for the country and its wider global community. The Malaysian case is also unique, with its veto players and unconstitutional powers in the forest and wildlife sector coming into play.

APPENDIX 1 – CODING THEMES

1. Successful versus failed implementation

Implementation status	
Successful	Has fully or partially re-established, maintained and enhanced links between major remaining forest complexes within the allocated area under the CFS.
Failed	Have implemented the plan on paper, or the implementation is at a standstill, and/or an ideological conflict of development versus conservation.

2. Evaluation factors

Evaluation factors	Criteria/words searched for
Power	Constitutional powers, formal powers, resources such as finances, workforce and time.
Motivation	
- Internal motivation	adaptability to implementation goals, work-based inspiration, character towards implementation objectives, attitude towards other implementers, performance.
- External motivation	availability of incentives or existence of penalties.
Information	clarity of basic outlines of the policy and its compliance, explanation of specific roles of different agencies and policy requirements, availability of information about other actors involved in policy implementation and their roles, availability of further information, existence of transparent processes.

APPENDIX 2 – FIELDWORK INFORMATION

List of Interviews Conducted

Interview P1

Head of Department, Ministry of Natural Resources & Environment
19 January 2015

Interview P2

Assistant Director-General, Department of Wildlife & National Parks Peninsular Malaysia
12 January 2015

Interview P3

Director-General, Forestry Department Peninsular Malaysia
8 January 2015

Interview P4

Head of Department, Kelantan Department of Wildlife & National Parks
15 April 2015

Interview P5

State Officer, Pahang Department of Town & Country Planning
4 February 2015

Interview P6

Director, Perak Department of Wildlife & National Parks
20 January 2015

Interview P7

Director, Terengganu Department of Town & Country Planning
7 April 2015

Interview P8

IC-CFS Manager, United Nations Development Programme
20 April 2015

Interview P9

Programme Officer (Policy & Advocacy), WWF Malaysia
22 April 2015

Interview P10

Director, Pahang Department of Land and Mines
5 February 2015

Interview P11

Principal Investigator, MEME
21 March 2015

Interview P12

Head of Department, Ministry of Natural Resources & Environment
1 April 2015

Interview P13

Director, Terengganu State Forestry Department
18 February 2015

Interview P14

Director, Perak State Forestry Department
20 January 2015

Interview P15

Head of Department, Perak State Development Office
16 April 2015

Interview P16

State Officer, Selangor Department of Town & Country Planning
17 April 2015

Interview P17

Director, Kelantan State Forestry Department
6 April 2015

Interview P18

Director, Selangor State Forestry Department
10 February 2015

Interview P19

Head of Department, Selangor Department of Wildlife & National Parks
13 February 2015

Interview P20

Director, Pahang State Economic Planning Unit
5 February 2015

Interview P21

President, REACH
8 March 2015

Interview P22

Director, Pahang Department of Wildlife & National Parks
4 February 2015

Interview P23

Head of Department, Forestry Department Peninsular Malaysia
11 March 2015

Interview P24

State Officer, Pahang State Forestry Department
5 February 2015

Interview P25

Director, Terengganu Department of Wildlife & National Parks
18 February 2015

Interview P26

Head of Department, Department of Town & Country Planning Peninsular Malaysia
13 January 2015

Interview P27

Chief Minister, Kelantan State
6 May 2015

Interview P28

Director, Perak State Economic Planning Unit
31 March 2015

Interview P29

State Executive Committee (Environmental Portfolio), Selangor State Government
15 April 2015

Office of the Vice-Chancellor
Finance, Ethics and Compliance



The University of Auckland
Private Bag 92019
Auckland, New Zealand
Level 10, 49 Symonds Street
Telephone: 64 9 373 7599
Extension: 87830 / 83781
Facsimile: 64 9 373 7432

UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE (UAHPEC)

13-Aug-2014

MEMORANDUM TO:

Assoc Prof Jennifer Curtin
Political Studies

Re: Application for Ethics Approval (Our Ref. 011755): Approved

The Committee considered your application for ethics approval for your project entitled **Federalism and Policy Implementation: A Case of Malaysia's Central Forest Spine**.

We are pleased to inform you that ethics approval is granted for a period of three years.

The expiry date for this approval is 13-Aug-2017.

If the project changes significantly, you are required to submit a new application to UAHPEC for further consideration.

If you have obtained funding other than from UniServices, send a copy of this approval letter to the Research Office, at ro-awards@auckland.ac.nz. For UniServices contracts, send a copy of the approval letter to the Contract Manager, UniServices.

In order that an up-to-date record can be maintained, you are requested to notify UAHPEC once your project is completed.

The Chair and the members of UAHPEC would be happy to discuss general matters relating to ethics approvals. If you wish to do so, please contact the UAHPEC Ethics Administrators at ro-ethics@auckland.ac.nz in the first instance.

Please quote reference number: **011755** on all communication with the UAHPEC regarding this application.

(This is a computer generated letter. No signature required.)

UAHPEC Administrators
University of Auckland Human Participants Ethics Committee

c.c. Head of Department / School, Political Studies
Miss Agkillah N Maniam
Julie MacArthur

Interview Questionnaires

Government Bureaucrats & Political Actors at Federal Level

POLITICS AND INTERNATIONAL RELATIONS
School of Social Sciences
Te Pokapū Pūtaiao Pāpori
Faculty of Arts

 THE UNIVERSITY
OF AUCKLAND
NEW ZEALAND

Te Whare Wānanga o Tāmaki Makaurau

1-11 Short Street
Auckland, New Zealand
Telephone 64 9 373 7599
Ext: 83744
Facsimile 64 9 373 7449
Email: anms441@auckland.ac.nz

The University of Auckland
Private Bag 92019
Auckland 1142
New Zealand

INTERVIEW QUESTIONS: GOVERNMENT BUREAUCRATS & POLITICAL ACTORS AT FEDERAL LEVEL

Project Title	: Federalism and Policy Implementation – The Case Study of Malaysia's Central Forest Spine
Name of Researcher	: Agkillah Maniam

A. General questions

1. Could you introduce yourself? Please include details on how long you have been working with this organization, what is your current position and role in this organization?

B. General Understanding of Agency's Involvement

1. Could you briefly tell me which states have successfully implemented the CFS or otherwise?
2. Could you tell me if there are any implementing agency/agencies that I have missed from the list I have here?
3. Could you tell me how is your agency involved with the implementation of CFS in the various states?
4. What is the extent of CFS objectives that has been attained by your agency over time?
5. Do you have an agency report for CFS?

C. Understanding Motivation

1. What is your agency's motivation in implementing CFS?
2. What is/are your work-based inspiration(s)?
3. What is your opinion on the implementation objectives outlined to you?
4. Is your agency able to adapt to the implementation goals?
5. If there is anything that is hard to adapt, is there any implementation goals that should be amended?
6. How open is your agency towards other implementers?
7. Do you collaborate with other implementing agencies?
8. How to you define performance and how important is performance to you?

D. Understanding Information

1. What are the basic outlines of the policy for your agency?
2. How is it required for your agency to comply with the policy?
3. Is information readily made available to you?
4. Are the processes that occur in CFS transparent?

E. Understanding Power

1. What is your formal capacity in carrying out tasks for CFS?
2. Is there any informal interaction with other agencies / institutions in executing CFS?
3. If yes, how does this influence your implementation tasks?
4. What is your capacity with regards to finances, workforce and time allocated to you?
5. How much control do you have over finances, workforce and time allocated to you?

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE ON _____ FOR (3) YEARS REFERENCE NUMBER /

POLITICS AND INTERNATIONAL RELATIONS
School of Social Sciences
Te Pokapū Pūtaiao Pāpori
Faculty of Arts



1-11 Short Street
Auckland, New Zealand
Telephone 64 9 373 7599
Ext: 83744
Facsimile 64 9 373 7449
Email: anme441@auckland.ac.nz

The University of Auckland
Private Bag 92019
Auckland 1142
New Zealand

**INTERVIEW QUESTIONS:
GOVERNMENT BUREAUCRATS & POLITICAL ACTORS AT STATE LEVEL**

Project Title	: Federalism and Policy Implementation – The Case Study of Malaysia's Central Forest Spine
Name of Researcher	: Agkillah Maniam

A. General questions

1. Could you introduce yourself? Please include details on how long you have been working with this organization, what is your current position and role in this organization?

B. General Understanding of Agency's Involvement

1. Do you consider your state to have successfully implemented the CFS or otherwise?
2. Could you tell me if there are any implementing agency/agencies that I have missed from the list I have here?
3. Could you tell me how is your agency involved with the implementation of CFS in your state?
4. What is the extent of CFS objectives that has been attained by your agency over time?
5. Do you have an agency report for CFS?

C. Understanding Motivation

1. What is your agency's motivation in implementing CFS?
2. What is/are your work-based inspiration(s)?
3. What is your opinion on the implementation objectives outlined to you?
4. Is your agency able to adapt to the implementation goals?
5. If there is anything that is hard to adapt, is there any implementation goals that should be amended?
6. How open is your agency towards other implementers?
7. Do you collaborate with other implementing agencies?
8. How to you define performance and how important is performance to you?

D. Understanding Information

1. What are the basic outlines of the policy for your agency?
2. How is it required for your agency to comply with the policy?
3. Is information readily made available to you?
4. Are the processes that occur in CFS transparent?

E. Understanding Power

1. What is your formal capacity in carrying out tasks for CFS?
2. Is there any informal interaction with other agencies / institutions in executing CFS?
3. If yes, how does this influence your implementation tasks?
4. What is your capacity with regards to finances, workforce and time allocated to you?
5. How much control do you have over finances, workforce and time allocated to you?

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Auckland, New Zealand
Telephone 64 9 373 7599
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Facsimile 64 9 373 7449
Email: snme441@auckland.ac.nz

The University of Auckland
Private Bag 92019
Auckland 1142
New Zealand

**INTERVIEW QUESTIONS:
NON-GOVERNMENTAL ORGANISATIONS & INTEREST GROUPS
AT FEDERAL LEVEL**

Project Title	: Federalism and Policy Implementation – The Case Study of Malaysia's Central Forest Spine
Name of Researcher	: Agkillah Maniam

1. Can you tell me a little about what your role is in this organisation, and how you are involved with this policy area?
2. Can you tell me how the process of implementation of CFS has proceeded to date?
3. What sorts of reasons do you think explain why the policy has succeeded or not in the various states?
4. Who do you think are the key veto players, implementing officials / actors and target groups across federal and state levels, in relation to the CFS policy?
5. How has each of these actors been involved to date?
6. Working through the various steps in the implementation process, where do you think the key obstacles occur and why? Which actors have been most critical in either facilitating or obstructing meeting key objectives?
7. What aspects of the CFS policy objectives as set by the federal government have been easy to implement and why?
8. What are the principal factors that are likely to produce successful and workable CFS policy outputs at both the federal and state levels?
9. Were there any re-developments of CFS implementation strategies by the different federal or state implementing officials over time?

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1-11 Short Street
Auckland, New Zealand
Telephone 64 9 373 7599
Ext: 83744
Facsimile 64 9 373 7449
Email: anma441@auckland.ac.nz

The University of Auckland
Private Bag 92019
Auckland 1142
New Zealand

**INTERVIEW QUESTIONS:
NON-GOVERNMENTAL ORGANISATIONS & INTEREST GROUPS
AT STATE LEVEL**

Project Title	: Federalism and Policy Implementation – The Case Study of Malaysia's Central Forest Spine
Name of Researcher	: Agkillah Maniam

1. Can you tell me a little about what your role is in this organisation, and how you are involved with this policy area?
2. Can you tell me how the process of implementation of CFS has proceeded to date?
3. What sorts of reasons do you think explain why the policy has succeeded or not in your state?
4. Who do you think are the key veto players, implementing officials / actors and target groups across federal and state levels, in relation to the CFS policy?
5. How has each of these actors been involved to date?
6. Working through the various steps in the implementation process, where do you think the key obstacles occur and why? Which actors have been most critical in either facilitating or obstructing meeting key objectives?
7. What aspects of the CFS policy objectives as set by the federal government have been easy to implement and why?
8. What are the principal factors that are likely to produce successful and workable CFS policy outputs at both the federal and state levels?
9. Were there any re-developments of CFS implementation strategies by the different federal or state implementing officials over time?

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APPENDIX 3

Logging Licenses Issued in 2014 for South Kelantan Forest District

No.	License No.	Company Name	Forest Reserve	Compartment	Area (hectares)
1	DS 01-01/2014	Tg. Abdul Halim Ibni Al-Marhum Sultan Ibrahim	Bukit Hantu	7	50
2	DS 01(P)-02/2014 TLC	Rimbun Azamat Sdn. Bhd.	Ulu Galas	73 & 74	143
3	DS 01-03/2014	Syarikat Seri Bintang Sdn. Bhd.	Perias	252	116
4	DS 01-04/2014	IQY Trading	Sg. Betis	102	70
5	DS 01-05/2014	IQY Trading	Sg. Betis	142	30
6	DS 01-06/2014	Gemilang BM Enterprise	Sg. Betis	142	30
7	DS 01(P)-07/2014 TLC	Laksana Jejaka Sdn. Bhd.	Batu Papan	32 & 32	200
8	DS 01(P)-07/2014 LBG	Excellent Bonus Sdn. Bhd.	Nenggiri	63	130
9	DS 01(P)-07/2014 LBG	CKH Ceria Trading	Nenggiri	107	50
10	DS 01(P)-07/2014 LBG	Excellent Bonus Sdn. Bhd.	Nenggiri	69	10
11	DS 01(P)-07/2014 TLC	Pullah PC Daud Sdn. Bhd.	Batu Papan	10, 22, 23 & 32	400
12	DS 01(P)-07/2014 TLC	Kenangan Sepakat Sdn. Bhd.	Batu Papan	6	20
13	DS 01-13/2014	Seri Bintang Sawmill Sdn. Bhd.	Batu Papan	71	100
14	DS 01-14/2014	TLG Miskini Enterprise	Sg. Berok	25	100
15	DS 01-15/2014	Syarikat Galas Setia (Ulu Kelantan) Sdn. Bhd.	Nenggiri	17	120
16	DS 01(P)-16/2014 TLC	AWB Resource	Sg. Berok	20 & 22	400
17	DS 01-17/2014	Penawar Delima Sdn. Bhd.	Sg. Betis	76	50
18	DS 01-18/2014	Seri Bintang Sawmill Sdn. Bhd.	Sg. Betis	33	72
19	DS 01(P)-19/2014 TLC	Kenangan Sepakat Sdn. Bhd.	Batu Papan	38, 39 & 54	268
20	DS 01-20/2014	Usaha Tenaga Trading	Bukit Hantu	4	50
21	DS 01-21/2014	SH Awana Enterprise	Sg. Betis	102	60
22	DS 01-22/2014	Tuah Dabong Trading	Gunung Rabong	25	50
23	DS 01-23/2014	Che Mohamed Enterprise	Perias	250	30
24	DS 01-24/2014	Arthi Enterprise	Nenggiri	105	50

25	DS 01-25/2014	Awaris Trading	Sg. Betis	38	25
26	DS 01-26/2014	Gertak Kangkong Enterprise	Perias	115	50
27	DS 01(P)-27/2014 LBG	Petri Jaya	Sg. Betis	57, 168 & 210	43
28	DS 01-28/2014	Bantuk Nas Enterprise	Sg. Betis	22	20
29	DS 01(P)-29/2014 TLC	Rimbun Azamat Sdn. Bhd.	Ulu Galas	56 & 60	339
30	DS 01-30/2014	Kasih Tegoh Enterprise	Sg. Betis	21	50
31	DS 01-31/2014	Syarikat Mar & Company	Nenggiri	73	117
32	DS 01-32/2014	Umrah Bazar Trading	Gunung Rabong	22	50
33	DS 01-33/2014	Syarikat Seri Bintang Sdn. Bhd.	Sg. Berok	22	170
34	DS 01(P)-34/2014 LBG	Syarikat Galas Setia (Ulu Kelantan) Sdn. Bhd.	Sg. Betis	196	84
35	DS 01(P)-35/2014 LDG	Ladang Kelantan Sdn. Bhd.	Kuala Betis	77, 190 & 197	385
36	DS 01-36/2014	Kota Semenanjung Enterprise	Nenggiri	76	27
37	DS 01(P)-37/2014 LBG	Syarikat Galas Setia (Ulu Kelantan) Sdn. Bhd.	Sg. Betis	197	65
38	DS 01-38/2014	Zasal Jaya Enterprise	Perias	180	70
39	DS 01-39/2014	Syarikat Seri Bintang Sdn. Bhd.	Perias	173	100
40	DS 01-40/2014	Kilang Papan A. Abdullah (GM) Sdn. Bhd.	Ulu Nenggiri	49	70
41	DS 01(P)-41/2014 LDG	Keruing Teknik Sdn. Bhd.	Gunung Rabong	38, 40 & 41	364.2

Source: Sahabat Alam Malaysia

REFERENCES

- Abadie, A., Diamond, A., & Hainmueller, J. (2010). Synthetic Control Methods for Comparative Case Studies: Estimating the Effect of California's Tobacco Control Program. *Journal of the American Statistical Association*, 105(490), 493-505.
- Abdul Razak M.A., Woon Weng Chuen, & Lim Hin-Fui. (2002). *Challenges in Implementing Forestry Related Policies in Malaysia*. A paper presented at IUFRO Science-Policy Interface Task Force Workshop, July 1.
- Abdullah, A. R., Weng, C. N., & Mohamed, B. (2013). *Potentials and Challenges of Involving Indigenous Communities in Ecotourism in Belum-Temenggor Forest Complex, Perak, Malaysia*. Paper presented at the International Conference on Tourism Development, Penang, Malaysia, 4-5 February, (332-344). Sustainable Tourism Research Cluster.
- Abdullah, A., Weng, C., & Som, A. (2011). The Potentials and Perils of Ecotourism in Belum Temenggor Forest Complex. *World Applied Sciences Journal*, 12(9), 1-9.
- Abrams, J., Wollstein, K., & Davis, E. J. (2018). State Lines, Fire Lines, and Lines of Authority: Rangeland Fire Management and Bottom-up Cooperative Federalism. *Land Use Policy*, 75, 252-259.
- Ackermann, C. and Steinmann, W. (1982). Privatized Policy-making: Administrative and Consociational Types of Implementation in Regional Economic Policy in Switzerland. *European Journal of Political Research*, 11, 173-185.
- Adham, K. A., Kasimin, H., Said, M. F., & Igel, B. (2012). Functions and Inter-relationships of Operating Agencies in Policy Implementation from a Viable System Perspective. *Systemic Practice and Action Research*, 25(2), 149-170.
- Agrawal, A., & Chhatre, A. (2007). State Involvement and Forest Co-governance: Evidence from the Indian Himalayas. *Studies in Comparative International Development*, 42(1-2), 67-86.
- Ahmat, S. (1984). *Tradition and Change in a Malay State: A Study of the Economic and Political Development of Kedah, 1878-1923*. Kuala Lumpur: Council of the Malaysian Branch of the Royal Asiatic Society.
- Aiken, R. S. and Leigh, C. H. (1986). Land-use Conflicts and Rainforest Conservation in Malaysia and Australia: The Endau-Rompin and Gordon-Franklin Controversies. *Land Use Policy*, 13(3), 161-179.
- Aiken, S. R., & Leigh, C. H. (1985). On the Declining Fauna of Peninsular Malaysia in the Post-Colonial Period. *Ambio*, 1, 15-22.
- Aiken, S. R., & Leigh, C. H. (1988). Environment and the Federal Government in Malaysia. *Applied Geography*, 8(4), 291-314.
- Aiken, S. R., & Leigh, C. H. (1992). *Vanishing Rainforests: The Ecological Transition in Malaysia*. Oxford, United Kingdom: Clarendon Press.
- Ali, A. (2015). Moving Selangor Forward with a Knowledge Economy. Special Luncheon Address by YAB Dato' Menteri Besar Selangor at *17th Malaysia Strategic Outlook*

Conference organised by Asian Strategy & Leadership Institute (ASLI). Sunway Resort Hotel, Selangor, 27 January. Retrieved from <http://azminali.com/moving-selangor-forward-with-a-knowledge-economy/>

- Allison, G. (1971) *Essence of Decision: Explaining the Cuban Missile Crisis*. Boston, MA: Little, Brown.
- Amarcher, G. S. (2000). Forest Policies and Many Governments. *Forest Science*, 48(1), 146-158.
- Anderson, G. (2008). Chapter Four: Dividing powers – Who Does What and How? In G. Anderson (Ed), *Federalism: An introduction* (pp. 21-29). Ontario, Canada: Oxford University Press.
- Ansori, S. (2013) *Policy Formulation Processes in Malaysia and Australia: Cultural Differences Do Matter*. Canberra, Australia: Australian National University.
- Anuar, A. R. (2000). Fiscal Decentralization in Malaysia. *Hitotsubashi Journal of Economics*, 41(2), 85-96.
- Arshed, N., Carter, S., & Mason, C. (2014). The Ineffectiveness of Entrepreneurship Policy: Is Policy Formulation to Blame?, *Small Business Economics*, 43(3), 639-659.
- Awang, M. K. (1998). *The Sultan and the Constitution*. Kuala Lumpur, Malaysia: Dewan Bahasa dan Pustaka.
- Aziz, M. K. A. (2011). Warisan Kesultanan Melayu: Surat-Menyurat Sultan Abdul Hamid dan Ekonomi Kedah. *SARI: Jurnal Alam dan Tamadun Melayu*, 29(2), 45-66.
- Azrai, A. (2012, June 22). SASET Launches Charity Gala. *The Edge Malaysia*. Retrieved from <http://www.theedgemarkets.com/article/saset-launches-charity-gala>
- Babbie, E. (2013). *The Practice of Social Research*. Belmont, CA: Wadsworth Cengage Learning.
- Bailey, S., & Bryant, R. (2005). *Third World Political Ecology: An Introduction*. London: Routledge.
- Bakir, C., & Jarvis, D. S. L. (2018). Institutional and Policy Change: Meta-theory and Method. In *Institutional Entrepreneurship and Policy Change* (pp. 1-38). Cham, Switzerland: Palgrave Macmillan.
- Bakvis, H., & Brown, D. (2010). Policy Coordination in Federal Systems: Comparing Intergovernmental Processes and Outcomes in Canada and the United States. *Publius: The Journal of Federalism*, 40(3), 484-507.
- Balvanera, P., Pfisterer, A. B., Buchmann, N., He, J. S., Nakashizuka, T., Raffaelli, D., & Schmid, B. (2006). Quantifying the Evidence for Biodiversity Effects on Ecosystem Functioning and Services. *Ecology Letters*, 9(10), 1146-1156.
- Bari, A. A. (2008). *Perlembagaan Malaysia: Asas-asas dan Masalah* (4th ed.). Malaysia: Dewan Bahasa dan Pustaka.

- Barrett, S. M. (2004). Implementation Studies: Time for a Revival? Personal Reflections on 20 years of Implementation Studies. *Public Administration*, 82(2), 249-262.
- Barrett, S., & Fudge, C. (1981). *Policy and Action: Essays on the Implementation of Public Policy*. London, England: Methuen.
- Baxter, P., & Jack, S. (2008). Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *The Qualitative Report*, 13(4), 544-559.
- Bees for Development. (2007, June). Threats to Malaysia's Bee Trees. *Bees for Development Journal*, 83, 6-8.
- Beiske, B. (2007) *Research Methods: Uses and Limitations of Questionnaires, Interviews and Case Studies*. Munich, Germany: GRIN Verlag.
- Berita Harian*. (2014, December 23). *Terkini: Banjir di Kelantan, Terengganu, Pahang Tambah Buruk*. Retrieved from <http://www.bharian.com.my/node/24876>.
- Berita Harian*. (2016, November 1). *Pahang, Kelantan dan Terengganu Bersiap bagi Banjir*. Retrieved from <http://www.beritaharian.sg/dunia/pahang-kelantan-dan-terengganu-bersiap-bagi-banjir>
- Bernama* (2015). *Bribery: Former District Forestry Officer fined RM70,000, ordered to return RM3.8 million to Government*. 26 February. <http://english.astroawani.com/malaysia-news/bribery-former-district-forestry-officer-fined-rm70-000-ordered-return-rm3-8-million-govt-54630>
- Berry, J. M. (2015). *Lobbying for the People: The Political Behavior of Public Interest Groups*. New Jersey, United States: Princeton University Press.
- Besley, T., & Ghatak, M. (2017). Public-private Partnerships for the Provision of Public Goods: Theory and an Application to NGOs. *Research in Economics*, 71(2), 356-371.
- Bhaskaran, S. (1999). Economic Meltdown in Malaysia: Down to Basics? A Review of Interest Group and Public Policy Trends in Malaysia's Dairy Farming Sector. *Journal of International Food & Agribusiness Marketing*, 10(2), 31-47.
- Biesbroek, G. R., Swart, R. J., Carter, T. R., Cowan, C., Henrichs, T., Mela, H. & Rey, D. (2010). Europe Adapts to Climate Change: Comparing National Adaptation Strategies. *Global Environmental Change*, 20(3), 440-450.
- Birkland, T. A. (2015). *An Introduction to the Policy Process: Theories, Concepts, and Models of Public Policymaking*. London: Routledge.
- Bishop, J., Kapila, S., Hicks, F., Mitchell, P., & Vorhies, F. (2009). New Business Models for Biodiversity Conservation. *Journal of Sustainable Forestry*, 28(3-5), 285-303.
- Bligh, A. (2008). Speech Anna Bligh MP Premier of Queensland at *Inaugural ANZSOG Public Lecture*. 4 July. Retrieved from http://www.thepremier.qld.gov.au/library/office/ANZOG_040708.doc4
- Bøhn, T., & Amundsen, P. A. (2004). Ecological Interactions and Evolution: Forgotten Parts of Biodiversity?, *AIBS Bulletin*, 54(9), 804-805.

- Boyd, J., & Banzhaf, S. (2007). What are Ecosystem Services? The Need for Standardized Environmental Accounting Units. *Ecological Economics*, 63(2), 616-626.
- Boyle, J. (1998). Cultural Influences on Implementing Environmental Impact Assessment: Insights from Thailand, Indonesia, and Malaysia. *Environmental Impact Assessment Review*, 18(2), 95-116.
- Braun, D. (2000). *Public Policy and Federalism*. Aldershot, United Kingdom: Edward Elgar.
- Bressers, H. (2004). Implementing Sustainable Development: How to Know What Works, Where, When and How. In W. M. Lafferty (Ed), *Governance for Sustainable Development: The Challenge of Adapting Form to Function* (pp. 284-318). Cheltenham, United Kingdom: Edward Elgar.
- Bressers, H. (2009). From Public Administration to Policy Networks: Contextual Interaction Analysis. In S. Narath & F. Varone (Eds.), *Rediscovering Public Law and Public Administration in Comparative Policy Analysis: A Tribute to Peter Knoepfel* (pp. 123-142). Lausanne, Switzerland: Presses Polytechniques.
- Bressers, H., & De Bruijn, T. (2005). Conditions for the Success of Negotiated Agreements: Partnerships for Environmental Improvement in the Netherlands. *Business Strategy and the Environment*, 14(4), 241-254.
- Bressers, H., De Bruijn, T., Lulofs, K., & O'Toole, L. J. (2011). Negotiation-based Policy Instruments and Performance: Dutch Covenants and Environmental Policy Outcomes. *Journal of Public Policy*, 31(2), 187-208.
- Bressers, J. T. A., & Dinica, V. (2003). The Implementation of Renewable Energy Policies: Theoretical Considerations and Experiences from Spain, Netherlands and United Kingdom. *Renewables for a Sustainable Energy Supply*, 39-45.
- Bressers, J. T., & Ringeling, A. B. (1996). Policy Implementation. In W. J. M. Kickert & F. A. van Vught (eds.). *Public Policy and Administration Sciences in the Netherlands*, 125-146.
- Bressers, J. T., Klok, P. J., O'Toole Jr, L. J., & Session, S. (2000). Explaining Policy Action: A Deductive but Realistic Theory. Paper presented at the Meetings of the International Political Science Association, Quebec City, Quebec, Canada, 1-5 August.
- Breukers, S., & Wolsink, M. (2007). Wind Power Implementation in Changing Institutional Landscapes: An International Comparison. *Energy Policy*, 35(5), 2737-2750.
- Brewer, G. A. & Selden, S. C. (1998). Whistle Blowers in the Federal Civil Service: New Evidence of the Public Service Ethic. *Journal of Public Administration Research and Theory*, 8, 413-439.
- Brinkerhoff, D. W. (1996). Coordination Issues in Policy Implementation Networks: An Illustration from Madagascar's Environmental Action Plan. *World Development*, 24(9), 1497-1510.
- Brodkin, E. Z. (2011). Policy Work: Street-level Organizations Under New Managerialism. *Journal of Public Administration Research and Theory*, 21, i253-i277.

- Brown, G. K., Ali, S. H., & Muda, W. M. W. (2004). Policy Levers in Malaysia. Centre for Research on Inequality, Human Security and Ethnicity, CRISE. Queen Elizabeth House: University of Oxford. CRISE Policy Context Paper: 4 May 2004.
- Browne, A. and Wildavsky, A. (1984). Implementation as Mutual Adaptation. In J. L. Pressman & A. Wildavsky (Eds). *Implementation* (pp. 206–231). Berkeley, CA: University of California Press.
- Brundtland Commission. (1987). *Our Common Future: Report of the World Commission on Environment and Development*. UN Documents Gathering a Body of Global Agreements.
- Buck, A. J., Gross, M., Makin, S., & Weinblatt, J. (1993). Using the Delphi Process to Analyse Social Policy Implementation: A Post hoc Case from Vocational Rehabilitation. *Policy Sciences*, 26(4), 271-288.
- Bull, J. W., Suttle, K. B., Gordon, A., Singh, N. J., & Milner-Gulland, E. J. (2013). Biodiversity Offsets in Theory and Practice. *Oryx*, 47(03), 369-380.
- Bullock, C. S., & Rodgers, H. R. (1976). Coercion to Compliance: Southern School Districts and School Desegregation Guidelines. *Journal of Politics*, 38(4), 987-1011.
- Burns N., & Grove S. K. (2005). *The Practice of Nursing Research: Conduct, Critique & Utilization*. St Louis, MO: Elsevier Saunders.
- Cahn, M. A. (2013). Institutional and Non-institutional Actors in the Policy Process. In *Public Policy: The Essential Readings*, 2nd ed., ed. Theodoulou, S. Z. and Cahn, M. A. Boston: Pearson.
- Cairns, R. D. (1992). Natural Resources and Canadian Federalism: Decentralization, Recurring Conflict, and Resolution. *Publius: The Journal of Federalism* 22(1), 55-70.
- Calister, D. J. (1999). *Corrupt and Illegal Activities in the Forest Sector: Current Understandings and Implications for the World Bank*. Background paper for the 2002 Forest Strategy.
- Cameron, D., & Simeon, R. (2002). Intergovernmental relations in Canada: The emergence of collaborative federalism. *Publius: The Journal of Federalism*, 32(2), 49-72.
- Cameron, J. (1965). *Our tropical possessions in Malayan India*. Oxford in Asia Historical Reprint. Kuala Lumpur: Oxford University Press, pp. 127-28.
- Cameron, M. A., & Falleti, T. G. (2005). Federalism and the subnational separation of powers. *Publius: The Journal of Federalism*, 35(2), 245-271.
- Canes-Wrone, B. (2003). Bureaucratic decisions and the composition of the lower courts. *American Journal of Political Science*, 47, 205–214.
- Cardinale, B. J., Duffy, J. E., Gonzalez, A., Hooper, D. U., Perrings, C., Venail, P., & Kinzig, A. P. (2012). Biodiversity loss and its impact on humanity. *Nature*, 486(7401), 59.
- Carter, A. V., Fraser, G. S., & Zalik, A. (2017). Environmental policy convergence in Canada's fossil fuel provinces? Regulatory streamlining, impediments, and drift. *Canadian Public Policy*, 43(1), 61-76.

- Case, W. (2004). New uncertainties for an old pseudo-democracy: The case of Malaysia. *Comparative Politics*, 83-104.
- Chapin III, F. S., Walker, B. H., Hobbs R. J., Hooper D. U., Lawton J. H., Sala O. E., & Tilman D. (1997). Biotic control over the functioning of ecosystems. *Science*, 277, 500–504.
- Ching, O. O., & Leong, T. F. (2011). Orang Asli and wildlife conservation in the Belum-Temengor forest complex, Malaysia. *TRAFFIC Bulletin* Vol. 23(3), 94.
- Chye, L. I. M. K. I. M (2010). Belum-Temengor Forest Complex, North Peninsular Malaysia. *Landscape*, 14, 15-22.
- Clarke-Sather, A., Qu, J., Wang, Q., Zeng, J., & Li, Y. (2011). Carbon inequality at the sub-national scale: A case study of provincial-level inequality in CO 2 emissions in China 1997–2007. *Energy Policy*, 39(9), 5420-5428.
- Clements, R., Rayan, D. M., Zafir, A. W. A., Venkataraman, A., Alfred, R., Payne, J., & Sharma, D. S. K. (2010). Trio under threat: Can we secure the future of rhinos, elephants and tigers in Malaysia? *Biodiversity and Conservation*, 19(4), 1115-1136.
- Coelho, F., & Augusto, M. (2010). Job characteristics and the creativity of frontline service employees. *Journal of Service Research*, 13(4), 426-438.
- Coffey, J. W., & Hoffman, R. R. (2003). Knowledge modeling for the preservation of institutional memory. *Journal of Knowledge Management*, 7(3), 38-52.
- Cole, D. H., & Grossman, P. Z. (2018). When is command-and-control efficient? Institutions, technology, and the comparative efficiency of alternative regulatory regimes for environmental protection. In *The Theory and Practice of Command and Control in Environmental Policy* (pp. 115-166). Routledge.
- Collins, E. (2015). Alternative routes: Intergovernmental relations in Canada and Australia. *Canadian Public Administration*, 58(4), 591-604.
- Conlan, T. (2006). From Cooperative to Opportunistic Federalism: Reflections on the Half-Century Anniversary of the Commission on Intergovernmental Relations. *Public Administration Review*, 66(5), 663-676.
- Constitution of Malaysia. (1998). Kuala Lumpur, Malaysia: International Law Book Service.
- Consumer Association of Penang. (2002). *The lack of vision of the National Vision Policy*. Retrieved from Social Watch <http://unpan1.un.org/intradoc/groups/public/documents/apcity/unpan007053.pdf>
- Conteh, C. (2013). Administering Regional Development Policy in Socioeconomically Disadvantaged Regions. In . Conteh and B. Segsworth (eds) *Governance in Northern Ontario: Economic Development and Policy Making*. Toronto: University of Toronto Press, pp.43-57.
- Crotty, P. M. (1987). The new federalism game: Primacy implementation of environmental policy. *Publius: The Journal of Federalism*, 17(2), 53-67.

- Davis, C., Daviet, F., Nakhooda, S., & Thuault, A. (2009). *A review of 25 readiness plan idea notes from the World Bank Forest Carbon Partnership Facility* (WRI Working Paper). World Resources Institute, Washington, DC.
- Davis, J. (2004). Corruption in public service delivery: Experience from South Asia's water and sanitation sector. *World Development*, 32(1), 53-71.
- De Boer, C. (2012). *Contextual water management: A study of governance and implementation processes in local stream restoration projects*. Doctoral Thesis. Netherlands: University of Twente.
- De Boer, C., & Bressers, H. (2013). *Analyzing the renaturalization of the Dutch Regge River: Complex and dynamic implementation process*. Twente, Netherlands: University of Twente in collaboration with the Dutch Water Governance Centre.
- De Mesquita, B. B. (2004). Decision-making models, rigor and new puzzles. *European Union Politics*, 5(1), 125-138.
- De Oliveira, J. A. P. (2002). Implementing environmental policies in developing countries through decentralization: the case of protected areas in Bahia, Brazil. *World Development*, 30(10), 1713-1736.
- De Oliveira, J. A. P. (2009). The implementation of climate change related policies at the subnational level: An analysis of three countries. *Habitat International*, 33(3), 253-259.
- DeLeon, P., & DeLeon, L. (2002). What ever happened to policy implementation? An alternative approach. *Journal of Public Administration Research and Theory: J-PART*, 12(4), 467-492.
- Deleon, P., & Resnick-Terry, P. (1998). Comparative policy analysis: Déjà vu all over again? *Journal of Comparative Policy Analysis: Research and Practice*, 1(1), 9-22.
- Department of Statistics Malaysia (2012). Household Income and Basic Amenities Survey 2012 Report. Kuala Lumpur, Malaysia: Department of Statistics Malaysia. Retrieved from https://www.dosm.gov.my/v1/index.php?r=column/cone&menu_id=U1V1bUxzUWo0L3FEaWZmUVg4ZFQzZz09
- Department of Statistics Malaysia (2016). Press Release: GDP by State, 2010-2015. Kuala Lumpur, Malaysia: Department of Statistics Malaysia. Retrieved from <https://www.dosm.gov.my/v1/index.php?r=column/pdfPrev&id=Y1NNYUhXOG14MTNQeEpCbXJVNURkZz09>
- Department of Town and Country Planning Department Peninsular Malaysia. (2010). Laporan Akhir Central Forest Spine: Pelan Induk Rangkaian Ekologi. Kuala Lumpur: Department of Town and Country Planning Peninsular Malaysia.
- Department of Town and Country Planning Peninsular Malaysia. (2010). Laporan Akhir Central Forest Spine: Pelan Induk Rangkaian Ekologi. Jabatan Perancang Bandar dan Desa.
- Department of Town and Country Planning Peninsular Malaysia. (2018). Fungsi JPBD Semenanjung Malaysia. Retrieved from <https://www.townplan.gov.my/content.php?ID=20>

- Department of Wildlife and National Parks Peninsular Malaysia. (2008). National Tiger Action Plan for Malaysia. Kuala Lumpur, Malaysia.
- Department of Wildlife and National Parks Peninsular Malaysia. (2018). Mission, Vision and Objective. Retrieve from <http://www.wildlife.gov.my/index.php/en/2016-04-11-03-50-17/2016-04-11-03-57-37/objektif>
- Desai, U. (1989). Public participation in environmental policy implementation: Case of the Surface Mining Control and Reclamation Act. *The American Review of Public Administration*, 19(1), 49-65.
- Dimitrakopoulos, D. G. (2018). The power of the centre: central governments and the macro-implementation of EU public policy. *Public Administration*, 87(4), 987-989.
- Dredge, D., & Jenkins, J. (2003). Federal–state relations and tourism public policy, New South Wales, Australia. *Current Issues in Tourism*, 6(5), 415-443.
- Dwivedi, O., Khator, R., & Nef, J. (2007). Managing development in a global context. Springer.
- Easton, G. (2010). Critical realism in case study research. *Industrial Marketing Management*, 39, 118–128.
- Eaton, S., & Kostka, G. (2014). Authoritarian environmentalism undermined? Local leaders' time horizons and environmental policy implementation in China. *The China Quarterly*, 218, 359-380.
- Eckersley, R. (2007). Green Theory. In D., Tim, M., Kurki, and S., Smith, International Relations Theory. Oxford: Oxford University Press.
- Eckstein, H. (2000). Chapter 6: Case study and theory in political science. In R. Gomm, M., Hammersley, & P., Foster (eds) Case study method, 119-164. London: SAGE Publications.
- Economic Planning Unit. (1998). Mid-term Review of 7th Malaysia Plan. Prime Minister's Office Malaysia.
- Economic Planning Unit. (2003). Mid-term Review of 8th Malaysia Plan. Prime Minister's Office Malaysia.
- Economic Planning Unit. (2006). 9th Malaysia Plan. Prime Minister's Office Malaysia.
- Economic Planning Unit. (2008). Mid-term Review of 9th Malaysia Plan. Prime Minister's Office Malaysia.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532-550.
- Elazar, D. J. (1962). *The American partnership: Intergovernmental co-operation in the nineteenth-century United States*. Chicago, IL: University of Chicago Press.
- Elazar, D. J. (1972). *American federalism: A view from the States* (2nd ed). New York, NY: Crowell.

- Elazar, D. J. (1987). *Exploring federalism*. Tuscaloosa, AL: University of Alabama Press.
- Elazar, D. J. (2000). Introduction: From Biblical Covenant to Modern Federalism: The Federal Theology Bridge. In Elazar, D. J. & Kincaid, J. (Eds.), *The Covenant Connection: From Federal Theology to Modern Federalism* (pp.1-14). Oxford, England: Lexington Books.
- Eliadis, P., Hill, M. M., & Howlett, M. (2005). Designing government: from instruments to governance. McGill-Queen's Press-MQUP.
- Ellis, K. (2011). 'Street-level bureaucracy' revisited: the changing face of frontline discretion in adult social care in England. *Social Policy & Administration*, 45(3), 221-244.
- Elmore, R. F. (1978). Organizational models of social program implementation. *Public Policy*, 26(2), 185-228.
- Elmore, R. F. (1979). Backward mapping: Implementation research and policy decisions. *Political Science Quarterly*, 94(4), 601-616.
- Engel, K. H. (2006). Harnessing the benefits of dynamic federalism in environmental law. *Emory Law Journal*, 56, 159-188.
- Erkuş-Öztürk, H. (2011). Institution-based Approach in Sustainable Tourism: Emerging Importance of Environmental Associations in Turkey. In *Sustainability of Tourism: Cultural and Environmental Perspectives* (Vol. 155, No. 181, pp. 155-181). Cambridge Scholars Publishing in association with GSE Research.
- Etzioni, A. (1961). *A comparative analysis of complex organizations*. New York, NY: Free Press.
- Evans, T. (2010). Professionals, managers and discretion: Critiquing street-level bureaucracy. *The British Journal of Social Work*, 41(2), 368-386.
- Evans, T. (2016). *Professional discretion in welfare services: Beyond street-level bureaucracy*. London: Routledge.
- Evans, T., & Harris, J. (2004). Street-level bureaucracy, social work and the (exaggerated) death of discretion. *British Journal of Social Work*, 34, 871-895.
- Exworthy, M., & Powell, M. (2004). Big windows and little windows: Implementation in the 'congested state'. *Public Administration*, 82(2), 263-281.
- Fahrig, L. (2003). Effects of habitat fragmentation on biodiversity. *Annual Review of Ecology, Evolution, and Systematics*, 34, 487-515.
- Fairhead, J., Leach, M., & Scoones, I. (2012). Green grabbing: A new appropriation of nature? *Journal of Peasant Studies*, 39(2), 237-261.
- Faruqi, S. S. (2007, February 8). Powers and functions of state rulers. The Malaysian Bar. Retrieved from http://www.malaysianbar.org.my/constitutional_law/powers_and_functions_of_state_rulers.html

- Faruqi, S. S. (2008). *Document of destiny: The constitution of the Federation of Malaysia*. Petaling Jaya, Malaysia: Star Publications.
- Feeley, M. M., & Rubin, E. L. (2009). *Federalism: Political identity and tragic compromise*. Ann Arbor, MI: University of Michigan Press.
- Fenna, A. (2006, September). What Use is Federalism Anyway?. In *Refereed paper presented to the Australasian Political Studies Association conference* (p. 2).
- Fenna, A. (2007). The malaise of federalism: comparative reflections on commonwealth–state relations. *Australian Journal of Public Administration*, 66(3), 298-306.
- Ferraro, P. J., & Kiss, A. (2002). Direct payments to conserve biodiversity. *Science*, 298, 1718-1719.
- Flanigan, S. T. (2013). Bureaucratic Discretion and Same-Sex Couples: Considering Administrative Advocacy as an Activism Strategy. *Administrative Theory & Praxis*, 35(3), 448-456.
- Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative Inquiry*, 12(2), 219-245.
- Forder, J. (1996). On the assessment and implementation of ‘institutional’ remedies. *Oxford Economic Papers*, 48(1), 39-51.
- Frank, D. J., Hironaka, A., & Schofer, E. (2000). The nation-state and the natural environment over the twentieth century. *American Sociological Review*, 65(1), 96-116.
- Frank, D. J., Longhofer, W., & Schofer, E. (2007). World society, NGOs and environmental policy reform in Asia. *International Journal of Comparative Sociology*, 48(4), 275-295.
- Fraser, D. R., Zhang, H., & Derashid, C. (2006). Capital structure and political patronage: The case of Malaysia. *Journal of Banking & Finance*, 30(4), 1291-1308.
- Gabris, G. T., & Simo, G. (1995). Public sector motivation as an independent variable affecting career decisions. *Public Personnel Management*, 24, 33-51.
- Galligan, B. (2006). 21 Institutions of federalism and decentralized government. *Handbook of fiscal federalism*, 521-543.
- Gamfeldt, L., Hillebrand, H., & Jonsson, P. R. (2008). Multiple functions increase the importance of biodiversity for overall ecosystem functioning. *Ecology*, 89(5), 1223-1231.
- Gamkhar, S., & Pickerill, J. M. (2012). The state of American federalism 2011–2012: A fend for yourself and activist form of bottom-up federalism. *Publius: The Journal of Federalism*, 42(3), 357-386.
- Gamkhar, S., & Vickers, J. (2010). Comparing federations: Lessons from comparing Canada and the United States. *Publius: The Journal of Federalism*, 40(3), 351-356.
- Gan, P. L. (2011). No to de-gazetting of forest reserve. *Selangor Times*, Issue 14 (March 4-6), 4.

- Gerlak, A. K. (2006). Federalism and US water policy: Lessons for the twenty-first century. *Publius: The Journal of Federalism*, 36(2), 231-257.
- Geva-May, I. (2002). Comparative studies in public administration and public policy. *Public Management Review*, 4(3), 275-290.
- Gibbs, H. K., Brown, S., Niles, J. O., & Foley, J. A. (2007). Monitoring and estimating tropical forest carbon stocks: Making REDD a reality. *Environmental Research Letters*, 2(4), 045023.
- Gill, S. K. (2006). Change in language policy in Malaysia: The reality of implementation in public universities. *Current Issues in Language Planning*, 7(1), 82-94.
- Glicksman, R. L. (2006). From cooperative to inoperative federalism: The perverse mutation of environmental law and policy. *Wake Forest Law Review*, 41, 719-803.
- Goggin, M. L. (1986). The "too few cases/too many variables" problem in implementation research. *Western Political Quarterly*, 39(2), 328-347.
- Goggin, M. L., Bowman, A. O., Lester, J., & O'Toole, L. (1990). *Implementation theory and practice: Toward a third generation*. Glenview, ILL: Scott Foresman and Co.
- Gomez, T. & Jomo, K.S. (1997), *The Political Economy of Malaysia*. Melbourne: Cambridge University Press.
- Gramlich, E. M. (1987). Federalism and federal deficit reduction. *National Tax Journal*, 40, 299-313.
- Greenstone, M., & Hanna, R. (2014). Environmental regulations, air and water pollution, and infant mortality in India. *American Economic Review*, 104(10), 3038-72.
- Grindle, M. S. (2017). *Politics and policy implementation in the Third World* (Vol. 4880). New Jersey, United States: Princeton University Press.
- Gu, L., & Sheate, W. R. (2005). Institutional challenges for EIA implementation in China: a case study of development versus environmental protection. *Environmental Management*, 36(1), 125-142.
- Guo, J. (2014). Learning through international cooperation: A case study of two Chinese counties implementing the Grain for Green project. *Asia Pacific Journal of Public Administration*, 36(3), 201-210.
- Gupta, K. (2012). Comparative public policy: Using the comparative method to advance our understanding of the policy process. *Policy Studies Journal*, 40(s1), 11-26.
- Hague, R., & Harrop, M. (2013). *Comparative government and politics: An introduction*. New York: Palgrave Macmillan.
- Haila, Y and Kouki, J. (1994) The phenomenon of biodiversity in conservation biology. *Annales Zoologici Fennici* 31: 5-18.

- Halkier, H. (2000). *Regional policy: An inter-organisational approach* (Regional and Industrial Policy Research Paper Number 37, February). European Policies Research Centre, University of Strathclyde.
- Hall, P. A., & Taylor, R. C. (1996). Political science and the three new institutionalisms. *Political Studies*, 44(5), 936-957.
- Hammond, D. (1997). *Asia-Pacific forestry sector outlook study* (Working Paper Series, No: APFSOS/WP/22, Commentary on forest policy in the Asia-Pacific Region. A review for Indonesia, Malaysia, New Zealand, Papua New Guinea, Philippines, Thailand and Western Samoa). Bangkok, Thailand: Forestry Policy and Planning Division, Rome & Regional Office for Asia and the Pacific.
- Hanf, K., & Scharpf, F. W. (1978). *Interorganizational policy making: Limits to coordination and central control*. London, England: SAGE.
- Happaerts, S., Schunz, S., & Bruyninckx, H. (2012). Federalism and intergovernmental relations: The multi-level politics of climate change policy in Belgium. *Journal of Contemporary European Studies*, 20(4), 441-458.
- Hashim, H., & Shuib, K. B. (2012). Comparing economic and social indicators towards sustainable development in Selangor, Malaysia. *OIDA International Journal of Sustainable Development*, 3(12), 39-48.
- Hassenfeld, Y., & Brock, T. (1991). Implementation of social policy revisited. *Administration & Society*, 22, 451-479.
- Hays, S. P., Esler, M., & Hays, C. E. (1996). Environmental commitment among the states: Integrating alternative approaches to state environmental policy. *Publius: The Journal of Federalism*, 26(2), 41-58.
- Hezri, A. A. (2004) Sustainability indicator system and policy process in Malaysia: A framework for utilization and learning. *Journal of Environmental Management*, 73(4), 357-371.
- Hezri, A. A. (2014). Mainstreaming environment and sustainable development policies. In M. L. Weiss (ed) *Routledge Handbook of Contemporary Malaysia*, pp.226-235. New York, United States: Routledge.
- Hezri, A. A., & Dovers, S. R. (2013). 13 Shifting the policy goal from environment to sustainable development. In H. Hill, S. Y. Tham & R. H. M. Zin (eds) *Malaysia's Development Challenges: Graduating from the Middle*, 11, 276-294. New York, United States: Routledge.
- Hezri, A. A., & Hasan, M. N. (2006). Towards sustainable development? The evolution of environmental policy in Malaysia. *Natural Resources Forum*, 30(1), 37-50.
- Hill, M. J., & Hupe, P. L. (2002). *Implementing public policy: Governance in theory and practice* (No. 04; H97, H5). London, England: SAGE.
- Hill, M., & Hupe, P. (2006). Analysing policy processes as multiple governance: Accountability in social policy. *Policy & Politics*, 34(3), 557-573.
- Hill, M., & Hupe, P. (2014). *Implementing Public Policy. An Introduction to the Study of Operation Governance*. London, United Kingdom: SAGE.

- Hills, P., & Man, C. S. (1998). Environmental regulation and the industrial sector in China: the role of informal relationships in policy implementation. *Business Strategy and the Environment*, 7(2), 53-70.
- Hisamuddin, T., Selamat, A. & Mustapha, M. L. (2009). *Sustainable development initiatives in the Malaysian mineral industry*. Paper presented at APEC Conference on Sustainable Development of Mining Sector in APEC, Singapore, 23-24 July.
- Hjern, B., & Hull, C. (1982). Implementation research as empirical constitutionalism. *European Journal of Political Research*, 10, 105–116.
- Hoare, A. (2015). *Illegal logging and related trade: The response in Malaysia*. London, United Kingdom: Chatham House.
- Holland, K. M., Morton, F. L., & Galligan, B. (1996) *Federalism and the environment: Environmental policymaking in Australia, Canada and the United States*. Westport, CT: Greenwood Press.
- Hollander, R. (2009). Rethinking overlap and duplication: Federalism and environmental assessment in Australia. *Publius: The Journal of Federalism*, 40(1), 136-170.
- Hooper, D. U., Chapin, F. S., Ewell, J. J., Hector, A., Inchausti, P., & Lavorel, S. (2005). Effects of biodiversity on ecosystem functioning: A consensus of current knowledge. *Ecological Monographs*, 75, 3–35.
- Hophmayer-Tokich, S. (2012). Interaction processes between key actors: Understanding implementation processes of legislation for water pollution control, the Israeli case. INTECH Open Access Publisher.
- House, C. (2010). A model for the implementation of ICM in the Mediterranean region. *Journal of Coastal Conservation*, 14(4), 273-284.
- Howlett, M. (2004). Beyond good and evil in policy implementation: Instrument mixes, implementation styles, and second generation theories of policy instrument choice. *Policy and Society*, 23(2), 1-17.
- Hueglin, T. O., & Fenna, A. (2015). *Comparative federalism: A systematic inquiry*. Toronto, Canada: University of Toronto Press.
- Hupe, P. (2014). What happens on the ground: Persistent issues in implementation research. *Public Policy and Administration*, 29(2), 164-182.
- Hupe, P. L. (2011). 10. Revisiting Pressman and Wildavsky: implementation and the thickness of hierarchy. *Policy, Performance and Management in Governance and Intergovernmental Relations: Transatlantic Perspectives*, 156.
- Hupe, P., & Buffat, A. (2014). A public service gap: Capturing contexts in a comparative approach of street-level bureaucracy. *Public Management Review*, 16(4), 548-569.
- Husin Ali, S. (1993). *Isu raja dan pindaan perlembagaan. Edisi Kedua*. Petaling Jaya, Selangor, Malaysia: Vinlin Press Sdn. Bhd.

- Husin Ali, S. (2013). *The Malay Rulers: Regression or reform?* Petaling Jaya, Selangor, Malaysia: Strategic Information and Research Development Centre.
- Ingram, H., & Schneider, A. (1990). Improving implementation through framing smarter statutes. *Journal of Public Policy*, 10(1), 67-88.
- International Union for Conservation of Nature. (2018). Summary Statistics: Summary by Country. Retrieved from http://cmsdocs.s3.amazonaws.com/summarystats/2018-1_Summary_Stats_Page_Documents/2018_1_RL_Stats_Table_5.pdf
- Ismail, R. (2012). Policy convergence in international biodiversity regimes: A perspective from Malaysia. *International Journal of Humanities and Social Sciences*, 12(19), 309-316.
- Jayum, A. J. (2008). *Malaysian politics and government* (5th ed). Malaysia: Karisma Publication.
- Jennings, P. D., & Zandbergen, P. A. (1995). Ecologically sustainable organizations: An institutional approach. *Academy of Management Review*, 20(4), 1015-1052.
- Johan, K. (1984). *The emergence of the modern Malay administrative elite*. Singapore: Oxford University Press.
- Johns, C. M., O'reilly, P. L., & Inwood, G. J. (2006). Intergovernmental innovation and the administrative state in Canada. *Governance*, 19(4), 627-649.
- Johnson, D. A., & Milner, A. (2005). Westminster implanted: The Malaysian experience. In Patapan, H., Wanna, J. & Weller, P. (Eds), *Westminster legacies, democracy and responsible government in Asia Pacific*. Sydney, Australia: University of New South Wales Press, (pp.81-108).
- Jomo, K. S., Chang, Y. T., & Khoo, K. J. (2004). *Deforesting Malaysia: The political economy and social ecology of agricultural expansion and commercial logging*. London, UK: Zed Books.
- Jones, S. W. (1953). *Public administration in Malaya*. London: Royal Institute of International Affairs.
- Jordan, A. (1999). The implementation of EU environmental policy: A policy problem without a political solution? *Environment and Planning C. Government & Policy*, 17(1), 69-90.
- Jordan, A., & Tosun, J. (2012). 14 Policy implementation. In A. Jordan & C. Adelle (eds) *Environmental Policy in the EU: Actors, Institutions and Processes*. Pp.247-266. New York: Routledge.
- Jørgensen, K., Mishra, A., & Sarangi, G. K. (2015). Multi-level climate governance in India: the role of the states in climate action planning and renewable energies. *Journal of Integrative Environmental Sciences*, 12(4), 267-283.
- Juntti, M., & Potter, C. (2002). Interpreting and reinterpreting agri-environmental policy: Communication, trust and knowledge in the implementation process. *Sociologia Ruralis*, 42(3), 215-232.

- Kaljonen, M. (2006). Co-construction of agency and environmental management. case of agri-environmental policy implementation at Finnish farms. *Journal of Rural Studies*, 22(2), 205-216.
- Kaneko, Y. (2002). Malaysia: Dual structure in the state-NGO relationship. In Shigetomi, S. (eds), *The state and NGOs: Perspective from Asia*, pp.178-199. Singapore: Institute of Southeast Asian Studies.
- Kangayatkarasu, N. (2018). *Biodiversity governance in Peninsular Malaysia-identifying conservation priorities, evaluating the impact of federalism and assessing the governance of protected areas*. Doctoral dissertation. Malaysia: University of Nottingham.
- Kanowski, P. J., McDermott, C. L., & Cashore, B. W. (2011). Implementing REDD+: Lessons from analysis of forest governance. *Environmental Science & Policy*, 14(2), 111-117.
- Kapucu, N., Arslan, T., & Collins, M. L. (2010). Examining intergovernmental and interorganizational response to catastrophic disasters: Toward a network-centered approach. *Administration & Society*, 42(2), 222-247.
- Kathirithamby-Wells, J. (2005). *Nature and nation: Forests and development in peninsular Malaysia* (No. 9). Singapore: NUS Press.
- Kaur, R., Ong, T., Lim, K. C., & Yeap, C. A. (2011). A survey on mass movements of the vulnerable plain-pouched hornbill in the Belum-Temengor forest complex, peninsular Malaysia. *Raffles Bulletin of Zoology*, 24, 171-176.
- Kawanishi, K., Gumal, M., Soosayraj, L. A., Goldthorpe, G., Shepherd, C. R., Krishnasamy, K., & Hashimm, A. K. A. (2010). The Malayan tiger. *Tigers of the world: The science, politics, and conservation of Panthera tigris* (2nd ed.) (pp. 367-76). London, England: Elsevier.
- Kelantan Land and Mines Department. (2018). Government of Kelantan: Enactment No. 26 of 1938. Retrieved from http://www.ptg.kelantan.gov.my/v3/index.php?option=com_docman&task=doc_download&gid=238&Itemid=37
- Kelantan State Forestry Department. (2018). Fungsi Jabatan. Retrieved from <http://forestry.pahang.gov.my/index.php/profil/fungsi>
- Khan, M. M. (2014). *Big 5 Malaysian animal series: The Malayan tiger*. Kuala Lumpur: Institut Terjemahan & Buku Malaysia.
- Kheng, C. B. (1994). Feudalism in pre-Colonial Malaya: The past as a colonial discourse. *Journal of Southeast Asian Studies*, 25(2), 243-269.
- Kheng, C. B. (2009). The Communist insurgency in Malaysia, 1948-90: Contesting the nation-state and social change. *New Zealand Journal of Asian Studies*, 11(1), 132-152.
- Kim, Y. S., Bae, J. S., Fisher, L. A., Latifah, S., Afifi, M., Lee, S. M., & Kim, I. A. (2016). Indonesia's forest management units: effective intermediaries in REDD+ implementation?. *Forest Policy and Economics*, 62, 69-77.
- Kincaid, J. (Ed.). (2011). *Federalism: Alternative Models, Constitutional Foundations, and Institutional Features of Federal Governance*. Los Angeles, United States: SAGE.

- King, G., Keohane, R. O., & Verba, S. (1994). *Designing social inquiry: Scientific inference in qualitative research*. New Jersey, United States: Princeton University Press.
- Knill, C., & Lenschow, A. (1998). Coping with Europe: The impact of British and German administrations on the implementation of EU environmental policy. *Journal of European Public Policy*, 5(4), 595-614.
- Knoepfel, P., Nahrath, S., & Varone, F. (2007). Institutional Regimes for Natural Resources: An Innovative Theoretical Framework for Sustainability (2007). In *Environmental Policy Analyses* (pp. 455-506). Berlin, Heidelberg: Springer.
- Knoke, D., & Wright-Isak, C. (1982). Individual motives and organizational incentive systems. *Research in the Sociology of Organizations*, 1(2), 209-254.
- Konisky, D. M., & Woods, N. D. (2012). Measuring state environmental policy. *Review of Policy Research*, 29(4), 544-569.
- Koontz, T. M., & Newig, J. (2014). From Planning to Implementation: Top-Down and Bottom-Up Approaches for Collaborative Watershed Management. *Policy Studies Journal*, 42(3), 416-442.
- Kotzebue, J. R., Bressers, H. T. A., & Yousif, C. (2010). Spatial misfits in a multi-level renewable energy policy implementation process on the Small Island State of Malta. *Energy Policy*, 38(10), 5967-5976.
- Kraft, M. E., & Scheberle, D. (1998). Environmental federalism at decade's end: New approaches and strategies. *Publius: The Journal of Federalism*, 28(1), 131-146.
- Kubo, H. (2010). Understanding discretionary decision making of frontline bureaucrats in state forestland management: a case from java, Indonesia. *Society and Natural Resources*, 23(3), 240-253.
- Kusmanoff, A. (2017). Framing the conservation conversation: an investigation into framing techniques for communicating biodiversity conservation.
- Lafferty, W., & Hovden, E. (2003). Environmental policy integration: Towards an analytical framework. *Environmental Politics*, 12(3), 1-22.
- Landman, T. (2008). *Issues and methods in comparative politics: An introduction*. New York: Routledge.
- Langbein, L. (2009). Controlling federal agencies: The contingent impact of external controls on worker discretion and productivity. *International Public Management Journal*, 12(1), 82-115.
- Lau, A. (1989). Malayan Union citizenship: Constitutional change and controversy in Malaya, 1942-48. *Journal of Southeast Asian Studies*, 20(2), 216-243.
- Lee, D., & McGuire, M. (2017). Intergovernmental Alignment, Program Effectiveness, and US Homelessness Policy. *Publius: The Journal of Federalism*, 47(4), 622-647.
- Lee, J. (2014). Environmental legislative standstill and bureaucratic politics in the USA. *Policy Studies*, 35(1), 40-58.

- Legard, R., Keegan, J., and Ward, K. (2003) In-depth interviews. In: Ritchie, J. and Lewis, J. (eds). *Qualitative Research Practice: A Guide for Social Science Students and Researchers*. London: Sage, 138–169.
- Lemons, J., & Morgan, P. (1995). Conservation of biodiversity and sustainable development. In *Sustainable Development: Science, Ethics, and Public Policy* (pp. 77-109). Dordrecht, Netherlands: Springer.
- Lent, J. A. (1979). Social change and the human right of freedom of expression in Malaysia. *Universal Human Rights*, 1(3), 51-60.
- LeRoy, K., & Saunders, C. (Eds.) (2006). *Legislative, executive and judicial governance in federal countries, forum of federations and international associations of centres for federal studies. A global dialogue on federalism* (Vol. 3). Montreal, Canada: McGill-Queen's University Press.
- Leroy, P., & Arts, B. (2006). Institutional dynamics in environmental governance. In *Institutional dynamics in environmental governance* (pp. 1-19). Dordrecht, Netherlands: Springer.
- Lester, J. P. (1995). Federalism and state environmental policy. *Environmental politics and policy: Theories and evidence*, pp.39-60. Durham, NC: Duke University Press
- Lester, J. P., Bowman, A. O'M., Goggin, M.L. and O'Toole, L. J. Jr (1987). Public policy implementation: Evolution of the field and agenda for future research. *Policy Studies Review*, 7(1), 200–216.
- Levin, D. Z., & Cross, R. (2004). The strength of weak ties you can trust: The mediating role of trust in effective knowledge transfer. *Management science*, 50(11), 1477-1490.
- Levitt, J. N. (Ed.). (2005) *Walden to Wallstreet: Frontiers of conservation finance*. Washington, DC: Island Press.
- Lijphart, A. (1999). *Patterns of democracy*. New Haven, CT: Yale University Press.
- Lim, P. P. H., & Wong, D. (Eds.). (2000). *War and memory in Malaysia and Singapore*. Institute of Southeast Asian Studies.
- Linder, S. H., & Peters, B. G. (1987). Relativism, contingency, and the definition of success in implementation research. *Review of Policy Research*, 7(1), 116-127.
- Linder, S. H., & Peters, B. G. (1990). An institutional approach to the theory of policy-making: The role of guidance mechanisms in policy formulation. *Journal of Theoretical Politics*, 2(1), 59-83.
- Lipsky, M. (1980). *Street-level bureaucracy: Dilemmas of the individual in public services*. New York, New York: Russell Sage Foundation.
- Loh, C. L., Kaur, R. & Ong, T. (n.d.). Towards an integrated management plan for Belum-Temengor rainforest: Concept and strategy. Working paper prepare by The Malaysian Nature Society. Access online at: [http://www.darwininitiative.org.uk/documents/EIDPO029/21536/EIDPO029%20AR1%](http://www.darwininitiative.org.uk/documents/EIDPO029/21536/EIDPO029%20AR1%20.pdf)

- Loh, F. K. W. (2010). Restructuring federal–state relations in Malaysia: From centralised to co-operative federalism? *The Round Table*, 99(407), 131-140.
- Lowndes, V. (2010). The institutional approach. In D. Marsh, & G. Stoker (Eds.), *Theories and methods in political science* (3rd Ed.) (pp.60-79). Basingstoke, England: Palgrave Macmillan.
- Lowry Jr, G. K., & Okamura, N. H. (1983). Institutionalized evaluation and intergovernmental relations: The case of coastal zone management. *Publius: The Journal of Federalism*, 13(4), 79-95.
- Lowry, R., Alt, J., & Ferree, K. (1999). Fiscal policy outcomes and electoral accountability in the American states. *American Political Science Review*, 92, 759-774.
- Maclaurin, J., & Sterelny, K. (2008). *What is biodiversity?* Chicago, IL: University of Chicago Press.
- Maidin, A. J. (2005, 17 November). Challenges in implementing and enforcing environmental protection measures in Malaysia. Retrieved from http://www.malaysianbar.org.my/environmental_law/challenges_in_implementing_and_enforcing_environmental_protection_measures_in_malaysia_by_ainul_jaria_bt_maidin.html
- Majone, G., and Aaron, W. (1978). 'Implementation as Evolution'. In Howard, E. F. (ed), *Policy Studies Review Annual*, Vol. 2. Beverly Hills, California: Sage: 103-117.
- Malaysiakini*. (2015, January 23). Stop risking Kelantan's environs-sensitive areas. Retrieved from <https://www.malaysiakini.com/letters/287163>
- Maniam, A. (2015, 12 April). Path dependence, the blockade to conservation. *The Malaysian Insider*, 12 April. Retrieved from <http://www.themalaysianinsider.com/sideviews/article/path-dependence-the-blockade-to-conservation-agkillah-maniam>
- Maniam, A., & Singaravelloo, K. (2015). Impediments to linking forest islands to Central Forest Spine in Johor, Malaysia. *International Journal of Social Science and Humanity*, 5(1): 22-28.
- March, J. G., & Olsen, J. P. (2006). Elaborating the “new institutionalism”. *The Oxford handbook of political institutions*, 5, 3-20.
- March, J. G., & Olsen, J. P. (2010). *Rediscovering institutions*. Simon and Schuster.
- March, J. G., Olson, J. P., & Olsen, J. P. (1983). Organizing political life: What administrative reorganization tells us about government? *American Political Science Review*, 281-296.
- Marsh, D., & McConnell, A. (2010). Towards a framework for establishing policy success. *Public administration*, 88(2), 564-583.

- Marsh, D., & Rhodes, R. A. W. (1992). *Implementing Thatcherite policies: Audit of an era*. London: Open University Press.
- Marsh, D., & Stoker, G. (Eds.). (2002). *Theory and methods in political science*. Basingstoke, UK: Palgrave Macmillan.
- Marsh, J. A., Sloan McCombs, J., & Martorell, F. (2010). How instructional coaches support data-driven decision making: Policy implementation and effects in Florida middle schools. *Educational Policy*, 24(6), 872-907.
- Marshall, C., & Rossman, G. B. (2016). *Designing qualitative research*. Singapore: Sage.
- Masrek, M. N., Noordin, S. A., Yusof, N. I., & Anwar, N. (2014, November). The relationship between knowledge conversion abilities and innovation: A case of administrative and diplomatic officers of Malaysian Federal Ministries. In *Information Society (i-Society), 2014 International Conference on* (pp. 128-133). IEEE.
- Matland, R. E. (1995). Synthesizing the implementation literature: The ambiguity-conflict model of policy implementation. *Journal of Public Administration Research and Theory*, 5(2), 145-174.
- May, P. J. (2015). Implementation failures revisited: Policy regime perspectives. *Public Policy and Administration*, 30(3-4), 277-299.
- May, P. J., & Winter, S. C. (2007). Politicians, managers, and street-level bureaucrats: Influences on policy implementation. *Journal of Public Administration Research and Theory*, 19(3), 453-476.
- Maynard-Moody, S., Musheno, M., & Palumbo, D. (1990). Street-wise social policy: Resolving the dilemma of street-level influence and successful implementation. *Political Research Quarterly*, 43, 833-848.
- Mazmanian, D. A., & Sabatier, P. A. (1983). *Implementation and public policy* (pp. 18-43). Glenview, IL: Scott, Foresman.
- McAfee, K. (1999). Selling nature to save it? Biodiversity and green developmentalism. *Environment and Planning D: Society and Space*, 17(2), 133-154.
- McDowell, B. D. (2003). Wildfires create new intergovernmental challenges. *Publius: The Journal of Federalism*, 33(3), 45-62.
- McLanahan, S. S. (1980). Organizational issues in US health policy implementation: Participation, discretion, and accountability. *Journal of Applied Behavioral Science*, 16(3), 354-369.
- McLaughlin, M. W. (1987). Learning from experience: Lessons from policy implementation. *Educational Evaluation and Policy Analysis*, 9(2), 171-178.
- Médail, F. & Quézel, P. (1999). Biodiversity hotspots in the Mediterranean basin: Setting global conservation priorities. *Conservation Biology*, 13(6), 1510-1513.
- Memon, P. A. (2000). Devolution of environmental regulation: environmental impact assessment in Malaysia. *Impact Assessment and Project Appraisal*, 18(4), 283-293.

- Miles, L., & Kapos V. (2008) Reducing greenhouse gas emissions from deforestation and forest degradation: Global land-use implications. *Science*, 320, 1454–1455.
- Miles, M. B. & Huberman, A. M. (1994). *Qualitative Data Analysis: A Methods Sourcebook*, Third edition. Washington DC: SAGE.
- Milne, R. S. (1986). Malaysia-beyond the new economic policy. *Asian Survey*, 26(12), 1364-1382.
- Milner, A. C. (1982). *KERAJAAN: Malayan political culture on the eve of colonial rule* (No. 40). Tucson, AL: University of Arizona Press.
- Minang, P. A., Bressers, H. T. A., Skutsch, M. M., & McCall, M. K. (2007). National forest policy as a platform for biosphere carbon management: The case of community forestry in Cameroon. *Environmental Science & Policy*, 10(3), 204-218.
- Ministry of Natural Resources and Environment. (2006). *Biodiversity in Malaysia*. Kuala Lumpur, Malaysia: Ministry of Natural Resources and Environment.
- Ministry of Natural Resources and Environment. (2009). *Fourth national report to the Convention on Biological Diversity*. Kuala Lumpur, Malaysia: Government of Malaysia.
- Ministry of Natural Resources and Environment. (2011, April). News updates: Johor Wildlife Conservation Project. *Malaysian Parks Newsletter*, 1.
- Ministry of Natural Resources and Environment. (2014). *Fifth national report to the Convention on Biological Diversity*. Kuala Lumpur, Malaysia: Government of Malaysia.
- Ministry of Natural Resources and Environment. (2018). Client Charter. Retrieved from <http://www.kats.gov.my/en-my/ClientsCharter/Pages/default.aspx>
- Mitchell, R., & Bernauer, T. (1998). Empirical research on international environmental policy: Designing qualitative case studies. *Journal of Environment & Development*, 7(1), 4-31.
- Mittermeier, R. A. (1988). Primate diversity and the tropical forest. In Wilson, E.O. & Peter, F. M. (eds) *Biodiversity*, 145-154. Washington DC, United States: National Academy Press.
- Moh, Y. C., & Manaf, L. A. (2014). Overview of household solid waste recycling policy status and challenges in Malaysia. *Resources, Conservation and Recycling*, 82, 50-61.
- Mohamed Noordin Sopiee. (2005). *From Malayan union to Singapore separation: Political unification in the Malaysia Region 1945–65* (2nd ed.). Kuala Lumpur, Malaysia: Universiti Malaya Press.
- Mokhtar, K. A. (2002). *Federalism in Malaysia: A Constitutional Study of the Federal Institutions Established by the Federal Constitution of Malaysia and Their Relationships with the Traditional Institutions in the Constitution (With Special Reference to the Islamic Religious Power and Bureaucracy in the States)*. Retrieved from Cadair Open Access Repository <http://cadair.aber.ac.uk/dspace/handle/2160/3253>
- Mokhtar, M. B., & Tan, K. W. (2004). *Integrated water resources management in Malaysia: An effective institutional framework*. Bangi: Institute for Environment And Development (LESTARI), National University of Malaysia, UKM Bangi, Selangor, Malaysia.

- Molnar, J., & Rogers, D. L. (1982). Interorganizational coordination in environmental management: Process, strategy, and objective. In Mann, D. E. (ed.) *Environmental Policy Implementation*, 95-108. Massachusetts, United States: D. C. Heath.
- Montjoy, R. S., & O'Toole, L. J. (1979). Toward a theory of policy implementation: An organizational perspective. *Public Administration Review*, 465-476.
- Morris, C. (2004). Networks of agri-environmental policy implementation: A case study of England's Countryside Stewardship Scheme. *Land Use Policy*, 21(2), 177-191.
- Morris, L. (1997). Developing a cooperative intra-institutional approach to EAD implementation: The Harvard/Radcliffe Digital Finding Aids Project. *The American Archivist*, 60(4), 388-407.
- Moss, T., & Newig, J. (2010). Multilevel water governance and problems of scale: Setting the stage for a broader debate.
- Moten, A. R. (2008). *Government and politics in Malaysia*. Singapore: Cengage Learning.
- Murphy, J. (1976). Title V of ESEA: The impact of discretionary funds on state education bureaucracies. In W. Williams, & R. F. Elmore (Eds.), *Social program implementation* (pp. 77-100). New York, NY: John Wiley.
- Murray, C. (2004). The role of information in European rural development: an institutional perspective.
- Naidoo, R., & Adamowicz, W. L. (2005). Economic benefits of biodiversity exceed costs of conservation at an African rainforest reserve. *Proceedings of the National Academy of Sciences of the United States of America*, 102(46), 16712-16716.
- Nakamura, R. T., & Smallwood, F. (1980). *The Politics of Policy Implementation*. New York, NY: St. Martin's Press.
- Narayanan, S., Hui, L. M., & Leng, O. W. (2009). Re-examining state finances and governance: The challenge for Penang. In Penang Outlook Forum.
- Natesan, S. D., & Marathe, R. R. (2015). Literature review of public policy implementation. *International Journal of Public Policy*, 11(4-6), 219-241.
- Nelson, H. T. (2012). *Government performance and US residential building energy codes. The performance of nations*. Rowman & Littlefield, Lanham, Maryland, USA, and Plymouth, UK, 267-292.
- New Straits Times*. (2015, December 16). Stricter penalties for wildlife crime. Retrieved from <http://www.nst.com.my/news/2015/12/117519/stricter-penalties-wildlife-crime?d=1>
- New Straits Times*. (2016, January 15). Malaysia tops list of threatened species. Retrieved from <http://www.nst.com.my/news/2016/01/122295/malaysia-tops-list-threatened-species>
- Newig, J. and Fritsch, O. (2009). Environmental governance: Participatory, multi-level – and effective? *Environmental Policy and Governance*, 19, 197-214.

- Newig, J., & Koontz, T. M. (2014). Multi-level governance, policy implementation and participation: the EU's mandated participatory planning approach to implementing environmental policy. *Journal of European Public Policy*, 21(2), 248-267.
- Ng, C. (2012). Gender and governance: The politics of federalism in Malaysia. *Kajian Malaysia*, 30(2), pp. 1-26.
- Nicholson-Crotty, S., & Theobald, N. (2010). Claiming credit in the US federal system: Testing a model of competitive federalism. *Publius: The Journal of Federalism*, 41(2), 232-256.
- Noh, A. (2014). Malay nationalism: A historical institutional explanation. *Journal of Policy History*, 26(2), 246-273.
- Noh, U. H. M. (1991). *Fiscal Federalism in Malaysia* (Doctoral dissertation). Universiti Malaya, Kuala Lumpur, Malaysia.
- Nohrstedt, D. (2005). External shocks and policy change: Three Mile Island and Swedish nuclear energy policy. *Journal of European Public Policy*, 12(6), 1041-1059.
- North, D. (1990), *Institutions, institutional change and economic performance*. Cambridge, England: Cambridge University Press.
- O'Toole Jr., L. J. (1986). Policy recommendations for multi-actor implementation: an assessment of the field. *Journal of Public Policy*, 6, 181-210.
- O'Toole Jr., L. J. (2000). Research on policy implementation: Assessment and prospects. *Journal of Public Administration Research and Theory*. 10(2), 263-288.
- O'Toole Jr., L. J., & Montjoy, R. S. (1984). Interorganizational policy implementation: A theoretical perspective. *Public Administration Review*, 44(6), 491-503.
- O'Toole, L. J. Jr. (2004). The theory–practice issue in policy implementation research. *Public Administration*, 82(2), 309-329.
- Oates, W. E. (1972). *Fiscal federalism*. New York: Harcourt Brace Jovanovich.
- Oates, W. E. (1997). The impact of urban land taxation: The Pittsburgh experience. *National Taxation Journal*, 50, 1-21.
- Oates, W. E. (1999). An essay on fiscal federalism. *Journal of Economic Literature*, 37, 1120-1149.
- Oates, W. E., & Portney, P. R. (2003). The political economy of environmental policy. In K. G. Maler, & J. R. Vincent (Eds.). *Handbook of environmental economics: Valuing Environmental Changes*. Vol. 1, pp. 325-354. Amsterdam, Netherlands: Elsevier.
- Olson, M. (1982). *The rise and decline of nations*. New Haven, NJ: Yale University Press.
- Omar, R. N. A. R. (2012). A historical perspective of federalism in Malaysia and its effects on the current system of federalism. *International Journal of Business, Economics and Law*, 1, 125-129.

- Ongkili, J. F. (1992). Federalism and parochialism: Relations between Kuala Lumpur and Sabah. *Journal of Contemporary Asia*, 22(4), 529-545.
- Osborne, S. P. (Ed.). (2010). *The new public governance: Emerging perspectives on the theory and practice of public governance*. Routledge.
- Ostrom, E. (1999). Coping with tragedies of the commons. *Annual Review of Political Science*, 2(1), 493-535.
- Ostrom, E., Lam, W. F., & Lee, M. (1994). The performance of self-governing irrigation systems in Nepal. *Human Systems Management*, 13(3), 197-207.
- Ostrom, V. (1985). The meaning of federalism in *The Federalist*: A critical examination of the Diamond theses. *Publius: The Journal of Federalism*, 15, 1-22.
- O'Toole Jr, L. J. (2004). The theory–practice issue in policy implementation research. *Public Administration*, 82(2), 309-329.
- Owens, K. A. (2008). *Understanding how actors influence policy implementation: A comparative study of wetland restorations in New Jersey, Oregon, the Netherlands and Finland*. (Doctoral dissertation). University of Twente. Netherlands.
- Owens, K. A., & Bressers, H. (2013). A comparative analysis of how actors implement: Testing the contextual interaction theory in 48 cases of wetland restoration. *Journal of Comparative Policy Analysis: Research and Practice*, 15(3), 203-219.
- Özerol, G. (2013). *Aligning the multiplicities in natural resource governance: A study on the governance of water and land resources in irrigated agriculture*. (Doctoral thesis). University of Twente, Netherlands.
- Pahang State Forestry Department. (2018). Fungsi Bahagian/Unit. Retrieved from http://www.jpnk.kelantan.gov.my/index.php?option=com_content&view=article&id=36&Itemid=229&lang=my
- Palumbo, D. J., & Calista, D. J. (1990). *Implementation and the policy process: Opening up the black box*. New York, NY: Greenwood Press.
- Paudel, N. R. (2009). A critical account of policy implementation theories: status and reconsideration. *Nepalese Journal of Public Policy and Governance*, 25(2), 36-54.
- Pelissier, R. (2008). Research Strategies and Data Types. In *Business Research Made Easy*, pp.13-29. Cape Town, South Africa: Juta & Co.
- Pepinsky, T. (2007a). Autocracy, elections, and fiscal policy: evidence from Malaysia. *Studies in Comparative International Development*, 42(1-2), 136-163.
- Pepinsky, T. B. (2007b). Malaysia: Turnover without change. *Journal of Democracy*, 18(1), 113-127.
- Perak Darul Ridzuan Financial Office. (2016). *Ucapan Bajet 2017: Pertumbuhan dan Kesejahteraan*. Retrieved from <http://kewangan.perak.gov.my/images/Ucapan-Bajet-N.Perak-2017.pdf> on 5 January 2017

- Perak State Forestry Department. (2018). Mission, Vision and Objective. Retrieved from <http://www.perakforestry.gov.my/index.php/en/mengenai-jpnpk/profail/misi,-visi-objektif.html>
- Percival, R. V. (1995). Environmental federalism: Historical roots and contemporary models. *Maryland Law Review*, 54(4), 1141-1182.
- Periathamby, A., Hamid, F. S., & Khidzir, K. (2009). Evolution of solid waste management in Malaysia: Impacts and implications of the solid waste bill, 2007. *Journal of Material Cycles and Waste Management*, 11(2), 96-103.
- Perry, J. L., & Wise, L. R. (1990). The motivational bases of public service. *Public Administration Review*, 50(3), 367-373.
- Peters, B. G. (2011). Institutional theory in political science: The new institutionalism. Bloomsbury Publishing USA.
- Phang, S. N. (2008). Decentralisation or Recentralisation? Trends in local government in Malaysia. *Commonwealth Journal of Local Governance*, (1), 126-132.
- Phua, M. H., & Minowa, M. (2005). A GIS-based multi-criteria decision making approach to forest conservation planning at a landscape scale: A case study in the Kinabalu Area, Sabah, Malaysia. *Landscape and Urban Planning*, 71(2), 207-222.
- Pierson, P. (2011). Politics in time: History, institutions, and social analysis. Princeton University Press.
- Platts, P. J., Burgess, N. D., Gereau, R. E., Lovett, J. C., Marshall, A. R., McCLEAN, C. J., ... & Marchant, R. (2011). Delimiting tropical mountain ecoregions for conservation. *Environmental Conservation*, 38(3), 312-324.
- Pressman, J. L., & Wildavsky, A. (1984). *Implementation: How great expectations in Washington are dashed in Oakland; Or, Why It's Amazing that Federal Programs Work at All, This Being a Saga of the Economic Development Administration as Told by Two Sympathetic Observers Who Seek to Build Morals on a Foundation of Ruined Hopes*. Berkeley, CA: University of California Press.
- Prip, C., Gross, T., Johnston, S., & Vierros, M. (2010). Biodiversity Planning: An assessment of national biodiversity strategies and action plans. Yokohama, Japan: United Nations University Institute of Advanced Studies.
- Przeworski, A. (2004). Institutions matter? *Government and Opposition*, 39(4), 527-540.
- Public Services Commission. (2018). *Pembantu Hidupan Liar Gred G11 / G19*. Retrieved from <http://www.spa.gov.my/web/guest/deskripsi-tugas/pmr/6303>
- Puetter, U. (2012). Europe's deliberative intergovernmentalism: The role of the Council and European Council in EU economic governance. *Journal of European Public Policy*, 19(2), 161-178.
- Punch, K. (1998). Introduction to social research: Quantitative and qualitative methods. London: Sage.

- Purcell, V. (1964). A Malayan Union: The Proposed New Constitution. *Pacific Affairs*, Vol. XIX, No. 1, March, pp. 20-40.
- Puthucheary, M. (1978). *The politics of administration: The Malaysian experience*. Kuala Lumpur, Malaysia: Oxford University Press.
- Rainey, H. G., & Steinbauer, P. (1999). Galloping elephants: Developing elements of a theory of effective government organizations. *Journal of Public Administration Research and Theory*, 9(1), 1-32.
- Ramakrishna, K. (1984). Emergence of environmental law in the developing countries: A case study of India. *The Ecology Law Quarterly*, 12(4), 907-935.
- Rayan, D. M., Mohamad, S. W., Dorward, L., Aziz, S. A., Clements, G. R., Christopher, W. C. T. & Magintan, D. (2012). Estimating the population density of the Asian tapir (*Tapirus indicus*) in a selectively logged forest in Peninsular Malaysia. *Integrative Zoology*, 7(4), 373-380.
- Rector, C. (2009). *Federations: The political dynamics of cooperation*. Ithaca, NY: Cornell University Press.
- Reich, M. R. and Bowonder, B. (1992). Environmental policy in India: Strategies for better implementation. *Policy Studies Journal*, 20(4), 643-661.
- Reimer, A., & Prokopy, L. (2014). One federal policy, four different policy contexts: An examination of agri-environmental policy implementation in the Midwestern United States. *Land Use Policy*, 38, 605-614.
- Rhodes, R., & Weller, P. (2005). Westminster transplanted and Westminster implanted: Exploring political change. In H. Patapan, J. Wanna, and P. Weller, (Eds.). *Westminster legacies, democracy and responsible government in Asia Pacific* (pp. 1-12). Sydney: University of New South Wales Press.
- Rice, D. (2013). Street-level bureaucrats and the welfare state: Toward a micro-institutionalist theory of policy implementation. *Administration & Society*, 45(9), 1038-1062.
- Riker, W. H. (1964). *Federalism: Origin, operation, and significance*. Boston, MA: Little Brown and Company.
- Rivlin, A. M. (2012). Rethinking federalism for more effective governance. *Publius: The Journal of Federalism*, 42(3), 387-400.
- Rodden, J. (2002). The dilemma of fiscal federalism: Grants and fiscal performance around the world. *American Journal of Political Science*, 46(3) (Jul), 670-687.
- Rodriguez, I., Williams, A. M., & Hall, C. M. (2014). Tourism innovation policy: Implementation and outcomes. *Annals of Tourism Research*, 49, 76-93.
- Rose, P. and Greeley, M. (2006). Education in Fragile States: Capturing Lessons and Identifying Good Practice. Paper prepared for the DAC Fragile States Group.
- Rothchild, D. (1966). The Limits of Federalism: and Examination of political Institutional Transfer in Africa. *The Journal of Modern African Studies*, 4(3), 275-293.

- Rush, J. (1991). *The last tree: Reclaiming the environment in tropical Asia*. New York, NY: The Asia Society.
- Ryan, N. (1995). The competitive delivery of social services: Implications for program delivery. *AJPA* 54(3), 353–63.
- Ryan, N. (1996). Some advantages of an integrated approach to implementation analysis. A study of Australian industrial policy. *Public Administration*, 74(4), 737-53.
- Rykkja, L. H., Neby, S. and Hope, K. L. (2014). Implementation and governance: Current and future research on climate change policies. *Public Policy and Administration*, 29(2), 106-130.
- Sabatier, P. A. (1986). Top-down and bottom-up approaches to implementation research: A critical analysis and suggested synthesis. *Journal of Public Policy*, 6(1), 21–48.
- Sabatier, P. A. (1988). An advocacy coalition framework of policy change and the role of policy-oriented learning therein. *Policy Sciences*, 21(2-3), 129-168.
- Sabatier, P. A. (1991). Two decades of implementation research: From control to guidance and learning. In F-X. Kaufman, (Ed.), *The Public Sector Challenge for Co-ordination and Learning* (pp.257-270). Berlin, Germany: de Gruyter.
- Sabatier, P. A. (1993). Policy change over a decade or more. In P. A. Sabatier, & H.C. Jenkins-Smith (Eds.), *Policy Change and Learning: An Advocacy Coalition Approach* (pp.12-39). Boulder, Colorado: Westview Press.
- Sabatier, P. A. (2015). 13 Two Decades of Implementation Research: From Control to Guidance and Learning. *The public sector: Challenge for coordination and learning*, 31, 257.
- Sabatier, P. A. and Pelkey, N. (1987). Incorporating multiple actors and guidance instruments into modes of regulatory policy-making: An advocacy coalition framework. *Administration and Society*, 19(2), 236–263.
- Sabatier, P. A., & Jenkins-Smith, H. (1999). The advocacy coalition framework: An assessment. In P. Sabatier (Ed.), *Theories of the policy process*. Boulder, CO: Westview Press.
- Sabatier, P. A., & Mazmanian, D. (1980). A Framework of Analysis. *Policy Studies Journal*, 8, 538–60.
- Sabatier, P. A., & Mazmanian, D. A. (1981). The implementation of public policy. A framework of analysis. In D. A. Mazmanian, & P. A. Sabatier (Eds.), *Effective policy implementation* (pp. 3–35). Lexington: Lexington Books.
- Saetren, H. (2005). Facts and myths about research on public policy implementation: Out-of-Fashion, allegedly dead, but still very much alive and relevant. *Policy Studies Journal*, 33(4), 559-582.
- Saetren, H. (2014). Implementing the third generation research paradigm in policy implementation research: An empirical assessment. *Public Policy and Administration*, 29, 84-105. doi:10.1177/0952076713513487

- Sala, O. E., Chapin, F. S., Armesto, J. J., Berlow, E., Bloomfield, J., Dirzo, R., ... & Leemans, R. (2000). Global biodiversity scenarios for the year 2100. *science*, 287(5459), 1770-1774.
- Saleem, M. Y. (2005). Environmental issues in a federation: The Case of Malaysia. *Intellectual Discourse*, 13(2), 201-212.
- Sanali, S. Y. U. K. R. I., Bahron, A., & Dousin, O. (2013). Job rotation practices, stress and motivation: An empirical study among administrative and diplomatic officers (ADO) in Sabah, Malaysia. *International Journal of Research in Management & Technology*, 3(6), 160-166.
- Sani, S. (1993). *Environment and Development in Malaysia*. Kuala Lumpur: Centre for Environmental Studies, Institute of Strategic and International Studies (ISIS).
- Saravanamuttu, J. (1984). Book Review: KERAJAAN: Malayan Political Culture on the Eve of Colonial Rule. *Journal of the Malaysian Branch of the Royal Asiatic Society*, Vol. 57, No. 2 (247), 131-133.
- Sarbaugh-Thompson, M., & Zald, M. N. (1995). Child labor laws: A historical case of public policy implementation. *Administration & Society*, 27(1), 25-53.
- Scharpf, F. W. (2018). *Games Real Actors Play: Actor-centered Institutionalism in Policy Research*. New York, United States: Routledge.
- Scheberle, D. (2004). *Federalism and Environmental Policy: Trust and the Politics of Implementation*. Washington: Georgetown University Press.
- Schmidt, M. G. (1996). When Parties Matter: A review of the possibilities and limits of partisan influence on public policy. *European Journal of Political Research*, 30, 155–183.
- Schofield, J. (2001). Time for a revival? Public Policy Implementation: A review of the Literature and an Agenda for Future Research. *International Journal of Management Reviews*, 3(3), 245-263.
- Schofield, J., & Sausman, C. (2004). Symposium on Implementing Public Policy: Learning from Theory and Practice. *Public Administration*, 82(2), 235-248.
- Schreurs, M. A. (2008). From the Bottom Up Local and Subnational Climate Change Politics. *Journal of Environment & Development*, 17(4), 343-355.
- Schwabe, K. A., Carson, R. T., DeShazo, J. R., Potts, M. D., Reese, A. N., & Vincent, J. R. (2015). Creation of Malaysia's Royal Belum State Park: A case study of conservation in a developing country. *Journal of Environment & Development*, 24(1), 54-81.
- Scott, W. R. (2008). *Institutions and organizations: Ideas and interests*. Sage.
- Selangor State Forestry Department. (2018). Mission, Vision and Objective. Retrieved from <https://www.forestry.gov.my/index.php/en/about-us/mission-vission-objective>
- Shahbaz, B., Ali, T. & Suleri, A. Q. (2011). Dilemmas and challenges in forest conservation and development interventions: Case of Northwest Pakistan. *Forest Policy and Economics*, 13(6), 473-478.

- Shandra, J. M., Restivo, M., Shircliff, E., & London, B. (2011). Do commercial debt-for-nature swaps matter for forests? A cross-national test of world polity theory. *Sociological Forum*, 26(2) 381-410.
- Shepsle, K. A. (2006). Chapter 2: Rational Choice Institutionalism. In R. E. Goodin (ed) *The Oxford Handbook of Political Institutions*, 23-38. Oxford, United Kingdom: Oxford University Press.
- Shockley, G. (2014). From Federal-State Partnership to Advocacy Coalition: The Institutionalized Organization of Government Support for the Arts in the U.S. APSA 2014 Annual Meeting Paper. Retrieved from <https://ssrn.com/abstract=2453263>
- Siddiquee, N. A. (2002). Administrative reform in Malaysia: Recent trends and developments. *Asian Journal of Political Science*, 10(1), 105-130.
- Siddiquee, N. A. (2014). The Government Transformation Programme in Malaysia: A Shining Example of Performance Management in the Public Sector?. *Asian Journal of Political Science*, 22(3), 268-288.
- Simandjuntak, B. (1969). *Malayan federalism 1945-1963. A study of federal problems in a plural society*. Kuala Lumpur, Malaysia: Oxford University Press.
- Simmons, J. M., & Graefe, P. (2013). Assessing the collaboration that was “collaborative federalism” 1996-2006. *Canadian Political Science Review*, 7(1), 25-36.
- Sinar Harian*. (2016a, August 10). *Pegawai Perhilitan ditetak pencuri kayu gaharu*. Retrieved from <http://www.sinarharian.com.my/edisi/pahang/pegawai-perhilitan-ditetak-pencuri-kayu-gaharu-1.550810>
- Sinar Harian*. (2016b, May 25). *Rasuah anggota Perhilitan*. Retrieved from <http://www.sinarharian.com.my/mobile/edisi/pahang/rasuah-anggota-perhilitan-1.525029>
- Slater, D. (2003). Iron Cage in an Iron Fist: Authoritarian Institutions and the Personalization of Power in Malaysia. *Comparative Politics*, 36(1), 81-101.
- Smith, B. D., & Mogro-Wilson, C. (2008). Inter-agency collaboration: Policy and practice in child welfare and substance abuse treatment. *Administration in Social Work*, 32(2), 5-24.
- Snieder, R., & Larner, K. (2009). *The art of being a scientist: A guide for graduate students and their mentors*. United Kingdom: Cambridge University Press.
- Snyder, R. (2001). Scaling down: The subnational comparative method. *Studies in Comparative International Development*, 36(1), 93-110.
- Sovacool, B. K. (2008). The best of both worlds: Environmental federalism and the need for federal action on renewable energy and climate change. *Stanford Environmental Law Journal*, 27, 397-476.
- Spillane, J. P., Reiser, B. J., & Reimer, T. (2002). Policy implementation and cognition: Reframing and refocusing implementation research. *Review of Educational Research*, 72(3), 387-431.

- Steinberg, P. F., & VanDeveer, S. D. (2012). Comparative Environmental Politics in a Global World. In *Comparative Environmental Politics: Theory, Practice, and Prospects*, pp.3-28. Massachusetts, United States: MIT Press.
- Stensöta, H. O. (2011). Political influence on street-level bureaucratic outcome: Testing the interaction between bureaucratic ideology and local community political orientation. *Journal of Public Administration Research and Theory*, 22(3), 553-571.
- Steurer, R., & Clar, C. (2015). Is decentralisation always good for climate change mitigation? How federalism has complicated the greening of building policies in Austria. *Policy Sciences*, 48(1), 85-107.
- Stoker, R. P. (1989). A regime framework for implementation analysis: Cooperation and reconciliation of federalist imperatives. *Review of Policy Research*, 9(1), 29-49.
- Stoker, R. P. (1991). *Reluctant partners: Implementing federal policy*. Pittsburgh, PA: University of Pittsburgh Press.
- Sumner, A., & Tiwari, M. (2009). *How Does Development Policy Change (or Not)?*. In *After 2015: International Development Policy at a Crossroads*. (pp. 74-104). London: Palgrave Macmillan.
- Swanson, K. E., Kuhn, R. G., & Xu, W. (2001). Environmental policy implementation in rural China: A case study of Yuhang, Zhejiang. *Environmental Management*, 27(4), 481-491.
- Swenden, W. (2006). *Federalism and regionalism in Western Europe: A comparative and thematic analysis*. Basingstoke, UK: Palgrave Macmillan.
- Syed-Ikhsan, S. O. & Rowland, F. (2004). Benchmarking knowledge management in a public organisation in Malaysia. *Benchmarking: An International Journal*, 11(3), 238-266.
- Tanchev, E. (1998). The Constitution and the Rule of Law. In D. B. John (ed) *Bulgaria in Transition: Politics, Economic, Society, and Culture after Communism*, 65-92. Boulder, Colorado: Westview Press.
- Terengganu State Forestry Department. (2018). *Objective*. Retrieved from http://trgforestry.terengganu.gov.my/index.php?option=com_content&view=article&id=33&Itemid=259&lang=my
- Terman, J. N., Kassekert, A., Feiock, R. C., & Yang, K. (2016). Walking in the shadow of Pressman and Wildavsky: expanding fiscal federalism and goal congruence theories to single-shot games. *Review of Policy Research*, 33(2), 124-139.
- Thang, H. C. (2009). *Asia-Pacific forestry sector outlook study II* (Working Paper Series, No. APFSOS II/WP/2009/02). Bangkok, Thailand: Food and Agriculture Organization of the United Nations, Regional Office for Asia and the Pacific.
- The Malaysian Times*. (2014, December 14). 995,284.96 hectares in Perak gazetted as Permanent Forest Reserve. Retrieved from <http://www.themalaysiantimes.com.my/995284-96-hectares-in-perak-gazetted-as-permanent-forest-reserve/>

- The Star*. (2012, July 10). *Shrinking refuge*. Retrieved from <https://www.thestar.com.my/lifestyle/features/2012/07/10/shrinking-refuge/>
- The Star*. (2013, June 12). *Perak lauded for gazetting forest: it is part of plan to provide for wildlife corridor, says Zambry*. Retrieved from <http://www.thestar.com.my/News/Nation/2013/06/12/Perak-lauded-for-gazetting-forest-It-is-part-of-plan-to-provide-for-wildlife-corridor-says-Zambry/>
- The Star*. (2014a, September 25). *Jungle the size of Cyberjaya logged*. Retrieved from <http://www.thestar.com.my/News/Nation/2014/09/25/Jungle-the-size-of-Cyberjaya-logged-Only-areas-known-as-degraded-forest-cleared-says-state-Forestry/>
- The Star*. (2014b, December 10). *Perak's forest reserve stands at over 900,000ha*. Retrieved from <https://www.thestar.com.my/news/nation/2014/12/10/peraks-forest-reserve-stands-at-over-900000ha/>
- The Star*. (2015a, April 14). *Malaysian mammals face extinction*. Retrieved from <http://www.thestar.com.my/news/nation/2015/04/14/malaysian-mammals-face-extinction-world-bank-fifth-of-species-threatened/>
- The Star*. (2015b, June 17). *Heritage status for Royal Belum*. Retrieved from <https://www.thestar.com.my/news/nation/2015/06/17/heritage-status-for-royal-belum-rainforest-older-than-the-amazon-jungle/>
- The Star*. (2018, April 15). *Pakatan manifesto on environmental protection more specific, say activists*. Retrieved from <https://www.thestar.com.my/news/nation/2018/04/15/pakatan-manifesto-on-environmental-protection-more-specific-say-activists/#8KCODLAG2h81KGFw.99>
- Thio, L. A., & Tan, K. Y. (2010). *Constitutional law in Malaysia and Singapore* (3rd ed.). Malaysia: Lexis Nexis.
- Thomann, E., & Sager, F. (2017). Toward a better understanding of implementation performance in the EU multilevel system. *Journal of European Public Policy*, 24(9), 1385-1407.
- Tilman, R. O. (1976). The Centralization Theme in Malaysian Federal-State Relations, 1957–75. *Institute for Southeast Asian Studies (Singapore), Occasional Paper*, No. 39, May 1976, 63.
- Torrìti, J. (2010). Impact Assessment and the Liberalization of the EU Energy Markets: Evidence-Based Policy-Making or Policy-Based Evidence-Making?, *Journal of Common Market Studies*, 48(4), 1065-1081.
- TRAFFIC International. (2004). *Progress report on the study on forest law enforcement and governance in Malaysia in the context of sustainable forest management*. International Timber Council, Thirty-Sixth Session, 20-23 July 2004, Interlaken, Switzerland.
- Transparency International Malaysia. (2011). *Forest governance integrity practice*. Retrieved from <http://fgi.transparency.org.my/wp-content/uploads/sites/3/2013/09/Publication-Report-Peninsular-Malaysia.pdf>

- Triantafyllou, P. (2002). Machinating the responsive bureaucrat: Excellent work culture in the Malaysian public sector. *Asian Journal of Public Administration*, 24(2), 185-209.
- Tropical Rainforest Conservation and Research Centre. (2018). *Partner: Perak Forestry Department*. Retrieved from <http://www.trcrc.org/people/perak-forestry-department/>
- Tsebelis, G. (1995). Decision making in political systems: Veto players in presidentialism, parliamentarism, multicameralism and multipartism. *British Journal of Political Science*, 25(3): 289-325.
- Tsebelis, G. (2002). *Veto players: How political institutions work*. Princeton University Press.
- Tummers, L., & Bekkers, V. (2014). Policy implementation, street-level bureaucracy, and the importance of discretion. *Public Management Review*, 16(4), 527-547.
- United Nations Convention to Combat Desertification (2018). About the Convention. Retrieved from <https://www.unccd.int/convention/about-convention>
- United Nations Development Programme Malaysia. (2018). *Improving Connectivity in the Central Forest Spine (CFS) Landscape - IC-CFS: What is the project about?* Retrieved from http://www.my.undp.org/content/malaysia/en/home/operations/projects/environment_and_energy/improving-connectivity-in-the-central-forest-spine--cfs--landsca.html
- United Nations Development Programme. (2014). Global Environment Facility: Improving Connectivity in the Central Forest Spine (CFS) Landscape - IC-CFS. *Project Document*. Retrieved from <http://www.my.undp.org/content/dam/malaysia/docs/Central%20Forest%20Spine%20Final%20Pro%20Doc.pdf>
- United Nations Framework Convention on Climate Change. (2009). Fact sheet: The need for mitigation. November. Retrieved from https://unfccc.int/files/press/backgrounders/application/pdf/press_factsh_mitigation.pdf
- United Nations. (2012). *Report of the United Nations Conference on Environment and Development*. A/CONF.151/26 (Vol. IV). Rio de Janeiro, 3-14 June. Retrieved from <http://www.un.org/documents/ga/conf151/aconf15126-4.htm>
- Urdal, H. (2008). Population, resources, and political violence: A subnational study of India, 1956–2002. *Journal of Conflict Resolution*, 52(4), 590-617.
- Van der Putten, J., & Cody, M. K. (2009). *Lost times and untold tales from the Malay world*. Singapore: NUS Press.
- Van Meter, D. S., & Van Horn, C. E. (1975). The policy implementation process: A conceptual framework. *Administration & Society*, 6, 445-488.
- Van Tatenhove, J., Mak, J., & Liefferink, D. (2006). The inter-play between formal and informal practices. *Perspectives on European Politics and Society*, 7(1), 8-24.
- Vandenabeele, W. (2008). Government calling: Public service motivation as an element in selecting government as an employer of choice. *Public Administration*, 86(4), 1089-1105.

- Veiga, A., & Amaral, A. (2011). *The Impacts of Bologna and of the Lisbon Agenda. In Higher Education in Portugal 1974-2009* (pp. 265-284). Dordrecht, Netherlands: Springer.
- Vejai, B. (2006). *Federalism in Malaysia: The transformative potential of democratic politics in a culturally diverse polity*. A paper presented at the International Workshop on Democracy and Asian Federalism, Deakin University, Melbourne, Australia, 8-9 February.
- Vogel, B., & Henstra, D. (2015). Studying local climate adaptation: A heuristic research framework for comparative policy analysis. *Global Environmental Change*, 31, 110-120.
- Volden, C. (2007). Intergovernmental grants: A formal model of interrelated national and subnational political decisions. *Publius: The Journal of Federalism*, 37(2), 209-243.
- Wälti, S. (2004). How multilevel structures affect environmental policy in industrialized countries. *European Journal of Political Research*, 43(4), 599-634.
- Wang, H. (2010). Translating policies into practice: The role of middle-level administrators in language curriculum implementation. *Curriculum Journal*, 21(2), 123-140.
- Wang, Y. (2016). Understanding the implementation gap of China's urban pension scheme at the level of rural-urban migrant workers.
- Wanna, J., Phillimore, J., Fenna, A., & Harwood, J. (2009). Common cause: Strengthening Australia's cooperative federalism.
- Watts, R. L. (2008). *Comparing federal systems* (3rd ed.). Montreal, Canada: McGill-Queen's University Press.
- Watts, R. L. (2011). The federal idea and its contemporary relevance. In T. J. Courchene, J. R. Allan, C. Leuprecht, & N. Verrelli (Eds.), *The federal idea: Essays in honour of Ronald L. Watts* (pp.13-27). Montreal, Canada: McGill-Queen's University Press.
- Watts, R. L. (2015). Comparing Federal Political Systems. In S. Keil, A. G. Gagnon, & S. Mueller (Eds.). *Understanding federalism and federation*. pp. 11-30. New York, United States: Ashgate Publishing, Ltd.
- Weaver, R. K. (2010). But will it work?: Implementation analysis to improve government performance. *Issues in Governance Studies*, 32:1-17, Washington DC, United States: Governance Studies, The Brookings Institution.
- Weingast, Barry R. 2002. Rational-Choice Institutionalism. In I. Katznelson & H. V. Milner (eds) *Political Science: State of the Discipline*, 660–692. New York: W.W. Norton.
- Welborn, D. M. (1988). Conjoint federalism and environmental regulation in the United States. *Publius: The Journal of Federalism*, 18(1), 27-44.
- Werts, A. B., & Brewer, C. A. (2015). Reframing the study of policy implementation: Lived experience as politics. *Educational Policy*, 29(1), 206-229.
- Wichelman, A. F. (1976). Administrative agency implementation of the National Environmental Policy Act of 1969: A conceptual framework for explaining differential response. *Natural Resources Journal*, 16(2), 263-300.

- Williamson, I. P. (2001). Land administration “best practice” providing the infrastructure for land policy implementation. *Land Use Policy*, 18(4), 297-307.
- Wilson, L. S. (1996). Working Paper 07: Federal-State fiscal arrangements in Malaysia. Ontario, Canada: John Deutsch Institute for the Study of Economic Policy, Queen’s University.
- Winstedt, R. O. (1947). Kingship and enthronement in Malaya. *Journal of the Malayan Branch of the Royal Asiatic Society*, 20(1) (141), 129-139.
- Winter, S. C. (2012). Implementation perspectives: Status and reconsideration. In B. G. Peters & J. Pierre (Eds.), *Handbook of Public Administration* (2nd ed), (pp.265-278). New York, United States: SAGE.
- Wittrock, B. (1985). Social knowledge and public policy: Eight models of interaction. In H. Nowotny, & J. Lambiri Dimaki (Eds.), *The difficult dialogue between producers and users of social science research* (pp. 89-109). Vienna, Austria: European Centre for Social Welfare Training and Research,
- Wong, C. H. (2013). Time For A Second Federation in Malaysia? *Penang Monthly*. September Issue. Retrieved from [http://penangmonthly.com/article.aspx?pageid=6709&name=time for a second federation in malaysia?](http://penangmonthly.com/article.aspx?pageid=6709&name=time%20for%20a%20second%20federation%20in%20malaysia?)
- Wong, C. H., & Chin, J. (2011). Malaysia: Centralized federalism in an electoral one-party state. In R. Saxena (Ed.), *Varieties of federal governance: Major contemporary models*. New Delhi, India: Cambridge University Press.
- Wong, M. C. (2009). Prospects for Malaysian forest governance: an NGO perspective. In Leslie, R. N. *The future of forests in Asia and the Pacific: Outlook for 2020*. RAP Publication 2009/03. Bangkok, Thailand: Food and Agriculture Organization of the United Nations, Regional Office for Asia and the Pacific.
- Wook, I. (2015). *The rights of the Orang Asli in forests in Peninsular Malaysia: Towards justice and equality* (Doctoral dissertation). Victoria University.
- Woon, W. C. & Norini, H. (2002). Trends in Malaysian forest policy. *Policy Trend Report*, 2002, 12-28.
- Wu, J. C. (2000). *The mineral industry of Malaysia: 2000*. U.S. Geological Survey Department. Retrieved from <http://minerals.usgs.gov/minerals/pubs/country/2000/9318000.pdf>
- Wu, M. A. (1997). *The Malaysian legal system*. Malaysia: Longman.
- Yaacob, A. N. (1998). *Pengaruh kepuasan kerja dan faktor-faktor kerja ke atas prestasi kerja di bahagian audit dan akaun, Ibu Pejabat Jabatan Pembangunan Koperasi Malaysia*. Tesis Sarjana. Selangor, Malaysia: Universiti Putra Malaysia.
- Yeap, C. A., Krishnasamy, K., & Loh, C. L. (2009). Belum-Temenggor Forest Complex: Conserving one of Peninsular Malaysia’s last great wild northern frontiers. Paper presented at The Natural Heritage of Northern Peninsular Malaysia Conference. Penang, Malaysia: School of Humanities, Universiti Sains Malaysia.

- Yeo, K. W. (1980). The grooming of an elite: Malay administrators in the federated Malay States, 1903–1941. *Journal of Southeast Asian Studies*, 11, 287-319.
- Yin, R. K. (2011). Chapter 3: The Role of Theory in Doing Case Studies. In Applications of case study research, pp. 27-48. Washington DC, United States: Sage.
- Younis, T., & Davidson, I. (1990). The study of implementation. *Implementation in Public Policy*, 3-14.
- Yuen, M. K. (2012, November 5). Pertukaran Pegawai Perhilitan Setiap Tiga Tahun Elak Bersubahat Dengan Penyeludup. *The Star*. Retrieved from <http://www.mstar.com.my/berita/berita-semasa/2012/11/05/pertukaran-pegawai-perhilitan-setiap-tiga-tahun-elak-bersubahat-dengan-penyeludup/>
- Yusoff, M. A. (1995). *Perkembangan dan Perubahan Sosio-Politik Kelantan, 1955 – 1995*. Bangi, Malaysia: Fakulti Sains Kemasyarakatan dan Kemanusiaan, UKM.
- Yusoff, M. A. (2006). *Malaysian federalism, conflict or consensus*. Bangi, Malaysia: Fakulti Sains Kemasyarakatan dan Kemanusiaan, UKM.
- Zahir, M. (1989). Land Laws in the Unfederated Malay States to 1966. In Ibrahim, A. & Sihombing, J. (Eds), *The Centenary of the Torrens System in Malaysia*. Kuala Lumpur: Malayan Law Journal.
- Zainal-Abidin, R. (2004). Water Resources Management in Malaysia – The Way Forward, Opening Remarks to the Conference on Asian Water 2004, The Mines Kuala Lumpur, Malaysia. 30 March – 2 April.
- Zhan, X., Lo, C. W. H., & Tang, S. Y. (2013). Contextual changes and environmental policy implementation: a longitudinal study of street-level bureaucrats in Guangzhou, China. *Journal of Public Administration Research and Theory*, 24(4), 1005-1035.
- Zhang, X., & Bartol, K. M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of management journal*, 53(1), 107-128.
- Zhu, X., Zhang, L., Ran, R., & Mol, A. P. (2015). Regional restrictions on environmental impact assessment approval in China: The legitimacy of environmental authoritarianism. *Journal of Cleaner Production*, 92, 100-108.
- Zimmerman, J. F. (1996). *The neglected dimension of federalism: Interstate relations*. Westport, CT: Praeger.
- Zobel, T. (2008). Characterisation of environmental policy implementation in an EMS context: A multiple-case study in Sweden. *Journal of Cleaner Production*, 16(1), 37-50.