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The Theory of Change for Landscape Approaches and its Implementation in Sabah, Malaysia Borneo

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TITLE: THE THEORY OF CHANGE FOR LANDSCAPE APPROACHES AND ITS IMPLEMENTATION IN SABAH, MALAYSIA BORNEO

Keywords: jurisdictional approach, deforestation, palm oil, collaborative governance, transformational change, Borneo

Abstract:

The jurisdictional approach is a relatively new concept and only gained popularity in the early 2010s, and as such, there is no one jurisdiction that have actually progressed through the entire theory of change (TOC). This thesis will make the contribution of providing a better understanding of the TOC for the jurisdictional approach, and its practical implementation on the ground. It uses a potentially influential jurisdictional approach, the Roundtable of Sustainable Palm Oil Jurisdictional Approach (RSPO JA) implemented in Sabah, a state in Malaysia Borneo, as a case study. The objectives are to determine if Sabah is undergoing a transformational change through the RSPO JA, to identify its collaborative governance challenges, and to understand the perception of stakeholders on what should be the outcomes of the RSPO JA. The transformational change theory using a political-economy lens, collaborative governance theories, and the literature on landscape and jurisdictional approaches were used. Data collection drew primarily from (i) interviews with 29 respondents from the government, civil society, business and industry, and the research sectors, and supplemented by (ii) the review of grey literature such as policy documents, reports, and newspaper articles. The first objective used a case study method while for Objectives 2 and 3, the Q-methodology was used. The first objective concluded that Sabah did intend to transform but struggled to implement its ambitious policies because of the patronage system that is still very much in existence. The second objective examined the challenges of the RSPO JA. Securing higher-level political commitment, and the stakeholders not having a shared understanding of the common goals, which was attributed to the RSPO JA being a new initiative, were identified as the main challenges. The third objective helped illustrate the second objective on the "no shared understanding", as three different perspectives for the jurisdictional approach outcomes pertaining to the environment, economy, governance and smallholders' welfare were found. Notwithstanding, all three perspectives agreed that one of jurisdictional approach outcomes that will not happen in ten years' time, is achieving the "zero-deforestation" goal. In conclusion, for Sabah to access the environmentally sensitive countries' markets, the state needs to go for a "zero-deforestation territory". This is because one of the main issues in Sabah is the cross-commodities deforestation (tree plantations expansion at the expense of so-called degraded natural forests), and therefore, RSPO certification may not be the most appropriate for a jurisdiction. However, "zero-deforestation" in a large landscape is not easy to achieve. In moving forward, consumer countries should not have a narrow view on just reducing deforestation, but instead view such initiatives more holistically and recognise the efforts of producer countries and reward them. Only then would a producing country make sustainable production of commodities as part of their political agenda.

SUMMARY OF THESIS

The jurisdictional approach has gained popularity as a solution to address today's global challenges, specifically to resolve deforestation while balancing human livelihoods and the need for agriculture expansion. This thesis is about the jurisdictional approach and the goal is to provide a better understanding of the theory of change (TOC) for the jurisdictional approach and its implementation, by providing evidence on the way it brings about change in real life settings. I seek to do so because the jurisdictional approach is a relatively new concept and only gained popularity in the early 2010s. There is no one jurisdiction that have actually progressed through the entire TOC, and as such, this thesis used empirical evidence to understand why it started, the challenges it faced and its potential outcomes. A potentially influential jurisdiction approach, the Roundtable of Sustainable Palm Oil Jurisdictional Approach (RSPO JA) is used, which was conceptualised in 2015 by the RSPO secretariat themselves. The RSPO JA seeks to address the limitations of certifying individual plantation units, by instead using one certification for a whole jurisdiction to maintain forest cover, support wildlife conservation, and improve local communities and plantation workers' welfare. The other important aspect of the RSPO JA is that it requires the government to play the lead role for its overall implementation. Three jurisdictions volunteered to implement the RSPO JA, which are Sabah, a state in Malaysia Borneo, Seruyan district in Kalimantan, Indonesia, and the country of Ecuador. Sabah is used as a case study for this PhD because the state is assumed to be the most advance in its implementation of the RSPO JA, and that it had an interesting history of forest exploitation, and then the intention to change its bad practices to a jurisdiction that manages its natural resources sustainably. To achieve the goal, there are three specific objectives:

1. To determine if Sabah is going through a transformational change, and to identify the determinants that are enabling or hindering the change.
2. To identify collaborative governance challenges in the RSPO JA.
3. To understand the perception of stakeholders on what should be the outcomes of the RSPO JA.

To achieve the objectives, I drew upon literature of "transformational change" using a political-economy lens, collaborative governance theories, and the landscape and jurisdictional approach literature. A mixed qualitative and quantitative approach was employed. The data collection drew primarily from (i) interviews with 29 respondents from the government, civil society, business and industry, and the research sectors, and supplemented by (ii) the review of grey literature such as policy documents, reports, and newspaper articles. For the first objective, the case study method was used, because it can capture a rich array of contextual data based on the experiences and knowledge of the respondents interviewed. For Objectives 2 and 3, the Q-methodology was used, which is a mixed method of qualitative and quantitative approaches, through studying discourses and employing factor analysis. It is a method that is helpful in studying perceptions using a clear and structured way.

The first objective covered the beginning of the jurisdictional approach TOC, where I concluded that Sabah did intend to transform but struggled to implement its ambitious policies because of the patronage system that is still very much in existence. Political turnover also impacts the implementation by delaying or completely abandoning the new policies, as when a new government comes into power, time is needed to harness the new government's support, or the transformational change policies can be shelved because it was created by the previous government. In addition, because Sabah went on a more ambitious path to use international standards like FSC and RSPO, the state struggled to meet these high standards which also caused the non-implementation of its policies. Internally, the main drivers for its change were local leaders' visions that shaped and supported the policies, and a dominant civil society coalition lobbying for it. While externally, there was the international pressure to keep a good reputation, and the promises of economic returns through the global market demand for sustainably produced palm oil.

The second objective covered the middle part of the TOC, which is the collaborative process. This is where the consensus building and negotiations takes place, before the policy development and decision making. The second objective found three different perspectives for the collaboration challenges: - (i) members view that they do not have the mandate to make decision; (ii) members view there is non-accountability to the RSPO JA progress; and (iii) members view that they do not have a common understanding of the goals of the RSPO JA. These challenges identified are all inter-related. It shows that that different perceptions exist when it comes to power, where the less powerful members believe there is an imbalance although the more powerful members (government sector) do not. And as such, the less powerful members do not dare question the more powerful members when progress is slow (leading to non-accountability of the RSPO JA progress). The perspective that the members do not have the mandate to make decisions has to do with securing higher-level political commitment, which is a collaborative governance challenge common to the jurisdictional approach. The reason to this is because the political leaders and government officials are considered the more "powerful" actors in the RSPO JA policy network. They ultimately are the actors that can ensure that the RSPO JA is successful. However, political leaders may not want the RSPO JA to work because they are afraid of losing their patronage-client privileges and their vested interest in the palm oil business. As such, they can purposely delay the RSPO JA implementation by avoiding making decisions, or delaying activities.

The third objective also researches the middle part of the TOC, specifically on the "shared vision" of the collaborative process. Two criteria were used to find out the perspectives of stakeholders involved in the JA on what they think should be the outcomes of the RSPO JA, which were: - in ten years' time and it should be realistic. The results from the third objective helped illustrate one of the findings from the second objective, which was that were no "shared understanding" of the goals of the collaboration. This was because three different perspectives were found for the jurisdictional approach outcomes pertaining to the environment, economy, governance and smallholders' welfare. For the environment, two perspectives expect that crop expansion will cease in HCVs, biodiverse areas and peatlands, while one perspective remained neutral as they think landowners have the right to convert forest even if it is on HCV areas, as it is on private land. While for the economic outcomes, two

perspectives expect that preferential sourcing agreements will be secured between the jurisdiction's supplier and buyer companies outside of the jurisdiction, while one perspective remained neutral. Notwithstanding, all three perspectives agreed on one of the jurisdictional approach outcomes that will not happen in ten years' time, which was the non-feasibility to achieve the "zero-deforestation" goal, if it strictly follows the RSPO Principles and Criteria to be 100% RSPO certified. Interestingly, all three perspectives agreed that the most likely outcomes were of human-wellbeing: - (i) Free, Prior and Informed Consent will be required by law in Sabah, and (ii) labour and living conditions of plantation workers will be improved. These were very much influenced by the already established legislations, policies or commitments made in Sabah and Malaysia.

In conclusion, this PhD contributed to understanding the JA on its expected outcomes, and the institutional/political challenges faced to operationalised this type of approach. It has proven that applying the jurisdictional approach in a tropical forested landscape is a complex exercise because there are many political-economy factors that can affect its implementation and success. The research has shown that at each stage of the TOC, there are significant challenges that need to be taken into consideration before the jurisdictional approach is able to proceed to the next one, and reach its full potential. In theory, it is suggested that the jurisdictional approach is multi-stakeholder and decisions are made by consensus, but the fact remains that the political leaders and their clients are the more powerful actors, and therefore, such power asymmetries need to be taken into account. This research also shows that implementing a jurisdictional approach is a long-term endeavour, and Sabah's stakeholders can be said to be "muddling through" it because no one really knows in reality how to make a jurisdictional approach work. Therefore, the jurisdictional approach should not be seen as a linear process, but an iterative one, where adaptive management needs to be applied when things are not moving. Lastly, trade-offs between people and nature will happen and this needs to be acknowledged by all parties. This inevitably affects the "zero-deforestation" or "reduce deforestation" goals of a JA, and how achievable it is.

Moving forward, the recommendation is for the state to own up that is it not possible to stop deforestation completely in the whole landscape, clarify what can be achieved for deforestation reduction, and clearly communicate it to the rest of the world. Besides the renegotiation of the RSPO JA's goals, Sabah needs to also rethink its strategy especially if it wants continued access to the environmentally sensitive countries' markets (which initially was its main driver). A recommendation is to go for a "zero-deforestation territory". The reason this is recommended is because one of the main issues in Sabah is the cross-commodities deforestation (tree plantations expansion at the expense of so-called degraded natural forests), and therefore, RSPO certification may not be the most appropriate for a jurisdiction. However, the "zero-deforestation territory" is not easy to achieve. One way to move it along, is to make it more compelling for the political leaders to want it. This means, consumer countries should not have a narrow view on just reducing deforestation, but instead view such initiatives more holistically. Instead, these buyer countries should recognise and reward the efforts made by producer countries to improve, and help them achieve a more sustainable and equitable national economy. This would include preferential sourcing agreement, in particular supply chain commitments and long-term contracts from buyers, and buyers investing in the jurisdiction. Only by recognising efforts, rewarding producer countries for good

behaviour, and working together with them on an agreed common agenda, would a producing state make sustainable production of commodities as part of their broader institutional structure.

Table A below give a concise overview of my PhD thesis.

Table A. A concise overview of my PhD thesis

Objective	Analytical concept used	Research gap	Information needed	Data collected and methodology	Key message	Contribution to the overall goal
Objective 1: To determine if Sabah is going through a transformational change, and to identify the determinants that are enabling or hindering the change.	Transformational change (TC) through a political-economy lens	The literature on TC generally focus on policy changes directly initiated by external parties (e.g. REDD+). For Objective 1, there are two crucial issues to understand. The first is if a state is actually transforming, and what are the indicators to confirm it. Second, what are the conditions that enable or hinder the TC, especially when the said "TC" emerged internally, like the case of Sabah.	1) Confirmation if Sabah is transforming, the type of policies that lead to the transformation, reasons Sabah decided to adopt these policies, and the challenges it faced 2) Confirmation on why Sabah adopted the RSPO JA	<u>Case study research method used</u> 1) Data collection: - Desk review (policy documents, newspaper articles, published and unpublished materials) - Semi structured interviews (expert and snowball sampling, n=29) 2) Data analysis: - Content analysis using NVIVO - Triangulate the evidence from the	1) Sabah did intend to change but it was held back by the: - Patronage system in the state - Frequent political turnovers - Difficulty in meeting international certification standards 2) Sabah would be in a good position to implement changes, as the state meets two important conditions generally considered as key for TC: National ownership and a dominant coalition (i.e., civil society) pushing for TC. 3) Implementing TC requires innovative institutional reform by a government/state, and consumer countries will need to play a role in addressing the pressure to the forest caused by growing the commodities they import.	The first objective covers the start of the theory of change, showing the emergence of the jurisdictional approach (JA) that is crafted through a longer process of institutional change. It provides a better understanding on how and why a JA is adopted by a state. It also gives the enabling or hindering conditions for a TC, especially for a tropical forested landscape.

Objective	Analytical concept used	Research gap	Information needed	Data collected and methodology	Key message	Contribution to the overall goal
				desk review and interviews to verify interpretation		
Objective 2: To identify collaborative governance challenges in the RSPO JA	Collaborative governance in natural resource management	Knowledge gaps exist in unravelling the formula to a successful collaboration when confronted with complex environmental problems across countries' administrative jurisdictions. This research will provide a better understanding of collaborative governance challenges that are specific to jurisdictional approaches.	1) Perspectives of the stakeholders of the RSPO JA on what they think are the collaborative governance challenges	<u>Q-methodology used</u> 1) Data collection: - Interviews with stakeholders (n=17) to understand the collaborative governance challenges - Desk review (secondary sources reports and published articles) - Ranking of 30 statements pertaining to the research question, on a grid, called a	1) The collaborative governance challenges identified are: - Different perceptions exist when it comes to power, where the less powerful members believe there is an imbalance although the more powerful members do not. - Trust will erode if the collaboration does not produce results, and when it is not governed transparently with proper procedures in place. - The RSPO JA is a new and that no one has experience in certifying a whole jurisdiction, hence the delay in progress.	The second objective covers the middle part of the theory of change, which is termed the "collaborative process". It identifies the challenges faced by a multistakeholder platform (which is used by a jurisdictional approach) to achieve its goals. By doing so, it provides a better understanding on what can be done to sustain a jurisdictional approach. The results from Objective 2 also confirmed one of the conclusions I made in Objective 1, which is the challenge of obtaining political

Objective	Analytical concept used	Research gap	Information needed	Data collected and methodology	Key message	Contribution to the overall goal
				Q-sort (n=14 Q-sort) 2) Data analysis: - Using an open software Ken-Q Analysis, where Principal Component Analysis was used for initial factor extractions, and then Varimax to rotate the chosen factors.	- Securing higher-level government commitment. - There is no shared understanding of the common goal. 2) One immediate action that can be taken is to improve the governance of the collaboration, by ensuring transparency and accountability in its process. Shared goals should be clarified together as a group and communicated properly using a common language.	commitment to implement the RSPO JA.
Objective 3: To understand the perception of stakeholders on what should be the outcomes of the RSPO JA.	Value propositions for different type of stakeholders in the landscape or jurisdictional	Publications on JA mostly entailed the challenges it faces, its enabling conditions and its framework. Research focusing on the JA outcomes or the value propositions for the different stakeholders are lacking, as most JAs	1) Stakeholders' perspectives on what they think should be the outcomes of a jurisdictional approach. This question was asked with two criteria in place, that the outcomes should	<u>Q-methodology used</u> 1) Data collection: - Interviews with stakeholders (n=29) to understand	1) Three different perspectives for the JA outcomes among the RSPO JA stakeholders were found, on the environment, economy, governance and smallholders welfare outcomes. However, all three perspectives agree that: - It is not feasible to achieve the zero-deforestation goal	The third objective researches the middle part of the theory of change, specifically on the "shared vision" of the collaborative process. It provides a better understanding of the "no shared goal" collaboration

Objective	Analytical concept used	Research gap	Information needed	Data collected and methodology	Key message	Contribution to the overall goal
		are still being implemented. In the JA literature, the end goal is often stated as to stop or reduce deforestation. This objective seeks to provide a better understanding of key stakeholders' perceptions and expectation of what a JA can achieve.	happen in 10 years' time (2022-2032), and it should take into account the real-world situation.	stakeholders' perspectives on the JA outcomes - Desk review (secondary sources reports and published articles) - Ranking of 29 statements pertaining to the research question, on a grid, called a Q-sort (n=26 Q-sorts) 2) Data analysis: - Using an open software Ken-Q Analysis, where Principal Component Analysis was used for initial factor extractions,	- Compensation and incentives will not be given to private land owners that avoid forest conversion into plantations - Plantation workers' labour and living conditions will be improved - FPIC will be required by law in the jurisdiction 2) The perspectives of the stakeholders were influenced by the already established legislations, policies or commitments made (i.e. MSPO, Sabah Forest Policy, NDPE). These institutional factors create the enabling conditions for the RSPO JA to happen. 3) There needs to be more deliberations and communications on what the "shared goals" are for the RSPO JA outcomes.	challenge identified in the 2nd objective. It also showed that despite having different views of economic, environmental, governance, and smallholders' welfare outcomes, consensus exists on the unfeasibility of achieving the zero-deforestation goal, which in the literature is said to be the main goal of the JA.

Objective	Analytical concept used	Research gap	Information needed	Data collected and methodology	Key message	Contribution to the overall goal
				and then Varimax to rotate the chosen factors.	4) However, if the ultimate objective of the JA is to stop deforestation and obtain preferential sourcing, certifying a jurisdiction with a commodity standard may not provide the results. Instead, the more appropriate path to take is a "zero-deforestation territory, that goes beyond a specific commodity chain.	

TITRE : LA THÉORIE DU CHANGEMENT POUR LES APPROCHES PAYSAGISTES ET SA MISE EN ŒUVRE À SABAH, MALAISIE BORNEO

Mots-clés : approche juridictionnelle, déforestation, huile de palme, gouvernance collaborative, changement transformationnel, Bornéo

Résumé :

L'approche juridictionnelle est un concept relativement nouveau et n'a gagné en popularité qu'au début des années 2010, et à ce titre, aucune juridiction n'a réellement complétement mis en œuvre l'ensemble de la théorie du changement (TOC). Cette thèse vise à atteindre une meilleure compréhension de la réalité de la mise en œuvre de la TOC des approches juridictionnelles. Elle porte sur un cas d'approche juridictionnelle mise en œuvre par la Table ronde sur l'huile de palme durable à Sabah (RSPO), un État de Bornéo en Malaisie. Les objectifs sont de déterminer si la RSPO JA s'inscrit dans un réel processus de changement transformationnel autour de la gestion des terres à Sabah, d'identifier les défis de gouvernance collaborative posés par la mise en œuvre de cette approche et de comprendre la perception des parties prenantes sur ce que devraient être les résultats à moyen-terme de la RSPO JA. L'approche en économie politique du concept de changement transformationnel, les théories de la gouvernance collaborative et la littérature sur les approches paysagères et juridictionnelles ont été utilisées pour construire le cadre conceptuel et analytique de la thèse. La collecte des données s'est principalement appuyée sur (i) des entretiens avec 29 répondants du gouvernement, de la société civile, des entreprises et de l'industrie, et des secteurs de la recherche, et a été complétée par (ii) l'examen de la littérature grise. Le premier objectif a utilisé une méthode d'étude de cas tandis que pour les objectifs 2 et 3, la méthodologie Q a été utilisée. Le premier chapitre empirique de la thèse montre que Sabah avait bien l'intention de se transformer mais a globalement du mal à mettre en œuvre ses politiques ambitieuses en raison du système de clientélisme toujours très présent. Le deuxième chapitre empirique montre que l'obtention d'un engagement politique au plus haut niveau et le fait que les parties prenantes n'ont pas une compréhension partagée des objectifs communs figurent comme les barrières au succès de la RSPO JA. Le troisième chapitre empirique a permis d'étudier plus en avant cette « absence de compréhension partagée » et a révélé l'existence de trois perspectives différentes concernant les objectifs environnementaux, économique, sociaux et de gouvernance de la RSPO JA. Néanmoins, les trois points de vue ont convenu qu'il est irréaliste d'atteindre l'objectif de « zéro déforestation » à moyen terme. En conclusion, pour que Sabah accède aux marchés des pays écologiquement sensibles, l'État doit opter pour un "territoire zéro déforestation". En effet, l'un des principaux problèmes à Sabah est la déforestation inter-produits (expansion des plantations d'arbres au détriment des forêts naturelles dites dégradées), et par conséquent, la certification RSPO n'est peut-être pas la solution la plus appropriée pour cette juridiction. Cependant, l'objectif de « zéro déforestation » n'est pas facile à atteindre à large échelle. Pour aller de l'avant, les pays consommateurs ne devraient pas avoir une vision étroite de la simple réduction de la déforestation, mais plutôt envisager ces initiatives de manière plus globale et reconnaître les efforts des pays producteurs et les récompenser. Ce n'est qu'alors qu'un pays producteur intégrerait la production durable dans son agenda politique.

RÉSUMÉ DE LA THESE

L'approche juridictionnelle a gagné en popularité en tant que solution pour relever les défis mondiaux d'aujourd'hui, en particulier pour résoudre la déforestation tout en équilibrant les moyens de subsistance humains et le besoin d'expansion de l'agriculture. Cette thèse porte sur l'approche juridictionnelle et l'objectif est de fournir une meilleure compréhension de la théorie du changement (TOC) pour l'approche juridictionnelle et sa mise en œuvre, en fournissant des preuves sur la façon dont elle apporte des changements dans des contextes réels. Je cherche à le faire parce que l'approche juridictionnelle est un concept relativement nouveau et n'a gagné en popularité qu'au début des années 2010. Aucune juridiction n'a réellement progressé dans l'ensemble de la TOC et, à ce titre, cette thèse a utilisé des preuves empiriques pour comprendre pourquoi elle a commencé, les défis auxquels elle a été confrontée et ses résultats potentiels. Une approche de juridiction potentiellement influente, la table ronde sur l'approche juridictionnelle de l'huile de palme durable (RSPO JA) est utilisée. Elle a été conceptualisée en 2015 par le secrétariat de la RSPO lui-même. La RSPO JA cherche à remédier aux limites de la certification des unités de plantation individuelles, en utilisant à la place une certification pour toute une juridiction afin de maintenir le couvert forestier, de soutenir la conservation de la faune et d'améliorer le bien-être des communautés locales et des travailleurs dans les plantations. L'autre aspect important de la RSPO JA est qu'elle exige que le gouvernement joue le rôle principal pour sa mise en œuvre globale. Trois juridictions se sont portées volontaires pour mettre en œuvre la RSPO JA, à savoir Sabah, un État de Malaisie à Bornéo, le district de Seruyan à Kalimantan, en Indonésie, et le pays de l'Équateur. Sabah est utilisé comme étude de cas pour cette thèse parce que l'État est supposé être le plus avancé dans sa mise en œuvre de la RSPO JA, et qu'il avait une histoire intéressante d'exploitation forestière, avec l'intention de changer ses pratiques défaillantes en une juridiction qui gère ses ressources naturelles de manière durable. Pour atteindre le but, il y a trois objectifs spécifiques :

1. Déterminer si Sabah traverse un changement transformationnel et identifier les déterminants qui permettent ou entravent le changement.

2. Identifier les défis de la gouvernance collaborative dans la RSPO JA.

3. Comprendre la perception des parties prenantes sur ce que devraient être les résultats de la RSPO JA.

Pour atteindre ces objectifs, j'ai puisé dans la littérature sur le « changement transformationnel » en utilisant une approche d'économie politique, les théories de la gouvernance collaborative et la littérature sur l'approche paysagère et juridictionnelle. Une approche mixte qualitative et quantitative a été employée. La collecte de données s'est principalement appuyée sur (i) des entretiens avec 29 répondants du gouvernement, de la société civile, des entreprises et de l'industrie, et des secteurs de la recherche, et complétée par (ii) l'examen de la littérature publiée ou non, comme les documents politiques, les rapports et les articles de journaux . Pour le premier objectif, la méthode de l'étude de cas a été utilisée, car elle permet de saisir un riche éventail de données contextuelles basées sur les expériences et les connaissances des répondants interrogés. Pour les objectifs 2 et 3, la méthodologie

Q a été utilisée, qui est une méthode mixte d'approches qualitatives et quantitatives, à travers l'étude des discours et l'utilisation de l'analyse factorielle. C'est une méthode utile pour étudier les perceptions de manière claire et structurée.

Le premier objectif couvrait le début de l'approche juridictionnelle selon la TOC, où j'ai conclu que Sabah avait l'intention de se transformer mais avait du mal à mettre en œuvre ses politiques ambitieuses en raison du système de clientélisme qui existe toujours. Les changements politiques ont également un impact sur la mise en œuvre en retardant ou en abandonnant complètement les nouvelles politiques, car lorsqu'un nouveau gouvernement arrive au pouvoir, il lui faut du temps pour obtenir un soutien, et les politiques de changement transformationnel sont aussi mises de côté parce qu'elles ont été créées par le gouvernement précédent. De plus, parce que Sabah a suivi une voie plus ambitieuse pour utiliser des normes internationales telles que FSC et RSPO, l'État a eu du mal à respecter ces normes strictes, ce qui a également entraîné la non-mise en œuvre de ses politiques. En interne, les principaux moteurs de son changement étaient les visions des dirigeants locaux qui ont façonné et soutenu les politiques, et une coalition dominante de la société civile faisant pression en sa faveur. A l'extérieur, il y avait la pression internationale pour conserver une bonne réputation et les promesses de rendements économiques grâce à la demande du marché mondial pour l'huile de palme produite de manière durable.

Le deuxième objectif couvrait la partie médiane de la TOC, qui est le processus collaboratif. C'est là que se déroulent l'élaboration du consensus et les négociations, avant l'élaboration des politiques et la prise de décision. Le deuxième objectif a trouvé trois perspectives différentes pour les défis de la collaboration : - (i) les membres considèrent qu'ils n'ont pas le mandat de prendre des décisions ; (ii) les membres estiment qu'il n'y a pas de responsabilité vis-à-vis des progrès de la RSPO JA ; et (iii) les membres estiment qu'ils n'ont pas une compréhension commune des objectifs de la RSPO JA. Ces défis identifiés sont tous interdépendants. Il montre que différentes perceptions existent en matière de pouvoir, où les membres les moins puissants croient qu'il y a un déséquilibre alors que les membres les plus puissants (secteur gouvernemental) ne le pensent pas. Et en tant que tels, les membres les moins puissants n'osent pas interroger les membres les plus puissants lorsque les progrès sont lents (conduisant à la non-responsabilité des progrès de la RSPO JA). La perspective selon laquelle les membres n'ont pas le mandat de prendre des décisions est liée à l'obtention d'un engagement politique à un niveau supérieur, ce qui est un défi de gouvernance collaborative commun à l'approche juridictionnelle. La raison en est que les dirigeants politiques et les représentants du gouvernement sont considérés comme les acteurs les plus «puissants» du réseau politique RSPO JA. Ce sont en fin de compte les acteurs qui peuvent garantir le succès de la RSPO JA. Cependant, les dirigeants politiques peuvent ne pas vouloir que la RSPO JA fonctionne parce qu'ils ont peur de perdre leurs privilèges de patronage-client et leur intérêt direct dans le commerce de l'huile de palme. En tant que tels, ils peuvent délibérément retarder la mise en œuvre de la RSPO JA en évitant de prendre des décisions ou en retardant des activités.

Le troisième objectif étudie également la partie médiane de la TOC, en particulier la « vision partagée » du processus collaboratif. Deux critères ont été utilisés pour connaître les perspectives des parties prenantes impliquées dans la JA sur ce qu'elles pensent que devraient être les résultats de la RSPO JA, à savoir - dans dix ans et réalisme. Les résultats du troisième objectif ont aidé à illustrer l'une des constatations du deuxième objectif, à savoir qu'il n'y avait pas de « compréhension partagée » des objectifs de la collaboration. En effet, trois perspectives différentes ont été trouvées pour les résultats de l'approche juridictionnelle concernant l'environnement, l'économie, la gouvernance et le bien-être des petits exploitants. Pour l'environnement, deux perspectives s'attendent à ce que l'expansion des cultures cesse dans les HVC, les zones riches en biodiversité et les tourbières, tandis qu'une perspective reste neutre car ils pensent que les propriétaires fonciers ont le droit de convertir la forêt même si elle se trouve dans des zones HVC, comme c'est le cas sur des terres privées. Alors que pour les résultats économiques, deux perspectives prévoient que des accords d'approvisionnement préférentiels seront conclus entre le fournisseur de la juridiction et les entreprises acheteuses en dehors de la juridiction, tandis qu'une perspective est restée neutre. Néanmoins, les trois points de vue se sont accordés sur l'un des résultats de l'approche juridictionnelle qui ne se produira pas dans dix ans, à savoir la non-faisabilité d'atteindre l'objectif de « zéro déforestation », si le résultat attendu suit strictement les principes et critères de la RSPO à respecter à savoir une certification RSPO totale (100%). Fait intéressant, les trois perspectives ont convenu que les résultats les plus probables étaient le bien-être humain : - (i) le consentement libre, préalable et éclairé sera requis par la loi à Sabah, et (ii) les conditions de travail et de vie des travailleurs des plantations seront améliorées. Celles-ci ont été très influencées par les législations, politiques ou engagements déjà établis à Sabah et en Malaisie.

En conclusion, cette thèse a contribué à comprendre la JA sur ses résultats attendus et les défis institutionnels/politiques rencontrés pour opérationnaliser ce type d'approche. Il a été prouvé que l'application de l'approche juridictionnelle dans un paysage forestier tropical est un exercice complexe car de nombreux facteurs politico-économiques peuvent affecter sa mise en œuvre et son succès. La recherche a montré qu'à chaque étape de la TOC, il y a des défis importants qui doivent être pris en considération avant que l'approche juridictionnelle puisse passer à la suivante et atteindre son plein potentiel. En théorie, il est suggéré que l'approche juridictionnelle soit multipartite et que les décisions soient prises par consensus, mais il n'en demeure pas moins que les dirigeants politiques et leurs clients sont les acteurs les plus puissants et, par conséquent, de telles asymétries de pouvoir doivent être prises en compte. Cette recherche montre également que la mise en œuvre d'une approche juridictionnelle est une entreprise de longue haleine, et on peut dire que les parties prenantes de Sabah « ne s'en soucient guère » parce que personne ne sait vraiment comment faire fonctionner une approche juridictionnelle. Par conséquent, l'approche juridictionnelle ne doit pas être considérée comme un processus linéaire, mais itératif, où la gestion adaptative doit être appliquée lorsque les choses ne bougent pas. Enfin, des compromis entre les hommes et la nature se produiront et cela doit être reconnu par toutes les parties. Cela affecte inévitablement les objectifs de « zéro déforestation » ou de « réduction de la déforestation » d'une JA, et leur accessibilité.

À l'avenir, la recommandation est que l'État reconnaisse qu'il n'est pas possible d'arrêter complètement la déforestation dans l'ensemble du paysage, de clarifier ce qui peut être réalisé pour réduire la déforestation et de le

communiquer clairement au reste du monde. Outre la renégociation des objectifs de la RSPO JA, Sabah doit également repenser sa stratégie, surtout si l'état veut continuer à accéder aux marchés des pays sensibles à l'environnement (ce qui était initialement son principal moteur). Une recommandation est d'opter pour un « territoire zéro déforestation ». La raison pour laquelle cela est recommandé est que l'un des principaux problèmes à Sabah est la déforestation inter-produits (expansion des plantations d'arbres au détriment des forêts naturelles dites dégradées), et par conséquent, la certification RSPO peut ne pas être la plus appropriée pour une juridiction. Cependant, le « territoire zéro déforestation » n'est pas facile à atteindre. Une façon de faire avancer ce concept est de le rendre plus convaincant pour les dirigeants politiques. Cela signifie que les pays consommateurs ne devraient pas avoir une vision étroite de la simple réduction de la déforestation, mais plutôt envisager ces initiatives de manière plus holistique. Au lieu de cela, les pays acheteurs devraient reconnaître et récompenser les efforts déployés par les pays producteurs pour s'améliorer et les aider à parvenir à une économie nationale plus durable et équitable. Cela comprendrait un accord d'approvisionnement préférentiel, en particulier des engagements de chaîne d'approvisionnement et des contrats à long terme avec des acheteurs et des acheteurs investissant dans la juridiction. Ce n'est qu'en reconnaissant les efforts, en récompensant les pays producteurs pour leur bon comportement et en travaillant avec eux sur un programme commun convenu qu'un État producteur pourrait intégrer la production durable de produits de base dans sa structure institutionnelle plus large.

Le tableau A ci-dessous donne un aperçu concis de ma thèse de doctorat.

Tableau A. Un aperçu concis de ma thèse de doctorat

Objectif	Concept analytique utilisé	Lacune de la recherche	Informations requises	Données collectées et méthodologie	Message clé	Contribution à l'objectif global
Objectif 1 : Déterminer si Sabah traverse un changement transformationnel et identifier les déterminants qui permettent ou entravent le changement.	Changement transformationnel (CT) à travers une approche d'économie politique	La littérature sur le CT se concentre généralement sur les changements de politique directement initiés par des parties externes (par exemple REDD+). Pour l'Objectif 1, il y a deux questions cruciales à comprendre. La première est de savoir si un état se transforme réellement et quels sont les indicateurs pour le confirmer. Deuxièmement, quelles sont les conditions qui permettent ou entravent le TC, surtout lorsque ledit TC a émergé en interne, comme à Sabah.	1) Confirmation si Sabah se transforme, le type de politiques qui ont conduit à la transformation, les raisons pour lesquelles Sabah a décidé d'adopter ces politiques et les défis auxquels il a été confronté 2) Confirmation de la raison pour laquelle Sabah a adopté la RSPO JA	<u>Méthode de recherche par étude de cas utilisée</u> 1) Collecte de données: - Revue documentaire (documents politiques, articles de journaux, documents publiés et non publiés) - Entretiens semi-structurés (échantillonnage expert et boule de neige, n=29) 2) Analyse des données:	1) Sabah avait l'intention de changer mais il a été retenu par: - Système de mécénat de l'état - Changements politiques fréquents - Difficulté à respecter les normes internationales de certification 2) Sabah serait en bonne position pour mettre en œuvre des changements, car l'État remplit deux conditions importantes généralement considérées comme essentielles pour la CT : l'appropriation nationale et une coalition dominante (c'est-à-dire la société civile) faisant pression pour la CT. 3) La mise en œuvre de la CT nécessite une réforme	Le premier objectif couvre le début de la théorie du changement, montrant l'émergence de l'approche juridictionnelle (JA) qui est élaborée à travers un processus plus long de changement institutionnel. Il permet de mieux comprendre comment et pourquoi une JA est adoptée par un État. Il donne également les conditions favorables ou défavorables pour un CT, en particulier pour un paysage forestier tropical.

Objectif	Concept analytique utilisé	Lacune de la recherche	Informations requises	Données collectées et méthodologie	Message clé	Contribution à l'objectif global
				- Analyse de contenu avec NVIVO - Trianguler les preuves issues de l'examen documentaire et des entretiens pour vérifier l'interprétation	institutionnelle innovante par un gouvernement/État, et les pays consommateurs devront jouer un rôle dans la lutte contre la pression sur la forêt causée par la culture des produits qu'ils importent.	
Objectif 2: Identifier les défis de la gouvernance collaborative dans la RSPO JA	Gouvernance collaborative dans la gestion des ressources naturelles	Des lacunes dans les connaissances existent pour démêler la formule d'une collaboration réussie face à des problèmes environnementaux complexes dans les juridictions administratives des pays. Cette recherche permettra de mieux comprendre les défis de la gouvernance collaborative propres aux approches juridictionnelles.	1) Perspectives des parties prenantes de la RSPO JA sur ce qu'elles pensent être les défis de la gouvernance collaborative	<u>Q-méthodologie utilisée</u> 1) Collecte de données: - Entretiens avec les parties prenantes (n=17) pour comprendre les enjeux de la gouvernance collaborative - Revue documentaire (rapports de	1) Les enjeux de gouvernance collaborative identifiés sont: - Différentes perceptions existent en matière de pouvoir, où les membres les moins puissants croient qu'il y a un déséquilibre alors que les membres les plus puissants ne le pensent pas. - La confiance s'érodera si la collaboration ne produit pas de résultats et si elle n'est pas régie de manière transparente avec des procédures appropriées en place.	Le deuxième objectif couvre la partie médiane de la théorie du changement, appelée « processus collaboratif ». Il identifie les défis auxquels est confrontée une plateforme multipartite (qui est utilisée par une approche juridictionnelle) pour atteindre ses objectifs. Ce faisant, il permet de mieux comprendre ce qui peut être fait pour soutenir une approche

Objectif	Concept analytique utilisé	Lacune de la recherche	Informations requises	Données collectées et méthodologie	Message clé	Contribution à l'objectif global
				sources secondaires et articles publiés) - Classement de 30 énoncés relatifs à la question de recherche, sur une grille, appelée Q-sort (n=14 Q-sort) 2) Analyse des données: - Utilisation d'un logiciel ouvert Ken-Q Analysis, où l'analyse en composantes principales a été utilisée pour les extractions de facteurs initiales, puis Varimax pour faire pivoter les facteurs choisis.	- La RSPO JA est une nouveauté et personne n'a l'expérience de certifier toute une juridiction, d'où le retard en cours. - Obtenir l'engagement du gouvernement au plus haut niveau. - Il n'y a pas de compréhension partagée de l'objectif commun. 2) Une action immédiate qui peut être entreprise est d'améliorer la gouvernance de la collaboration, en assurant la transparence et la responsabilité dans son processus. Les objectifs partagés doivent être clarifiés ensemble en tant que groupe et communiqués correctement en utilisant un langage commun.	juridictionnelle. Les résultats de l'objectif 2 ont également confirmé l'une des conclusions que j'avais tirées de l'objectif 1, à savoir le défi d'obtenir un engagement politique pour mettre en œuvre la RSPO JA.

Objectif	Concept analytique utilisé	Lacune de la recherche	Informations requises	Données collectées et méthodologie	Message clé	Contribution à l'objectif global
Objectif 3: Comprendre la perception des parties prenantes sur ce que devraient être les résultats de la RSPO JA.	Propositions de valeur pour différents types de parties prenantes dans le paysage ou la juridiction	Les publications sur la JA portaient principalement sur les défis auxquels elle est confrontée, ses conditions favorables et son cadre. Les recherches axées sur les résultats de l'EC ou les propositions de valeur pour les différentes parties prenantes font défaut, car la plupart des AC sont encore en cours de mise en œuvre. Dans la littérature JA, l'objectif final est souvent énoncé comme étant d'arrêter ou de réduire la déforestation. Cet objectif vise à fournir une meilleure compréhension des perceptions et des attentes des principales parties prenantes quant à ce qu'une JA peut réaliser.	1) Les points de vue des parties prenantes sur ce qu'ils pensent être les résultats d'une approche juridictionnelle. Cette question a été posée avec deux critères en place, à savoir que les résultats devraient se produire dans 10 ans (2022-2032), et qu'elle devrait prendre en compte la situation réelle.	<u>Q-méthodologie utilisée</u> 1) Collecte de données: - Entretiens avec les parties prenantes (n=29) pour comprendre leurs points de vue sur les résultats de l'AP - Revue documentaire (rapports de sources secondaires et articles publiés) - Classement de 29 énoncés relatifs à la question de recherche, sur une grille, appelée Q-sort (n=26 Q-sorts)	1) Trois perspectives différentes pour les résultats de la JA parmi les parties prenantes de la RSPO JA ont été trouvées, sur les résultats de l'environnement, de l'économie, de la gouvernance et du bien-être des petits exploitants. Cependant, les trois points de vue s'accordent à dire que: - Il n'est pas possible d'atteindre l'objectif de zéro déforestation - Aucune compensation ni incitation ne sera accordée aux propriétaires fonciers privés qui évitent la conversion des forêts en plantations - Les conditions de travail et de vie des travailleurs des plantations seront améliorées - Le CLIP sera requis par la loi dans la juridiction 2) Les perspectives des parties prenantes ont été influencées par les législations, les	Le troisième objectif étudie la partie médiane de la théorie du changement, en particulier sur la « vision partagée » du processus collaboratif. Il permet de mieux comprendre le défi de la collaboration « sans objectif partagé » identifié dans le 2e objectif. Il a également montré qu'en dépit d'opinions différentes sur les résultats économiques, environnementaux, de gouvernance et de bien-être des petits exploitants, un consensus existe sur l'impossibilité d'atteindre l'objectif de zéro déforestation, qui, dans la littérature, est considéré comme

Objectif	Concept analytique utilisé	Lacune de la recherche	Informations requises	Données collectées et méthodologie	Message clé	Contribution à l'objectif global
				2) Analyse des données: - Utilisation d'un logiciel ouvert Ken-Q Analysis, où l'analyse en composantes principales a été utilisée pour les extractions de facteurs initiales, puis Varimax pour faire pivoter les facteurs choisis.	politiques ou les engagements déjà établis (c'est-à-dire MSPO, Sabah Forest Policy, NDPE). Ces facteurs institutionnels créent les conditions propices à la réalisation de la RSPO JA. 3) Il doit y avoir plus de délibérations et de communications sur ce que sont les « objectifs partagés » pour les résultats de la RSPO JA. 4) Cependant, si l'objectif ultime de la JA est d'arrêter la déforestation et d'obtenir un approvisionnement préférentiel, la certification d'une juridiction avec une norme de produit peut ne pas fournir les résultats attendus. Au lieu de cela, la voie la plus appropriée à emprunter est un «territoire zéro déforestation, qui va au-delà d'une filière spécifique.	l'objectif principal de la JA.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ASI	Assurance Services International
BAU	Business-as-usual
BN	Barisan Nasional
CG	Collaborative governance
CM	Chief Minister
EU	European Union
FAO	Food and Agricultural Organisation of the United Nations
FLEGT	Forest Law Enforcement and Governance and Trade
FMP	Forest Management Plan
FPIC	Free, Prior, and Informed Consent
FR	Forest Reserves
FSC	Forest Stewardship Council
HCS	High Carbon Stock
HCV	High Conservation Value
IPLC	Indigenous Peoples and Local Communities
JA	Jurisdictional Approach
JCSC	Jurisdictional Certification Steering Committee
LA	Landscape Approach
MPOB	Malaysian Palm Oil Board
MPOCC	Malaysian Palm Oil Certification Council
MSPO	Malaysia Sustainable Palm Oil
MTCC	Malaysian Timber Certification Council
MTCS	Malaysian Timber Certification Scheme
P&C	Principles and Criteria
PEFC	Programme for the Endorsement of Forest Certification
PES	Payment for Ecosystems
REDD+	Reducing Emission from Deforestation and forest Degradation, "+" signifies the role of conservation, sustainable management of forests and enhancement of forest carbon stocks.

RIL	Reduced Impact Logging
RSPO	Roundtable on Sustainable Palm Oil
RSPO JA	Roundtable on Sustainable Palm Oil Jurisdictional Approach
SFD	Sabah Forestry Department
SFM	Sustainable Forest Management
SFMLA	Sustainable Forest Management License Agreements
TC	Transformational change
TPA	Totally Protected Area
USNO	United Sabah National Organisation
UMNO	The United Malays National Organisation
UNFCCC	United Nations Framework Convention on Climate Change
WWF	World Wide Fund for Nature

CHAPTER 1

1.0 GENERAL INTRODUCTION AND BACKGROUND

1.1 World Crises

The world is in a dire situation. It is facing the increasing effects of climate change (e.g. floods, wildfire, drought), the economy is still trying to recover from the Covid pandemic, global resource are depleting, and people are living in poverty and hunger. Seventy-five percent of the world's land surface had been significantly altered, coral reefs lost by half since the 1870s, wildlife populations decreased by an average of 69% between 1970 and 2018, and 420 million ha of forest converted between 1990 and 2020 (FAO, 2020; IPBES, 2019; WWF, 2022). On top of that, human population have doubled in the past 50 years (eight billion in 2022), and the global economy increased fourfold, driving the demand for energy and materials (IPBES, 2019). Indeed, greenhouse gas emission from fossil fuel combustion, conversion and the degradation of forest leading to land use change, pollution, and unsustainable harvesting of natural resources are among the human activities that have placed us in this situation (WWF, 2022).

Land use change is the major driver of biodiversity loss and the source of nearly one-third of the greenhouse gas emission to the atmosphere, with almost 50% coming from the clearing and degradation of tropical forest (Nepstad et al., 2013; WWF, 2022). Although, tropical forest covers only six percent of the earth's land surface, it contains more than half of the world's global biodiversity and is considered as the most valuable ecosystem on earth (Angelsen & Kaimowitz, 1999; McCarthy & Tacconi, 2011). It is estimated that 4.17 billion people lived within 5 km of a forest in 2019, mostly around the tropical forest of Asia and Africa, and who are dependent on the forest for their livelihoods, but are of the extreme poor (FAO, 2022; Newton, Kinzer, Miller, Oldekop, & Agrawal, 2020). No matter its value as an ecosystem and as a source of livelihood to almost half of the world's population, it is subjected to over exploitation, and the tropics lost 11.9 million ha of tree cover in 2019 (Weisse & Goldman, 2020).

Reports by the Food and Agriculture Organization of the United Nations (FAO), Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), and the World Wide Fund (WWF) for Nature Living Planet Report have all pointed to the urgent need for a transformative change across economic, social, political and technological factors. Indeed, with the current trajectories, the 2030 Sustainable Development Goals (SDG) will not be met, and we risk an "*unliveable future*" (IPBES, 2019; WWF, 2022).

1.2 Deforestation in the Tropics

Deforestation is defined by FAO as the conversion of forest to another land use or the long-term reduction of tree canopy cover below the 10% threshold (Tejaswi, 2007). A substantial number of studies had been done to understand the reasons for tropical deforestation, starting as early as in the 1970s. A study conducted by Allen & Barnes (1985) suggested that deforestation in developing countries are significantly related to population growth, agriculture expansion, and wood harvesting for fuel and export. About 15 years later, the same questions on the causes of deforestation and solutions were still up for debate. However, instead of looking at just the causes, researchers were also trying to understand the underlying driving forces of tropical deforestation (Angelsen & Kaimowitz, 1999; Geist & Lambin, 2002). They found that the underlying driving forces were the public and individual decisions responding to changing national to global scale economic opportunities and/or policies, as mediated by local-scale institutional factors. While the proximate causes were similar to Allen & Barnes (1985), which were direct human activities such as agricultural expansion, wood extraction, and some new ones like infrastructure development and forest fires (Geist, Helmut & Lambin, Eric, 2002). These studies raised doubts about single hypotheses on the causes of deforestation, like the "*population thesis*" (population growth is the driving force of deforestation) and the '*tenure security thesis*" (secure tenure will reduce forest conversion) (Angelsen & Kaimowitz, 1999; Geist & Lambin, 2002). It showed that there is no one dominant theory of global deforestation, but rather, tropical deforestation is caused by different combinations of proximate causes and underlying driving forces, and dependent on the political-economy of the region or country. Oftentimes, deforestation is challenging because it involves numerous

stakeholders, and it permeates across man made boundaries that crosses complex ecosystems and societal dynamics that we sometimes have very little understanding of (Bodin, 2017). To address it, policy makers must take into account the sources of power in the government, political culture, institutional legitimacy and the economic development specific to that one country (McCarthy & Tacconi, 2011).

Fast forward to the year 2022: - the debate on deforestation is still ongoing, and halting it has become more urgent than ever. A meta-analysis done by Busch & Ferretti-Gallon (2017), using case studies of deforestation in well-studied countries like Indonesia, Thailand and Brazil suggest that present day deforestation is continued to be caused by economic returns, such as the clearing of forest for agriculture use. Thus, the direct causes of tropical deforestation is still agriculture expansion, but the political-economy have changed since the early 2000s (Pacheco et al., 2021). The demand for agriculture commodities like soy, palm oil, beef, etc., and its high profits, and the world's growing population have all but add to the problem on stopping or reducing deforestation. The African region have the highest net forest loss, and South America is the second-highest in the 2020 decade (FAO, 2020). On the positive side, the rate of net forest loss did decrease since 1990, from 7.84 million ha in 1990-2000, to 4.74 million ha in 2010-2020 (FAO, 2020). The decrease in the rate of net forest loss is because of reduced deforestation in some countries and forest gain (afforestation) in others, such as in China. For Southeast Asia, the rate of forest loss decreased significantly from 1.84 million ha per year in 1990-2000, to 941,000 ha per year in 2010-2020, and was due to Indonesia reducing its forest loss (FAO, 2020), as the country is now exporting legally recognized timber to the European Union (EU), and banned the drainage of peat for planting (Karsenty, 2021).

China has risen to be the world's new power, and is now a major influencer on the world's forest. Even though China banned logging in all of its natural forest, and slowed deforestation in its own country, its appetite for timber is great, especially for its Belt and Road Initiative[1]. China's timber import has increased fivefold since 2000, and its main tropical timber suppliers are from Indonesia, Malaysia, Papua New Guinea, Solomon Islands and several African countries (Karsenty, 2021). China is seen now as a major player in contributing to deforestation and forest degradation of the world's forest (Karsenty, 2021). This is because in addition to the timber trade, the country is also one of the largest importers of commodities associated with deforestation, like palm oil, which China is the second largest importer after India[2].

1.3 Responses to Deforestation

The responses to stop or reduce deforestation had evolved from the 1950s to the present day. Pacheco et al. (2021) classified these responses into area based and commodity responses, while Börner, Schulz, Wunder, & Pfaff (2020) classified them as disincentives, incentives and enabling measures. An example of area based or a disincentives response is establishing protected areas to protect the forest against overharvesting, which remains as the most widely applied strategy to stop deforestation (Laurance et al., 2012). An enabling measure and area based response that has been used since the 2000s, is the Indigenous Peoples and Local Communities

[1] The Belt and Road Initiative is a global infrastructure development strategy started by the Chinese government in 2013.
[2] India imported 8.53 million tonnes of palm oil while China imported 7.2 million tonnes in 2022 (Indexmundi, 2022a).

(IPLC) tenure rights, that is promoted for communities to protect their lands (Börner et al., 2020; Pacheco et al., 2021). Other area based responses are fire management efforts to prevent wildfires, and land use zoning for conservation and development planning. Land use zoning however, are not often linked to an incentive mechanism and have little enforcement (Pacheco et al., 2021).

For the commodity response, there are the supply chain-based initiatives where large businesses like Nestle and Wilmar voluntarily make public pledges to zero deforestation in their supply chain. A commodity response and disincentive used by the EU is the Forest Law Enforcement and Governance and Trade (FLEGT) that started in 2003 to eliminate illegal timber from EU countries' exports (Karsenty, 2021). Most recently, the European Council in 2022, adopted a new rule to limit the consumption of products contributing to deforestation and forest degradation. The European Council made it mandatory for all operators and traders to do their due diligence before placing a product in the European market. Each company must guarantee that is it not linked to an area that has been deforested after 31st December 2020 (Karsenty, 2022).

For incentives or commodity response, there is the voluntary certification standards or also known as voluntary market-based approaches, that started with the timber sector using the Forest Stewardship Council (FSC) in 1994, but has now expanded to agriculture commodities with deforestation footprints in the tropics, like the Roundtable on Sustainable Palm Oil (RSPO) that was formed in 2004. These standards are market instruments for consumers to use their "power" in rejecting products that

are sourced from deforested areas (Karsenty, 2021). Another incentive is the Payment for Environmental Services (PES) that rewards the provision of forest environmental services (Pacheco et al., 2021). It consist of voluntary transactions between service users and service providers that are conditional on agreed rules of natural resource management for generating offsite services (Wunder, 2015).

The Reducing Emissions from Deforestation and Forest Degradation, plus the sustainable management of forests, and the conservation and enhancement of forest carbon stocks (REDD+), was adopted by the United Nations Framework Convention on Climate Change (UNFCCC) in 2013. REDD+ frames the loss of forest as a climate mitigation issues, and uses performance-based payments to encourage national or sub-national political leaders to take action. In theory, REDD+ promises to bring in a new approach that is different from the previous response, which are large scale funding and performance-based rewards, so that forest users are given an economic incentive by using the value of the carbon sequestered and stored in trees, to keep the forest standing (Angelsen, Brockhaus, Sunderlin, & Verchot, 2012). Pilot REDD+ projects proliferated in forest rich countries such as Brazil, Colombia and Indonesia (Pacheco et al., 2021). Additionally, bilateral agreements were also made to compensate for the slowness of international agreements, such as Norway making performance-based payment agreements with amongst others, Brazil and Indonesia, for these forest rich countries to address the causes of deforestation and degradation (Karsenty, 2021). However, the risk of emissions leakage (amongst other problems) continue to plague REDD+ implementation, particularly at project-level activities (Streck, 2021). This was where the jurisdictional approach (JA) was suggested, to link government

interventions, supply chain efforts and conservation actions together in a more holistic manner (Streck, 2021; Wunder et al., 2020).

1.4 Jurisdictional Approach as a Response to Deforestation

The responses provided above are generally implemented by sectors, meaning there is no proper coordination among the multiple institutions, the different governance levels, and the stakeholders involved in forest management, along with those that benefit from the forest or depend on it. Thus, a more integrated approach to reducing deforestation and sustainable land use was needed, and the JA was introduced as a potential alternative (von Essen & Lambin, 2021). The JA originated from REDD+, the landscape approach (LA) and incentives responses such as sustainable commodity production (Boyd et al., 2018; Fishman, Oliveira, & Gamble, 2017; von Essen & Lambin, 2021). It came about because of the limitations of other strategies employed to address the threat of commodity production to the forest, such as producer level sourcing/certification, which for it to succeed, requires the supporting policies or enabling conditions that only governments can give (Boshoven et al., 2021; von Essen & Lambin, 2021). In essence, the JA main goals are to reduce, limit or address deforestation, and for the conservation of ecosystems, by tackling unsustainable resource use in the tropics and reconciling competing land uses (Boyd et al., 2018; Brandão et al., 2020; Reed, Ros-Tonen, & Sunderland, 2020; Stickler et al., 2018; von Essen & Lambin, 2021).

The LA and the JA are similar as they are both multi-stakeholders, and is used to manage conflicting land uses in a designated area for conservation and human well-being purposes. However, the JA differs from the LA as it has these criteria that a LA may not have:- it is mainly applied to reduce deforestation and sustainable commodity production, it works in a clearly defined administrative boundary, it uses government mandate to overcome institutional barriers and therefore it is a government led initiative, the multi-stakeholder collaboration is more formal, and often involves the private sector (Buchanan et al., 2019; Denier et al., 2015; Paoli, Palmer, Schweithelm, Limberg, & Green, 2016; Stickler et al., 2018; von Essen & Lambin, 2021).

In fact, the JA only started gaining recognition and appearing in literature in 2010s onwards (Brandão et al., 2020; Seymour, Aurora, & Arif, 2020). Emerging jurisdictional approaches were first analysed in grey literature by large non-governmental organizations like WWF and The Nature Conservancy who were interested in using this approach to reduce deforestation in agriculture commodity driven areas. In 2021, von Essen and Lambin compiled a global database of conservation initiatives using the JA, and defined the JA as, "*governance initiatives that promote sustainable resource use at the scale of jurisdictions through a formalized collaboration between government entities and actors from civil society and/or the private sector, based on practices and policies intended to apply to all affected stakeholders within the jurisdiction*" (von Essen & Lambin, 2021).

1.5 Problem statement

The theory of change is a method used to identify the logical and sequential effects that occur when a system responds to interventions, actions or disruptions (Qiu et al., 2018). It emphasizes on having a shared vision and anticipated goals in order for actions to be formulated, the benefits and consequences to be identified, and providing the evidence to validate the assumptions made (Qiu et al., 2018). From the literature review, there is yet a JA that has gone through the entire theory of change, as most are currently in formation or implementation. It is important to understand the causal linkages between the interventions of a JA (e.g. clarify assumptions) for it to be effective (Chervier, Piketty, & Reed, 2020). This PhD research thus intends to fill in this gap, in understanding the theory of change of the JA in reducing deforestation and for biodiversity conservation, by providing evidence on the way JA brings about change in real life settings. The focus is at the beginning of the theory of change (how and why it emerged), and the middle part (challenges and shared vision) (Figure 1), because as mentioned before, most JAs are still being implemented and thus the end part of the chain is difficult to analyse without empirical evidence.

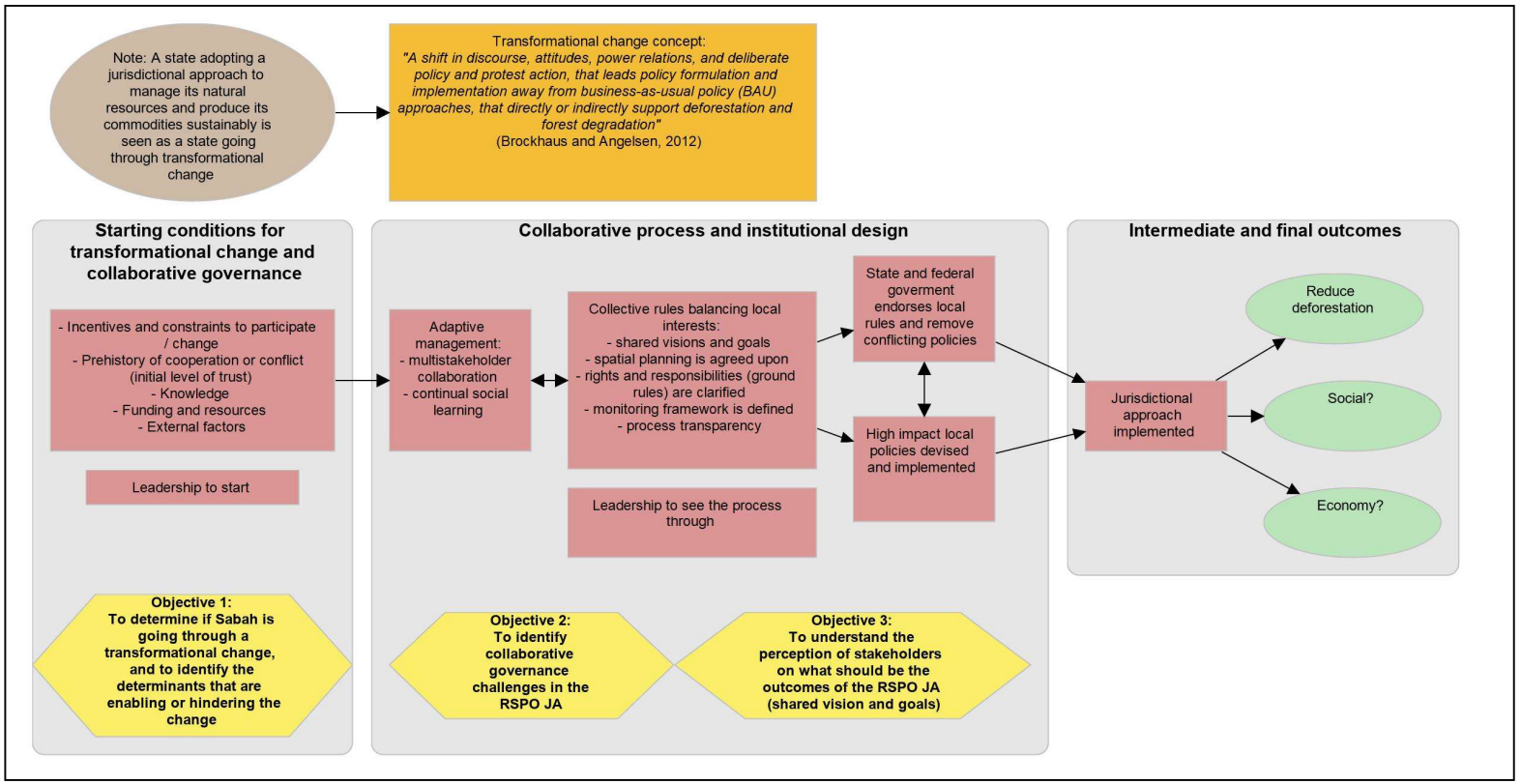


Figure 1. The PhD thesis framework showing a generic theory of change of a jurisdictional approach.

Adapted from (Ansell & Gash, 2008; Chervier et al., 2020)

1.6 Goals and Objectives of the Thesis

The **goal** of the thesis is:

"To advance the understanding of the theory of change for landscape approaches to biodiversity conservation, and how it can be implemented on the ground in a tropical forest landscape in Sabah, Malaysia Borneo".

To arrive at the goal, there are three specific **objectives:**

4. To determine if Sabah is going through a transformational change, and to identify the determinants that are enabling or hindering the change.
5. To identify collaborative governance challenges in the RSPO JA.
6. To understand the perception of stakeholders on what should be the outcomes of the RSPO JA.

Sabah, a Malaysian state on Borneo island is used as the case study for the PhD research. Malaysia is a country in Southeast Asia consisting of 13 states and three federal territories. It is a tropical and megadiverse country, and ranked 15th among the world's most biodiverse countries (Butler, 2016). The country is divided into two regions, Peninsular Malaysia (which is connected to mainland Asia), and Borneo. Three countries are on Borneo island: - the five Kalimantan provinces of Indonesia, Brunei Darussalam, and the states of Sabah and Sarawak, Malaysia.

Sabah is the second largest Malaysian state with a land mass of 7.39 million ha. Sabah is selected due to its status as the top palm oil producing state in Malaysia, its unique past of forest exploitation and conversion, and its relatively advanced environmental policies compared to other Malaysian states. Sabah's utilisation of international voluntary certification standards like FSC and RSPO for its forest management and palm oil production, as well as its early adoption of the RSPO Jurisdictional Approach (RSPO JA) in 2015, demonstrates a higher level of ambition towards sustainable practices.

The RSPO JA is a potentially influential JA that can help address deforestation caused by the agriculture commodity; palm oil. It is a novel approach that was developed by the RSPO Secretariat in 2015, with the aim of mitigating the adverse effects of palm oil cultivation on the natural ecosystems and local communities, that must be under the purview of government administered regions. It entails the gradual certification of sustainable palm oil production and processing at the jurisdictional level. This approach mandates the government to lead the collaborative process that involves a diversity of stakeholders to establish an overarching framework of regulations and governance. Sabah, the district of Seruyan, Kalimantan in Indonesia, and Ecuador are pilot sites for the implementation of RSPO JA. In Sabah, this initiative started in 2015 and the state gave itself 10 years to become 100% RSPO certified. However, progress is slow and the state encounter many challenges in implementing such a transformative and novel approach. More details on the workings of the RSPO JA are found in Chapter 2 and Chapter 3.

1.7 Sabah as a Case Study

This section would first provide an overview of Sabah's political-economy, to understand the local political power, the state's economic incentives, and how it connects with the global economic trade. All these factors are important to understand in order to address the issues of tropical deforestation (as what was discussed in Sub Chapter 1.2 Deforestation in the Tropics and Sub Chapter 1.3 Responses to Deforestation). To complement the narrative on Sabah's political-economy, a diagram was prepared to summarise Sabah's political-economy story and for easy visualisation of the timelines (Figure 2). Following Sabah's political-economy, the next sub chapter will be on certification standards, and the possible reasons Sabah chose private-driven and voluntary certification standards instead of national-driven standards.

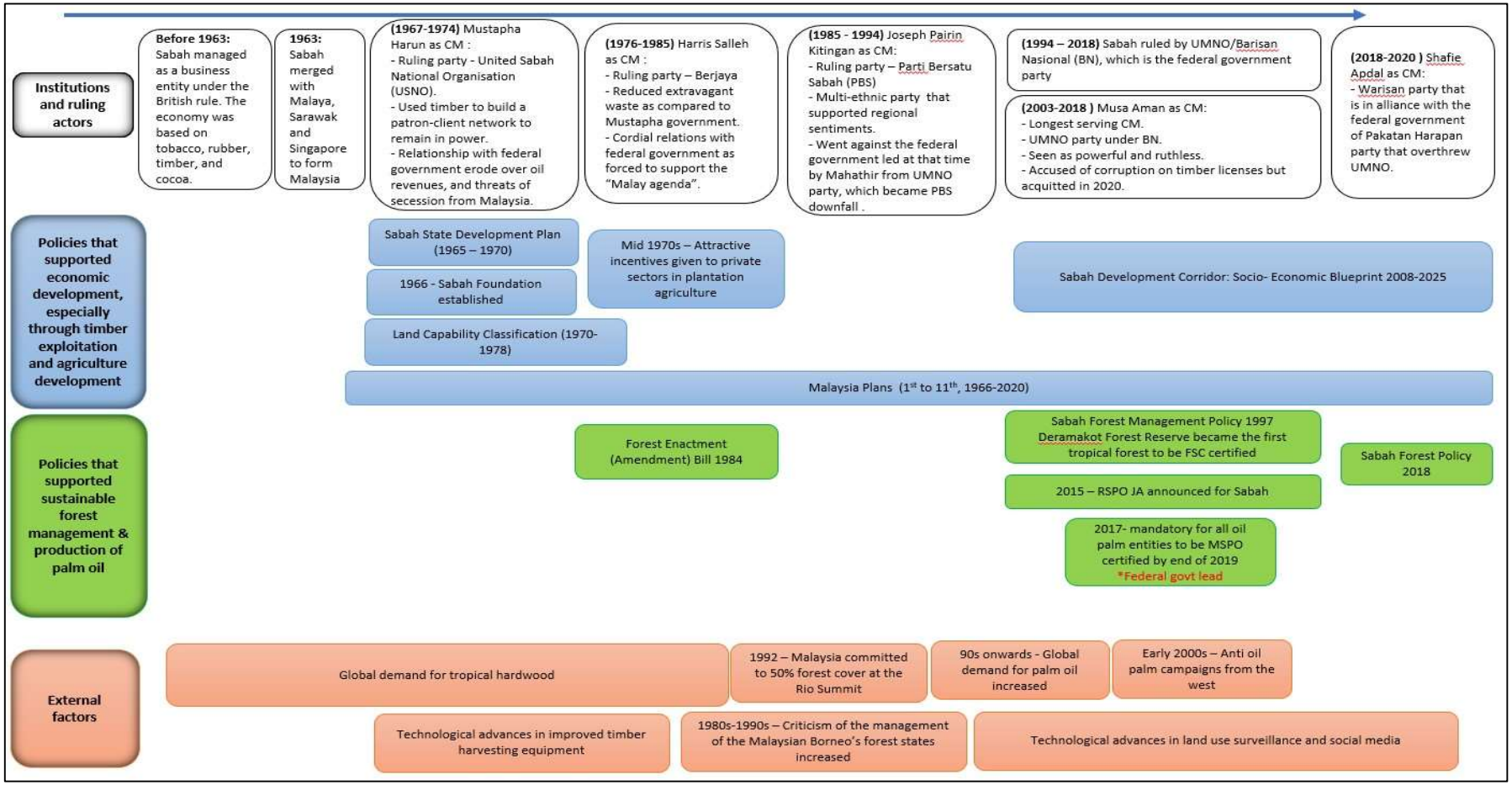


Figure 2. A summary of Sabah's political-economy story

1.7.1 The Political-economy of Sabah

Sabah was governed by the British since 1881. It was managed as a business entity by the British North Borneo Chartered Company till World War Two, where the company used the state as a private enterprise by harvesting its natural resources (e.g. timber) (Gunggut, Siti Noor Saufidah, Zuraidah, & Liu, 2014; Kaur, 1994). The scale of timber export was huge, an example; about 175,564 m^3 exported in 1937 (Jomo, Chang, & Khoo, 2004). Furthermore, priority was given to large scale forest clearance to plant rubber for export (Jomo et al., 2004). Sabah's Land Ordinance 1930 was introduced by the British to promote commercial agriculture production. This was when the term "state land" was instilled, which means land available for alienation or for a public purpose (Jomo et al., 2004; Majid Cooke, 2012). It was postulated that the British changed the way the native people in Sabah viewed nature, from it being a community resource not to be traded, that has cultural values, to it being a commodity with a market value (Gunggut et al., 2014).

After World War Two (1945), Sabah became a crown colony of Britain, ruled under the British Colonial Administration till it merged with Malaya, Sarawak and Singapore to form Malaysia in 1963. Timber took over from rubber and became the dominant export product. It is during this time that the linkages between timber, power and politics started (Dauvergne, 1995; Jomo et al., 2004). Before Sabah was part of Malaysia, the timber industry was largely dominated by Westerners and the ethnic Chinese, and few indigenous people owned commercial logging operations. But all these changed in 1963. Indigenous people of Sabah (e.g. Kadazan-Dusun) became the ruling parties (with the support of the British) and were given rights to log. The British

supported this system so that their long-term interest in the timber industry were protected. Indigenous parties like the United Sabah National Organisation (USNO), which ruled Sabah from 1967-1974, was formed, and timber was used to build the patron-client network (Jomo et al., 2004). Even though timber is the backbone of Sabah's economy, it only profited few people, mainly the political elites, while a small amount trickled down to the rural folks. These small funds were used during elections as cash payments or "vote-buying" to build the patron-client network (Dauvergne, 1995). Hence, with the formation of Malaysia, and Sabah no longer under the British rule, a new political situation begun which had adverse effects on deforestation in Malaysia. For one, is the federal-state government relationship, and that forest and land is now entirely under the state authority. Which leads to the second effect:- the state governments and politicians desire when they come into power is to maximize the revenues they can earn from the short term exploitation of Sabah's forest as well as from agriculture expansion (Jomo et al., 2004).

In Malaysia, all state government have authority over their land and forests, while the federal government sets overall policies for finance, defence, education and development (Jomo et al., 2004). When Malaysia was formed, Sabah and Sarawak negotiated to be semi-autonomous (called the Malaysia Agreement 1963) from the federal government and therefore both states have more freedom compared to the 11 states in Peninsular Malaysia. For instance, they have their own immigration and forestry laws. Although land and forestry fall under the purview of the state, the management of palm oil plantations and production are not directly managed by the states in Malaysia. Instead, the Malaysian Palm Oil Board (MPOB), a federal government agency, is responsible, and to be involved in the business, individuals and

companies in Malaysia must first obtain a license from MPOB as per the MPOB Regulations. This licensing requirement covers all aspects of the industry, which are production, sales, purchase, construction of palm oil mills, and the import and export of palm oil products (NEPCon, 2017). Furthermore, the development policies in Sabah are closely linked and reliant on the Malaysia Plan, which is a comprehensive roadmap for the country's development strategies. The plan is formulated very five years by the Economic Planning Unit of the federal government. Due to the complex relationship above, the federal government plays an important role in influencing the development and politics of the state.

Sabah's politics was considered tumultuous from 1963 to 1994, where the ruling party changed three times, indirectly / directly (?) caused by the federal government. The first time, under USNO rule, the chief minister[3] (CM) Mustapha Harun was forced to "retire" by the federal government over dispute of oil revenues (Dauvergne, 1995). Second time, under the Berjaya party (1976-1985), the CM Harris Salleh had a cordial relationship with the federal government but was seen by the Sabahans as supporting the "Malay agenda" in Peninsular Malaysia, and thus lost support in Sabah (Chin, 2014). Joseph Pairin Kitingan of Parti Bersatu Sabah took over (1985-1994), and supported "Sabahan" sentiments, thus going against the federal government. Mahathir Mohamad, the prime minister of Malaysia then took revenge and brought in his party, the UMNO / BN in 1990 to challenge Parti Bersatu Sabah (Chin, 2014). And thus, this is how Sabah was ruled by the "federal government" for 25 years (1994-2018) under

[3] The chief minister of Sabah is the head of government for Sabah state.

UMNO and Musa Aman (the longest serving CM in Sabah), until it fell to the Warisan party government in 2018 (and I could go on, but will stop here).

Throughout the government changes, timber was used by all parties as a patron-client network to win support (Dauvergne, 1995). The connection between timber and politics became particularly strong when the Sabah Foundation was founded by the state government in 1966. The foundation's main goal was to improve the lives of people in Sabah, particularly through education. To support its activities, the Foundation was granted about one million ha forest. However, it has been plagued by corruption due to its political connections, which allowed the exploitation of forest with the profits distributed to political allies (Dauvergne, 1995; Jomo et al., 2004). As such, all CMs in Sabah will serve as the chairman of its Board of Trustees, while many high-ranking staff members within the Foundation are often appointed based on political affiliations.

The timber industry was a significant contributor to Sabah's economy during the 1970s to 1980s, generating around 50% of the states total revenue (Jomo et al., 2004; Pang, 1989). The heavy dependence on timber as a major source of revenue had a negative impact on Sabah's forest cover. Prior to the 1980s, forest cover was estimated to be around 80% of the land area, but my mid-1980s, it has dropped to about 60% (Gunggut et al., 2014; Marsh & Greer, 1992). Figure 3 shows the forest area loss in Sabah for four periods from 1973 to 2015 (Gaveau et al., 2016). The most striking was the amount of forest area lost from 1973-2000 (1.39 million ha or 19% of Sabah's land area), indicating the intensive logging activities and then the conversion of forest into

oil palm plantation during that period. The amount of timber available in Sabah declined sharply from its peak of 13 million m^3 in 1978 to only 3.4 million m^3 in 1999, (Reynolds, Payne, Sinun, Mosigil, & Walsh, 2011) and in 2019, only 1.07 million m^3 was extracted from the natural forest (SFD, 2019). The rapid exploitation of timber was also due to the demand of tropical hardwood from Japan in the 80s, and Sabah supplied at least 90% of the logs from Southeast Asia (Dauvergne, 1995).

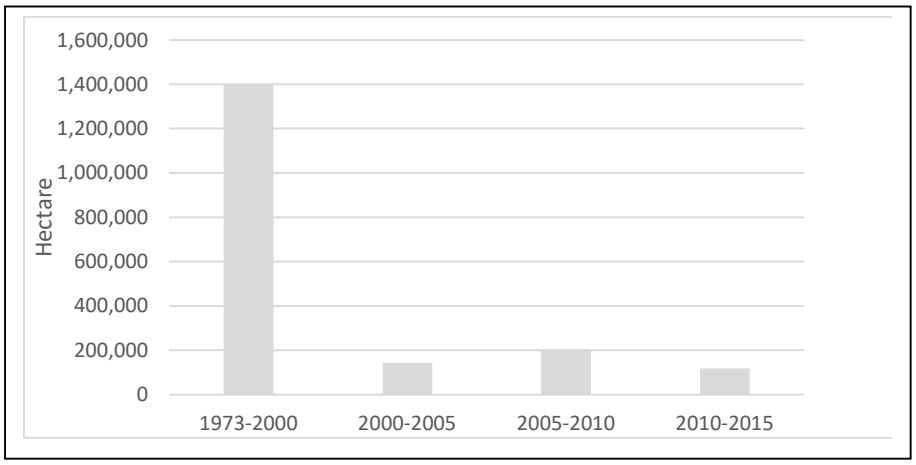


Figure 3. Forest area loss in Sabah 1973-2015

(Source: Gaveau et al., 2016)

Due to the unsustainable exploitation of its forest, the revenue from timber started to drop. In response, Sabah made a decision in 1983-1984 to allocate lands identified in the Land Capability Classification[4] (1976) of good potential for agriculture to private ownership for industrial agricultural development. At the same time, they established a "permanent forest estate" that covered roughly 50% of the state's land area

[4] The Land Capability Classification 1976 was not used as a formal land use planning mechanism as there was no one government agency in charge of it, but it had been influential over the years till today, especially for the allocation of agriculture, forestry and conservation land use (Jomo et al., 2004).

(Reynolds et al., 2011). Thus, the groundwork for the overall land use patterns in the state was established where roughly 50% of the land was designated as permanent forest estates and the remaining for agriculture use. The division of the land was done by the Sabah Forestry Department's (SFD) mapping division under the instructions of CM Harris Salleh. To enforce this, the Forest Enactment Bill 1984 was passed, which prevented the declassification of forest reserves, as any changes to the status of the forest reserves have to go through the Sabah Legislative Assembly (SFD, 2007). This mapping exercise carried out by the SFD in the 1980s has resulted in the present boundaries of the forest reserves in Sabah (J. Payne, personal communications, Sept 11, 2020). Regrettably, despite the forest reserve boundaries remained relatively unchanged till present, the forest quality deteriorated. As a result of persistent logging during the 90s, nearly all of Sabah's commercial forest, particularly the lowlands were severely degraded (Reynolds et al., 2011).

Agriculture in Malaysia, especially palm oil, was always seen as a means to lift the rural people out of poverty and the increase in land area for palm oil was advocated in the National Agriculture Policy (1992-1997) (Ng, Chervier, Ancrenaz, Naito, & Karsenty, 2022). It should be noted that initiatives to develop large-scale plantations in Sabah and Sarawak only became significant in the 1980s, compared to Peninsular Malaysia that started in the early 20th century (first with rubber and then oil palm) (Jomo et al., 2004). Figure 4 shows that the oil palm planted area for Peninsular Malaysia in 1980s was already over one million hectares compared to Sabah and Sarawak which only just started.

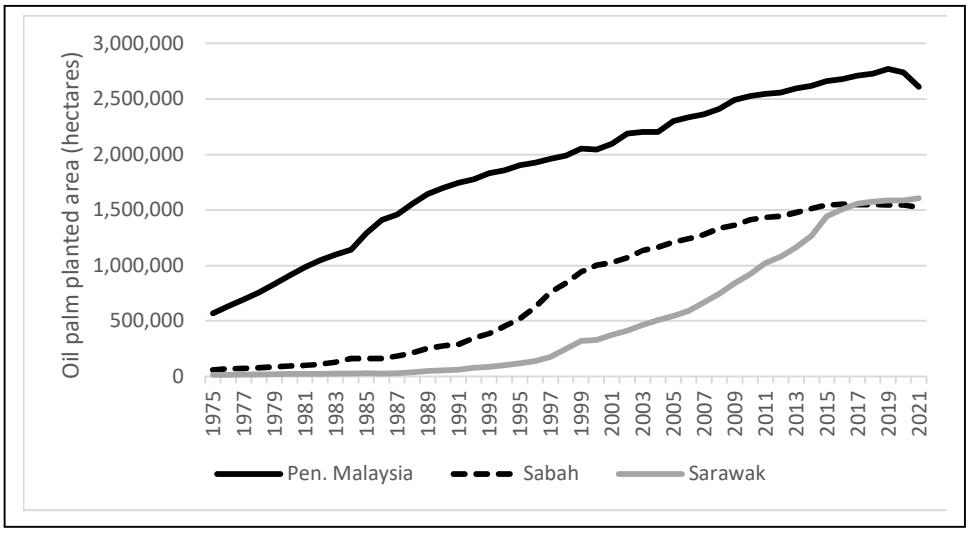


Figure 4. Oil palm planted area in Peninsular Malaysia, Sabah and Sarawak from 1975 to 2021

(Source: (MPOB, 2019, 2020, 2021a))

Malaysia and Indonesia are the biggest palm oil producers in the world. Indonesia produced 46,500 t of palm oil in 2022, while Malaysia produced 19,800 t, which is 59% and 25% of the worlds production (Indexmundi, 2022b). It is the third main export product for Malaysia, amounting to MYR 108 million in 2021, after electronic products and petroleum (Anon, 2022b). These figures indicate that oil palm is a very important agriculture crop for Malaysia. India is Malaysia's largest palm oil importer in 2021 (since 2014), importing 23.1% or 3.6 million t, followed by China at 12% or 1.87 million t, and the EU at 10.5% or 1.64 million t (MPOB, 2021b). Indonesia and other vegetable oils play an important role in the uptake of Malaysia's palm oil. For instance the higher export tax of Indonesia's crude palm oil in 2021 made India import more from Malaysia, and that EU's import of palm oil declined because they imported more soybeans from Brazil (MPOB, 2021b).

From the 90s onwards, oil palm cultivation became the primary reason for

deforestation in Sabah, as the vegetable oil gained popularity for its profitability (Jomo et al., 2004; Reynolds et al., 2011). Oil palm is the most important agriculture crop in Sabah, and the state's income highly depended on the crop. For instance, the state reported about 2.06 million ha of planted area for agriculture crops in 2020, and about 88% of it are oil palm planted area (Anon, 2021). From 1990, oil palm cultivation in Sabah increased, with the total area planted growing from below 300,000 ha or 4% of the land area to 1.54 million ha, which represents about 20% of the land area by 2019 (MPOB, 2019). This made Sabah the Malaysian state with the largest planted area of oil palm until Sarawak took over in 2017 (see Figure 4). It is the second main export product for the state, after crude petroleum, amounting to MYR 16 million in 2020 (crude petroleum brought in MYR 15.2 million in 2020, but it was always above MYR 20 million from 2017-2019) (Anon, 2021).

Gaveau et al. (2016) study proofed that the plantation industry (timber and oil palm) is the main driver of deforestation for Sabah from the period 1973-2015. The authors estimated the forest area left in Sabah for 2015 is 3.96 million ha, or 54% of Sabah's land area, where 31% is of logged forest[5] and 22% intact forest[6]. This means Sabah lost about 1.86 million ha of forest (about 25% of Sabah's land area) since 1973. On the other hand, the Sabah Forestry Department reported that the forest cover in Sabah for 2020 is 4.67 million ha or 63% of Sabah's land area, which is about a million hectares more than Gaveau et al. (2016) estimation in 2015 (SFD, 2021). The department did not provide details on the methodology of their mapping unlike Gaveau et al. (2016). Regardless of the number, it is clear that the proximate cause of

[5] Gaveau et al. (2016) consider that the forest has been logged if the database of images detected the presence of large (>10 m wide) logging roads in the forest.
[6] Gaveau et al. (2016) consider forest intact if the database of satellite images never detected the presence of large (>10 m wide) logging roads in the forest.

deforestation in Sabah is timber exploitation and then industrial oil palm plantations. The underlying driving forces are more complicated, pointing to past institutional arrangements (legacy left by the British), patronage-client relationship, economic development, policies supporting such practices, federal-state relationship, and the global demand for such commodities.

1.7.2 Why did Sabah Choose Voluntary and Private Certification Standards?

Voluntary certification standards as explained in Sub Chapter 1.3 Responses to Deforestation, is a commodity response to deforestation. It is based on the theory of incentives, where actors volunteer to adopt a standard because there is a potentially higher price signal, and this decision is not imposed through coercive means (Broughton & Pirard, 2011). It is a market instrument that relies on price differences and rose to prominence in the 1990s (Bartley, 2003). Privately organized, it is controlled by multi-stakeholder actors from private groups (e.g. companies and non-governmental organizations) rather than government agencies, and therefore it is not a top-down approach (Bartley, 2003). It seeks to reduce environmental degradation through interventions in the supply chain (Heilmayr & Lambin, 2016). This is done through setting the standards, ensuring compliance with it, and issuing the certificate to show the conformity (Depoorter & Marx, 2022). By issuing the certificate, consumers will know that the product meets a certain standard, like for example the product is sourced from "deforestation free" areas. Responsible consumer can than can make the informed decisions to buy the product.

Nonetheless, the down side of private certification and it being market-based, is that the certified product may not be in demand, consumers are not willing to pay a higher price for it, and that the product has no access to the market (Durst, McKenzie, Brown, & Appanah, 2006). The certification standards stringency may be limited because private certification are negotiations between civil society and the industries, who will not participate if a standard is too vigorous. On top of that, the compliance to the standards of the private certification may be weak if there is no monitoring and enforcement, thus generating limited effectiveness (Bishop & Carlson, 2022). There is also the issue of smallholders and certification. They lack the capacity, knowledge and legal documentation to comply and get certified, and thus have problems accessing the market (Ogahara, Jespersen, Theilade, & Nielson, 2022; Ruysschaert, Carter, & Cheyns, 2019; Schoneveld et al., 2019). Glasbergen (2018) study showed that they profit the least in the case of palm oil and coffee smallholders, and they continue to have unequal benefits in the value chain.

National certification standards emerged as an alternative to voluntary certification standards. Two of the main reasons it came about was to address sustainable management of forest or commodities in its own country, and the limitations of private standards (e.g. smallholders unable to afford the cost of private certification) (Higgins & Richards, 2019; Rahmat, Mat Yasin, Mad' Atari, & Tayeb, 2021). Also, it was as a means for the country to prevent the western countries (seen as the developers of private certification) from infringing into their rights to manage their own resources (Karsenty, 2020). National certifications created by southern countries have been known to face many criticisms for it not being stringent enough, and international conservation organizations have always supported private standards like FSC and

RSPO, citing it to be the more credible ones (Higgins & Richards, 2019; Lewis & Davis, 2015; Loh, 2018; WWF International, 2015). One of the reasons is that the standard development and adoption for private certification is done in a more transparent manner and a roundtable voting by its members takes place in its general assembly, unlike a national certification, where the minister in charge will give the final approval of the standard (although it goes through a vigorous consultation with the public and all stakeholders) (Efeca, 2015). However, this thesis is not about comparing which standards are better, but rather to find out why Sabah decided to choose private standards over national ones. Therefore, the next few paragraphs will attempt to describe how the standards that are important to Malaysia function (Table 1 summaries the main certification standards used in Malaysia and its governance), its certification challenges, and by what means it relates to Sabah's decision.

Table 1. A summary of the main certification standards used in Malaysia and its governance

Certification Standard	Type	Entity in charge	Board Members	Certification Body	Standards Body providing accreditation for certification body	Certified area (as of Oct 2022)
Forest Stewardship Council (FSC)	Private and voluntary Note: Gabon in 2018 made it mandatory for all forest concession by 2025	FSC National Offices. In Malaysia: FSC Malaysia National Office (independent company)	Environmental, social and economic chambers	Third party / independent	Assurance Services International	Certified forest area globally = 209,486,992 ha Certified forest area in Malaysia = 57,154 ha Source: (FSC, 2022)
Malaysian Timber Certification Scheme (MTCS) **Endorsed by Programme for the Endorsement of Forest Certification (PEFC)**	National and voluntary Note: Sarawak made it mandatory in 2017 for all Forest Timber License by 2022	Malaysia Timber Certification Council (MTCC)	Government, industry, and non-governmental organisations	Third party / independent	Department of Standards Malaysia, Ministry of International Trade and Industry, Government of Malaysia	Certified natural forest area in Malaysia = 5,480,939 ha Source: (MTCC, 2022)
Roundtable on Sustainable Palm Oil (RSPO)	Private and voluntary Note: Sabah in 2015 made it mandatory for the state by 2025 (RSPO JA)	RSPO Secretariat	Industry and non-governmental organisations	Third party / independent	Assurance Services International	Certified palm oil production area global = 3,515,778 ha Certified palm oil production area in Malaysia = 967,562 ha Source: (RSPO, 2022a)
Malaysia Sustainable Palm Oil (MSPO)	National Note: Malaysia in 2017 made it mandatory for the	Malaysian Palm Oil Certification Council (MPOCC)	Government, industry, environmental non-governmental organisation,	Third party / independent	Department of Standards Malaysia, Ministry of International Trade and Industry, Government of Malaysia	Total certified planted area in Malaysia = 5,623,745 ha Source: (MSPO, 2022)

	whole country by 2020	smallholders and academics	

One of the earliest private certification standards is the FSC that was created in 1993. It is used to certify sustainable forestry by promoting environmentally sound, socially beneficial and economically viable management of forest. The certification system works two ways, one by certifying forest management units, and secondly, certifying the chain of custody, which is the verification that wood products are handled correctly at the different stages of production (Watanabe, 2020). An independent certification body will audit the forest management unit against the FSC principles and criteria, which covers environmental as well as social aspects. If the applicant passes the audit, they will be granted the FSC certificate. Depoorter & Marx (2022) analysed the adoption dynamics of FSC at the global level and at countries' income groups from 2000-2019. They found that FSC certification experienced an almost tenfold growth from 21 million hectares in 2000 to 200 million in 2019, but the growth slowed down after 2013. The growth mostly happened in high-income and upper-middle-income countries, while it was negligible in lower-middle and low-income countries (developing countries). This was because these countries lack the financial and technical capacity to comply with the standards, that the governments do not support FSC, there is no access to premium prices, and because of the forest-ownership structure (state versus privately owned) and unclear tenure rights (Depoorter & Marx, 2022; Karsenty, 2019). Moreover, FSC faced competition from other certification schemes, especially from the PEFC, which is considered more "industry friendly" (Depoorter & Marx, 2022; Giessen, Burns, Sahide, & Wibowo, 2016).

FSC was viewed with hostility by both the forestry and government sector in developing countries during the early 1990s, because they see it as driven by the western environmental non-governmental organizations, and it infringed into their

prerogatives to manage their own forest (Karsenty, 2020). In fact, any timber certification at that time was a new concept and stakeholders were wary of its procedures which they deemed cumbersome and the cost burdensome (Chew, 2019). Despite that, Sabah in 1997, decided to implement sustainable forest management by using FSC as an indicator of success. This was considered to be a brave and innovative move by the state, when FSC was still new at that time. And this was especially true because Malaysia developed an alternative national standard called the Malaysia Timber Certification Scheme (MTCS), and it was promoted in Malaysia's National Forestry Policy and the Malaysia Plans (Ng et al., 2022). For Malaysia, as of October 2022, the FSC certified forest area is 57,154 ha, compared to MTCS-PEFC certification with 5,480,939 ha (FSC, 2022; MTCC, 2022).

MTCS was developed in the late 1990s by the Malaysia Timber Certification Council (MTCC) (now established as an independent company governed by a Board of Trustees, members are from the government, industry and non-governmental organizations). It was endorsed by the PEFC in 2008. Before the endorsement, MTCC played the role of the governing body and the certificate issuing body. However, to enhance its acceptance in the international market, MTCC stopped being the certificate issuing body. Instead, this role was passed to independent assessors that obtain accreditation from the Department of Standards Malaysia (Chew, 2019). FSC on the other hand is managed by the FSC Malaysia National Office (formed in 2014) in Malaysia, and governed by a Board of Directors from the environmental, social and economic chambers. Its certifying bodies are assured by an independent international body called Assurance Services International (ASI). MTCS is considered "government

controlled", unlike FSC, because the government is part of its governing body, and accreditation of assessors are given out by a government department.

The next voluntary and private certification scheme to discuss is the RSPO. RSPO is a global multi-stakeholder, not-for-profit organization that was created in 2004 by WWF, and the industry:- Malaysian Palm Oil Association, Unilever, AAK and Migros (RSPO, 2022c). It was first formed to improve the practices and image of palm oil, by addressing the issues of biodiversity loss and to stop forest conversion associated with palm oil (Ruysschaert et al., 2019). As it is, the crop is one of the main causes of deforestation in Southeast Asia (Pacheco et al., 2021). However, RSPO has now taken a broader view on sustainability and its aim is to transform the whole industry to make it sustainable for business, people and the environment. The RSPO Secretariat runs the day-to-day operations of RSPO, and is governed by a Board of Governors that provide strategic direction to the Secretariat. The Board is made up of members from the industry and non-governmental organizations. To become RSPO certified, the entity needs to comply to the RSPO standards, which are divided into the RSPO Principles and Criteria (P&C), RSPO Supply Chain Certification Standard (SCCS), and the RSPO Independent Smallholder Standard. The P&C covers oil palm growers while the SCCS covers the supply chain (RSPO, 2022a). Similar to FSC certification, independent parties that are accredited by ASI acts as the certification body that conducts the audit to evaluate members' compliance to the RSPO standards. Up till 2022, the certified RSPO production area for the world (including smallholders) is 3,515,778 hectares, where 52% of the area is in Indonesia, and 28% in Malaysia (RSPO, 2022b).

The governments of the south, specifically Indonesia and Malaysia being the main suppliers of palm oil globally, are not supportive of RSPO, as they felt that the appropriate authority to regulate palm oil should be the government themselves (Rahmat et al., 2021; Wijaya, 2016). Moreover, Malaysia is in the opinion that smallholders and mid-range growers cannot afford RSPO certification, as they do not have the capacity to achieve it, and therefore they will be left out in the whole supply chain (Rahmat et al., 2021). However, the pressure to produce certified sustainable palm oil is great, especially from the environmentally sensitive countries in the EU. Seven EU countries made a pledge under the Amsterdam Declaration in 2015 to eliminate deforestation from their agricultural commodity chains by no later than 2020, and one of their strategies is being supportive of private-sector and public initiatives. In addition to governments, multinational companies (along with indigenous people, and non-governmental organizations) also made a political declaration through the New York Declaration in 2014 to end natural forest loss by 2030. In response to these growing pressure for sustainably produced palm oil, Malaysia established its own certification scheme; Malaysia Sustainable Palm Oil (MSPO).

The MSPO standards are under the purview of the MPOB and administered by MPOCC. Formulated in 2013, the MSPO scheme is based on national laws and regulation. MPOCC, like MTCC is an independent company that manages the operations of MSPO and all its certification bodies must first be accredited by the Department of Standards Malaysia. They report to a Board of Trustees, which includes representatives from the government, industry, environmental non-governmental organisation, smallholders and academics. Like MTCS, MSPO is also seen as "government controlled". The similarities between RSPO and MSPO standards are

that they are structured along the same themes like business practices, legality, environment and social. According to Efeca (2015), the main difference between the two standards are that RSPO incorporates the rules on plantation management, and requires a commitment to transparency and ethical conduct in business operations. The RSPO is also more transparent in its standard development and auditing. In 2019, the Malaysian government started a review process of the MSPO addressing some of its previous weaknesses (e.g. stricter criteria for deforestation, adding in HCV) and completed it in 2022. Nevertheless, unlike the RSPO standard, High Carbon Stock (HCS) is not included in the MSPO standards, new planting on peat is allowed, and open burning can be done but under the Malaysian legal framework.

In 2017, the Malaysian government decided to institutionalise MSPO by making it mandatory for all palm oil producers to be certified by 1st January 2020. It is not the same case for MTCS, as MTCS was not made mandatory for the whole of Malaysia. However, Sarawak, the other semi-autonomous state in Malaysia institutionalised it by making it compulsory for all Sarawak's Forest Timber Licensees to be MTCS certified by 2022.

Earlier in this sub chapter, Sabah was mentioned as being innovative for choosing FSC over MTCS. The other innovative move that Sabah made towards certification, was adopting the RSPO JA. Conceptualized by the RSPO Secretariat, the RSPO JA was introduced as a new approach to minimize the negative impacts of palm oil cultivation on the environment and communities, at the scale of government administrative areas

(instead of plantation units), with the government as the lead[7]. For Sabah, this means committing to 100% RSPO certified sustainable palm oil production in the whole state by 2025. This new initiative involves using a voluntary certification standard driven by private entities and making it a part of public regulation. It is uncommon to use private instruments for public regulation, with the only other know examples being the district of Seruyan in Kalimantan, Indonesia and Ecuador, which are pilot sites for the RSPO JA. Furthermore, in 2018, Gabon's president announced that all of its forest concession would be FSC certified by 2022 (postponed to 2025) (Karsenty, 2018). Using private and voluntary certification standards for public regulation is considered as an innovative move, as inadvertently, the state is allowing an international entity to dictate the management of its forest or agriculture crops, and thus having less control over the resources (Karsenty, 2018). In addition, the RSPO JA uses the concept of a "jurisdictional approach", in which there is rarely a site that have proven for such an approach to work before.

It is worth mentioning that Sabah agreed to implement the RSPO JA in 2015, which was before the federal government made MSPO certification compulsory in 2017. When the federal government announced the compulsory MSPO certification requirements, Sabah was hesitant to adopt it and preferred to continue using RSPO. The reason was because all land matters are under the jurisdiction of the state and Sabah saw the management of its agriculture crop as their prerogative (see Sub Chapter 1.7.1 The Political-economy of Sabah) (Lee, 2021). In fact, there was a media war

[7] The details of the RSPO JA and its workings can be found in Chapters 2, 3 and 4.

between MPOCC and the Chief Conservator of Forest of Sabah Forestry Department, Sam Mannan, who was quoted as saying that "*Sabah would not bow down to federal pressure and that Sabah have the right to choose on what is best for its land management, as agreed in the Malaysia Agreement 1963*" (Amarthalingam, 2017). Eventually, an agreement was made to use a stepwise approach; first MSPO will be used and followed by RSPO. This was seen as a safe move by the state to avoid "disobeying" the federal government (Lee, 2021).

This sub chapter concludes by asking questions that my PhD research is trying to answer (which are linked to the goal and objectives questions):

"Why did Sabah choose private and voluntary certification standards instead of national certification standards[8]*? What were the strong driving forces that made Sabah decide? Was it the promised incentives and the market access because private certification is more credible? Or projecting a better image? Or was it political, where Sabah wanted to demonstrate its autonomy towards the federal government? Or was it a genuine desire to govern Sabah well?"*

Some answers to these questions, along with the PhD objectives questions will be given at the end of my thesis in Sub Chapter 5.4 Overall Conclusion.

[8] For FSC, Sabah was supportive of it in the late 90s to 2000s, where the state ambitiously announced that they want to certify all of its forest reserves using FSC. However, because it faced many challenges in its implementation, the state now does not mention any specific certification, but maintains its commitment to certify all forest reserves. See Chapter 2 for more details.

1.8 Theoretical Framework, Hypotheses and Literature Review

This sub chapter will provide a more in-depth view of the thesis goal and each objective, including the theories used and the literature referred to. The thesis drew its approach from the literature of "transformational change" using a political-economy lens, collaborative governance theories, and the landscape and jurisdictional approach literature. Figure 1 (on page 11) gives an overall view of my thesis framework, which are the three research objectives, the theories used to understand each one, and its contribution towards filling in the gaps between theory and practice in the JA theory of change (JA is used instead of the LA because the case study is specific to it, although the JA originates from the LA, which will be explained in Sub Chapter 1.8.3 Landscape and Jurisdictional Approaches). Figure 1 also shows how the three objectives are interconnected, as each objective tries to contribute to the knowledge gaps in the different stages of the JA theory of change. In each sub chapter, the published literature showing the current understanding in its research field will be discussed, followed by the research hypotheses based on the objectives.

1.8.1 Transformational Change (TC)

Brockhaus & Angelsen (2012) definition of TC is used for the first objective, "*A shift in discourses, attitudes, power relations, and deliberate policy and protest action that leads policy formulation and implementation away from business-as-usual policy approaches that directly or indirectly support deforestation and forest degradation*". This definition was used in the context of REDD+ by Brockhaus & Angelsen (2012),

as the authors deemed that such a change is needed in formal and informal institutions should REDD+ be implemented successfully. This TC definition is used because REDD+ goals are very much related to the JA goals, which is to reduce deforestation and forest degradation. To understand the TC better, and the challenges it face, Brockhaus & Angelsen (2012) introduced a REDD+ policy arena framework using a political-economy lens. A political-economy lens is used because there is growing recognition that effective TC policies must be grounded in the understanding of the institutional, political and economic factors of the state, which can drive or stop the change process (Brockhaus & Angelsen, 2012; Moncrieffe & Luttrell, 2005) (refer back to Sub Chapter 1.3 and Sub Chapter 1.7). The REDD+ framework is combined with another framework designed by the Overseas Development Institute (Moncrieffe & Luttrell, 2005), to help analyse the first objective on determining if Sabah is going through a TC and its determinants (see Figure 5).

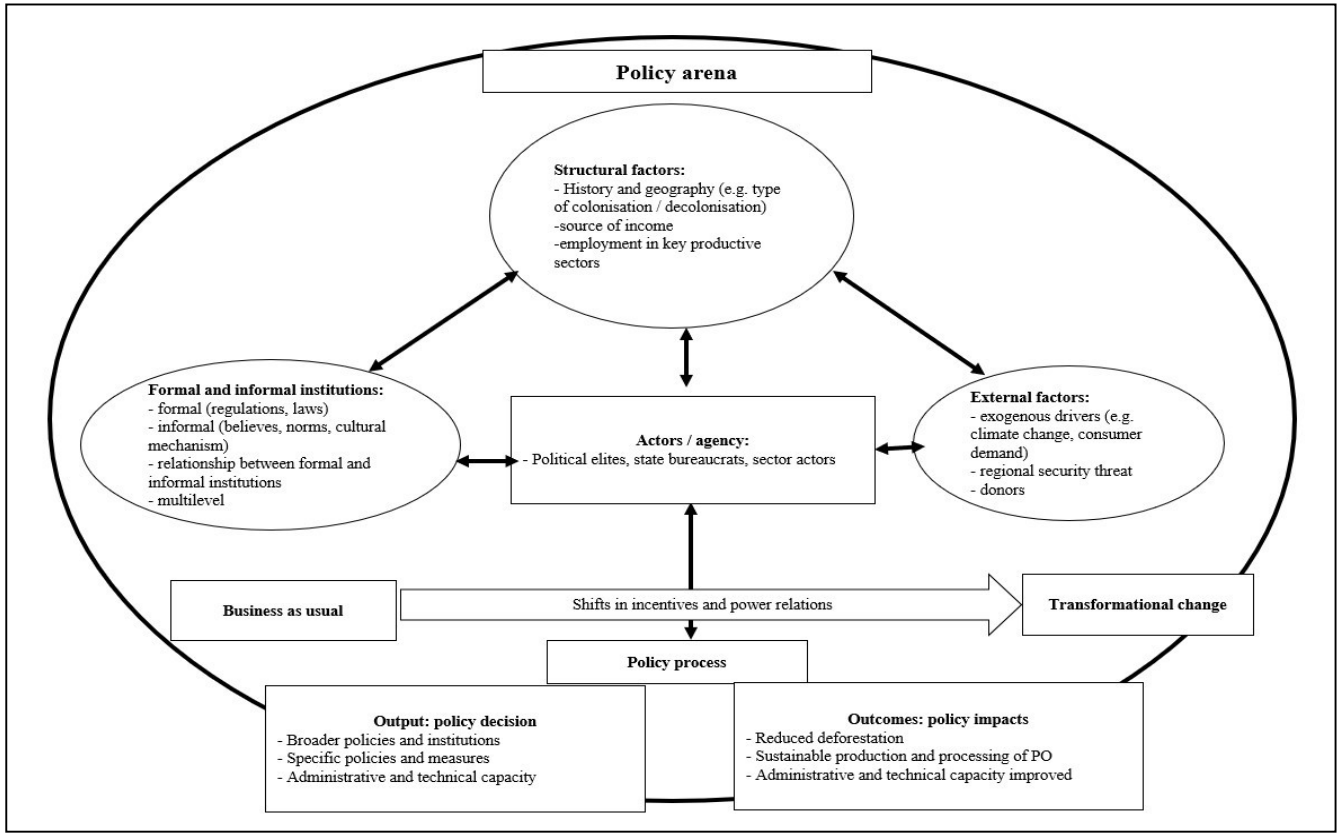


Figure 5. A political-economy framework to analyse transformational change

Adapted from Brockhaus & Angelsen (2012); Moncrieffe & Luttrell (2005)

Figure 5 displays a policy arena with four main factors influencing the TC, which are the structural factors, institutions, actors and external factors. Structural factors are features in the state that can play a role in defining how institutions and actors operate (Moncrieffe & Luttrell, 2005). Examples are the demography and ethnicity of the population, the type of institution left behind by the state's colonizer that is still practiced till today, and the type of commodities it depends on for its economy. Institutions, which can be formal or informal, is the rules of the game in a society that shapes human interaction (Richter, 2005). Institutions are hard to change and this is termed as "path-dependency", where there is resistance to change because it is the norm to do things the way it always was, and actors are afraid of losing their influence or power should a change happen (Brockhaus & Angelsen, 2012). External factors are those that are outside the realm of control of the state, but still capable of affecting policy changes. Examples are the global market demand for palm oil and international donor funds to drive the TC. The actors operate within this policy arena, and is influenced by these three factors. They hold different interests and belief, and those that rule, like the political elites can hold a lot of power, but some, like the marginalized groups may not have a voice in the decision-making.

The existing research on how tropical countries can achieve forest sustainability through state transformation is focused solely on the cases of REDD+ and climate change in Indonesia, Vietnam, Papua New Guinea, and Cameroon (Angelson et al., 2012; Babon et al., 2014; Boodoo, Mersmann, & Olsen, 2018; Boyd et al., 2018; Brockhaus, Di Gregorio, & Mardiah, 2014; Brockhaus et al., 2017; Di Gregorio et al., 2015; Korhonen-Kurki et al., 2019; Korhonen-Kurki, Sehring, Brockhaus, & Di Gregorio, 2014; Moeliono et al., 2020; Moeliono, Gallemore, Santoso, Brockhaus, &

Di Gregorio, 2014; Pacheco, Aguilar-Stoen, Etter, Putzel, & Vera, 2011; Wunder et al., 2020). The studies above provided enabling conditions/factors to which a transformational change can occur in a country or sub-nation:

- Leaders who possess a clear vision for change, can identify the right time to act and have strong network of contacts and can effectively mobilise resources are key to facilitating TC (Babon et al., 2014; Brockhaus, Di Gregorio, & Mardiah, 2014; Folke et al., 2010; Korhonen-Kurki et al., 2019; Moore et al., 2014).
- The need to address a resource scarcity or ecological crisis (Brockhaus et al., 2017; Folke et al., 2010; Gelcich et al., 2010; Korhonen-Kurki et al., 2019, 2014).
- A strong coalition of actors, who have the support of influential members (Babon et al., 2014; Brockhaus, Di Gregorio, & Carmenta, 2014; Brockhaus, Di Gregorio, & Mardiah, 2014; Gelcich et al., 2010; Korhonen-Kurki et al., 2019, 2014).
- When the state itself is motivated to pursue it for its own better future, and is led by national institutions (Brockhaus et al., 2017; Cole, Wong, Brockhaus, Moeliono, & Kallio, 2017; Kates, Travis, & Wilbanks, 2012; Korhonen-Kurki et al., 2019).
- When there are already established governance structures and policies that are align to the TC policies (Brockhaus, Di Gregorio, & Mardiah, 2014; Brockhaus et al., 2017; Kates et al., 2012; Korhonen-Kurki et al., 2019, 2014)
- External factors, like the availability of funding that encourage the change and to elevate the country's reputation globally (Brockhaus et al., 2017; Korhonen-Kurki et al., 2019; Pacheco et al., 2012; Pham et al., 2017).

While the factors that are barriers to transformational change are:

- A group of actors who are resistant to change and would rather continue BAU activities, because they have significant political influences that can prevent the implementation of new policies (Babon et al., 2014; Brockhaus, Di Gregorio, & Carmenta, 2014; Brockhaus, Di Gregorio, & Mardiah, 2014; Gelcich et al., 2010; Korhonen-Kurki et al., 2019, 2014).
- Challenged by path-dependencies, where the proposed TC policies are in conflict with the long-established institutions and norms of the state (Brockhaus, Di Gregorio, & Mardiah, 2014; Brockhaus et al., 2017; Karsenty & Ongolo, 2012; Kates et al., 2012; Korhonen-Kurki et al., 2019, 2014).

The hypotheses for the first objective were formulated using the political-economy framework in Figure 5 founded on Sabah's context, and the REDD+ literature on what constitutes TC, and the determinants that are driving or halting the change. The **hypotheses for Objective 1** are:

Hypothesis 1: Sabah is going through a transformational change because there are leaders and a coalition of actors anticipating the rewards (improved business and good reputation) to be received when the state exports primary goods that are proven to be sustainably produced.

Hypothesis 2: Sabah is challenged to transform because there is a coalition of actors that prefer to continue with business-as-usual activities of forest exploitation.

1.8.2 Collaborative Governance (CG)

For my second objective, I used the theories on CG to understand the challenges of the JA. Collaborative governance is defined as "*governing arrangements where public agencies directly involve non-state stakeholders in a collective decision-making process that is formal, consensus-oriented, and deliberative, with the aim to make or implement public policies or manage public assets*" (Ansell & Gash, 2008). Collaborative governance emerged in the field of natural resource management as a response to the limitations of conventional command and-control approaches to deal with wicked environmental problems (Feist, Plummer, & Baird, 2020; Gerlak, Heikkila, & Lubell, 2013). It is to reduce transaction cost for addressing such problems, where the primary parties have a stake in finding the solution to the problem, and is an alternative to top-down regulatory and technocratic management (Dupraw, Bernadette, & Placht, 2013; Gerlak et al., 2013). It brings together government actors and other interested stakeholders from different jurisdictions and organizations to help address environmental problems at landscape scale, because of the inability of governments to solve it unilaterally (Bartz, Baggio, Ávila, & Turcato, 2021; Gerlak et al., 2013). Such approach is necessary because the problems that need to be solved are transboundary; across man-made political boundaries, and temporal and spatial biophysical processes (Bodin, 2017). Collaborative governance is thus often seen as a means to overcome these institutional fragmentations, particularly to bring stakeholders with contrasted interest together to manage a landscape across administrative jurisdictions (Bodin, 2017). On the other hand, research have also shown that collaboration may not always work, as it is used only as a means to advocate for the actors own self-interest while they lack the will to actually contribute

towards solving the problem (Bodin, 2017). As such, unravelling the formula to a successful collaboration when confronted with complex environmental problems across countries' administrative jurisdictions is an area where a knowledge gap exist (Bodin, 2017).

Jurisdictional approach emerged as a way to address the limitations of pre-existing collaborative governance strategies, as it is based on the recognition that it is necessary to involve public authorities because they have the authority over the area of the jurisdiction, and thereby can better enforce and monitor the laws, as well manage the institutional mismatches (Boyd et al., 2018; Fishbein & Lee, 2015; von Essen & Lambin, 2021). It was mainly applied in forest carbon projects but the concept is now being used to promote sustainable production of forest-risk commodities at scale. Overall, the JA thus shares common principles with other collaborative strategies to landscape management such as it is multi-stakeholder, all stakeholders are supposed to engage in decision-making, it is formally organised, decision making is by consensus, and it is in the pursuit of meaningful and effective institutional integration and actor interaction across various ecological, social and political levels (Buchanan et al., 2019; Hovani et al., 2018; F. J. Seymour et al., 2020; von Essen & Lambin, 2021). However, boundaries are defined by political/administrative jurisdictions and the leadership role of government entities is here emphasized (von Essen & Lambin, 2021).

Fishman et al. (2017) viewed that building effective multi-stakeholder initiatives is likely the greatest challenge to the success of a JA, because governments and businesses are often motivated to seek short-term results and rewards. There is no

single solution on how a collaboration can succeed, but one way to start looking for solutions is by engaging the stakeholders participating in it (Bodin, 2017). My second objective thus intend to understand the challenges faced by multi-stakeholders in the JA by understanding their perspectives on the challenges they face.

The common pool resource literature is one of the more prominent bodies of literature that looked into CG. The common pool resource characteristics are that it is difficult to exclude users that only want to reap its benefits from it, and that the generation of the resource is finite, meaning one person's use will subtract from the quantity of the resource available to others till none is left (Ostrom, 1999). Problems arises when there is difficulty in excluding these outsiders, whom are interested in benefitting from the resource without contributing to its long term sustainability (Ostrom, 1999). There are eight designs principles that explains the success of governing a common pool resource, which are: (i) there must be clearly defined boundaries, (ii) there must be agreement between allocation and access rules and local conditions, (iii) the user is allowed to participate in making and modify the operational rules, (iv) the management system needs to be monitored, (v) users who violated operational rules receive graduated sanctions, (vi) there is conflict resolution mechanisms, (vii) the management rights of the resource users are not challenged by external actors, and (viii) the management, monitoring and enforcement are organised in multiple layers of nested enterprises (Ostrom, 1999). Although useful as a starting point in identifying challenges to CG, Ostrom's common pool resource design principles are more applicable to smaller localised common pool resources, as its applicability to larger landscapes may be limited by the landscape's complexity (e.g. many and diverse stakeholders), and its political economic factors.

To complement the common pool resource literature, a literature review specifically focusing on the collaborative governance challenges of natural resource management was conducted. The challenges identified were:

- The lack of trust among members (Agrawal, 2014; Ansell & Gash, 2008; Bodin, 2017; Coleman & Stern, 2018; Emerson, Nabatchi, & Balogh, 2012; Margerum, 2016; Memon & Weber, 2010; J. Sayer et al., 2013).
- No shared understanding of the objectives and solutions to the collaboration (Adams, Brockington, Dyson, & Vira, 2003; Ansell & Gash, 2008; Davies & White, 2012; Ingold & Fischer, 2014; Jones & White, 2022; Margerum, 2016; Reed, Ickowitz, et al., 2020; J. Sayer et al., 2013; Uetake, 2015; Ullah & Kim, 2020).
- There is power imbalance where some members can influence the goals and processes (Arai et al., 2021; Jones & White, 2022; Kallis, Kiparsky, & Norgaard, 2009; Margerum, 2016; Morrison et al., 2019; Paoli et al., 2016; Purdy, 2012; Thondhlana, Shackleton, & Blignaut, 2015; von Essen & Lambin, 2021)
- The lack of support from higher level government (Fish, Ioris, & Watson, 2010; Fishman et al., 2017; Hossu, Ioja, Patroescu, Dusa, & Hersperger, 2019; Margerum, 2016; Paoli et al., 2016; von Essen & Lambin, 2021).
- The lack of knowledge in implementing a new initiative (Davies & White, 2012; Fish et al., 2010; Reed, Ickowitz, et al., 2020).
- The lack of leadership to push for the outcomes of the collaboration (Ansell & Gash, 2008; Bodin, 2017; Davies & White, 2012; Emerson et al., 2012; Heikkila & Gerlak, 2005; Margerum, 2016; McIntyre & Schultz, 2020; Memon & Weber, 2010; Uetake, 2015; Ullah & Kim, 2020; Vodden, 2015).

- Participants cannot participate effectively because the objectives of the collaboration is not their core business (Fish et al., 2010; Jones & White, 2022; Margerum, 2016; Memon & Weber, 2010; Ullah & Kim, 2020; von Essen & Lambin, 2021).
- There is lack of process transparency (Ansell & Gash, 2008; Crona & Parker, 2012; Davies & White, 2012; Emerson et al., 2012; Paoli et al., 2016; J. Sayer et al., 2013; Sullivan, White, & Hanemann, 2019; Uetake, 2015; Ullah & Kim, 2020).
- The collective decision making process itself creates a deadlock as it needs consensus from everyone (Kallis et al., 2009; Margerum, 2016).
- There is lack of funding to see the collaboration through (Fishman et al., 2017; Margerum, 2016; Paoli et al., 2016; Vodden, 2015; von Essen & Lambin, 2021; Zanzanaini et al., 2017).

Ansell & Gash (2008) developed a model to understand the conditions under which stakeholders will collaborate, with four broad variables, which are the starting conditions, institutional design, collaborative process and facilitative leadership. Using the Ansell & Gash (2008) model, Sabah's case context, and the literature on collaborative governance challenges, I formed my **hypothesis for Objective 2**:

Hypothesis 3: The RSPO Jurisdictional Approach progress is slow[9] because it encounters challenges in its collaborative process and institutional design (e.g. no shared understanding of the common goals, power imbalance).

[9] I define the progress as slow because it is still in Step 1 of the RSPO Jurisdictional Approach Piloting Framework, after six years since it was formed. More details are given in Chapter 3.

1.8.3 Landscape and Jurisdictional Approaches

The LA have gained popularity as a potential solution to solve "wicked problems" in today's global challenges, such as addressing deforestation while balancing agriculture expansion and human's livelihoods (Reed, Deakin, & Sunderland, 2014; Sayer et al., 2013). One of the first article that provided a comprehensive overview of the LA was written by Sayer et al. (2013), and the authors stated that there is no universal definition of a landscape approach, and that this term is used loosely and interchangeably to describe work done using spatial planning at a landscape level. However, researchers in the next few years, including Sayer came up with definitions of the landscape approach: "*a long-term collaborative process bringing together diverse stakeholders aiming to achieve a balance between multiple and sometimes conflicting objectives in a landscape or seascape*" (Sayer et al., 2017), "*a framework to integrate policy and practice for multiple land uses, within a given area, to ensure equitable and sustainable use of land while strengthening measures to mitigate and adapt to climate change*" (Reed et al., 2014), and "*an approach to address social-ecological systems to manage resources and reach environmental goals at a landscape scale, with the aim of achieving the multiple objectives of the landscape*" (Freeman, Duguma, & Minang, 2015). These three definitions have the similar themes of it being multi-stakeholder, a loosely defined landscape, and it is multi-objective but leaning more towards the environmental ones. In Sayer et al. (2013) seminal paper, the ten principles of the LA were given to inform best practices on how agricultural production and environmental conservation can best be integrated at a landscape scale (Table 2). These principles were often referred to in other research on the LA and is very much relevant for the JA. These principles though do not explain how exactly the LA or JA will bring about

the change in solving environmental problems, and this, which is the lack of the theory of change, is a gap in the literature.

Table 2. The ten principles of the landscape approach

Principle 1	Practice adaptive management because landscape processes are dynamic
Principle 2	Have common concern entry points to start the collaboration and build trust
Principle 3	Be aware of the multiple scales of governance
Principle 4	Landscapes are multifunction and therefore trade-offs will exist
Principle 5	Recognize the concerns of all stakeholders
Principle 6	All stakeholders need to understand and agree on the general logic and course of action
Principle 7	Rights and responsibilities of stakeholders must be clear
Principle 8	Monitoring of the progress is participatory and information is shared freely
Principle 9	Bolster resilience by recognizing threats and vulnerabilities
Principle 10	Stakeholders' capacity should be strengthened for effective participation

Source: (Sayer et al., 2013)

Research on jurisdictional approaches as of now, focuses more on to the challenges it faces (Seymour et al., 2020; von Essen & Lambin, 2021; Wardell, Piketty, Lescuyer, & Pacheco, 2021; Wolosin, 2016), and the enabling conditions or good practices (Fishbein & Lee, 2015; Fishman et al., 2017; Freeman et al., 2015; Hovani et al., 2018; Nepstad et al., 2013; Pirard, Fishman, Gnych, Obidzinski, & Pacheco, 2015; Sayer et al., 2013). There is no impact evaluation study that demonstrates the effectiveness of a JA in reducing deforestation (Boshoven et al., 2021; Chervier et al., 2020; von Essen

& Lambin, 2021). Chervier, Piketty, & Reed (2020), argued that the key intermediary outcome of a JA is not to reduce deforestation, but rather, the formalization of a locally adapted framework of operational and collective rules that will lead to better long-term outcomes (like reduce deforestation). In such a scenario, policies or regulatory framework will be created to institutionalise the JA within the formal governance structure. The authors developed a generic theory of change to help illustrate their ideas, which I have used as part of my thesis framework in Figure 1.

One of the first comprehensive report that analysed the JA to reduce palm oil driven deforestation in Indonesia was written by Paoli et al. (2016). In the report, it suggested that the JA's value proposition of core actors (e.g. political leaders and large palm oil companies) are influenced by external factors like requirements of the law, market demands as well as the incentives created by the JA itself. Governments are attracted to adopt the JA for the value proposition factors such as the jurisdiction becoming a preferred choice for foreign investment and securing sourcing agreements between buyers and the jurisdiction's suppliers (Boshoven et al., 2021; Buchanan et al., 2019; Paoli et al., 2016; von Essen & Lambin, 2021). Adopting the JA can also raise the profile of the government leader, boosting the leader's political career (Paoli et al., 2016). While for the business sector, the value proposition factors would be that the business risk is reduced as the supply from that jurisdiction is "deforestation free", and that the commodity can be sold at a premium price (Boshoven et al., 2021; Buchanan et al., 2019; Denier et al., 2015; Fishman et al., 2017; Paoli et al., 2016; von Essen & Lambin, 2021).

Not many research analysed the JA's potential other than from the ecology standpoint, although there was one paper by Arts et al. (2017) that also reviewed the economy and social aspects of the LA. In the case for the environment, there is the goal of achieving zero-deforestation in the jurisdiction when a certification standard is used like the RSPO (Boshoven et al., 2021; Boyd et al., 2018). While others are optimistic that the outcome would be that the landscape will contain an adequate quantity and configuration of habitats to protect native biodiversity, and that crop expansion on High Conservation Values (HCV), biodiverse areas and peatland will cease (Boshoven et al., 2021; Fishman et al., 2017; Pacheco, Schoneveld, Dermawan, Komarudin, & Djama, 2020). Smallholders may benefit too, as through this approach, it is postulated that their land tenure rights will be clarified (land tenure is an occurring problem for smallholders in most tropical countries), their technical capacities in agriculture practices will increase, and that they will be compensated for the loss of cultivated area onto which they might have otherwise expanded (Birn, Qvarfordh, & Jesperson, 2021; Buchanan et al., 2019; Fishman et al., 2017; Ng, 2021; Pacheco et al., 2020; Paoli et al., 2016; Stickler et al., 2018). One outcome, which is specific to sustainable palm oil production context is that the labour and living conditions of plantation workers will improve (Buchanan et al., 2019; Pacheco et al., 2020).

There is no particular research to my knowledge that analysed the potential outcomes of the JA from the perspective of the local stakeholders, other than a WWF report by Fishman et al. (2017). As such, the third objective is to understand local stakeholders' perspectives on what should be the outcomes of the JA, in which I am hoping to populate the "shared vision and goals" in the Figure 1 JA theory of change, and to inform the potential outcomes at the end part of the theory of change.

The **hypothesis for my third objective** is:

Hypothesis 4: The local stakeholders of the RSPO JA do not share the same view of the JA outcomes because they have different understandings and expectations on how it can be implemented realistically on the ground.

1.9 Methodology

The PhD research employed a mixed qualitative and quantitative approach to achieve the objectives. The data collection drew primarily from (i) interviews with 29 respondents from the government, civil society, business and industry, and the research sectors (see Appendix A), and supplemented by (ii) the review of grey literature such as policy documents, reports, and newspaper articles.

1.9.1 Case Study Method

For the first objective, the case study method was used, which is to study a phenomenon over time, in one or few sites (Bhattacherjee, 2012). This method was used because it can derive richer, and more contextualized interpretation of the phenomenon of interest compared to other research methods, and it can capture a rich array of contextual data based on the experiences and knowledge of the respondents interviewed (Bhattacherjee, 2012). This method can be used for theory building or theory testing, which for my first objective, was for theory testing.

To conduct a case study research method, the first step was to define the research question, which for Objective 1, were, “Is Sabah undergoing a transformational change?”, and “What were the enabling or hindering conditions for this change?”. Using the research questions as a basis, a semi-structured questionnaire was developed (see Appendix B). A semi-structured questionnaire is characterised by primary questions, followed by questions that “probes” (McIntosh & Morse, 2015). The primary questions were formulated to generate discussions, and the probing question was to get a better understanding of their answers to the primary questions, by asking, “in what way?”, “tell me how?”, etc. Once completed, the questionnaire was tested to ensure that the questions are clear, and it elicits the answers that I wanted. Respondents were chosen by expert and snowball sampling, which are those that are knowledgeable of the phenomenon I am studying. I also ensured that I got a divergent of perspectives, which is part of the criterion for this method (Bhattacherjee, 2012). The interviews were all conducted online using the Zoom platform because of the Covid pandemic, and recorded with the consent of the respondent. After that, the interviews were transcribed verbatim. Once transcribed, NVIVO was used to conduct a content analysis. The transcriptions was coded following this guideline by Kawulich (2004):

“*The coding begins with the researcher’s theory of what occurs and the formulation of the indicators of evidence that would support the theory. The elements of the code are derived from the hypotheses or the elements of the theory*”

The limitations to using the case study method is that the quality of deduction depends heavily on the integrative abilities of the researcher, and it is heavily contextualized, which makes it difficult to generalize inferences from one case to another

(Bhattacherjee, 2012). To minimize the limitation on the researcher's integrative abilities, I ensured that I triangulated / cross-checked all the evidence obtained from the interviews with secondary data from government department reports, policy documents, websites and newspaper articles.

1.9.2 Q-methodology

For Objectives 2 and 3, the Q-methodology was used, which is a mixed method of qualitative and quantitative approaches, through studying discourses and employing factor analysis (Molenveld, 2020). It is a method that is helpful in studying perceptions. It works by reducing the number of perspectives to be studied by identifying inclinations shared by a group of people, and helps discover the conflicting views that exist among them so that solutions or a middle ground can be found (Brown, Danielson & van Exel, 2015; Molenveld, 2020).

Perceptions of stakeholders were used to answer Objectives 2 and 3 because it is one way to fill the gaps of the JA theory of change (theory testing), since this approach is still in the process of being implemented. The JA stakeholders often have different perceptions on how to achieve a goal, because of their particular values, expertise or preferences. Q-methodology is particularly useful in studying these perceptions by using a clear and structured method. It is does not necessitate a large sample size (difficult to achieve because of Covid pandemic), but instead places importance that the participants are knowledgeable and have perspectives / viewpoints on the subject matter, and that they are not homogenous (Watts & Stenner, 2012; Zabala, Sandbrook,

& Mukherjee, 2018). This is an advantage over quantitative surveys like the Likert scale, which is the more commonly used method to capture perceptions and attitudes. Likert scale provides limited detail on how perceptions and attitudes may differ across respondents or groups, it is a normative assessment of overall attitude, and it requires large participant sample size for statistical power (Ho, 2017). On the other hand, Q-methodology not only illustrate the majority perspectives, but also minority ones that may otherwise be lost when using Likert-type scales (Ho, 2017; Molenveld, 2020).

There are five stages in the research process of Q-methodology, which are the research design, data collection, analysis, results and interpretation. These have been illustrated and explained in each stage in Figure 6. The actual analysis of the Q-methodology is discussed in detail in Sub Chapter 3.3.3 and Sub Chapter 4.3.3.

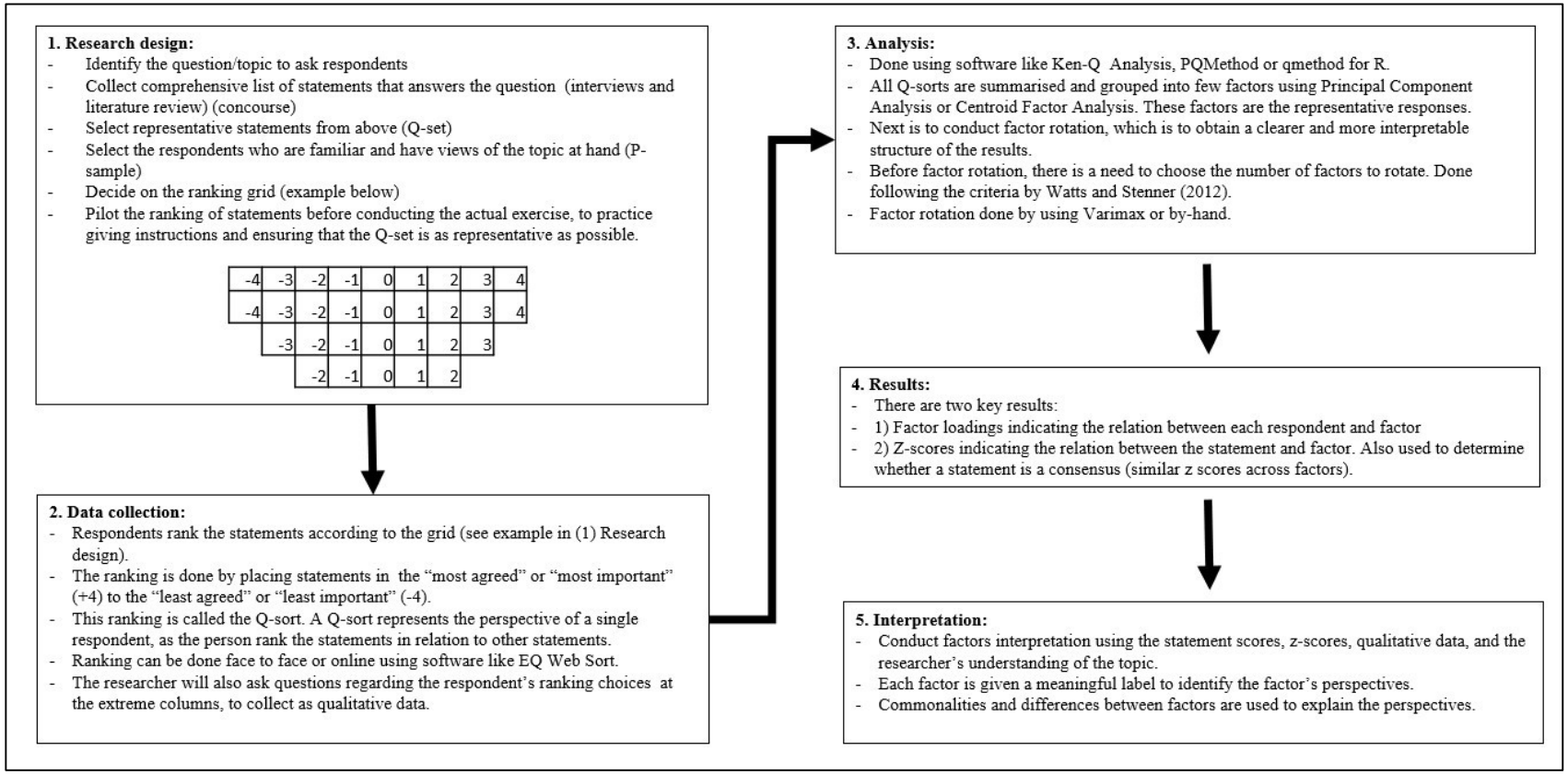


Figure 6. The general research process of Q-methodology

Adapted from Zabala et al. (2018)

The Q-methodology do have some limitations. The results of the study cannot be generalized to a particular population based on the respondents' characteristics (e.g. where they work, ethnicity). The conclusion only applies to those who took part in the study (Ho, 2017; Molenveld, 2020). Q-methodology takes a "snapshot" of the issue at the specific time the research is conducted, and therefore, it does not consider time (Cross, 2005; Molenveld, 2020). The same respondent may provide different answers when the method is used at another time, yielding different results. For the actual conduct of the method (sorting the statements to make a Q-sort), detailed instructions need to be given, and the sorting process can be time consuming (Ho, 2017). The process of sorting can appear complicated to some respondents, and they may find it tiring to sort, and therefore, will complete the sorting for the sake of "doing it" (Corr, 2001; Watts & Stenner, 2012) (note: I faced this problem during my research and had to omit respondents that could not understand the sorting process). Some other respondents may not be honest in the sorting and will try to sort accordingly to what they think is acceptable to the researcher, instead of their own feelings (Cross, 2005). For the interpretation stage, there is the risk of biasness with the researcher, as the researcher provides the meanings for the different perspectives (factors) (Corr, 2001; Cross, 2005). As such, when making conclusions using the Q-methodology, the limitations above need to be taken into account. Conclusions made by the researcher must be cross-checked with other secondary data. Additionally, respondents that are found to have not done the Q-sort properly (because they cannot understand the concept or are not honest) must be removed from the overall analysis.

1.9.3 Overview of the PhD Research Design

Table 3 below provide readers with a quick overview of the research design of the PhD thesis.

Table 3. Summary of the research design of the PhD thesis

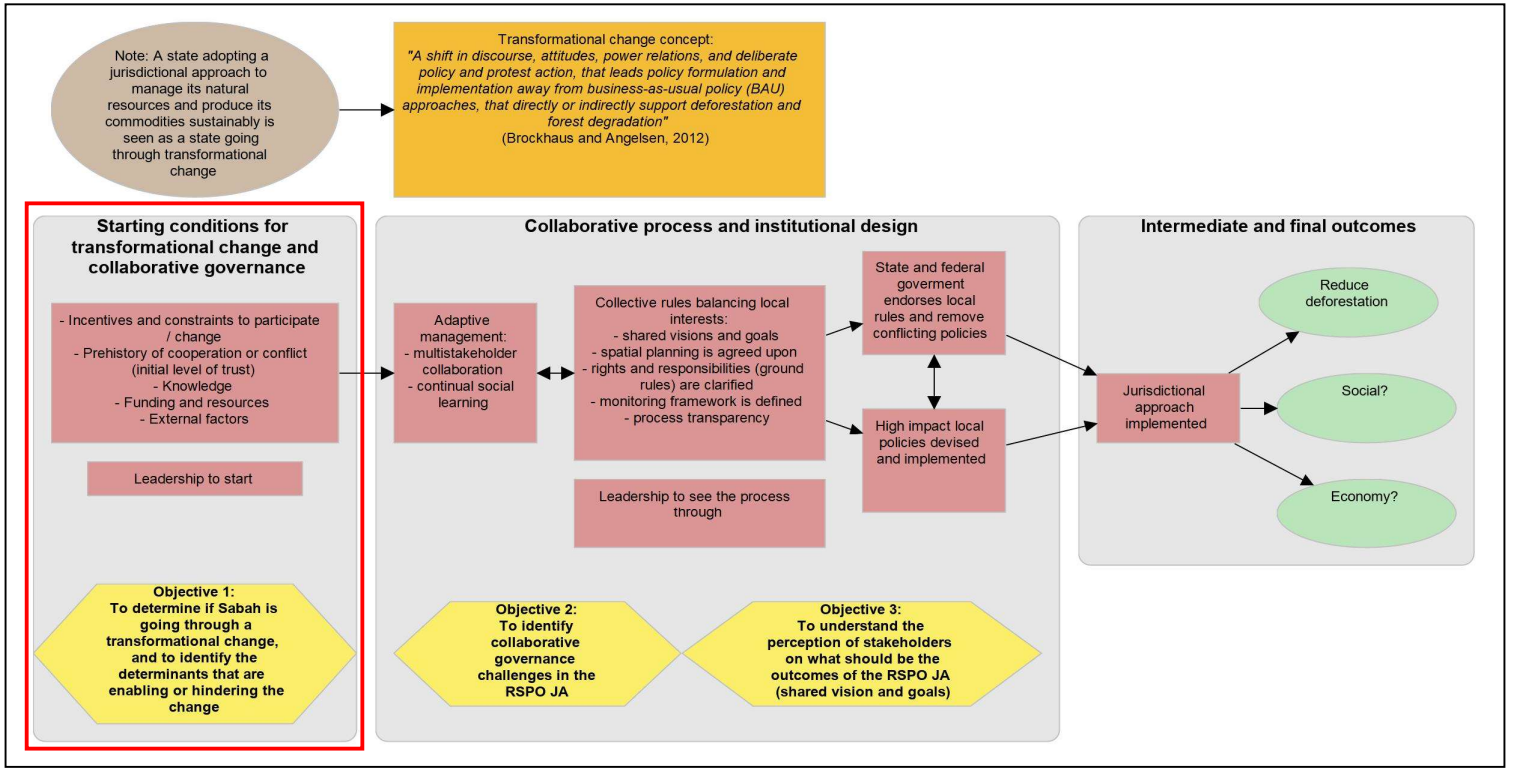
Objective	Analytical concept used	Research gap	Information needed	Data collected and methodology
Objective 1: To determine if Sabah is going through a transformational change, and to identify the determinants that are enabling or hindering the change.	TC through a political-economy lens	The literature on TC generally focus on policy changes directly initiated by external parties (e.g. REDD+). For Objective 1, there are two crucial issues to understand. The first is if a state is actually transforming, and what are the indicators to confirm it. Second, what are the conditions that enable or hinder the TC, especially when the said "TC" emerged internally, like the case of Sabah.	1) Confirmation if Sabah is transforming, the type of policies that lead to the transformation, reasons Sabah decided to adopt these policies, and the challenges it faced 2) Confirmation on why Sabah adopted the RSPO JA	<u>Case study research method used</u> 1) Data collection: Desk review (policy documents, newspaper articles, published and unpublished materials) Semi structured interviews (expert and snowball sampling, n=29) 2) Data analysis: Content analysis using NVIVO Triangulate the evidence from the desk review and interviews to verify interpretation
Objective 2: To identify collaborative governance challenges in the RSPO JA	Collaborative governance in natural resource management	Knowledge gaps exist in unravelling the formula to a successful collaboration when confronted with complex environmental problems across countries' administrative jurisdictions. This research will provide a better understanding of collaborative	1) Perspectives of the stakeholders of the RSPO JA on what they think are the collaborative governance challenges	<u>Q-methodology used</u> 1) Data collection: Interviews with stakeholders (n=17) to understand the

Objective	Analytical concept used	Research gap	Information needed	Data collected and methodology
		governance challenges that are specific to jurisdictional approaches.		collaborative governance challenges Desk review (secondary sources reports and published articles) Ranking of 30 statements pertaining to the research question, on a grid, called a Q-sort (n=14 Q-sort) 2) Data analysis: Using an open software Ken-Q Analysis, where Principal Component Analysis was used for initial factor extractions, and then Varimax to rotate the chosen factors.
Objective 3: To understand the perception of stakeholders on what should be the outcomes of the RSPO JA.	Value propositions for different type of stakeholders in the landscape or jurisdictional approach literature	Publications on JA mostly entailed the challenges it faces, its enabling conditions and its framework. Research focusing on the JA outcomes or the value propositions for the different stakeholders are lacking, as most JAs are still being implemented. In the JA literature, the end goal is often stated as to stop or reduce deforestation. This objective seeks to provide a better understanding of key stakeholders'	1) Stakeholders' perspectives on what they think should be the outcomes of a jurisdictional approach. This question was asked with two criteria in place, that the outcomes should happen in 10 years' time (2022-2032), and it should take into account the real-world situation.	Q-methodology used 1) Data collection: Interviews with stakeholders (n=29) to understand stakeholders' perspectives on the JA outcomes Desk review (secondary sources reports and published articles)

Objective	Analytical concept used	Research gap	Information needed	Data collected and methodology
		perceptions and expectation of what a JA can achieve.		Ranking of 29 statements pertaining to the research question, on a grid, called a Q-sort (n=26 Q-sorts) 2) Data analysis: Using an open software Ken-Q Analysis, where Principal Component Analysis was used for initial factor extractions, and then Varimax to rotate the chosen factors.

The next three chapters (Chapter 2, Chapter 3, and Chapter 4) of the thesis will be based on the thesis' three objectives. Note that there are repetition of certain facts and definitions (e.g. Sabah's governance, workings of the RSPO JA, literature review) in the three following chapters that were already explained in Chapter 1. This is because the following chapters were written in articles format for publication. After the three chapters, a summary and conclusion will be done in Chapter 5

Linking Chapter 2 (Objective 1) with Chapters 3 and 4



Chapter 2 covers Objective 1 and the first part of the theory of change indicated by ☐

CHAPTER 2

2.0. RECENT FOREST AND LAND-USE POLICY CHANGES IN SABAH, MALAYSIAN BORNEO: ARE THEY TRULY TRANSFORMATIONAL?

This chapter is published in:

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Abstract

This paper analyses the policy changes occurring in the forest and palm oil sectors of Sabah, Malaysian Borneo, through the lens of the transformational change concept. The aim is to first examine whether Sabah is transforming and, if so, to identify the determinants enabling or hindering the change. To determine if Sabah is transforming, we used two criteria: - (i) an ambitious change in the policy framework, that promotes forest conservation and sustainable use, and is moving away from business-as-usual activities; and (ii) the level of implementation of the policies that we identified as

supporting transformational change. We found that Sabah very likely did intend to transform. We made this conclusion based on comparing changes in policies occurring in Sabah, and we decided if it is ambitious by primarily comparing Sabah's policies with other Malaysian states, the federal government, and internationally. We showed that: (i) Sabah decided to use voluntary international certification standards (private market instruments) like FSC and RSPO, while the other Malaysian states did not; (ii) they decided to protect more forest compared to national and international targets; and (iii) Sabah is an early mover as the state is one of the first in the world to adopt the RSPO Jurisdictional Approach. But intention needs to be followed by implementation, and this is where the state falls short. The policies in Sabah were not fully implemented because of the patronage system where the more powerful actors used their power to continue with business-as-usual activities, there is frequent political turnover in Sabah, and the state faced difficulty in meeting international standards. Our research shows that local leadership and a local transformational change coalition (civil society actively working in Sabah) mainly prompted the transformational change, although the promises of economic gains and better reputation also played a role. We conclude by emphasising the change must be made more compelling for political leaders, as part of a broader institutional structure, not only through the narrow focus on reducing deforestation but through the development of a more sustainable and equitable national economy, and that consumer countries should play a role in reducing pressures on forest by providing incentives to a state that manages its natural resources sustainably.

2.1 Introduction

Although tropical forests cover only about 6% of the Earth's land surface, they harbour more than half of the world's biodiversity (McCarthy & Tacconi, 2011; Laurance et al., 2012). Alarmingly, 90% of total deforestation was of tropical forests between the years 1990 and 2020 (FAO, 2020). Tropical deforestation and forest degradation are major concerns because they contribute to 17% of total greenhouse gas emissions, cause biodiversity loss and reduce the forest's capacity to supply the products and ecosystem services that many people depend on for their survival (Gibson et al., 2011; McCarthy & Tacconi, 2011; Pacheco et al., 2021; F. Seymour & Harris, 2019). Incremental change (doing slightly more gradually of what is being done) to address deforestation is not effective and not happening fast enough because the world is facing more frequent and intense climatic extreme events that will overwhelm the environment systems, and cause irreversible losses to humans (Kates et al., 2012; Portner et al., 2022). As such, urgent action is needed to foster transformational change (TC), as a necessary societal response to stop or reduce tropical forest loss and degradation and also to meet global sustainability goals, such as the Sustainable Development Goals, the Paris Agreement on Climate Change and the New York Declaration on Forests) (Termeer et al., 2017; Barlow et al., 2018; Dasgupta, 2021).

TC is an emerging concept in the field of natural resource management, but it has no universally accepted definition (Kehrer, Flossmann-Kraus, Alarcon, Albers, & Aschmann, 2020; Puri, 2018). One commonly used definition through a political-economy lens is '*a shift in discourse, attitudes, power relations, and deliberate policy and protest action, that leads policy formulation and implementation away from*

business-as-usual policy (BAU) approaches, that directly or indirectly support deforestation and forest degradation' (Brockhaus & Angelsen, 2012). From an analytical point of view, it is crucial to understand the conditions under which TC is enabled or hindered. However, before addressing this question, we need to determine whether TC is occurring. Indeed, too often, forested countries change their policy framework to satisfy citizen and/or foreign pressure but implement strategies that are ineffective in changing the way natural resources are exploited (Milne & Adams, 2012; Ongolo & Karsenty, 2015). In this paper, we therefore map changes in the policy framework that occurred in the forested state of Sabah, Malaysian Borneo, and analyse the extent to which these changes translate into meaningful policy implementation.

The scientific literature on TC in the field of natural resource management is scarce. In addition, available studies generally focus on policy changes directly initiated and even sometimes piloted by foreign actors, for example, REDD+ (Babon et al., 2014; Brockhaus, Di Gregorio, & Carmenta, 2014; Brockhaus, Di Gregorio, & Mardiah, 2014; Brockhaus et al., 2017; Cole et al., 2017; Pham et al., 2017; Chia et al., 2019; Korhonen-Kurki et al., 2019; Moeliono et al., 2020). The adoption of a policy under external influence but without or lacking national ownership is commonly reported as hindering long-term and viable TC (Brockhaus et al., 2017). As a result, the understanding of TC enabling and hindering conditions, when it is perceived to emerge internally because of strong national ownership deserves more scrutiny.

In this paper, we analysed the case of Sabah, Malaysian Borneo, a major producer and exporter of timber and palm oil commodities. Starting in the 1990s, the Sabah government adopted a series of ambitious policy measures to move away from the

unsustainable exploitation of its forest resources. In 2015, the state authorities decided to adopt a jurisdictional approach to sustainable palm oil production. The specificities of changes that occurred in the Sabah policy framework – and what makes this case particularly interesting – are that (1) they were not the result of injunctions from the federal government of Malaysia or incentives from the international community; (2) they were ambitious, since Sabah chose to adopt international certification standards, such as those of the Forest Stewardship Council (FSC) and Roundtable on Sustainable Palm Oil (RSPO) instead of national standards; and (3) they were developed before the federal government and other Malaysian states made a move towards sustainability in the timber and palm oil sectors (early mover).

The aims of this paper are to first examine whether Sabah is transforming and, if so, to identify the determinants that are enabling or hindering the change. We focused specifically on policy changes occurring in two of the main land uses responsible for deforestation in Sabah: production forest (for timber) and palm oil agriculture. We do so by first explaining our analytical framework of what TC entails and the type of data collected and its analysis. The results section draws on the data collected to examine whether Sabah is transforming and what are the determinants of the change. We then discussed what the findings could mean for Sabah's effort to improve its forest and land-use management, and its contribution to the wider TC literature.

2.2 Case Study Overview

Sabah is part of Malaysia, a federation of 13 states and three federal territories. Eleven states are on Peninsular Malaysia and two, Sabah and Sarawak, on Borneo island. All state governments have authority over their natural resources, such as land and forests, while the federal government sets overall policies for finance, education, defence and development (Jomo et al., 2004).

In the Federal Constitution, Sabah and Sarawak are semi-autonomous and have more freedom in the running of their states than Peninsular Malaysia. The two states have their own specific forestry laws and policies,[10] while the 11 states of Peninsular Malaysia share the same law and policy.[11] As such, Sabah Forestry Department (SFD) has the full power to issue permits for timber harvesting, log transport, and export and import licences for timber products in Sabah (NEPCon, 2018).

The management of palm oil is a different matter. Although land titles for agricultural purposes are given out by the state, the federal government controls the licensing of palm oil plantations and products. This is under the purview of the Malaysian Palm Oil Board (MPOB), which is a federal government agency. As such, all persons wanting to be involved in the palm oil business need to be licensed by MPOB, according to the MPOB Regulations of 2005. This encompasses the production, sale, purchase, construction of oil palm mills, and export and import of oil palm products

[10] Sabah Forest Enactment 1968, Sabah Forest Policy 2018, Sarawak Forest Ordinance 1958, Sarawak Forest Policy 2019
[11] National Forestry Act 1984, Forest Policy Malaysia 2021

(NEPCon, 2017). Sabah's Department of Agriculture thus plays a minimal role in palm oil development, compared to MPOB.

2.2.1 Main Causes of Forest Loss in Sabah

The two main causes of forest loss in Sabah are the unsustainable exploitation of its timber resources, resulting in severe forest degradation, followed by the conversion of its forest into industrial oil palm plantations (McMorrow & Talip, 2001; Reynolds et al., 2011; Mashor et al., 2014; Gaveau et al., 2018). It is estimated that Sabah lost 1,862,375 ha of its forest (about 25% of Sabah's land area[12]) from 1973 to 2015 (Gaveau et al., 2016). However, the forest cover in 2015 was still 53% of the land area (or 3,969,288 ha). Of this, 1,647,149 ha (22% of Sabah) was considered intact[13] forest, while 2,322,139 ha (31%) was logged forest area[14] (Gaveau et al., 2016). Over the past few decades, 86% of Sabah's logged forest had been logged at least twice, 12% three times and the remaining 1% four or more times causing it to be severely degraded (Bryan et al., 2013). Indeed, in the 1970s to '80s, logging for timber was the backbone of Sabah's economy (Jomo et al., 2004). Forest revenue during those years accounted for more than 50% of Sabah's total revenue (Pang, 1989). Sabah exported an average of 9 million m^3 of logs from 1979 to 1988 (Dauvergne, 1995). The availability of timber declined rapidly from a peak of 13 million m^3 in 1978 to 3.4 million m^3 in 1999

[12] Sabah's size is 7,396,621 ha (Gaveau et al., 2016)
[13] Gaveau et al. (2016) consider forest intact if the database of satellite images never detected the presence of large (>10 m wide) logging roads in the forest.
[14] Gaveau et al. (2016) consider that the forest has been logged if the database of images detected the presence of large (>10 m wide) logging roads in the forest.

(Reynolds et al., 2011) and in 2019, only 1.07 million m^3 was harvested from the natural forest (SFD, 2019).

Starting in the 1990s, demand for palm oil and the increasing profitability of its cultivation became the main driver of deforestation in Sabah (Reynolds et al., 2011), taking over from timber overexploitation. In 25 years, the planted area of oil palm in Sabah increased by 1592% from 59,139 ha in 1975 to more than 1 million ha by 2000 (MPOB, 2019). In 2019, the total area planted with oil palms was about 1.54 million ha or 22% of Sabah (MPOB, 2019). Sabah had the largest planted area in Malaysia until Sarawak overtook it in 2017. From the late 1990s until 2019, Sabah produced the most crude palm oil in Malaysia, compared to the other states, with 5.03 million tons in 2019 (25% of Malaysia's production), making it the most important state in Malaysia[15] for this industry (MPOB, 2019). Malaysia is second only to Indonesia in terms of palm oil export, with Indonesia exporting 55% of the total global exports and Malaysia 34% (MPOB, 2019).

2.2.2 Overview of Sabah's Land and Forest Governance

The head of government for Sabah is the Chief Minister (CM), who often leads the political party with the most seats in the State Legislative Assembly. Executive power is vested in the State Cabinet that is led by the CM. Sitting under the CM's Department

[15] Sarawak supplied 21% or 4.23 million tons in 2019.

are two agencies in charge of managing Sabah's land: SFD, and the Land and Survey Department (LSD). The SFD is responsible for managing forest reserves (FRs), which cover almost 50% of Sabah, and are gazetted under the Forest Enactment 1968. The LSD is responsible for issuing titles for land outside of the FRs, using the Land Ordinance 1968. There are two types of land categories outside of FRs: 'state land' for all lands in the state other than a FR that is not yet alienated; and 'alienated land' for lands that are leased out by the state to private individuals, companies and local communities. FRs are managed under seven classes (Table 4), where three of these classes (Classes I, VI and VII) are categorised as Totally Protected Areas (TPAs) (Figure 7). Other than Classes I, VI and VII FRs, TPAs also include land managed by Sabah Parks and Sabah Wildlife Department (274,129 ha in 2019), whom are under Sabah's Ministry of Tourism, Culture and Environment. Logging is strictly prohibited in all TPAs. Commercial logging is allowed in Class II FRs. Class I and Class II FRs make up the bulk of the FRs and TPAs in Sabah, amounting to 86% of Sabah's FRs or 3.04 million hectares, as of 2019.

Table 4. The seven classes of Forest Reserves in Sabah and their functions

Class	Management function
I – Protection forest (TPA)	Forests conserved for the protection of watersheds and maintenance of essential environmental services. Logging is not permitted.
II – Commercial forest	Forests allocated for harvesting to supply timber and other forest produce, contributing to the state's economy.
III – Domestic forest	The produce from these forests is for the consumption of local communities only and commercial use is not allowed.
IV – Amenity forest	Forests primarily for providing amenity and recreation to the public.
V – Mangrove forest	Forests supplying mangrove timber and other forest products to meet general demands and multiple uses.

VI – Virgin jungle (TPA)	Intact forests conserved strictly for forestry research purposes, including biodiversity and genetic conservation. Logging is not permitted.
VII – Wildlife reserve (TPA)	Forests conserved primarily for the protection and research of wildlife. Logging is not permitted.

Source: Mashor et al. (2014)

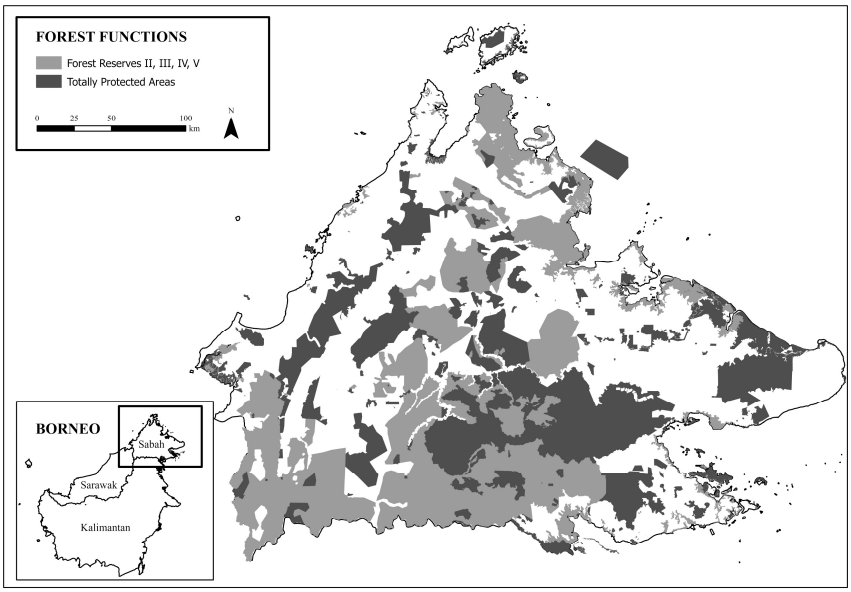


Figure 7. Sabah's Totally Protected Areas and other Forest Reserves in 2019

(Source: SFD, 2019)

The Sabah Foundation is another key actor in the governance of land in Sabah: it is a parastatal organisation that manages almost one-third of Sabah's FRs. Sabah Foundation was established in 1966 by the State Legislative Assembly to improve the socioeconomic status of Sabahans, especially through education. The funds for such activities were obtained from forest harvesting and downstream processing of timber. Eventually, the foundation ventured into other businesses, such as agro-plantation and tourism. The foundation is important in Sabah's forest management because it was allocated almost 1 million hectares of FRs to manage, and it had a history of abuse and

corruption, due to its privileged political access (Jomo et al., 2004), which will be discussed in the later sections of this paper.

2.3 Research Design

2.3.1 Analytical Framework

We reviewed the literature using the concept of TC in the field of natural resource management, especially forests. Using the Scopus search engine,[16] we identified articles with 'transformational change' and 'forest' (allowing for prefixes and suffixes) in their titles, abstracts or keywords (n = 96) and selected those focusing on TC aimed at reducing tropical deforestation or improving tropical forest management (n = 14) (Appendix A). We used these papers to identify the relevant indicators to assess TC and to formulate hypotheses regarding the determinants (enabling and hindering conditions) of TC.

In the literature, four features were used to determine if a state is transforming: - an ambitious change in the policy framework, from one that stimulates forest exploitation to one that promotes forest conservation and sustainable use; and it should be accompanied by a shift in discourse, attitudes and power relations (Brockhaus & Angelsen, 2012; Brockhaus, Di Gregorio, & Mardiah, 2014; Kanninen et al., 2007; Moeliono, Gallemore, Santoso, Brockhaus, & Di Gregorio, 2014). Changes in the policy framework should occur inside and outside the forestry policy domain, should

[16] TITLE-ABS-KEY ('transformational change' AND *forest*)

move away from a BAU[17] scenario and be implemented (Brockhaus & Angelsen, 2012; Di Gregorio et al., 2015). In our study, we could only use the first feature, "ambitious change in the policy framework" to analyse TC. We could not consider the shift in discourses, attitudes and power relations directly (Brockhaus & Angelsen, 2012; Di Gregorio et al., 2015), because data was not available to compare the before and after changes. As such, we would not know if the policies changes are actually embedded into the institutional arrangements for longer term continuities. However, to mitigate this limitation, we considered the level of implementation of the policies that we identified as supporting TC as an extra criterion. The literature indeed suggests that the actual implementation of ambitious policies might signal that deeper changes occurred (and that very often, the absence of implementation suggest that changes in mindsets, power relations, etc. have not changed) (Brockhaus & Angelsen, 2012). We also did touch on these aspects when we analysed the determinant of the policy changes and the reasons why the level of implementation of ambitious policies were limited.

We formulated the following hypotheses for determinants (enabling and hindering conditions) of TC: (i) **leaders** that can seize the opportunity and build coalitions to achieve TC (Babon et al., 2014; Korhonen-Kurki et al., 2019); (ii) **urgency** to transform because of shortage of resources (Brockhaus et al., 2017; Korhonen-Kurki et al., 2014); (iii) **presence of advocacy coalitions,** with shared beliefs promoting their interest, which could be TC or BAU (Babon et al., 2014; Brockhaus, Di Gregorio, &

[17] BAU optimises short term gains in natural resource management without any consideration for future use, and BAU forest exploitation is excessively timber-centric, failing to take into account the economic, social and environmental benefits associated with the forest (Wang, 2004; Brockhaus, Di Gregorio, & Mardiah, 2014).

Carmenta, 2014; Brockhaus, Di Gregorio, & Mardiah, 2014; Korhonen-Kurki et al., 2014; Moeliono et al., 2014); (iv) **strong national ownership,** where national actors are dominant in shaping the policy discourse for TC (Brockhaus et al., 2017; Cole et al., 2017; Di Gregorio, Brockhaus, Cronin, & Efrian, 2012; Korhonen-Kurki et al., 2014); (v) **country-specific political and institution structures** that can influence the change (e.g. inclusive institution arrangements that support TC, political path dependencies that support the *status quo* and are hard to change, the level of autonomy of state actors from interests linked to BAU activities) (Brockhaus, Di Gregorio, & Mardiah, 2014; Brockhaus et al., 2017; Chia et al., 2019; Di Gregorio et al., 2012); (vi) **external factors**, such as availability of donor money to incentivise the change, the will to improve a country's image internationally, and the global market demand and policies in consumer countries that can influence or discourage the change (Brockhaus et al., 2017; Korhonen-Kurki et al., 2019; Pacheco, Putzel, Obidzinski, & Schoneveld, 2012; Pham et al., 2017).

2.3.2 Data Collection and Analysis

We used a case study research method (Bhattacherjee, 2012), where data was collected through desk review and semi-structured interviews. The desk review included policy documents, published and unpublished materials, and newspaper articles. For newspaper articles, we searched two main English newspapers in Sabah, which were the *Borneo Times* and the *Daily Express*. We searched online through the newspapers' websites, from 2009 to 2020 (articles before 2009 were not available online). We used keywords 'forest', 'deforestation', 'jurisdictional approach' and 'palm oil'.

We pilot tested the questionnaire for semi-structured interviews with three volunteers who were knowledgeable on the research matter before conducting the actual interviews. The semi-structured interviews were done through expert sampling where the respondents were chosen in a non-random manner based on their expertise on Sabah's forest and land-use governance. Snowball sampling was also used as the experts who were first identified recommended others that could be interviewed. A total of 29 respondents were interviewed, government ($n = 8$), civil society (environment sector, $n = 12$, social sector, n = 3), research organisations ($n = 2$) and business (oil palm sector, $n = 3$, finance sector, n = 1). The respondents were senior-level government officials or senior organisation/company staff. The one-to-one interviews were conducted using the Zoom online platform during November and December 2020. The interviews were recorded with the permission of the respondents and transcribed verbatim, under a confidential agreement. In the results, we identified the respondents by providing running numbers of R1, R2, and so on, to keep their identities confidential.

We performed a content analysis of the interview transcripts, data acquired from the reviews, and newspaper articles using NVIVO software by coding accordingly to the TC policy indicators and hypotheses listed in our analytical framework. We triangulated the evidence obtained from the different sources to verify the interpretation of the data.

2.4 Results

2.4.1 Are Sabah's Policies Transformational?

Before assessing whether Sabah's policies can be qualified as TC, it is important to understand the context of how Sabah's policies are interlinked with the federal ones. Sabah's development policies are very much aligned and dependent on the Malaysia Plan, which is a comprehensive outline of the country's development strategies, prepared by the federal government. Malaysia Plans are prepared for a period of 5 years and the 1st Malaysia Plan covered the period 1966 to 1970. Malaysia is now in its 12th Plan (2021–2025). The main goals for the Malaysia Plans have always been to increase economic growth, promote national unity, eradicate poverty and ensure equitable wealth distribution. The agriculture sector, especially palm oil, was seen as a crucial means of achieving these goals, which were prescribed in the National Agriculture Policies. Malaysia has several federal policies concerning natural resource use and management, and some of the more relevant policies for this paper are the National Policy on Biological Diversity 1998 (revised 2016–2025), and the National Forest Policy 1978 (revised 1992, and the latest 2021). Similar to the development policies, Sabah developed its policies for both sectors independently from the federal government, but used the national policies as guidelines.

Our results showed that the development policies of Sabah and Malaysia in the early years of independence focused wholly on socioeconomic development. In Sabah, this was done by developing land settlement schemes and infrastructural facilities to link

major population centres, and by improving human resources through education (Pang, 1989). However, over the years, Sabah started developing policies that are more ambitious than the federal government and Sarawak (the other semi-autonomous state) with regards to natural resource management. We present the evidence from the relevant policies below. For each policy, we provide a description of the policy, justify why it is moving away from a BAU scenario and assess the level of implementation. This is summarised in Table 5.

Table 5. Summary of Sabah's policies moving away from BAU as compared to the other states in Malaysia, and the progress in its implementation

Sabah's policy	Matching policies at Federal or Sarawak state level	How was Sabah's policy more ambitious	Implementation progress for Sabah's policy
1) Sabah Development Corridor: The Socioeconomic Blueprint 2008-2025	• 9th to 11th Malaysia Plans (2006-2010, 2011-2015, 2016-2020) • Sarawak Corridor of Renewable Energy 2008-2030	<u>Sabah</u> • Stated that for palm oil production, it will leverage on the RSPO standards that could be translated into law. Note that RSPO certification was only just beginning, when this policy was written, so Sabah is an "early mover". <u>Federal</u> • Certified sustainable palm oil was not mentioned till the 11th Malaysia Plan, where MSPO was promoted. <u>Sarawak</u> • No mention of certified	• In 2015, Sabah announced that it will apply the RSPO jurisdictional approach.

			sustainable palm oil.	
2)	Sustainable Forest Management (SFM) Policy 1997	• National Forest Policy 1978 (reviewed in 1992 and 2021) • Sarawak Forest Ordinance 2015	<u>Sabah</u> • Decided to use FSC as an indicator of SFM, when at that time, FSC was viewed with hostility by governments of developing world. <u>Federal and Sarawak</u> • The federal government started operating the Malaysian Timber Certification Scheme in 2001 and promotes this certification.	• Sabah was the first state in Malaysia to have a FSC certified FR. Deramakot FR (55,139 ha) is the first tropical forest certified by FSC in the world. • SFM was unevenly implemented in the FRs of Sabah. Conventional logging was allowed in the Sabah Foundation areas. Licenses for forest conversion in FRs for oil palm plantation continued to be given out.
3)	Sabah Forest Policy 2018	• National Forest Policy 2021 • National Policy on Biological Diversity (2016-2025) • Sarawak Forest Policy 2019 • Sarawak Land Use Policy	<u>Sabah</u> • Target 30% protected area by 2025. • Directed that all FRs must be certified using international standard certification schemes. <u>Federal</u> • No target on protected areas coverage given in National Forest Policy. • Target 20% protected area in National Policy on Biodiversity. • No commitment on certifying all FRs. <u>Sarawak</u> • No target on protected areas coverage given in the Sarawak Forest Policy.	• As of 2019, 26% of Sabah is gazetted as Totally Protected Areas. Sabah has the highest percentage of protected areas in Malaysia (Peninsular ±14%, Sarawak ± 7%) • Sabah and Terengganu (a state in Peninsular) are the only states with FSC certified FRs. In 2019, 586,697 ha of Sabah is FSC certified, Terengganu is 116,697 ha. However, only 17% of Sabah's FRs are FSC certified. • As of 2019, only 22% of Sabah's FRs are certified (MTCS-PEFC and FSC certification)

			• Committed to 8% protected areas in Sarawak Land Use Policy. • Announced in 2017 that all Forest Timber License should be MTCS certified by 2022.	
4)	Sabah RSPO Jurisdictional Approach (RSPO JA) 2015	• Federal government announced in 2017 that it is mandatory for all palm oil producers to be MSPO certified by 1st Jan 2020	• Sabah's decision to use RSPO, which is a higher and an independent certification standard, for the whole state.	• The RSPO JA is yet to be made into a policy or law. However, a letter was issued by Sabah's Chief Minister Office in 2021 to all government departments to cooperate in making the RSPO JA a reality.

2.4.1.1 The Sabah Development Corridor: The Socioeconomic Blueprint 2008-2025

The Socioeconomic Blueprint was produced in 2008 by the Sabah government, and guided by the 9th Malaysia Plan (2006–2010). The goals of these two plans were to enhance the quality of life of the people by accelerating the growth of the economy, promoting regional balance (between Peninsular Malaysia and Sabah) and bridging the rural–urban divide. Agriculture was seen as an important means of assisting the rural population to address poverty. The plans differ, however, in their environment chapters: the Blueprint is more ambitious than the Malaysia Plan. The Blueprint stated that it would put in place sustainable agriculture practices to access more discerning markets and to possibly command premium pricing in the future. The aim was to leverage standards issued by the RSPO that could be translated into law with a management authority to address such issues. Neither RSPO nor any other form of certification for palm oil were mentioned in the Malaysia Plans till the 11th Malaysia Plan (2016–2020), where the Malaysian Sustainable Palm Oil (MSPO) certification was promoted. There was no mention of palm oil certification in Sarawak's

development policy (Sarawak Corridor of Renewable Energy 2008–2030) published around the same time. This demonstrated Sabah's forward-thinking approach to sustainability: it was already planning to use an international certification scheme in 2008, that is relatively new, as RSPO was only officially established in 2004.

Seven years after the Blueprint was launched, Sabah announced the goal of certifying the whole state's palm oil production as sustainable under a new initiative called the RSPO Jurisdictional Approach (RSPO JA). The RSPO JA will be discussed in subsection 4.1.4.

2.4.1.2. Sustainable Forest Management Policy 1997

Malaysia is a signatory to the International Tropical Timber Organization, signifying its commitment to sustainable forest management (SFM). Even though Sabah has complete control of its forest, its forest policies and practices are often streamlined to the National Forest Policy. However, despite commitments made in the international arena, Sabah conducted intensive logging in the 1970s, '80s and '90s, without regard to the forest's ability to regenerate, and many short-term licences (1–5 years) were issued. In 1989, SFD obtained technical support from the German Agency for Technical Cooperation (GTZ), to develop a management system aimed at responsible production of timber. The objective was to manage the commercial FRs in a way that mimics natural processes for the production of high-priced timber products in a sustainable manner (Lagan et al., 2007). As a result, the SFM policy was introduced in 1997. The intention was to phase out short-term timber harvesting licences to make

way for 100-year Sustainable Forest Management License Agreements (SFMLAs), averaging about 100,000 ha each. In these areas, reduced impact logging (RIL) practices had to be strictly followed. RIL aims to reduce damage to soils and residual forest, in comparison to conventional harvesting operations (Pinard et al., 2000).

Deramakot FR (55,139 ha) was selected for the SFM experiment and became the first tropical forest in the world to be certified by the FSC in 1997 (Mashor et al., 2014). The state policy's goal was to manage all commercial FRs based on the SFM Deramakot model. The policy stipulates that the SFMLAs must produce a 10-year Forest Management Plan approved by SFD before harvesting. The plan translates the SFM 1997 policy to the ground, as it specifies the stands identified for harvest in the next 10 years, and the forest restoration/enrichment and silvicultural treatments that are to be implemented (SFD, 2009). Based on the plan, the SFMLA must produce an Annual Work Plan, containing maps and descriptions of the area, and a Comprehensive Harvesting Plan, containing the total and net production areas, which must comply with the *RIL Operation Guide Book* (NEPCon, 2013).

The SFM 1997 policy is moving away from deforestation and forest degradation activities because it phases out short-term licences in favour of longer-term ones to ensure proper planning. It is implementing log harvesting regulations using SFM standards and it intends to use FSC certification as an indicator for successful SFM. Most respondents agreed that it was an excellent policy with descriptions of it being a "*good decision made*", "*visionary*" and "*contains the right messages to reduce deforestation"* (R6, R17, R18, R25, R27). It was also an ambitious policy since the

FSC certification is one of the highest standards of forestry certification in the world. In addition, volunteering to use FSC was a bold move because, in the 1990s, FSC was viewed with hostility by both the forestry and government sectors in developing countries (Karsenty, 2020). Sabah was the first Malaysian state to adopt FSC standards, when the other states used the Malaysia Timber Certification Scheme (MTCS), which was promoted in the National Forestry Policy and the Malaysia Plans. MTCS was developed in the late 1990s using FSC's principles and criteria, and later – in 2008 – was endorsed by the Programme for the Endorsement of Forest Certification (PEFC).[18] However, an assessment by the World Wide Fund for Nature (WWF) found that the MTCS–PEFC standards needed to be improved, by excluding natural forest conversion, safeguarding High Conservation Values (HCVs) and addressing indigenous people's rights (WWF International, 2015). WWF concluded that FSC provides the most credible forest certification scheme at present. The only other Malaysian states that subsequently opted for FSC were Perak[19] and Terengganu in 2002 and 2008, respectively. Implementation of Sabah's forest certification will be discussed in subsection 4.1.3.1.

Implementation of the Sustainable Forest Management Policy 1997

The SFM 1997 policy faced challenges in its implementation since the SFMLA licensees were not ready for the change (R6). The SFM 1997 policy only applied to FRs. Consequently, conventional logging was ongoing on state land and alienated

[18] The MTCS has been endorsed by PEFC schemes, the largest forest certification programme worldwide, and accepted in the European Union.
[19] Perak's FSC certification was revoked in 2006.

lands, through ‘License Form 2B’ and ‘License Form 1’ issued by SFD. We verified the implementation, or lack thereof, of the SFM 1997 policy through SFD’s annual reports and the licenses given out for plantation expansion in FRs. We focused on plantation expansion to determine whether the policy reduced deforestation and forest fragmentation. Development of industrial plantations (oil palm or fast-growing timber species) requires clear felling of large areas of natural forest, although certain rules are in place to reduce adverse impacts on the environment (e.g. no clearing of HCV areas, riparian areas, steep slopes, etc.). Industrial tree plantations are considered ‘forest’ under the FAO definition and by SFD, and are viewed as an important supply of timber for the future. However, oil palm plantation is not considered ‘forest’ under the FAO definition or even by SFD. We also included data on the plantations, conventional logging and conversion that happened outside of FRs to understand the management of ‘forest’ in the state (land use versus land cover), and how it will impact the state when it implements the RSPO JA.

Coupe permits are issued to SFMLA licensees in Class II FR. These are for: (i) natural forest management with or without RIL; (ii) industrial tree plantations with or without RIL; (iii) helicopter logging; (iv) mosaic planting and restoration; (v) silviculture; (vi) restoration; and (vii) agroforestry/oil palm plantation. According to the SFD annual report, the Sabah Foundation was allowed to practice conventional logging in their licensed area even after the SFM 1997 policy was implemented (SFD, 2011). A portion of Sabah Foundation’s area (250,000 ha) was destined to be a pulp and paper mill in 1998, and the area was logged without SFM techniques. Special licences were also issued for helicopter yarding on slopes steeper than 25° (Reynolds et al., 2011). RIL was made compulsory for all licensees on 1 January 2011, including for the Sabah

Foundation (SFD, 2014a). Based on the coupe permit data, from 2010 to 2019, 66,701 ha were allocated inside SFMLAs for the development of oil palm plantations, 230,442 ha for industrial tree plantations and 15,811 ha for industrial tree plantations under RIL. This amounts to 312,955 ha, indicating there were some forms of forest conversion happening (SFD, 2006, 2007, 2016, 2017, 2018, 2019, 2008, 2009, 2010, 2011, 2012, 2013, 2014a, 2015).

License Form 2B is used for alienated land that can be clear-felled for agricultural purposes, such as oil palm plantations, rubber and short-term crops. On the other hand, License Form 1 can be applied to alienated land, state land or FRs and is valid for one year. Clear-felling can be done under License Form 1 on state land and alienated land. However, only trees of 60 cm diameter at breast height and above can be extracted in FRs using Form 1 and RIL is subjected in these FRs (R44). Between 2006 and 2019, 2,645 Form 2B licences were issued, covering 524,919 ha. For Form 1,109 licences were issued from 2006 to 2019, covering 180,242 ha. Of these area, 133,053 ha were alienated or state land. After 2014, SFD stopped issuing the Form 1 licence for FRs, corresponding to the reduction in issuing short-term licences in FRs (SFD, 2006, 2007, 2016, 2017, 2018, 2019, 2008, 2009, 2010, 2011, 2012, 2013, 2014a, 2015).

We were unable to verify whether the areas given out through SFMLA coupe permits in FRs, License Form 2B, and Form 1 in state and alienated lands (total 970,927 ha) were good forest stands or degraded, or whether the forest was cleared as per the licenses. However, the data clearly showed that licences were given out for forest conversion in FRs and outside of FRs.

2.4.1.3 Sabah Forest Policy 2018

Sabah updated its State Forest Policy in 2018. This was approved by the State Cabinet and subsequently included in the national policy. The policy clearly stated that the state is committed to SFM and maintaining 50% of Sabah's landmass under FRs and tree cover. The policy also aspires to have not less than 30% of Sabah's land area under TPAs by the year 2025 and to certify all FRs in stages. In the meantime, the federal government published an updated National Forest Policy in 2021. This policy is divided into three different regions; Peninsula, Sabah and Sarawak, and each region presented its policies accordingly in the national one.

Compared with the Peninsula and Sarawak forest policies, Sabah was seen to be more ambitious by deciding to fully protect 30% of its area by 2025. The other two regions did not provide a target for their respective TPA coverage in their forest policies. For Sarawak, the TPA target is instead given in the Sarawak Land Use Policy, where the state committed to keeping 8% of Sarawak's land as TPAs. Sabah's TPA target is also higher than Malaysia's National Policy on Biological Diversity (2016–2025) of achieving 20% TPA coverage, and the 17% for the global Aichi Biodiversity Targets. In addition, in 2014, SFD directed that all FRs must be certified using international standard certification schemes (SFD, 2014b). Peninsula did not make this commitment in its policy, although the MTCS was promoted. In 2017, Sarawak mandated that all of its Forest Timber Licence area should obtain MTCS by 2022.

Implementation of Sabah Forest Policy 2018

We analysed the trends in Sabah's FRs and TPAs over the years, and the size of its certified areas. Sabah's total FR area pre-1963 was estimated to be about 2.483 million ha (SFD, 2008). This had expanded to 3.541 million ha (48% of Sabah's area) by 2019, which is an increase of 1.058 million ha in 56 years. In 2019, 26% of Sabah (1.907 million ha) was gazetted as TPAs, which showed that the state continues to uphold its commitment to achieving 30% TPA by 2025. As of 2019, Sabah had the highest percentage of TPAs in Malaysia (Peninsular ±14%, Sarawak ± 7%). Sabah's increase in TPAs is attributed to the increase in Class I FRs, which mostly came from the reclassification of Class II FRs. Sabah's Class I FRs increased to 1.04 million ha while its Class II FRs decreased by1.02 million ha from 2006 to 2019 (SFD, 2006, 2007, 2016, 2017, 2018, 2019, 2008, 2009, 2010, 2011, 2012, 2013, 2014a, 2015). However, most of the Class II FRs that were reclassified as protected Class 1 FRs had been heavily exploited and degraded previously. They underwent a last cycle of logging just before their gazettement as protected forest. In other words, most of their timber resources had been extracted before being protected (R14, R18). SFD admitted that the quality of the FRs is of less than pristine condition, but still claimed this as an achievement in itself as legislative protection of TPAs will provide "*security of tenure in perpetuity*" (SFD, 2011).

After Deramakot FR, Sabah subsequently certified eight more FRs under FSC. Currently, Sabah and Terengganu are the only states in Malaysia with FSC certified

forests. As of 2019, 586,697.54 ha (17%) of Sabah's FRs were FSC certified.[20] Only Deramakot is a Class II commercial forest. The other eight are Class I FRs. SFD certifies non-production FRs to institutionalise the governance of the FR, as a certified forest means large stakeholder participation, which will reflect the wider interest of society (SFD, 2010). In addition to FSC certification, four SFMLA companies are MTCS-PEFC certified, totalling 180,351.43 ha. Together with the MTCS-PEFC certification, 22% (767,048 ha) of Sabah's FRs were certified in 2019. Two forest plantations in Sabah are also FSC certified with an area of 40,281.27 ha. Sabah still has about 2.77 million ha of FR to certify (of which 1.4 million ha are Class II FR), suggesting that it needs substantially more effort to achieve SFM. The lack of certification implementation in Class II FR is because both FSC and MTCS-PEFC only allow 5% of natural forest conversion, with differing cut-off dates. The SFMLA licensees inherited forest areas that were badly degraded from past unsustainable logging practices and therefore could not get a return on their investments. As such, SFD decided that 15% of their FMU could be converted into timber plantations, and in 10–15 years, they can harvest and fulfil the demand for the wood industry (Anon, 2011). This however means that the licensees could not meet the 5% forest conversion certification standard.

[20] The FSC certification for Deramakot lapsed on 31 October 2019 due to the change of government in Sabah in 2018, which delayed the FSC reassessment for the sixth cycle. The re-assessment was postponed to the following year (SFD, 2019).

2.4.1.4 Agriculture Policies and the RSPO Jurisdictional Approach

The first National Agriculture Policy (1984–1991) promoted land development for export crops: - cocoa, rubber, and palm oil. The second National Agriculture Policy (1992–1997) promoted specifically an increase in land area for oil palm plantations. Both policies strongly influenced Sabah's land development, by commercialising agriculture and resulting in large tracts of forest being converted into oil palm plantations (McMorrow & Talip, 2001).

In 2015, the Sabah government declared its goal of implementing the RSPO JA, aiming for the entire production of palm oil in the state to be 100% RSPO certified by 2025. Conceptualised by the RSPO Secretariat, the RSPO JA was introduced as a new approach to minimise the negative impacts of palm oil cultivation on the environment and communities, at the scale of government administrative areas. It is done through the stepwise certification of the production and processing of sustainable oil palm products at a jurisdictional level. This approach requires government leadership in facilitating a multi-stakeholder process and setting up overall governance and regulations (RSPO, 2019). Sabah, the district of Seruyan, Kalimantan in Indonesia, and Ecuador are pilot sites for the implementation of RSPO JA. In Sabah, this initiative is being led by SFD.

Sabah's adoption of the RSPO JA clearly shows the intent to move away from deforestation and forest degradation, and moving beyond the forestry domain. The choice of RSPO as a certification standard means that the state will subscribe to the

highest available certification standard of sustainable palm oil production. When certified, it will be achieving the goals of no deforestation at a landscape level,[21] no new planting on peat, ensuring safe and decent working conditions, and upholding human rights.

We also view RSPO JA as moving away from BAU, since, with this decision, Sabah wants to use a higher standard of certification than the federal government. The federal government did not agree with Sabah choosing RSPO certification over their own certification scheme, MSPO. MSPO is less stringent than RSPO, and many international conservation organisations still consider RSPO to be the only credible certification scheme for sustainable palm oil (Loh, 2018). MSPO certification was made mandatory for all palm oil producers in Malaysia by the end of 2019. However, Sabah continued to insist on using RSPO, despite pressure from the federal government. This was a notable decision by Sabah, as licences for all palm oil businesses are given out by the federal government through MPOB and, therefore, if MSPO is not used, MPOB can revoke the licenses of growers and producers in Sabah. Both the federal and Sabah government eventually came to an agreement that certification for Sabah's palm oil will take a stepwise approach, where plantations and mills will be certified first by MSPO and eventually RSPO.

[21] The state and RSPO are still debating what 'no deforestation' means at a landscape level.

Progress of the RSPO Jurisdictional Approach

Sabah has yet to make the RSPO JA into a policy or law, although a letter was issued by the CM Office in 2021 to all government departments to cooperate in making the RSPO JA a reality. The RSPO Secretariat (at the time of writing) is still in the process of drafting a certification system document for the JA, primarily based on the experiences of the three JA pilot sites. RSPO has so far recognised four stepwise approaches to achieve a jurisdictional certification, with requirements for each step (RSPO, 2019). Sabah is still in the first step, meeting the requirements of: (i) establishing a multi-stakeholder board in 2016 with mandate from the state government led by SFD, (ii) the state issuing a statement of intent to achieve 100% RSPO compliance, (iii) producing a draft HCV map, (iv) formulating the free prior and informed consent procedure. The contentious issue faced is that the RSPO criterion requires that new plantings do not cause deforestation or replace any area required to maintain or enhance HCV and high carbon stock (HCS). This criterion is difficult to achieve at a jurisdictional level compared to a plantation unit. One way forward as stipulated in the RSPO document is to develop a jurisdictional level map of 'no-go' zones for oil palm. This map is the draft HCV map produced by SFD. However, the development of the HCV map has been delayed because of disagreements among the multi-stakeholder board members about adding HCV values 5 (community needs) and 6 (cultural values),[22] and HCS to the map. Wider consultation with other stakeholders is also needed, but this has been delayed because of the COVID-19 situation.

[22] Some of the members felt that HCV 5 and 6 cannot be mapped at a landscape scale.

2.4.2 Determinants (Enabling and Hindering Conditions) of TC in Sabah

In the previous section, we presented the policies that we consider to be transformational and analysed the extent to which they have been implemented. We will now present our results on what we found as the determinants enabling and hindering conditions TC in Sabah.

2.4.2.1 Shortage of Resources

In the 1980s, the state realised that its timber exploitation was not sustainable in the long run. This was the main reason SFD implemented the 1997 SFM policy. They admitted that the 50 years of unsustainable practices that were "*politically driven*" had completely depleted timber stocks (Anon., 2015a). This was acknowledged in published literature (Kleine & Heuveldop, 1993; Lagan et al., 2007; Mashor et al., 2014; Reynolds et al., 2011; Toh & Grace, 2006), and recognised by respondents in the interviews (R6, R7, R13, R23, R27).

2.4.2.2 Leadership

Many respondents recognised that the leadership at the SFD level played a key role in orientating political decisions and implementing new forestry decisions. In 1989, the then director of SFD, Miller Munang, invited GTZ to Sabah to develop a sustainable model for forestry in Deramakot FR. This laid the foundations of the SFM 1997 policy (R6, R17, R18). His legacy was further reinforced by Sam Mannan who was the Director and Chief Conservator of Forests for SFD from 2004 to 2018. Mannan viewed the management of forest in Sabah through his "*big picture goal*", which was security

of tenure for the FRs. Without this, SFM cannot be applied. To Mannan, the SFM Deramakot model should be applied in other FRs, adapting the concept to local site conditions (SFD, 2009). Mannan was seen as someone who could influence the CMs of Sabah who were in charge during his time as Chief Conservator by knowing how to play the political game (R7, R17, R18, R23). He is said to be, "*exceptional in his boldness and vision*", "*open to engaging with new ideas*", "*has a long-term agenda for the forest*", "*able to navigate the political game very well*", and "*a person that can whip and move things along*" (R17, R25, R34, R6, R21). One respondent commented that SFM in the state did not happen from a governance process or stakeholder consultations, but from the visions of leaders like Mannan and Munang, and it made a difference that these leaders were professionally trained as foresters, as this gave them the capacity to see the bigger picture on forest resource management (R18). In contrast, Mannan was equally criticised by human rights groups for not respecting local indigenous people's rights to land and being too heavy-handed in evicting them from homes that SFD alleged were encroaching into the FRs (Anon., 2017a, 2018; Butler, 2018).

2.4.2.3 Civil Society Influences

Mannan and other like-minded civil servants were supported by civil society groups in Sabah to develop new visions and policies at the core of the TC, such as the SFM policy, 30% TPA, forest certification and the RSPO JA. These groups included conservation and social NGOs and research institutions actively working in Sabah. They can be seen as a 'coalition' partnering with state agencies to achieve the overall goals of sustainability. They had a few things in common: ability to see the big picture

for the state; connections to international funding, experience and skills; legitimacy and credibility to operate in Sabah because of their long-time commitment to the state, and genuinely having Sabah's best interest at heart (R10, R11, R17, R23). A respondent explained that one reason SFD was forward-thinking and willing to accept new ideas was that it had a lot of partnerships with international organisations and donors, which increased exposure to new ideas and capacity to implement them (R27). Mannan often mentioned that these groups are "*like-minded friend*" that provided technical and funding support to help SFD move the conservation agenda. He understood that SFD could not carry the whole agenda alone, and needed them to promote the agenda when SFD's hands were "*politically*" tied (R6, R18). Respondent 23 said, "*Civil society could sit down together with the government, and exchange ideas and solutions that helped the state move towards sustainability*". This is especially prevalent in Sabah, compared to the other states in Malaysia that do not view civil society as "*friends*" (R11, R17, R27).

The idea of the RSPO JA came about from a few Sabahan members of these groups, one of which was the previous Chief Executive Officer of RSPO, and another the founder of a prominent community-based NGO in Sabah. These actors, including Mannan, managed to convince the CM at that time, Musa Aman, and thus the state, to move towards the RSPO JA (R8, R9, R10, R11, R12, R14, R17, R18, R19, R21, R23, and R25).

2.4.2.4 Nature Tourism

A few respondents said that nature-based tourism played a role in shifting the attitude of the government towards preserving and better managing the state's natural resources. Tourists are attracted to Sabah to see the forest and its wildlife (R7, R14, R23). Nature and wildlife could therefore become a source of revenue for development via tourism-generated income, employment opportunities and foreign exchange earnings. Tourism is thus one reason why Sabah decided to embark on better forest management and conservation as it brought in more revenue than forestry in recent years, before the COVID-19 crisis (Anon., 2014). In fact, tourism is the third-highest contributor to Sabah's economy after agriculture and manufacturing (IDS, 2008).

2.4.2.5 International Reputation and Pressure

The state of Sabah is particularly mindful of international reputation, with Mannan quoting "*We don't want to be the pariahs of the world*!" when asked why Sabah introduced the SFM 1997 policy. Throughout the late 1980s to the '90s, there were mounting criticism of the Malaysian Borneo states' management of their forest resources by Western countries. In the 2000s, many Western organisations started anti-palm oil campaigns because palm oil was seen as the major cause of deforestation and orangutan population decline in Borneo and Sumatra (Koh & Wilcove, 2007; Swarna Nantha & Tisdell, 2009). This international criticism also influenced Malaysia and Sabah to move towards sustainable management of its forest (R7, R8, R10, R13, R18, R23, R37).

2.4.2.6 Improvement in Technology

The development of technologies also increased societal pressure on the state of Sabah. Respondents said that "*Because everything you do now can be recorded, your bad behaviour can thus be broadcasted on social media to the whole world*" (R13, R23). Technological advances in remote surveillance of land use (e.g., Global Forest Watch) also made it difficult to 'hide' deforestation. As such, "*The government realised, they could not go on the way they did before and international perceptions need to be taken into account*" (R23).

2.4.2.7 Global Market Demand

For the RSPO JA, Mannan said that it makes business sense for the state to remain competitive with its palm oil. Given the relatively small size of the state, Sabah had to compete based on governance and not size (Anon., 2015c). The industry players agreed that the RSPO JA would lower reputational risk, and provide continued access to markets in Europe that demand certified sustainable palm oil (R35, R36, R37). Indeed, due to public pressure, the large Asian palm oil multinationals made pledges of "*zero deforestation, no new development on peat and no exploitation of people*" in their supply chains as early as 2013 (Ivancic & Koh, 2016; Nesadurai, 2018). Therefore, the RSPO JA fits the sustainability agenda of these companies. The industry also sees the potential revenue from selling palm oil that states have jurisdictionally RSPO certified. Sabah would then become the preferred choice for certain buyers of palm oil, especially Western countries that had recently decided to only import certified sustainable palm oil, and even the preferred destination for tourism and other businesses, because of the reputation it will build (R35).

2.4.2.8 Changing Governments

Respondents saw the change of the state government in 2018 delaying the progress of the RSPO JA (R2, R4, R8, R10, R11, R18, R23, R25, R35). Sabah had the same government from 1994 to 2018 (24 years), and the RSPO JA was conceived during this time. The change of the state government in 2018, with a new CM, delayed RSPO JA progress because the new government was not familiar with the process. The person pushing the RSPO JA agenda from the government side, Mannan, was removed from his position when the new government took over. Those left to carry on the RSPO JA agenda had to convince the new state leaders of its importance. It took about a year to get the new government on board with the RSPO JA initiative.

2.4.2.9 Pressure from Actors that Benefit from Exploitation and Conversion of Forest

Poor implementation of the transformational policies can largely be explained by the fact that policymakers, and government departments, tried to satisfy the interests of actors benefitting from the activities of deforestation and forest degradation. These included logging companies and contractors, and those promoting narrow and personal sectoral interests like oil palm expansion (R6, R18, R21, R34). Respondents pointed to the existence of patronage-like systems characterised by strong linkages between policymakers' interests and change-resistant interests of private actors. Examples of quotes from the respondents are: "*The intimate links between timber contractors and the politicians make it impossible for SFMLA to be implemented!*" (R21); "*You know the politicians look for timber and they want to log as fast as possible to get money*"

(R6); and "*SFD had to compromise with the state government on allowing oil palm in FRs, and up till today they are still struggling to explain this decision*" (R13).

Patronage politics is defined as two people involved in a relationship in which one individual is of higher socioeconomic position (patron) and uses influence and power to provide protection or benefits to the other person of lower status (client). The client reciprocates by offering support to the patron (Varkkey, 2016). Such politics is practiced and implicitly accepted in Sabah, other states in Malaysia and also throughout Southeast Asia (Dauvergne, 1995; Jomo et al., 2004; Varkkey, 2016). In the case of Sabah, it is often the politicians that are patrons and the actors, that benefit from receiving the rights to log or convert a forest area, are the clients.

An example of patronage politics is the Sabah Foundation's receipt of special privileges to practice conventional logging, as explained in subsection 4.1.2.1. The SFD annual report stated that the Foundation was allowed to practice conventional logging methods at the "*insistence*" of logging contractors and for economic reasons (SFD, 2011). Its investment arm, Innoprise Cooperation Ltd., made a huge loss between 1986 and 1994 because of abuse of power, with irregularities of log sales and non-compliance with the Forest Management Plan (meaning SFM was not practiced) (Jomo et al., 2004). In addition, Sabah Foundation was the first concession to be allowed to develop oil palm plantations in the FRs that they manage. Sabah Foundation sought permission from SFD to convert more than 100,000 ha of the forest into oil palm plantations, citing their social responsibility towards Sabahans, and permission was granted under specific conditions (for 30 years). According to the CM at that time, Musa Aman, the Foundation was allowed to plant oil palms, because it gazetted the

richest forest stand in their area (i.e. Danum, Imbak and Maliau Basin amounting to 132,640 ha) into TPAs (Anon., 2017b). Another privilege retained by Sabah Foundation was the option to harvest logs on steep slopes above 25°, provided helicopters were used (Anon., 2017c). Jomo et al. (2004) postulated that the Sabah Foundation consolidated the relationship between timber and politics in the state. Indeed, the person who becomes the CM is the de facto Chairman of the Sabah Foundation Board of Trustees, while its senior management staff are often political appointees. This gives the CM control of about a million hectares of forest concessions. As such, the Sabah Foundation provided the ruling party with a prime vehicle to exploit the forest and distribute the profits to its political supporters (Dauvergne, 1995).

Between the years 2014 and 2016, a total of 74,791 ha of FRs were degazetted, mostly from the Class II FRs (SFD, 2014a, 2015, 2016). The SFD annual reports explained that the degazettement happened because of encroachment by local communities and for development purposes that were not specified. The reason quoted is "*supporting the government's social-economic policies*". Land is a contentious issue among the indigenous people, and local communities are often in disagreement with SFD regarding the boundaries of the FRs and their native customary right to reside there. The more suitable agriculture land in Sabah has already been taken up by oil palm companies and FRs, and therefore, the only land left available for the indigenous people to plant their crops are in FRs, forcing them to encroach (Majid Cooke, 2012). Politicians often take advantage of the local communities' claims for land to elicit political support from them. They lobby SFD for FRs to be declassified for local community use, and forest conversion to happen in the name of development that will

benefit the local communities; for example, the construction of the Kinabatangan bridge to improve transport infrastructure for rural villages (Anon, 2012, 2015b, 2015d, 2019; Cannon, 2017). This is considered a form of the patronage system, although the issues of community land and its native customary rights are a much complicated and wider topic by itself, and beyond the scope of this paper.

2.5. Discussion

2.5.1 Is Sabah Transforming?

We compared changes in policies occurring in Sabah that is moving away from BAU, and we decide if it ambitious by primarily comparing Sabah's policies with other Malaysian states and the Federal government. We show that (i) Sabah decided to use voluntary international certification standards (private market instruments) like FSC and RSPO, while the other Malaysian states did not; ii) they decided to protect more forest compared to national targets (20% for Malaysia); iii) Sabah is an early mover as the state is one of the first to adopt the RSPO JA. This way of conceptualizing transformational change might be problematic if the comparison is made with jurisdictions with very low standards. What makes our claim that Sabah is somehow engaged in transformational change is that policy changes occurring in Sabah are also ambitious and innovative by international standards. For example, Aichi target for protected areas is 17%. Sabah is also particularly innovative by international standards because the state decided to use a private certification scheme (RSPO) as a public policy instrument. Indeed, voluntary international standards usually go beyond the

regulatory standards of public policies, it provides a process for continuous improvement, and its enforcement is independent from public authorities (Karsenty, 2019). Such approach is yet to be done by any other country or prominent subnational jurisdiction, except for Gabon where the president recently announced that all forest concessions will have to be FSC certified by 2022 (Karsenty, 2018).

We also checked if Sabah's ambitious policies were implemented. Our study provided evidence for the uneven implementation of Sabah's policies which enabled continued forest loss. This uneven enforcement of environmental policies aimed at halting deforestation has been documented in the literature (Austin et al., 2014; Chervier, Peresse, Millet-Amrani, & Meral, 2016; Erbaugh & Nurrochmat, 2019; Lederer, Hohne, Navarro, Siciliano, & Villalobos, 2020; Moeliono et al., 2020; Ongolo & Karsenty, 2015). Our paper adds to this literature by showing that even in situations where policy changes are mostly driven by internal forces, resistance to change occurs and affects policy implementation. We show that the reasons for not full implementation are linked to the other important indicators of TC; shift in discourses, attitudes, and power relations, which we could not analyse in-depth in this paper, but will touch upon when we discuss the determinants that hindered and enabled the TC in the following subsection 5.2.

It is not easy to provide a definitive yes or no answer to whether Sabah is transforming, as the opinion on TC is often relative and contextual (Termeer et al., 2017). But based on our arguments above, we can conclude here that Sabah very likely did intend to

transform. But intention needs to be followed by implementation, and this is where the state falls short.

2.5.2 Determinants that Hindered Transformational Change

One of the main reason the policies in Sabah were not fully implemented was because of the patronage system that we found in Sabah. This is linked to the discourses, attitudes and power relations in TC. Patronage system leads to what Brockhaus & Angelsen (2012) termed "institutional path dependencies", that makes change hard to happen. Actors, often in seat of power and wealth, are afraid of losing their benefits from the BAU activities. The different discourses advocated by the many actors, BAU or TC coalition, will be negotiated, and policy change will be the results of these negotiations. The discourse that wins is often a combination of economic and political power (Brockhaus & Angelsen, 2012; Nesheim et al., 2014). Like in the case of REDD+, uneven policy implementation in Sabah is linked to the fact that a number of actors with an interest in forest conversion and exploitation use their political power to influence authorities' decisions (Babon et al., 2014; Brockhaus, Di Gregorio, & Carmenta, 2014; Brockhaus, Di Gregorio, & Mardiah, 2014; Korhonen-Kurki et al., 2014; Pham et al., 2017). The literature explains that the introduction of any ambitious environmental policy inevitably creates winners and losers (King, Cavender-Bares, Balvanera, Mwampamba, & Polasky, 2015; McShane et al., 2011; Sunderland, Ehringhaus, & Campbell, 2007). As a result, the losers will deploy various strategies to avoid being negatively impacted by the policy. The strategy that is favoured in Sabah is to build on existing patronage systems linking 'losers' with political authorities to create exceptions to policy implementation. The influence of patronage

politics on law enforcement and on the consolidation of the rule of law has been widely documented, particularly in Southeast Asia (Fukuyama, 2013; Ingalls, Meyfroidt, Phuc, Kenny-Lazar, & Epprecht, 2018; Kong et al., 2019).

What is interesting in the case of Sabah is that the patronage system is used as a vehicle to manage trade-offs emerging from the introduction of new policies and the resulting conflicts of interest. For example, building on its close relationship with the Sabah Foundation, the state agreed to compromise on conversion of FRs to oil palm plantations in exchange for other areas becoming TPAs in the Foundation area. In addition, Class II FRs were logged indiscriminately before they were reclassified as Class I FRs. The risk with this type of approach to trade-offs management strategy is that the interest of stakeholders not included in these patronage systems are not taken into account so that they might bear disproportionate costs from policy change.

Related to the patronage system is the impact of political turnover. In Sabah, when a new government comes into power, time is needed to harness its support for TC policies. These are often seen as more complicated than BAU ones, and that have been started by the previous government. This situation has delayed the progress of the RSPO JA. This result echoed the findings of Deacon (2012); Galinato & Galinato (2012); Sui, Chang, & Chu (2021), who found that countries that are politically stable are more likely to enforce forest and environmental protection policies. It also supports the literature of jurisdictional approaches, which shows that political turnovers could delay or even backslide green initiatives (Boshoven et al., 2021; Boyd et al., 2018; Colchester, 2020; Fishman et al., 2017). Deacon (2012) also stated that insecure tenure

of the government will lead to an absence of government accountability in implementing these policies.

In addition to patronage and political turnover, Sabah's decision to follow international standards (i.e., FSC and RSPO certification), also contributed to explain the uneven implementation of its transformational policies. Andrews (2013), McCarthy and Tacconi (2011) and Geist et al. (2002) argued that, for a state to succeed with new environmental policies, the policies must be context specific and not follow international best practices standards. This could lead to unrealistic goals and a failed attempt to transform. This is often alluded as one of the main challenges to achieve FSC certification and RSPO JA in Sabah.

2.5.3 Determinants that Enabled Transformational Change

We found that what distinguishes the policy change in Sabah from other environmental policies aimed at reducing deforestation at scale (e.g., REDD+) is that Sabah was not pressed by external actors to adopt these ambitious policies. Our research shows that local leadership and a Sabahan TC coalition, which we termed 'civil society influences', were the main determinants in adopting the policies. This result confirms findings from the literature on TC (Babon et al., 2014; Brockhaus, Di Gregorio, & Mardiah, 2014; Chia et al., 2019; Cole et al., 2017; Korhonen-Kurki et al., 2019, 2014). The literature indeed shows that national ownership, that is the fact that 'national actors are dominant in shaping and supporting the policy discourse on REDD+ [for example], and are involved in the development of policy documents' is an important condition

for TC to occur (Brockhaus et al., 2017). The literature also stated that there needs to be the presence of dominant coalition(s) to want to break off from BAU practices, as in the case of Sabah (Di Gregorio et al., 2012).

However, the policy change processes in Sabah do not occur in complete isolation from external influence. The difference here from other situations were that there was no strong injunction from the international community to adopt external policies that came with promises of funding (e.g., REDD+). Here, we show that external pressure from the international community combined with prospects for increased access to the niche 'green' international commodity market and increased revenues from tourism are important determinants explaining the emergence of transformational policies in Sabah. This result confirms Pham et al.'s (2017) finding for Indonesia and Vietnam that an underlying determinant for TC is rooted in national economic development and seen as a way to improve the state's image in the international policy arena.

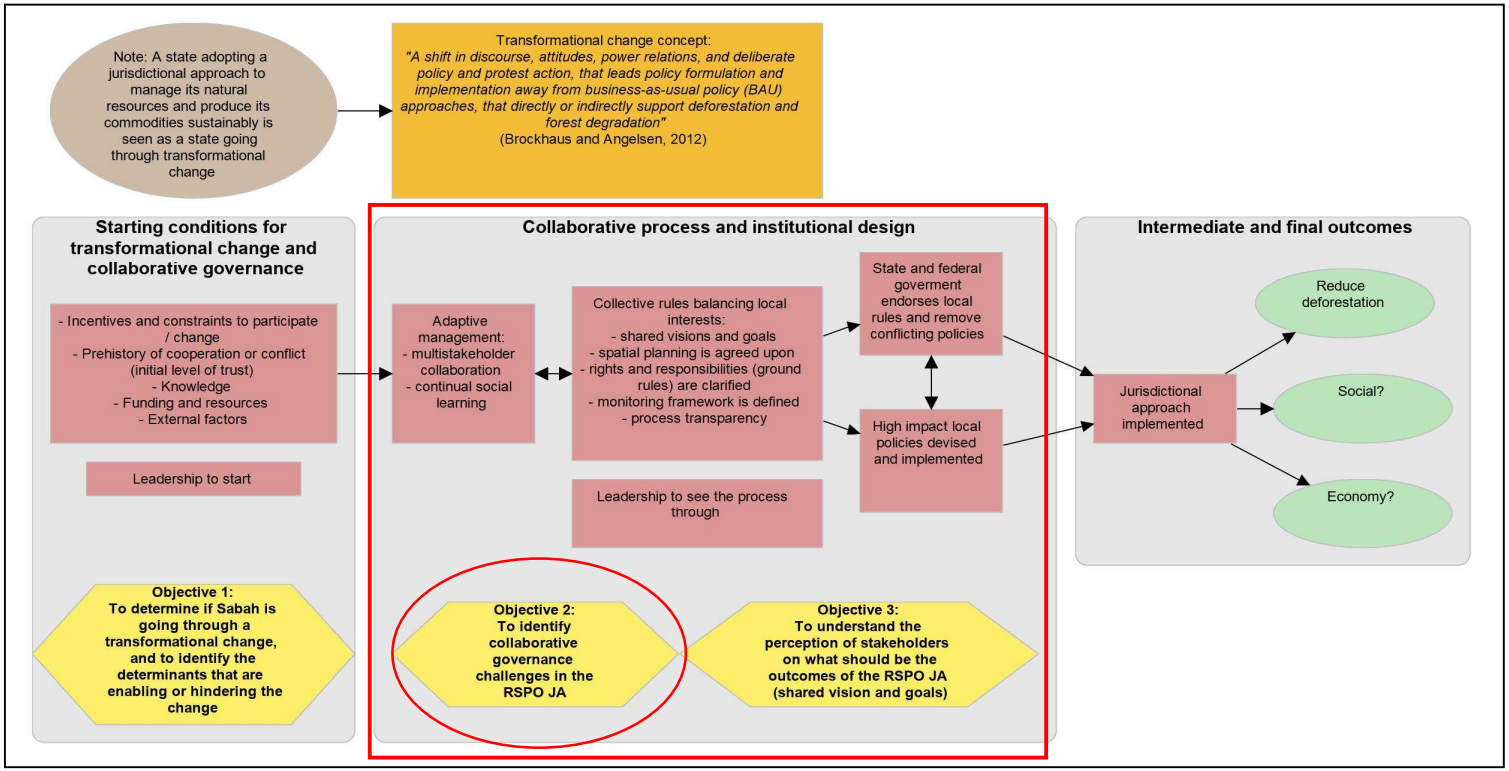
2.6 Conclusion

We finally would like to reiterate that Sabah did intend to change, but the intention was held back by the patronage system with actors that wielded their power to continue BAU activities. Other challenges were the frequent political turnover and the difficulty in meeting international standards, making Sabah's quest to change an uphill task. If these significant challenges could be overcome, Sabah would be in a good position to implement changes, as the state meets two important conditions generally considered

as key for TC: national ownership and a dominant coalition (i.e., civil society) apparently pushing for TC. However, breaking free from path dependencies will be a major endeavour. To move from policy orientations to field implementation, the change must be made more compelling for political leaders, as part of a broader institutional structure, not only through the narrow focus on reducing deforestation with sectoral (and often marginal) adjustments, but above all through the development of a more sustainable and equitable national economy (Fishbein & Lee, 2015; Pacheco et al., 2012).

Implementing TC, beyond policy intentions, means that incentive structures must be aligned, accountability reporting improved, and the playing field levelled especially for the weaker actors (e.g., smallholders) (Larson et al., 2021; Pacheco et al., 2012). This requires innovative institutional reform by a government that not only protects the interest of the current generation, but the future one as well, with the technical support of the coalition (Pham et al., 2017). The TC coalition must also hold the state to the commitments made, especially when there is a political turnover or when a leader retires (Babon et al., 2014; Brandão et al., 2020; Brockhaus, Di Gregorio, & Carmenta, 2014). Likewise, on the demand side, consumer countries will need to play a role in addressing the pressures to the forest. Incentives such as preferential procurement sourcing linked to certification schemes like the RSPO, and help in implementing incentive-based environmental taxation to support agricultural products based on zero-deforestation / sustainable forest management practices, need to be put in place (Karsenty, 2021; Pacheco et al., 2012).

Linking Chapter 3 (Objective 2) with Chapters 2 and 4



Chapter 3 covers Objective 2 and the middle part of the theory of change indicated by □ and ○

CHAPTER 3

3.0 UNDERSTANDING STAKEHOLDERS' PERSPECTIVES ON THE COLLABORATIVE GOVERNANCE CHALLENGES IN SABAH'S (MALAYSIAN BORNEO) JURISDICTIONAL APPROACH

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Abstract

Collaborative governance is increasingly being used as a solution to address climate change and deforestation in the tropics, but its stakeholders face many challenges to make it work. This study aims to understand stakeholders' perspectives on the collaborative governance challenges focusing on Sabah's jurisdictional approach. We applied the Q-methodology to derive the perspectives of the stakeholders involved. The results showed three significant perspectives. The first was on 'participant factors' to which we identified that representation of the 'right' stakeholders, and the mandate

to make decisions are not adequate. The second perspective was on 'non-progress in its activities', which suggests that the progress of the initiative is hampered by the lack of accountability. The third perspective was on 'shared understanding', in which stakeholders cannot agree on the 'common goal'. The consensus on the collaboration challenge is that because the jurisdictional approach initiative is new, no one knows how to implement it, and that higher-level government commitment is needed. This study reveals the challenges of collaborative governance in a jurisdictional approach by providing empirical evidence of the diverse perspectives of stakeholders.

3.1 Introduction

Forest conversion into commodity crops and cattle pasture remains a central threat across the tropics (Pacheco et al., 2021; Seymour & Harris, 2019). From 1990-2020, more than 90% of deforestation was in tropical regions, averaging 9.28 million hectares per year (FAO, 2020). There is an urgency to halt such deforestation because tropical forests are important for climate change mitigation, biodiversity conservation and ecosystem services, and are home to many indigenous groups (FAO, 2022). Globally, policy discourse has acknowledged the need to develop more integrated solutions and holistic approaches to address this threat, as a forest ecosystem comprises complicated entities spanning geographical and temporal scales that cannot be easily aligned to man-made political boundaries (Bodin, 2017; Reed, Ickowitz, et al., 2020). Collaborative governance is thus often seen as a means to overcome these institutional fragmentations, particularly to bring stakeholders with contrasted interest together to manage a landscape and to contribute to deforestation reduction objectives

(Bodin, 2017). It is defined as "*a governing arrangement where public agencies directly engage non-state stakeholders in a collective decision making process that is formal and consensus-oriented, that aims to make/implement public policy or manage public assets*" (Ansell & Gash, 2008). One solution, which is becoming increasingly popular is the use of collaborative strategies such as the jurisdictional approach to landscape management (FAO, 2022; Fishman et al., 2017; Pedroza-Arceo, Weber, & Ortega-Argueta, 2022; Reed, Ickowitz, et al., 2020).

Jurisdictional approach emerged as a way to address the limitations of pre-existing collaborative governance strategies, as it is based on the recognition that it is necessary to involve public authorities because they have the authority over the area of the jurisdiction, and thereby can better enforce and monitor the laws, as well manage the institutional mismatches (Boyd et al., 2018; Fishbein & Lee, 2015; von Essen & Lambin, 2021). It was mainly applied in forest carbon projects but the concept is now being used to promote sustainable production of forest-risk commodities at scale. It is defined by von Essen & Lambin (2021) as "*a governance initiative that advocates for sustainable resource use at the scale of jurisdictions through a formalized collaboration between government entities and actors from civil society and/or private sectors, based on the policies intended for the jurisdiction*". von Essen & Lambin (2021) compiled a global database of 25 initiatives that met their definition of a jurisdictional approach. These initiatives were being implemented in African, South American and Southeast Asian countries, working on commodities such as beef, soy, timber, cocoa, palm oil, and on reducing carbon emissions. One potentially influential

jurisdictional approach is the Roundtable on Sustainable Palm Oil (RSPO)[23] Jurisdictional Approach to Certification (RSPO Jurisdictional Approach). The RSPO Jurisdictional Approach was conceptualised by the RSPO Secretariat[24] in 2015 to minimise the negative social and environmental impacts of palm oil production at the scale of government administrative areas, done through the stepwise certification of the production of sustainable palm oil products at a jurisdictional level (RSPO, 2019). It is currently being piloted at the sub-national level in Sabah, a state in Malaysian[25] Borneo, the district of Seruyan, Kalimantan in Indonesia, and at the national level in Ecuador.

Overall, the jurisdictional approach thus shares common principles with other collaborative strategies to landscape management such as it is multi-stakeholder, all stakeholders are supposed to engage in decision-making, it is formally organised, decision making is by consensus, and it is in the pursuit of meaningful and effective institutional integration and actor interaction across various ecological, social and political levels (Buchanan et al., 2019; Hovani et al., 2018; F. J. Seymour et al., 2020; von Essen & Lambin, 2021). However, boundaries are defined by political/administrative jurisdictions and the leadership role of government entities is here emphasized (von Essen & Lambin, 2021). So, the jurisdictional approach is not likely to follow the ideal type of equal participation in collaborative processes that often characterize, in theory, collaborative governance. These specificities potentially

[23] RSPO certification is a global standard certifying the sustainability of palm oil production.

[24] The RSPO Secretariat is in charge of the day to day running of the RSPO, and services the RSPO members and RSPO's board of governors.

add new challenges: risks to the operationalization and success of collaborative strategies to deforestation reduction. Indeed, the role of governments in tropical forested countries following vested interests and the need to maintain a control over how natural resources are used has been heavily documented (Geist, Helmut & Lambin, Eric, 2002; Karsenty, 2021; F. Seymour & Harris, 2019). For example, the literature on REDD+ show that it is a multilevel initiative that must ensure that global demands, national and subnational structures, local leaders and people's interest are all linked in efforts to reduce emissions from deforestation and forest degradation. If these interconnections are ignored, REDD+ could fail (Korhonen-Kurki, Brockhaus, Duchelle, Atmadja, & Pham, 2012). These challenges are likely to be emphasize in the case of a jurisdictional approach. This is why it is needed to consider the specific challenges of jurisdictional approach.

We define challenges to collaborative governance as the limitations, weakness or difficulties which hamper consensus building efforts to negotiate and deliver the agreed goals (Margerum & Robinson, 2016). There are many articles written on the challenges of collaborative governance (Ansell & Gash, 2008; Bodin, 2017; Emerson et al., 2012; Margerum, 2016; Memon & Weber, 2010; Morrison et al., 2019; Purdy, 2012), but few have been done for the collaboration challenges of a jurisdictional approach as this approach is still relatively new (started in 2010s) (Brandão et al., 2020; Seymour et al., 2020). Therefore, our objective is to provide a better understanding of the collaboration challenges of the jurisdictional approach, by using the literature written on collaborative governance challenges as a framework. We will focus specifically on the stakeholders' perspectives on the collaboration challenges of

a jurisdictional approach using the RSPO Jurisdictional Approach in Sabah as a case study.

We chose Sabah as a case study because of the three RSPO Jurisdictional Approach piloted sites; Sabah was identified as one of the most advanced of the jurisdictional approaches to supply chain sustainability (Wolosin, 2016). We used "perspectives" because, ultimately, it is the stakeholders involved in the jurisdictional approach who will ensure whether the collaboration succeeds. We used Bennett (2016) definition of perspectives, which is the way an individual observes, understands, interprets, and evaluates a referent issue or policy. Perception is important as individuals can perceive the same situation in vastly different ways, and although perceptions are not always the truth, they are what the individual believes (Bennett, 2016). This type of evidence is valuable in comprehending and should be given due attention for effective collaboration, as it exposes distinct methods of doing things or differing perspectives among individuals (Zabala et al., 2018).

3.2 Case Study Context

Sabah aspires to have all palm oil production within the state certified by RSPO by 2025. The state government declared this objective in 2015, granting them a decade to attain full RSPO certification. Nonetheless, roughly one year later, the Malaysian federal government mandated certification for all palm oil producers using their own certification scheme, known as Malaysia Sustainable Palm Oil (MSPO). Despite this announcement, Sabah continued to insist on using RSPO. RSPO is seen as a more

credible international certification standard for sustainability by some importing countries like the European Union. As such, Sabah chose RSPO to remain more relevant in the global palm oil market, by competing using the basis of good governance as competitive advantage and being the preferred choice for buyers seeking certified sustainable palm oil (Ng et al., 2022). Sabah made this decision because its economy largely depended on exporting palm oil, and it is the state with the largest planted oil palm area in Malaysia (1.54 million ha or 22% of the state) – until Sarawak overtook it in 2017 (MPOB, 2019). Starting from the late 1990s until 2019, Sabah was responsible for the highest quantity of crude palm oil production, reaching 5.03 million metric tons in 2019 (equivalent to 25% of Malaysia's output). This made Sabah the foremost state in Malaysia for this sector (MPOB, 2019).

As one of the first actions taken to achieve the objective of state-wide certification, a multi-stakeholder body was formed by the Sabah government in 2016, to govern and lead the RSPO Jurisdictional Approach. This body was named the 'Jurisdictional Certification Steering Committee' (JCSC). The JCSC consists of representatives from three sectors; the government (n = 4), industry (n = 4), and civil society (n = 4), is co-chaired by two government representatives, facilitated by a secretariat, and supported by two technical advisors. The government representatives are from the mid-level government and must report to the higher-level government, the Chief Minister of Sabah, who heads the state and is appointed by the political party that wins the state election. The Chief Minister has considerable power in decision-making on land use in Sabah, although it must first be debated and approved by the State Legislative Assembly. This hierarchy in the government is important to know as it has implications on our results and discussion.

The JCSC has a Terms of Reference to set the ground rules for how it should be conducted. Membership is by invitation, by institution and voluntary, and is decided by the representation or expertise the member can bring to the committee. Decision is made by consensus. Technical advisors can be appointed with the approval of the members. Currently, there are two advisors: - the RSPO Secretariat and the Climate Advisor to the Sabah state government. To assist it in its task, the JCSC can create working groups with knowledge on a specific matter (e.g. to set up Free, Prior and Informed Consent procedure (FPIC)). At the beginning, the JCSC did not have a secretariat. As such, a government agency, the Sabah Forestry Department filled that role because they were the initial government department that convinced Sabah's Chief Minister to adopt the RSPO Jurisdictional Approach. It was only in 2020 that a JCSC secretariat was hired.

The RSPO secretariat introduced the idea of the RSPO Jurisdictional Approach in 2015, but did not provide any guidance document on the requirements for a jurisdictional certification. They finally publish the document, called the Jurisdictional Approach RSPO Piloting Framework, in 2021, six years after they introduced the RSPO Jurisdictional Approach. The framework provided three steps to achieve full certification. Each step is guided by the key requirements in its; (i) system performance indicators, and (ii) landscape performance indicators (RSPO, 2021). Sabah, as at mid-2022, is still in Step 1, whereby it has met the required system performance indicators of the establishment of a multi-stakeholder body (i.e. JCSC), and the issuance of a statement of intent to achieve 100% RSPO compliance by 2025 has been made

public[26]. However, the other system performance indicators progress for Step 1 is slow. For the landscape performance indicators, most of the activities are still in progress, such as establishing procedures for FPIC and providing an indicative High Conservation Value and High Carbon Stock map. When the JCSC was first established, one of its first activities was to develop a five-year workplan (2016-2020) to guide Sabah towards full certification, consisting of the activities described above. The workplan has since been reviewed and revised in 2021 (though it is not publicly available).

Apart from the slow progress, four members (two from civil society, and two from the industry) have resigned from the JCSC at various stages in the seven years it has been active. Even though replacements were sought to meet the representation composition, if more members decide to quit, it could undermine the whole collaborative process. As the collaboration is already mature, it is imperative that we understand the challenges it currently faces, based on the perspectives of the members themselves, to provide suggestions on how it can be sustained and how the progress can be improved.

3.3 Methodology

We selected Q-methodology for this research because it provides a clear and structured way to elicit stakeholder's perceptions on a subject matter (Zabala et al., 2018). It uses empirical evidence to provide rich descriptions of divergent viewpoints (Ramlo, 2020)

[26] A letter from the state government was issued in early 2021.

and it has been used widely in the field of natural resource management to understand perceptions (Buckwell et al., 2020; Carmenta, Zabala, Daeli, & Phelps, 2017; Langston et al., 2019). The Q-methodology can be divided into four stages: research design, data collection, analysis, and interpretation (of results) (Watts & Stenner, 2012).

3.3.1 Research Design

We first identified the research topic and question, which in our case is identifying the collaboration challenges the JCSC members are facing. The next step is creating a concourse of statements (Q-set) that contains expression of all the perspectives held regarding collaboration challenges of a jurisdictional approach. The set of statements was drawn from interviews (conducted in 2020 and 2021) with the current and ex-JCSC members, and those involved in facilitating the JCSC (n=17). We also included specific jurisdictional approach challenges that were not found in collaborative governance literature, which we gathered from secondary sources (reports and published articles). Once we had a collection of statements, we divided them into ten themes (Table 6). See Appendix C for the literature sources for each theme.

Table 6. Identified themes for collaboration challenges of jurisdictional approach based on literature review and interviews

Theme	Explanation
1) Trust	When there is no trust or when a member has had negative past experience working with another member, the willingness to collaborate is attenuated. Members will need to invest more time and energy to re-build trust.
2) Shared understanding	When members have different understandings of the objectives and solutions, and there is no common language used in the collaboration, members will be less likely to commit.

3) Power imbalance	When there are differences in power to influence the goals and processes, such as experience, expertise, resources and even the power to delay, the effectiveness of the collaboration will be limited, and members will be wary of participating if they feel they are at a disadvantage.
4) Support from higher level government	When leaders of the state do not provide the stamp of approval or are reluctant to do so, because they are used to a top-down approach (among many other reasons), members may be reluctant to commit because the group has no mandate to make decisions, to change policies, etc.
5) Unchartered territory	When there isa lack of knowledge around implementing a new initiative (i.e. RSPO jurisdictional approach), and it being governed in a new way (i.e. collaborative governance vs top-down), the progress can be slow, and members may feel lost and unmotivated.
6) Leadership	When there is no leader to start the collaboration, to sustain it and push for its outcomes, members will be lost and the collaboration will dissipate over time. In addition, there is need for diversity of leaders so as not to be too dependent on just one person.
7) Participant factors	Members may not be effective or interested in the collaboration if the 'core business' in their own organisations are not the same as the collaboration's objectives, and when the anticipated cost of deliberation, and the time needed to deliberate, outweighs the benefits of collaboration.
8) Process transparency	When members do not have confidence that the collaboration process is fair, equitable and open (e.g. have clear ground rules, a designated coordinator who maintains procedural integrity), they will quit for fear that the collaboration is used for private backroom deals.
9) Collective decision making	Because decisions are made by consensus in a collaboration, the deliberative nature of the process can create a deadlock, which some members prefer, as it would maintain the status quo. In addition, members tend to avoid bringing up important issues that will provoke serious disagreements so that the collaboration remains on good terms.
10) Funding	Collaboration involves transaction costs like time, money and staff resources to sustain its activities and interactions, while deliberations and obtaining the results take time. Unfortunately, funding is usually given within a short term, and funders often demand results too quickly. Therefore, the collaboration may end because of insufficient money to continue.

In line with other studies, we included less than 40 statements in our final concourse (n=30) (Carmenta et al., 2017; Sy et al., 2018). We piloted the statements with five respondents, who were not in the research sample, to ensure that the statements made sense and to adjust our list if any important challenges were missed.

3.3.2 Data Collection

Our respondents were the JCSC members, the secretariat and technical advisors of the JCSC. We conducted 14 Q-sorts (Table 7) out of the 17 that are part of the JCSC. In Q-methodology, the sample of respondents does not need to be large or representative of the population, but it must be diverse, which we achieved (Zabala & Pascual, 2016).

Table 7. The Q-sort respondents and the sectors they belong to

Category	No. of online interviews	No. of face-to-face interviews	Total no. of respondents/Q-sorts
Civil society	4	0	4
Business and industry	2	1	3
Non-members	1	2	3
Government	2	2	4
Total	9	5	14

The sorting starts with the respondent reading through all the statements and placing them into three piles, “Agree”, “Disagree” and “Neutral”. This will help them in the next step of placing all 30 statements in the Q-sort, which is a forced normal distribution (bell-shaped) grid with a nine-point distribution, from strongly disagree (-4) to strongly agree (+4). The ranking of Q-sorts was conducted between February and March 2022, in person and in online interviews. We used easy-HTMLQ (https://github.com/shawnbanasick/easy-htmlq) for the online sorting, where the main researcher guided the respondent through the whole process using the Zoom platform. For face to face, statements were placed directly on to a physical grid. Respondents were asked to sort the statements on current challenges according to how much they agreed that it was indeed a challenge based on their experience with the JSCS. During the Q-sorting, dialogues between the researcher and the respondent on the person’s

choice of ranking with each statement, were noted down to assist interpretation of their perspectives. After the Q-sorting, respondents were interviewed to elaborate on their rankings, with a focus on those placed at the most extremes of the grid. The sorting process and interviews took between 45 minutes to 120 minutes, depending on how talkative they are. Respondents were asked to give their personal views (as opposed to that of their institution) and were assured confidentiality. Therefore, when we reported the results, we purposely kept the respondent identities vague, and gave no details of their background, other than which sector they belonged to. We kept the sector identity because we expect that some reflection of where the respondents work will permeate their personal views.

3.3.3 Q-analysis

Following Watts & Stenner (2012) and using an open software Ken-Q Analysis (https://shawnbanasick.github.io/ken-q-analysis/#section1 Version 1.0.7) for our statistical analysis, we extracted eight factors using Principal Component Analysis initially. Four criteria were used to decide the number of factors to extract: Kaiser Guttman, scree test, two or more significant factor loadings at the 0.01 level following extraction, and using the Humphrey rule (Brown, 1980; Watts & Stenner, 2012). However, we decided to only use the last two criteria after checking the five and four factors extracted by the Kaiser Guttman and scree test respectively as the factor groupings did not make sense, which is in line with suggestions by Webler, Danielson, & Tuler (2009). As such, only three factors were chosen for extraction. Varimax was used to rotate the three factors. Respondents were assigned into factors with a p-value of<0.05, using Ken-Q Analysis's auto-flag function. Of the 14 respondents, 13 loaded

into the three rotated factors. Five respondents loaded on Factor 1, four on Factor 2, and four on Factor 3. These three factors explain 50% of the total variance among the 14 respondents (Appendix D). There is a low correlation between all three factors: -0.0022 between F1 and F2, 0.1201 between F1 and F3, 0.0345 between F2 and F3. The low correlation shows that the factors are distinct (Webler et al., 2009).

3.4 Results

The three factor arrays (the ideal Q-sort) for each of the extracted factors are arranged according to the 10 themes in Appendix E, with the factor scoring and Z-scores.

3.4.1 Factor 1 – Stakeholders' Representation and Mandate

Factor 1 accounts for 18% of the variance. Respondents from the government sector only appear in Factor 1. Statements that scored the highest (+4) belong to the collaboration challenges' themes of "Support from higher level government" and "Participant factors", while statement that scored the lowest (-4) are from the themes "Shared understanding" and "Funding" (Table 8).

Table 8. Relative ranking of statements for Factor 1 - Stakeholder representation and mandate

No.	Highest Ranked Statements	Factor scoring	Theme

6	Some members do not have the mandate to make the decisions	4	Support from higher level government
18	Important stakeholders are not sitting in the JCSC	4	Participant factors
	Positive Statements Ranked Higher in Factor 1 Array than in Factor 2 and 3		
29	The RSPO JA is new and therefore no one has experience in its process and implementation	3	Unchartered territory
19	Some organisations do not send the same person for the JCSC meetings	3	Participant factors
13	Lack of recognition of the JCSC by higher levels of the government	3	Support from higher level government
21	The goals of the JCSC are too ambitious or unachievable	2	Shared understanding
23	Our organisations' purposes are just too different	2	Participant factors
11	We do not have enough time to meet and deliberate on challenging issues during JCSC meetings	1	Collective decision making
16	There is no clear leadership that can steer the JCSC	0	Leadership
12	Potential benefits from the JCSC are just too long term and vague	0	Participant factors
15	Scientific conclusions are not taken seriously and used to inform policy decisions in this collaboration	0	Process transparency
	Negative Statements Ranked Lower in Factor 1 Array than in Factor 2 and 3		
25	No accountability for the lack of progress of the workplan implementation	0	Process transparency
9	Some members are in competition with each other for funding or market access	-1	Participant factors
22	Some members are afraid of making their opinion known as it would put them at a disfavour with the more powerful members	-2	Power imbalance
17	We cannot agree on the JCSC common goals	-2	Shared understanding
27	Decisions are made by the more powerful members of the JCSC	-2	Power imbalance
20	Lack of transparency on how decisions are made	-3	Process transparency
8	We are suspicious of each other	-3	Trust
2	Some members voices are not heard	-3	Power imbalance
	Lowest Ranked Statements		
3	Funds are used on unimportant activities	-4	Funding
7	We do not have the same level of understanding on the severity of the environmental problem	-4	Shared understanding

Factor 1 displays strong agreement that the main collaboration challenge in the JCSC is that 'important stakeholders are not sitting on the JCSC' (+4/1.72)[27]. The stakeholders who were most referred to were the oil palm growers. A respondent said that '*one plantation company cannot be the voice for all growers'*. Another informed that industry players representing smaller scale plantations were invited to join the JCSC but the invitation was declined. '*What can we do about that*?', the respondent asked. They felt possible reasons some stakeholders are not participating in the JCSC because 'some members cannot give enough time and attention' (+2/1.1) and 'their organisation purposes are too different' (+2/1.01).

The other challenge Factor 1 is in strong agreement with is 'some members do not have the mandate to make the decisions' (+4/1.73). One respondent frankly said, '*Ultimately, decisions will still be made by the state government*'. This is because for any policy changes required, the JCSC will still need to refer to a higher authority in the government. Another respondent explained, '*A lot of the decisions depend on higher level government commitment that is hard to secure*'. As such, Factor 1 agrees that 'there is lack of recognition of the JCSC by higher levels of the government' (+3/1.18).

Factor 1 is the only one among the three to view that 'the goals of the JCSC are too ambitious or unachievable' (+2/1.18). They consider that 'the RSPO Jurisdictional Approach is new and therefore no one has experience in its process and

[27] Factor score/Z-score

implementation' (+3/1.48). One respondent said, '*The RSPO jurisdictional approach idea came about without thinking about the reality on the ground*'. An example given was the land issues, '*If palm oil is certified in encroached lands, we are legalising fraudulent claims, this needs to be sorted out and it is not easy as it is very political*' (note: for RSPO certification, the land the oil palms is cultivated on must belong to the person or company legally).

Factor 1 is not of the opinion that the challenge is 'power imbalance', compared to the other two factors. They believe that all involved members have equal voices in the committee, as the statements in the 'power' category all have negative sort values (-2 and -3). However, one respondent admitted that there is a tendency for the 'louder voices' to be heard more.

3.4.2 Factor 2 – Accountability and Power

Factor 2 accounts for 17% of the variance. Respondents from civil society dominate this factor. Statements that scored the highest (+4) belong to the collaboration challenges' themes of "Participant factors" and "Process transparency", while statements that scored the lowest (-4) are from the themes "Shared understanding" and "Process transparency" (Table 9).

Table 9. Relative ranking of statements for Factor 2 - Accountability and power

No.	Highest Ranked Statements	Factor scoring	Theme
25	No accountability for the lack of progress of the workplan implementation	4	Process transparency

26	Some members cannot give enough attention and time	4	Participant factors
	Positive Statements Ranked Higher in Factor 2 Array than in Factor 1 and 3		
10	We cannot secure long term funding	3	Funding
7	We do not have the same level of understanding on the severity of the environmental problem	3	Shared understanding
27	Decisions are made by the more powerful members of the JCSC	3	Power imbalance
30	We have limited experience making decisions in a multi-stakeholder collaboration	2	Unchartered territory
2	Some members voice are not heard	2	Power imbalance
4	We tend to avoid discussing issues that will provoke serious disagreement	1	Collective decision making
22	Some members are afraid of making their opinion known as it would put them at a disfavour with the more powerful members	0	Power imbalance
	Negative Statements Ranked Lower in Factor 2 Array than in Factor 1 and 3		
11	We do not have enough time to meet and deliberate on challenging issues during JCSC meetings	0	Collective decision making
15	Scientific conclusions are not taken seriously and used to inform policy decisions in this collaboration	-1	Process transparency
14	We had bad experience working in the past	-2	Trust
24	Lack of processes/mechanisms on how to address conflicts among members	-2	Process transparency
17	We cannot agree on the JCSC common goals	-2	Shared understanding
18	Important stakeholders are not sitting in the JCSC	-3	Participant factors
5	Lack of clear internal rules about how the JCSC should be governed	-3	Process transparency
12	Potential benefits from the JCSC are just too long term and vague	-3	Participant factors
	Lowest Ranked Statements		
1	The JCSC workplan lacks clearly defined goals and milestones to guide us	-4	Process transparency
21	The goals of the JCSC are too ambitious or unachievable	-4	Shared understanding

This factor displays strong agreement that the main challenge is 'there is no accountability for the lack of progress of the JCSC workplan implementation' (+4/1.82). Examples given were the HCV-HCS map that has yet to be presented for

consultation, the non-functioning working groups to move the workplan forward (e.g. the smallholders working group is not functioning and it is supposed to address the issues on land titles, while the legal working group has yet to be set up to develop a legal framework for the RSPO Jurisdictional Approach). The other statement showing strong agreement as being a key challenge was 'some members cannot give enough attention and time' (+4/1.44), which could be one of the reasons the workplan showed lack of progress.

Factor 2 alone scores positively on the power imbalance, as respondents feel somewhat that 'decisions are still made by the more powerful members' (+3/1.14), and that 'some members voices are not heard' (+2/0.56). They also agree that 'members do avoid discussing issues that will provoke serious disagreement' (+1/0.51), which Factor 1 and 3 does not consider to be a challenge. Interestingly, although they deem that there is a lack of accountability in the workplan progress and power imbalance, they believe that the process transparency is mostly there for the JCSC, as most statements in that theme had a negative value. One respondent explained that, with the establishment of the secretariat, transparency in decision making has become much better.

3.4.3 Factor 3 – Unclear Goals

Factor 3 accounts for 15% of the variance. Respondents from the business and industry dominate this factor. Statements that scored the highest (+4) belong to the collaboration challenges' themes of "Shared understanding" and "Process

transparency", while statements that scored the lowest (-4) are from the themes "Leadership" and "Funding" (Table 10).

Table 10. Relative ranking of statements for Factor 3 – Unclear Goals

No.	Highest Ranked Statements	Factor scoring	Theme
1	The JCSC workplan lacks clearly defined goals and milestones to guide us	4	Process transparency
17	We cannot agree on the JCSC common goals	4	Shared understanding
	Positive Statements Ranked Higher in Factor 3 Array than in Factor 1 and 2		
29	The RSPO JA is new and therefore no one has experience in its process and implementation	3	Unchartered territory
13	Lack of recognition of the JCSC by higher levels of the government	3	Support from higher level government
24	Lack of processes/mechanisms on how to address conflicts among members	3	Process transparency
9	Some members are in competition with each other for funding or market access	2	Participant factors
5	Lack of clear internal rules about how the JCSC should be governed	2	Process transparency
28	Lack of ability to adapt the JCSC workplan to changing circumstances and failures	2	Process transparency
8	We are suspicious of each other	1	Trust
14	We had bad experience working in the past	1	Trust
12	Potential benefits from the JCSC are just too long term and vague	0	Participant factors
22	Some members are afraid of making their opinion known as it would put them at a disfavour with the more powerful members	0	Power imbalance
	Negative Statements Ranked Lower in Factor 3 Array than in Factor 1 and 2		
11	We do not have enough time to meet and deliberate on challenging issues during JCSC meetings	0	Collective decision making
6	Some members do not have the mandate to make the decisions	-1	Support from higher level government
15	Scientific conclusions are not taken seriously and used to inform policy decisions in this collaboration	-1	Process transparency
19	Some organisations do not send the same person for the JCSC meetings	-2	Participant factors
23	Our organisations' purposes are just too different	-2	Participant factors

20	Lack of transparency on how decisions are made	-3	Process transparency
30	We have limited experience making decisions in a multi-stakeholder collaboration	-3	Unchartered territory
4	We tend to avoid discussing issues that will provoke serious disagreement	-3	Collective decision making
	Lowest Ranked Statements		
3	Funds are used on unimportant activities	-4	Funding
16	There is no clear leadership that can steer the JCSC	-4	Leadership

Factor 3 indicates strong agreement that the main challenge is that the JCSC goals lack clarity. Thus, this factor loaded strongly on 'the JCSC workplan lacks clearly defined goals and milestones to guide us' (+4/1.72) and 'we cannot agree on the JCSC common goals' (+4/1.56). One respondent stated '*It is not clear what is the RSPO Jurisdictional Approach and the JCSC for. Is it for palm oil or for something else? If it is more than palm oil, then it should be clearly articulated*'. Another respondent disclosed '*I feel like we are still working in silos, even though it had been more than 5 years since we started*'. Also, one respondent judged that the JCSC struggled with its workplan because the RSPO secretariat did not provide adequate support. The person referred to the Jurisdictional Approach RSPO Piloting Framework document that was only finalised in 2021. '*When the RSPO framework was drawn out, the JCSC was already going on its own direction. You can't tell the members it is the wrong direction as they thought they were doing the right thing at that time*'.

This is the only factor that agrees that trust is a challenge, loading positively on 'we are suspicious of each other' (+1/0.54) and 'we had bad experience working in the past' (+1/0.36). One respondent brought up the recent natural capital agreement that the Sabah government signed with a Singaporean firm on October 28th, 2021. This

agreement laid out a revenue-sharing plan that covered the right to sell credits from the ecosystem services provided by 2 million hectares of forest for at least the next 100 years (Cannon, 2022). Civil society in Sabah (including those that are JCSC members) had filed a complaint to the United Nations about this deal which they regarded was done without any transparency or consultation with the indigenous people living around the forest. This respondent felt that the deal eroded the trust between the government and civil society members in the JCSC.

This factor scored mostly positively for 'process transparency', indicating that they think the group's ground rules could be managed better. However, despite that, like the other two factors, they disagree that 'there is lack of transparency on how decisions are made' (-3/-1.19) and strongly disagree that 'there is no clear leadership that can steer the JCSC' (-4/-1.59).

3.4.4 Consensus and Contention Statements

Consensus statements do not distinguish between any factors and it is used as a potential starting points for engagement among a group of people that have different perspectives (Zabala & Pascual, 2016). Table 11 lists the consensus statements for all three factors.

Table 11. Consensus statements

No.	Statement	Factor 1 – Stakeholder representation and mandate		Factor 2 – Accountability and power		Factor 3 – Unclear goals	
		Factor scores	Z-score	Factor scores	Z-score	Factor scores	Z-score

10	We cannot secure long term funding	1	0.59	3	1.37	2	0.854
13	Lack of recognition of the JCSC by higher levels of the government	3	1.18	1	0.48	3	1.095
20	Lack of transparency on how decisions are made	-3	-1.07	-1	-0.579	-3	-1.193
26	Some members cannot give enough attention and time	2	1.103	4	1.44	1	0.6
29	The RSPO JA is new and therefore no one has experience in its process and implementation	3	1.483	2	1.013	3	1.349

One of the intriguing uses of Q-method is to help groups clarify what they disagree about. Such results can be very helpful to spell out differences and to give direction on how the group can move forward (Webler et al., 2009). Table 12 indicates the contention statements (statements that the factor scoring differs the greatest among all three factors) for the three factors.

Table 12. Contention statements between the 3 factors

No.	Statement	Factor 1 – Stakeholder representation and mandate		Factor 2 – Accountability and power		Factor 3 – Unclear goals	
		Factor score	Z-score	Factor score	Z-score	Factor score	Z-score
7	We do not have the same level of understanding on the severity of the environmental problem	-4	-1.487	3	1.178	-1	-0.52
17	We cannot agree on the JCSC common goals	-2	-0.892	-2	-0.934	4	1.563
21	The goals of the JCSC are too ambitious or unachievable	2	1.176	-4	-1.87	-2	-0.949
18	Important stakeholders are not sitting on the JCSC	4	1.715	-3	-1.132	-1	-0.892
1	The JCSC workplan lacks clearly defined goals and milestones to guide us	-1	-0.607	-4	-1.187	4	1.721

3.5 Discussion

3.5.1 Study Limitations

The limitation to this study was that we did not manage to capture the perspectives of all the JCSC members. Three of the JCSC members were excluded because two could not understand the sorting process and therefore had to be excluded out of the analysis, while the last member was not available to be interviewed. However, as suggested by Watts & Stenner (2012) this is mitigated by ensuring that the respondents were not homogenous (they were from different sectors), and to ensure that the Q-set captures almost all the collaboration challenges. This is because in Q-methodology, the representativeness refers to the representativeness of the statements for the Q-set and not the representativeness of the participants for the population (Molenveld, 2020).

3.5.2 Consensus on the Collaboration Challenges of a Jurisdictional Approach

There is consensus among all three factors that the collaboration challenge is that the RSPO Jurisdictional Approach is a new approach and that no one has experience in certifying a whole jurisdiction. This is consistent with the literature, as a study by Davies & White (2012) showed that a lack of knowledge about new approaches can be a challenge to collaborative natural resource management. The lack of human and technical capacity to implement complex initiatives at such a large scale, and the fact that it is still in its conceptualization phase, not yet moving from theory to practice, are the reasons for such a challenge (Fishbein & Lee, 2015; Reed, Van Vianen, Deakin,

Barlow, & Sunderland, 2016; Wolosin, 2016). The RSPO secretariat did not provide guidance on how to achieve jurisdictional certification when they introduced the idea. This caused plenty of confusion, people were uncertain how to meet RSPO's principles and criteria[i] at a landscape level. Nobody knows how to translate a voluntary standard, and one with a high standard like RSPO, into a mandatory requirement within Sabah's legal and institutional system (Colchester, 2020).

The other consensus is a lack of recognition by the higher levels of government for the jurisdictional approach, even after the state government issued a letter of intent to achieve 100% RSPO compliance in 2021. Political commitment, from the highest level of government, is found to be the most important challenge facing jurisdictional approaches (Boyd et al., 2018). This challenge is related to the RSPO Jurisdictional Approach being new, as leaders of a state will not automatically recognise a new form of governance (i.e. the JCSC), because they prefer other forms of decision making, like the normal top down approach (Fish et al., 2010). It also relates to members not having the mandate to make decisions, as was identified by Factor 1 members as a challenge, even though the majority hold managerial positions within the government. Political commitment is also affected by political turnover, which can delay or backslide such jurisdictional approaches (Boshoven et al., 2021; Fishman et al., 2017; von Essen & Lambin, 2021). The Sabah government changed twice since the RSPO Jurisdictional Approach was initiated, in 2018 and 2020, delaying its progress as the new governments were not accustomed to it. Lack of recognition of the jurisdictional approach also has to do with political influence and bureaucratic structures that are deeply embedded into the institutional systems and will not be easily changed (Fish et al., 2010). The lack of government recognition can be seen as the difficulty in getting

commitment from the state politicians, who ultimately make the decisions on whether the RSPO Jurisdictional Approach should progress, or not. The reason there is non-commitment from politicians often has to do with the political-economy of the state, driven by economic factors, and institutional 'stickiness' (resistance to change often seen in government departments because they are afraid of losing their influence or getting restricted in the opportunities for new agricultural land) (Brockhaus & Angelsen, 2012). Furthermore, the state politicians and some government departments in Sabah, along with the larger palm oil companies, are wary of the friction between the state and federal government on the choice of using RSPO, as Malaysia is promoting its own standard, MSPO (Houten & Koning, 2018)(Houten & Koning, 2018). Similarly, Fishbein & Lee (2015) reported that REDD+ jurisdiction initiatives at subnational level that are not aligned to national level efforts may risk limited support and tension from the national government.

The third consensus, 'the difficulty in securing funding', is connected to the first two challenges above. A jurisdictional approach has several financial requirements: the initial funds to set up its structure, financing for its ongoing activities, and monetary rewards for delivery of results (Fishman et al., 2017; von Essen & Lambin, 2021). Because the jurisdictional approach is new, potential funders are hesitant to provide funding as there is no proof of success. Consequently, the lack of international and national financial assistance for the ongoing effort is one reason for the limited political support, as such assistance can provide incentives for the government to move away from business-as-usual activities (Boyd et al., 2018). Studies prove that such initiative in Southeast Asia frequently struggle to continue beyond the initial funding phase, with stakeholders voicing funding sustainability as a key concern (Zanzanaini

et al., 2017). Procuring funds from public agencies can be bureaucratic and slow, while private funding is often short-term with results expected rapidly, which is not the case for a jurisdictional approach (von Essen & Lambin, 2021). For the JCSC, the main funding concerns are for the secretariat: paying for their salaries and the activities to run the committee, and the subsequent monetary awards should landowners forgo converting their forest into plantations. The latter has to do with the value proposition of the RSPO Jurisdictional Approach to political leaders, and other key partners, to compel them to drive the fundamental long-term changes in their land use planning (Fishbein & Lee, 2015).

Members unable to give their time for the JCSC was also a collaboration challenge consensus. This relates to the cost and benefits of a collaboration and is linked to the funding challenge. Significant time is needed for members to reach a consensus; therefore, money is needed to support the members as they continue to provide their time and resources (Jones & White, 2022; Margerum, 2016). The returns from the collaboration also take time, which may lead members to lose interest (Margerum, 2016). For the JCSC, the members use their own departmental budgets to participate in the meetings. This could be a problem should their own funds run out, thus making it hard for them to continue participating actively. In addition, many collaborations demand the participation of the leaders of the organisation, who can make the decisions or who have the technical capacity to engage, making it a challenge for them to divide their time and sustain their effort (Margerum, 2016). The JCSC members are mostly managers/department heads and therefore they have numerous other responsibilities. Because of the members' inability to focus entirely on the JCSC, the secretariat plays

an important role in distributing and coordinating tasks to ensure there is progress within the collaboration, a task of the utmost importance according to Bodin (2017).

The one statement that all three factors agree is not a challenge is the lack of transparency on how decisions are made. The JCSC members, especially the ones who were part of the collaboration from the beginning, observed that the hiring of the secretariat greatly improved the decision-making process. This was not the case in the past as it was reported that previously the three most influential members of the committee made the decisions and subsequently the other members were informed (Houten & Koning, 2018). However, this is the only aspect of the 'process transparency' that all three factors agree is not a challenge, indicating that there is still a great deal of work needed to prove to the members that the process is fair, equitable and open. These other aspects will be discussed in the next section.

3.5.3 Different Perspectives of the Collaborative Challenges of a Jurisdictional Approach

Factor 2 perceived strongly that the main collaboration challenge is that the JCSC workplan lacks accountability and progress. This is the other aspect of the 'process transparency' that the civil society members perceive is a challenge. This finding supports the work of Langston et al., (2019), who found that accountability to civil society (in our case, getting the agreed work done in the JCSC or owning up if the work is not completed) was a constraint in making a collaboration work. A study by Ulibarri et al. (2020) cautioned that the declining attention to accountability in a

collaboration can contribute to its deterioration. Closely linked to accountability is that there is power imbalance. Again, it is interesting to note that this is the only factor, dominated by civil societies, that expresses that power imbalance is a challenge. This is very unlike the Factor 1 view, where respondents, whom we assume are more powerful because they are predominantly members of the government, think everyone can voice their thoughts without fear. This finding was also reported by Jones & White (2022) in their study, where the powerful members believe that everyone has an equal voice when it is not so. Bringing the context closer, a study done in Indonesia found that collaborative governance failed to solve power inequalities (Riggs et al., 2021). In the case of Sabah, civil society members are still wary of being too vocal (e.g. questioning why the work has not been done) before more powerful members as resentments may complicate their future work in the state and, more so, they understand the difficulties faced by their government counterparts in the JCSC in getting support from the higher-level government.

Factor 3 viewed that the challenge has to do with the shared understanding of the whole initiative, which was highlighted in the literature as an important feature in collaborative governance (Adams et al., 2003; Ansell & Gash, 2008; Davies & White, 2012; Ingold & Fischer, 2014; Reed, Ros-Tonen, et al., 2020; Uetake, 2015). This challenge is the most disagreed among the three factors. Firstly, Factor 3 finds that the JCSC workplan lacks clearly defined goals and milestones, which Factor 2 strongly disagree with. Besides that, Factor 3 views that the group cannot agree on the JCSC common goals, which was disagreed by both Factor 1 and 2. And pertaining to the goals, both Factor 2 and 3 view them as not too ambitious, but Factor 1 does. The confusion regarding what the goals are, and what suitable milestones need to be set to

achieve the goals, has to do with the fact that the RSPO Jurisdictional Approach concept is new and, as explained in the previous section, the initiative was thought up first without the specific plans to achieve it. In addition, the group members' diverse backgrounds lead to different interpretations of the goals, as a 'common' language is not used. Different interpretations are also caused by each member's different priorities. This type of challenge was found to affect the 'buy-in' of a collaboration (Davies & White, 2012; Fish et al., 2010). The government respondents (Factor 1) probably viewed the goals as too ambitious because they are ultimately responsible for balancing economic development and conservation in the state and implementing the legislations and policies that will be drafted for the RSPO Jurisdictional Approach. They find committing to the standards of RSPO (e.g. no more forest conversion to oil palm plantations in Sabah) seemingly impossible.

The last point on the diverse perception we would like to discuss is trust. Factor 3 is concerned that the trust in the collaboration is eroding, unlike Factor 1 and 2. Trust emerges when the members have similar values and objectives (Coleman & Stern, 2018; J. Sayer et al., 2013). Trust is needed initially to convene stakeholders and also to continue the collaboration, as the lack of trust once the collaboration has begun will cause the members to grow frustrated and disengaged (Coleman & Stern, 2018). One way to sustain trust is by having a shared vision, transparency in the collaboration process, and producing results (Coleman & Stern, 2018; Sayer et al., 2013), which are points we brought up as challenges. For Sabah, the JCSC members have prior working relationships, and are connected in many ways, even outside of the RSPO Jurisdictional Approach. They have collaborated before on other projects and have known each other for some years (they have shared positive experiences). Because of

this, they see each other as a ‘good person’, even if they have different opinions, and therefore, went into the collaboration willingly. Time is saved as they do not need to build the relationship from the ground up. Seven years have passed since the JCSC started. Some respondents have pointed out emerging trust issues, because of the lack of progress and the recently signed natural capital agreement deal in 2021 by the state government (explained in Section 3.4.3).

3.6 Conclusion

Our research adds to the body of literature exploring the challenges associated with collaborative governance specific to the jurisdictional approach. In addition, our research approach is unique as there has not been any research undertaken to understand collaboration challenges in a jurisdictional approach using Q-methodology previously (to our knowledge).

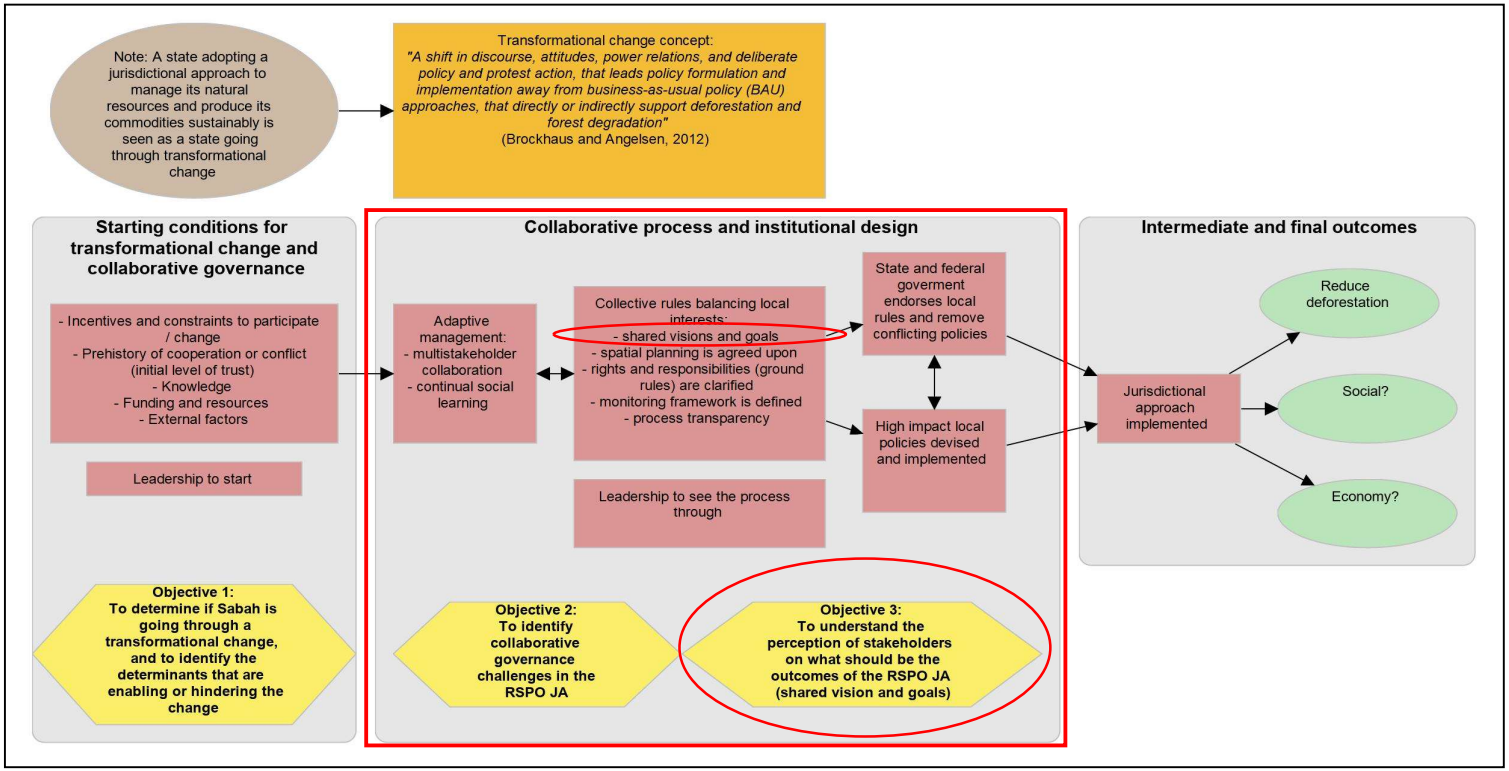
The collaboration challenges as demonstrated by our research, are that different perceptions exist when it comes to power, where the less powerful members believe there is an imbalance although the more powerful members do not. We found that trust among the collaborators will erode if the collaboration does not produce results, and when it is not governed transparently with proper procedures in place. We also found that trust among members is affected by matters external to the collaboration, proving that decisions made outside of the collaboration could affect it.

We established that one of the collaboration challenges specific to jurisdictional approach is that of securing higher-level government commitment. Without the state leaders' support, there will be little or slow progress. We found that that stakeholders in the jurisdictional approach should have a shared understanding of the common goals, or this would create frustration and confusion among members. The slow progress of the work and the confusion about the goals were also attributed to the jurisdictional approach being a new initiative and, in the case of the RSPO Jurisdictional Approach, the lack of guidance from the RSPO secretariat. In addition, our research showed that expectations for a jurisdictional approach should be managed locally and globally to avoid creating unachievable goals and timeframes. It must be made clear to funders that a jurisdictional approach is a lengthy process, with many challenges as explained above, and the benefits may not be seen immediately (Buchanan et al., 2019). We agree with Stickler et al., (2018) that the early steps taken towards jurisdictional sustainability should be recognised and rewarded. A jurisdiction thus needs continuous support and commitment for long term to develop an effective collaboration so that its goals can be achieved.

In the case of Sabah, we studied the implications for the JCSC if the identified challenges are not addressed. There are potential concerns as some members may resign (as has happened in the past), making it more difficult to find the right representatives for the different types of stakeholders. Members can start to distrust each other after a failed attempt to collaborate. The challenges we identified are not easy to solve, as they deal with multi-actor power relations in a landscape with conflicting land uses. However, there is one immediate action that can be taken within the JCSC. That is to improve the governance of the collaboration, by ensuring

transparency and accountability in its process. First, the group should clarify the common goals together once again, articulate what they are trying to achieve and communicate these properly using a common language. Second, the goals need to be operationalised, and responsibilities made clear. It is critical for members to have more open conversations regarding unmet goals and be transparent in what they cannot achieve, identifying the reasons why, so that a solution can be found to move forward. Both actions are important especially to obtain more support from international agencies or companies (Ng, 2021). Finally, the secretariat has an important role to play in maintaining procedural integrity (Ansell & Gash, 2008; Bodin, 2017). If these procedures are put in place, trust will increase among members allowing the collaboration to continue, and the reputation of the RSPO jurisdictional approach will improve, with positive impacts on funding and outcomes.

Linking Chapter 4 (Objective 3) with Chapters 2 and 3



Chapter 4 covers Objective 3 and also the middle part of the theory of change indicated by □ and ○

CHAPTER 4

4.0 PERCEPTIONS OF REALISTIC OUTCOMES FOR THE JURISDICITONAL APPROACH IN SABAH, MALAYSIA BORNEO

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Abstract

The jurisdictional approach concept emerged in response to the widespread failure of sectoral forest conservation projects and is seen as an alternative to better manage trade-offs and reduce deforestation for conservation. Despite its increasing popularity, understanding jurisdictional approaches outcomes is challenging given many remain in either formation or implementation. Further, diverse stakeholders hold different perspectives of what exactly a jurisdictional

approach is intended to pursue. These different perspectives are important to unravel as having a shared understanding on the outcomes is important to build the critical support needed for it. This study aims to add to the limited evidence with a case study in Sabah, Malaysian Borneo, that is committed to addressing a leading deforestation driver (palm oil) through sustainability certification in a jurisdiction. We used Q-methodology to explore stakeholder perceptions, revealing three distinct perspectives regarding what outcomes jurisdictional approaches should pursue. We asked about outcomes achievable within ten years (2022-2032), and considering real-world constraints. We found differences in perspectives regarding economic, environmental, governance, and smallholders' welfare outcomes. However, we found consensus between stakeholders in relation to some outcomes: (i) that achieving zero-deforestation is untenable, (ii) that issuing compensation or incentives to private land owners to not convert forests into plantations is unrealistic, (iii) that the human well-being of plantation workers could improve through better welfare, and (iv) the free, prior and informed consent being required legally. The findings provide a better understanding of what key stakeholders consider deliverable from a jurisdictional approach, and it cautions against the difficulty of achieving aims under real-world constraints.

4.1 Introduction

Human-induced climate change - droughts, heatwaves, fires - has already caused widespread harms to nature and people. With the observed increases in the frequency and intensity of climate and weather extremes the situation looks set to worsen (Portner et al., 2022). Policy makers are challenged to find effective ways to address these threats while keeping societies and economies afloat, and deliver on the quest for growth (FAO, 2022). Tropical forest

ecosystems represent a type of frontier, increasingly under threat of proximate and remote drivers of deforestation and degradation in this process. Yet they also play a particularly vital role in climate regulation, biodiversity conservation, and human livelihoods and well-being (Pacheco et al., 2021). The global policy discourse has acknowledged the need to have more integrated solutions and holistic approaches to halt, and reverse deforestation and forest degradation (Reed, Ickowitz, et al., 2020). One solution that is becoming increasingly popular, and supported by the research community, donors and governments is the landscape and jurisdictional approaches (FAO, 2022; Pedroza-Arceo et al., 2022; Reed, Ickowitz, et al., 2020). Both approaches are seen as a potential alternative to traditional, sectoral, forest conservation and development strategies (Arts et al., 2017; von Essen & Lambin, 2021).

The jurisdictional approach has its origins from the landscape approach, Reducing Emissions from Deforestation and Degradation (REDD+), and sustainable commodity production (Boyd et al., 2018; Fishman et al., 2017; von Essen & Lambin, 2021). The main aim of a jurisdictional approach is to reduce, limit or address deforestation, and more broadly to secure the conservation of ecosystems. The theory is that this can be done by reconciling the multiple and competing land uses within a clearly defined area (e.g. government administrative area) (Boyd et al., 2018; Brandão et al., 2020; Houten & Koning, 2018; Reed, Ickowitz, et al., 2020; Stickler et al., 2018; von Essen & Lambin, 2021). The assumption is that a jurisdictional approach can deliver these aims through improved collective action so that the different stakeholders involved can agree on the common goals and deliberate acceptable losses, which in turn will better the alignment of policies for the jurisdictional approach (Chervier et al., 2020).

A review of the literature demonstrates a lack of empirical evidence in relation to understanding jurisdictional approach stakeholders' perspectives on what outcomes they consider is possible in the face of real-world constraints. Rather, empirical work has so far mostly focussed on the challenges faced, enabling conditions required and the frameworks applied to the jurisdictional approach (Fishbein & Lee, 2015; Fishman et al., 2017; F. J. Seymour et al., 2020; von Essen & Lambin, 2021). Perspective is used because most jurisdictional approaches have yet to progress through the entire theory of change (Boshoven et al., 2021; von Essen & Lambin, 2021). It is important as individuals can perceive the same situation in vastly different ways, and although perceptions are not always the truth, they are what the individual believes (Bennett, 2016). It is a form of evidence that is useful to understand and to be taken under consideration as it reveals different ways of "doing" or "seeing" things among individuals (Zabala et al., 2018). For this reason, it is important to consider and understand the anticipated outcomes for a jurisdictional approach by the stakeholders implementing it, as they have the strongest stakes in it. Hence, our research objective was to have a better understanding of the jurisdictional approach "outcomes". Specifically, we wanted to investigate the congruence between perspectives of jurisdictional approach stakeholders in relation to the pursued outcomes, with the added criteria of a 10-years' time range, and taking into consideration the real-world constraints.

For our research, we selected the Roundtable on Sustainable Palm Oil (RSPO)[28] Jurisdictional Approach to Certification (RSPO JA), which was conceptualised by the RSPO Secretariat[29] in 2015. This jurisdictional approach was selected for its influence, operationalisation, and

[28] RSPO certification is a global standard certifying the sustainability of palm oil production.
[29] The RSPO Secretariat is in charge of the day to day running of the RSPO, and services the RSPO members and RSPO's board of governors.

existence in a powerful commodity sector in a landscape of biological and cultural diversity that has been undergoing rapid and drastic land use change with the advent of oil palm, especially in Southeast Asia (Gaveau et al., 2016; Pacheco et al., 2021). The RSPO JA seeks to address what other interventions, such as REDD+ have failed, which is deflecting the powerful drivers of land use change (in this case, forest conversion into oil palm plantations), while taking into account the political-economy of developing countries to address such problems (Karsenty, 2021). This is done by addressing the limitations of certifying individual plantation units through certifying a jurisdiction to maintain its forest cover, support wildlife conservation, and improve local communities and plantation workers' wellbeing (e.g., decent living wages, proper housing), while creating sustainable and resilient businesses. The RSPO JA is completely voluntary. Three jurisdictions volunteered to pilot it: sub-national level in Sabah, a state in Malaysian Borneo; the district of Seruyan, Kalimantan in Indonesia; and at the national level in Ecuador. We focussed our research in Sabah because the state was identified as one of the most advanced of the jurisdictional approaches to supply chain sustainability, making it an interesting case study (Wolosin, 2016).

4.2 Case Study Context

We present a short description of how palm oil is governed in Malaysia (federal versus state), the importance of palm oil to Sabah's economy, and the reasons Sabah adopted the RSPO JA. We proceed by giving a summarized version on how the RSPO JA certification can be achieved, followed by briefly describing the policies in Malaysia/Sabah, and corporate commitments that can help Sabah achieve its aim of 100% RSPO certification by 2025. Such

details are provided because the RSPO standards and the policies/commitments play a role in influencing the perspectives of stakeholders on the outcomes of the RSPO JA.

4.2.1 The Importance of Palm Oil in Sabah and Adoption of the RSPO JA

Oil palm is the main crop planted for agriculture in Sabah (1.543 million ha or 21% of Sabah land area as of 2020), and palm oil products are the most important export product for Sabah, making up 39% or USD 3.5 million of total exports in 2020 (Anon, 2021). Sabah possessed the largest cultivated oil palm land area in Malaysia until it was surpassed by Sarawak in 2017 (Anon, 2021). Starting from the late 1990s until 2019, Sabah was responsible for the highest quantity of crude palm oil production, reaching 5.03 million t in 2019 (equivalent to 25% of Malaysia's output). This made Sabah the foremost state in Malaysia for this sector (MPOB, 2019). Despite its importance, and Sabah being semi-autonomous from the federal government of Malaysia (i.e., land and forest is controlled by the state), palm oil falls under the control of the Malaysian Palm Oil Board - a federal government agency. According to the regulations set forth by the Malaysian Palm Oil Board Regulations 2005, anyone desiring to get involved in the palm oil industry must obtain a license from the agency. Licensing is required for the production, sale, purchase, and export and import of oil palm products, as well as for the construction of palm oil mills (NEPCon, 2017).

In 2015, Sabah made the announcement to adopt the RSPO JA, with the aim for the production of palm oil in the state to be 100% RSPO certified by 2025. Sabah made this decision because its economy largely depended on exporting palm oil, and it would made good business sense to move towards the highest standard of sustainability which will make it the preferred choice

for buyers seeking certified sustainable palm oil (Ng, Chervier, Ancrenaz, Naito, & Karsenty, 2022). By choosing RSPO standards, Sabah has taken a voluntary private certification scheme, and made it into a public policy instrument, which is not often done by any other country or subnational jurisdictions (Ng et al., 2022). One of the first actions taken by the Sabah government to achieve state-wide certification, was forming a multi-stakeholder body in 2016, to govern and lead the RSPO JA. This body was named the 'Jurisdictional Certification Steering Committee' (JCSC) and consists of representatives from three sectors; the government (n = 5), industry (n = 4), and civil society (n = 5), co-chaired by two government representatives, facilitated by a secretariat, and supported by two technical advisors. The Sabah government did not include the federal government in the JCSC, and this created tension between them. Following this, in 2017, the federal government announced their very own certification scheme, the Malaysian Sustainable Palm Oil (MSPO), and made it mandatory for all palm oil producers in Malaysia by 1st Jan 2020. As such, Sabah had to make the decision to go for RSPO or MSPO certification, which inevitably created complications on implementing the RSPO JA, slowing its progress, and also influencing the stakeholders' perspectives on the jurisdictional approach's outcomes.

4.2.2 Achieving RSPO JA Certification

To be RSPO JA certified, Sabah needs to adhere to the RSPO Standards (Principles and Criteria for the Production of Sustainable Palm Oil 2018) (RSPO, 2021). For that, it uses the principle of "upward delegation" by which the responsibility for the RSPO Standards is delegated to a higher-level institution, which is the Jurisdictional Entity[30] (RSPO, 2021). The essential RSPO

[30] An association that has legal standing in the eyes of the jurisdiction's law, established within a jurisdiction, and holds the RSPO certificate for that jurisdiction.

Standards as listed in the RSPO Jurisdictional Piloting Framework[31] that should be upwardly delegated to ensure that the jurisdiction is certified are in Table 13.

Table 13. Essential RSPO Principles and Criteria that need to be met in order to achieve RSPO JA certification

RSPO Principles	Criteria
Principle 4: Respect community and human rights and deliver benefits	*Criteria 4.1 – 4.8* This principle and criteria call for the respect of human rights. It prohibits plantings for oil palm established on local peoples' land where it can be demonstrated that there are legal customary or users' rights. Free, Prior Informed Consent (FPIC)[32] must be given first.
Principle 6: Respect workers' rights and conditions	*Criteria 6.1 – 6.7* This principle and criteria prohibit any form of discrimination towards the workers. Pay and conditions for oil palm plantation workers must always meet the legal or industry minimum standards. No child can be employed and there should be no forms of forced or trafficked labour.
Principle 7: Protect, conserve, and enhance ecosystems and the environment	*Criteria 7.7, 7.11 and 7.12* This principle and criteria forbid new planting on peat after 15 November 2018, the use of fire in the preparing the land for planting, and land clearing that cause deforestation in High Conservation Value (HCV)[33] and High Carbon Stock (HCS)[34] forest. For land clearing since November 2005, it should not damage primary forest or any area required to protect HCVs. Land clearing since 2018 should not damage HCVs and HCS forest.

Source: (RSPO, 2018, 2021)

[31] This document provides guidance for a jurisdiction to be certified following RSPO standards.
[32] FPIC is the right of indigenous people and other local communities to give or withhold their consent to any project affecting their lands, livelihoods and environment (Colchester, Chao, Anderson, & Jonas, 2015).
[33] A HCV is a biological, ecological, social or cultural value of outstanding significance or critical importance. The HCV approach is used widely in certification standards for forestry and agriculture (Brown et al., 2017).
[34] The HCS approach is used to distinguish forest areas for protection from degraded lands with low carbon and biodiversity values that may be developed.

Besides meeting RSPO Standards, the jurisdiction will also need to meet key requirements on its systems and landscape level performance, that is specified in the RSPO Jurisdictional Piloting Framework. Indicators for its system performance and landscape performance are given in three steps (see Appendix F). As of October 2022, Sabah is currently still in Step 1, as it has met some of the indicators (e.g., multi-stakeholder group which is the JCSC established, and government produced a statement of intent for 100% RSPO compliance), and is progressing on others (e.g., formulating procedures for FPIC, have an indicative HCV and HCS map of Sabah, conduct a legal gap analysis of difference between RSPO Standards and Sabah's laws).

4.2.3 Policies in Malaysia/Sabah that Support Achieving the Standards of the RSPO JA

4.2.3.1 Mandatory MSPO Certification

The MSPO standards were developed by the Malaysian federal government, under the purview of Malaysian Palm Oil Board, and administered by the Malaysian Palm Oil Certification Council. In 2019, the Malaysian government started a review process of the MSPO addressing some of its previous weaknesses (e.g., stricter criteria for deforestation, adding in HCV) and completed it in 2022. The revised MSPO Principles and Criteria 2022 do complement the RSPO Standards in achieving RSPO JA (see Appendix G for MSPO Principles and Criteria that complements RSPO Standards). In Sabah's case, because the announcement of mandatory MSPO certification came after the RSPO JA, the state made the decision to go for dual certification. However, the certifications are led by different bodies; RSPO JA by the JCSC (entirely state led), and MSPO by Malaysian Palm Oil Board and Malaysian Palm Oil Certification Council.

4.2.3.2 Sabah state policies that complement the RSPO JA

The Sabah Forest Policy 2018 commits Sabah to sustainable forest management, maintaining 50% of Sabah's landmass under forest reserves and tree cover, to have not less than 30% of Sabah under totally protected areas by 2025, and to certify all forest reserves in stages (SFD, 2018). These commitments will assist in reaching the RSPO JA goal of maintaining forest cover and supporting wildlife conservation at the landscape level. While the Sabah Development Corridor Blueprint 2.0 (2021-2030), reiterated Sabah's commitment to sustainable production and consumption particularly to facilitate and incentivize the sustainability certification of oil palm plantations.

4.2.3.3 Corporate commitment that support the RSPO JA

Corporates play an important role in halting agriculture-driven deforestation as 60% of global palm oil trade is covered by no deforestation commitments (Buchanan et al., 2019). One of the most prominent initiatives driven by voluntary corporate commitments is the No Deforestation, No Peat, No Exploitation that started in 2013 (Buchanan et al., 2019). No Deforestation, No Peat, No Exploitation is a palm oil sourcing policy that requires suppliers to refrain from clearing forest and peatlands, as well as not to exploit workers and communities, and respecting their land rights through FPIC. As of April 2020, about 83% of large companies in the global palm oil supply chain in Indonesia and Malaysia have adopted this commitment (ten Kate, Kuepper, Piotrowski, Steinweg, & Rijk, 2020).

4.3 Methodology

Q-methodology was applied in this research owing to its strengths in providing clear, structured and holistic appraisal of the multifaceted nature of stakeholder subjectivity (Zabala et al., 2018). It has been used widely in the field of natural resource management to understand perceptions (Astari & Lovett, 2019; Buckwell et al., 2020; Carmenta et al., 2017; Langston et al., 2019). Q-methodology is proven to be useful in conflict resolution, where in our case, it will help identify conflicting views regarding the outcomes of the RSPO JA. It can also identify, sometimes unanticipated areas of consensus in views of seemingly opposing stakeholders, which potentially inform starting points for effective dialogue (Zabala et al., 2018). Q-methodology can be divided into four stages: research design, data collection, analysis, and the interpretation (results) (Watts & Stenner, 2012; Zabala et al., 2018).

4.3.1 Research Design

We first identified the 'instruction' which speaks directly to our research question: "What should be the outcomes of the jurisdictional approach in the near future (10 years' time), taking into consideration the real-world constraints that you are familiar with?". We added in the two criteria of timeline and considerations of real-world constraints because we wanted the answers to be specific, and for it to not be an idealized, theoretical wish list.

The next step is creating a concourse of statements (Q-set) that contains expressions of all the perspectives that describe the outcomes that exist (Watts & Stenner, 2012; Zabala et al., 2018). The potential statements were drawn from interviews with the current and ex-JCSC members,

and with government, civil society or researchers working in Sabah that are knowledgeable on the RSPO JA (n=29). These interviews were conducted in 2020 and 2021. We also included secondary sources from reports, journals, the policies from Sections 2.2 and 2.3 and the RSPO theory of change (see https://rspo.org/impact/theory-of-change).

We determined a list of 29 statements in our final Q-set. We piloted the statements with five respondents, who were not part of the research but familiar with the jurisdictional approach, to ensure that the statements made sense, and if we missed out listing any important outcomes. After the testing, adjustments were made. The 29 statements were arranged accordingly to five themes of the jurisdictional approach outcomes: economy, environment, governance, plantation workers' welfare and smallholders' welfare.

4.3.2 Data Collection

Our respondents were typically divided into two categories; (1) those that were and still are part of JCSC (ex-members, current members, and the non-members but who are actively participating in it because they are the secretariat and technical advisors) (n=14), and (2) those that that are familiar with the jurisdictional approach concept, but are non-members who do not participate in the JCSC meetings (civil societies, research institutions, and business and industry) (n=12). They were asked to rank the 29 statements over a forced normal distribution grid with columns called a Q-sort. The Q-sort used for this research is a simplified bell-shaped with a nine-point distribution, from strongly disagree (-4) to strongly agree (+4). We conducted 26 Q-sorts, and the number of respondents from each sector are found in Table 14. In Q-methodology, the sample of respondents does not need to be large or representative of the population, but it must be diverse, which we achieved (Zabala, 2014).

Table 14. The Q-sort respondents and the sectors they belong to

Category	No. of online interviews	No. of f2f interviews	Total no. of respondents/Q-sorts
Civil society	7	5	12
Business and industry	4	1	5
Others (non-JCSC member but participate actively in the meetings)	1	1	2
Government	1	4	5
Research institution	1	1	2
Total	14	12	26

The Q-sorting was conducted between February and March 2022. It was done face to face and online, because of the Covid pandemic. For face to face, statements were placed directly on to a physical grid. We used easy-HTMLQ (https://github.com/shawnbanasick/easy-htmlq) for the online sorting, where the main researcher guided the respondent through the whole process using the Zoom platform. During the Q-sorting, sometimes there would be dialogues between the researcher and the respondent on the person's choice of ranking with each statement, which were noted down for interpretation of the factors. Once the Q-sorting was completed, the respondent will be interviewed to discover why they have sorted the statements as they have, especially for those few placed at the most extremes of the grid. Respondents were asked to give their personal views (as opposed to that of their institution), and were assured confidentiality. Therefore, when reporting the results, the respondent identities were purposely kept vague, and have no details of their background, other than which sector they belong to.

4.3.3 Q-analysis

We followed the criteria for analysis outlined by Watts & Stenner (2012). An open software Ken-Q Analysis (https://shawnbanasick.github.io/ken-q-analysis/#section1 Version 1.0.7) was

used for our statistical analysis. Initially, we extracted eight factors using Principal Component Analysis. These eight unrotated factors indicates the initial association of each Q-sort with each factor. Factor extraction summarizes all Q-sorts (which are the individual responses) into a few representative responses that we call "factor". After the initial extraction of factors, the next step is to decide how many factors to keep for rotation. We chose to keep three factors by accepting those factors that have two or more significant factor loadings at the 0.01 level following extraction, and using the Humphrey rule, "*a factor is significant if the cross-product of its two highest loadings (ignoring the sign) exceeds twice the standard error"* (Brown, 1980; Watts & Stenner, 2012). Factors 1 to 3 accounts for 43% of the total study variance, and according to Kline (1994), anything within the region of 35-40% or above would ordinarily be considered a sound solution on the basis of common factors. Varimax was used to rotate the three factors. Respondents were assigned into factors with a p-value of<0.05, using Ken-Q Analysis's auto-flag function. However, we manually flagged one respondent (OT7) (see Appendix H for the factor loadings) as that respondent was one of those that came up with the idea of the RSPO JA and therefore, that person's opinion on the outcomes is important.

4.4 Results

Of the 26 respondents, 21 loaded into three factors. Eights respondents loaded onto Factor 1, five onto Factor 2 and eight onto Factor 3 (Appendix H). There is a low correlation between all three factors: -0.2284 between F1 and F2, 0.2932 between F1 and F3, 0.1877 between F2 and F3. The low correlation shows that the factors are distinct (Webler et al., 2009). Table 15

shows the factor arrays (the ideal Q-sort) for each of the three extracted factors. We use the factor scores and Z-score[35] for interpretation of our results.

[35] The weighted average of the scores given by the flagged Q-sorts to that statement (Zabala, 2014)

Table 15. The three factor arrays arranged according to jurisdictional approach outcome's themes

Theme	Statement No.	Statement	Factor 1 – Favouring the environment and human rights group		Factor 2 - Favouring the economic and environment group		Factor 3 – The pragmatic group	
			Factor score	Z-score	Factor Score	Z-score	Factor Score	Z-score
Economy	23	The jurisdiction will be able to sell its agricultural products with premium price	0	0.015	2	0.881*	0	0.002
	25	**Preferential sourcing agreements will be secured between the jurisdiction's supplier and buyer companies outside of the jurisdiction**	0	0.542*	**4**	**1.994**	**4**	**1.544**
	2	The cost to obtain sustainable certification for agriculture commodities will be reduced	-2	-1.044	1	0.251	1	0.596
	15	The jurisdiction will be a preferred choice for foreign investments	0	-0.188	3	1.507	3	1.29
	3	Business risk for the downstream industry will be reduced as the supply will be "deforestation free"	-2	-0.952*	3	1.248*	0	-0.036*
Environment	**1**	**Zero gross deforestation (conversion of natural forest cannot be offset by reforestation) will be achieved**	**-4**	**-1.379**	-1	-0.382	-3	-1.048
	28	Deforestation will be reduced inside and outside Forest Reserves / Estates	0	0.348	-1	-0.609*	1	0.296

	10	Deforestation will stop inside Forest Reserves / Estates but can continue outside such areas	-1	-0.649*	1	0.44	0	0.034
	17	Land users will accept that sustainable agricultural practices is the norm in the jurisdiction and accept such practices	2	0.927	1	0.556	0	-0.214*
	22	**The jurisdiction will be carbon neutral**	**-4**	**-2.097***	0	-0.318*	-3	-1.341*
	14	**There will be no more forest conversion for new plantations**	0	-0.249	0	-0.253	**-4**	**-1.955***
	9	**Crop expansion on HCVs, biodiverse areas and peatland will cease**	**4**	**1.545**	**4**	**1.835**	0	-0.054*
	19	**Zero net deforestation (conversion of forest is allowed in one area as long as an equal area is replanted elsewhere) will be achieved**	-1	-0.371*	2	0.721*	**-4**	**-1.382***
	8	The landscape will contain an adequate quantity and configuration of habitats to protect native biodiversity (e.g., wildlife corridors)	3	1.125	-2	-0.746*	3	1.105
	21	The agricultural industry will fund forest conservation efforts (e.g., forest restoration)	-3	-1.272	-1	-0.66	2	0.818*
	7	Forest fires and haze will be reduced	-3	-1.234	-2	-0.692	2	0.881*
	16	**The landscape will continue to provide crucial ecosystem services**	3	1.012*	0	-0.368*	**4**	**2.176***
Governance	20	Incentives will be given to land users that prioritise the activities that support the jurisdictional approach (e.g., tax reduction for not converting forest)	-2	-0.977	-3	-0.909	-2	-0.622

	18	FPIC will be required by law in the jurisdiction	3	1.029	2	0.66	1	0.073
	6	A clear land-use map indicating areas for future development and areas for conservation will be adopted and translated into law	1	0.62	0	0.117	-1	-0.579
	11	Governance mechanisms will be in place to ensure concerted land use planning	1	0.816*	-2	-0.871	-1	-0.278
	4	The jurisdictional approach will be institutionalised within formal governance structure	1	0.805	3	1.389	-2	-0.873*
Plantation workers' welfare	24	**Labour and living conditions of plantation workers will be improved**	**4**	**1.299**	1	0.634	3	1.401
Smallholders' welfare	26	Smallholders will be compensated by the government for the loss of cultivated area onto which they might have otherwise expanded	-3	-1.228	-1	-0.644	-1	-0.43
	27	Smallholders will have equitable access to critical natural resource stocks (e.g., clean water)	-1	-0.384	-3	-0.924	-3	-1.222
	5	Smallholders will increase their technical capacities in agricultural practices	2	0.945	0	-0.367*	2	1.024
	12	**Smallholders will have the right to convert forest outside of Forest Reserves / Estates into plantations for their livelihoods**	-1	-0.722*	**-4**	**-1.828***	1	0.173*
	13	**Land tenure rights of smallholders will be clarified**	1	0.798*	**-4**	**-1.42***	-1	-0.379*
	29	Smallholders will be given the option to practice alternative livelihoods that will prevent them from converting forest	2	0.922*	-3	-1.244	-2	-1

Note: Distinguishing statements are noted for each factor with a * if significant at $p<0.01$. Distinguishing statements are significantly different compared to other factors. Although not always on extreme ends of the scale, they are important for understanding a certain perspective. Sentences in **bold** are the characterizing statements, which are statements that scored the highest or lowest in a certain factor.

4.4.1 Factor 1 – Favouring the Environment and Human Rights Group

Factor 1 accounts for 17% of the variance. This factor thinks that benefits to the environment and plantation workers'[36] welfare will be the main outcomes of the jurisdictional approach. Respondents in this factor do not favour the economic outcomes for the jurisdictional approach.

Factor 1 displays strong agreement that the jurisdictional approach outcomes should be "Crop expansion on HCVs, biodiverse areas and peatland will cease" (+4/1.545). Respondents here felt that this is the most likely outcome, as most large companies in the global palm oil supply chain have committed to the No Deforestation, No Peat, No Exploitation, and that MSPO do not allow it in most circumstances (refer Appendix G). One respondent though voiced the concern that some licences have been already given out for palm oil activities in forest reserves that could be HCVs and it is difficult to go back on the license agreement. Factor 1 also thinks that the jurisdictional approach outcomes should be "The landscape will contain an adequate quantity and configuration of habitats to protect native biodiversity" (+3/1.125). Those that are optimistic for this statement felt that Sabah is already going on the right direction with this, especially with the almost ready HCV/HCS map that was produced for the RSPO JA.

[36] Employees of the plantation, which include migrants, contract workers and casual workers (RSPO, 2018).

The other statement that Factor 1 is in strong agreement with is "Labour and living conditions of plantation workers will be improved" (+4/.299). One respondent said that "*This could be one of the strongest selling points, by telling the world that when you buy our palm oil, you know for sure that it does not come from child labour and that the workers are treated well"*. The other statement that has to do with the rights of the local communities, where respondents agree that the jurisdictional approach outcome should be is, "FPIC will be required by law in the jurisdiction" (+3/1.029). There are two opinions on this, (i) some respondents think that elements of FPIC are already embedded into the local laws, and that is why it scored highly; and (ii) some felt that FPIC is one of the most crucial criteria for the RSPO JA to work, and therefore, it must be an outcome. Respondents in Factor 1 also ranked the smallholders' welfare statements "Smallholders will increase their technical capacities in agricultural practices" (+2/0.945), and "Land tenure rights of smallholders will be clarified" (+1/0.798) higher compared to Factor 2 and 3. Like FPIC, some respondents felt that increasing the technical capacity of smallholders is a must for an outcome, as one respondent said, "*they need incentives to become certified*".

Factor 1 is in strong disagreement that the jurisdictional approach outcome would be "Zero gross deforestation will be achieved" (-4/-1.379) and "The jurisdiction will be carbon neutral" (-4/-2.097). Respondents felt that both outcomes were unrealistic. For the carbon neutral outcome, respondents indicated that deforestation is not the only activity emitting carbon, but it would also need more effort in the energy and transport sector, which is out of the RSPO JA scope.

4.4.2 Factor 2 – Favouring the Economic and Environment Group

Factor 2 accounts for 13% of the variance. This factor thinks that benefits to the environment and economy of the state will be the main outcomes of the jurisdictional approach.

Factor 2 displays strong agreement that the jurisdictional approach outcomes should be, “Preferential sourcing agreements will be secured between the jurisdiction's supplier and buyer companies outside of the jurisdiction” (+4/1.994). One respondent said, “*This is really what we are hoping for. It is easier to have an agreement with the whole state instead of sourcing from individual companies for certified sustainable palm oil*”. This factor scored positive for all the statements in the economy theme, indicating that the respondents here think that the jurisdictional approach outcomes should benefit the state’s economy. The statements in the economy theme that ranked higher than Factors 1 and 3 are “Business risk for the downstream industry will be reduced as the supply will be "deforestation free"” (+3/1.248), and “The cost to obtain sustainable certification for agriculture commodities will be reduced” (+1/0.251).

Similar to Factor 1, Factor 2 also strongly agrees that the jurisdictional approach outcome should be “Crop expansion on HCVs, biodiverse areas and peatland will cease” (+4/1.835). The reasons given were alike with Factor 1. One respondent added that “*This is the one very likely outcome for the jurisdictional approach, and in the palm oil growers’ perspectives, this is very achievable*”. For governance, this is the only factor that scored highly, with “The jurisdictional approach will be

institutionalised within formal governance structure" (+3/1.389). One respondent has a strong opinion on this, saying, "*This must happen first. As long as there is no formal structure the RSPO JA will not be able to move"*.

Factor 2 does not think that the jurisdictional approach outcomes will benefit smallholders. As such, statements on smallholders' welfare were strongly disagreed; "Land tenure rights of smallholders will be clarified" (-4/-1.42) and "Smallholders will have the right to convert forest outside of Forest Reserves / Estates into plantations for their livelihoods" (-4/-1.828). A respondent said that "*The state has the power and the law on their side to give out land titles or prevent any types of land use from happening. The smallholders do not have the power to do so*". Other statements pertaining to smallholders that scored negative highly are, "Smallholders will have equitable access to critical natural resource stocks" (-3/-0.924) and "Smallholders will be given the option to practice alternative livelihoods that will prevent them from converting forest" (-3/1.244).

One out of the five respondents in Factor 2 (OT 19) was bipolar[37] to this factor, most notably concerning the person's opinion with the economic benefits that the RSPO JA will bring to the state, where the economic outcomes statements scored negatively; "The jurisdiction will be able to sell its agricultural products with premium price (S23/-4), "The jurisdiction will be a preferred choice for foreign investments" (S15/-3), and "Preferential sourcing agreements will be secured between the jurisdiction's supplier

[37] This is when a factor is defined by both positive and negative loading Q-sorts. A Q-sort that loads significantly at the negative end represents an opposing viewpoint to those Q-sorts that load positively on the positive end (Watts & Stenner, 2012)

and buyer companies outside of the jurisdiction" (S25/-3). This person believes that certified sustainable palm oil has already became a norm globally, so there is no reason that Sabah gets preference because other countries are doing it too.

4.4.3 Factor 3 – The Pragmatic Group

Factor 3 accounts for 13% of the variance. This factor shares similarity to both Factor 1 and Factor 2, but it has more of a pragmatic approach to what they think should be the jurisdictional approach outcomes.

Factor 3 shows similarity to Factor 2 in the economic outcomes, as like Factor 2, it displays strong agreement that, "Preferential sourcing agreements will be secured between the jurisdiction's supplier and buyer companies outside of the jurisdiction" (+4/1.544). A respondent from the business sector remarked, "*I personally think this is the most important outcome*". Factor 3 also agreed with Factor 2 for the economic outcomes of, "The jurisdiction will be a preferred choice for foreign investments" (+3/+1.29), and "The cost to obtain sustainable certification for agriculture commodities will be reduced" (+1/+0.596).

This factor also displays strong agreement for the environment outcomes with statements, "The landscape will continue to provide crucial ecosystem services" (+4/2.176), "The landscape will contain an adequate quantity and configuration of habitats to protect native biodiversity" (+3/1.105). This however is because

respondents think that Sabah already have the existing laws and policies to take care of landscape connectivity matters and therefore it is a low hanging fruit, which the RSPO JA can enhance, but will happen with or without it. Factor 3 shows similarity to Factor 1 for the two statements above, which also scored highly in Factor 1.

Factor 3 is the only factor that scored positively for "The agricultural industry will fund forest conservation efforts" (+2/0.818). Some of the respondents here wants some sort of tax levy to be implemented, where the money is place back into conservation (e.g., for forest restoration). For example, Sabah Forestry Department collects cess funds from companies operating oil palm plantations in it forest reserves amounting to USD 8.36 million in 2021 (SFD, 2021). The opinion is that this can be made compulsory for all industrial oil palm plantations in Sabah, like an atonement for converting the forest when they first started. Others in this factor is in the opinion that the agriculture industry is already funding conservation work, like setting aside wildlife corridors, done in partnership with government and civil societies.

Factor 3 scored mostly negative when it came to the outcome of halting forest conversion. Unlike Factor 1 and 2 that scored a +4 for statement, "Crop expansion on HCVs, biodiverse areas and peatland will cease", Factor 3 scored a neutral (0/-0.054), indicating that they are not optimistic on ceasing expansion in HCV areas. In fact, they think that "Smallholders will have the right to convert forest outside of Forest Reserves / Estates into plantations for their livelihoods" (+1/0.173), compared to the other factors that disagreed. Factor 3 strongly disagree that "Zero net deforestation will be achieved" (-4/-1.382), and that "There will be no more forest conversion for new

plantations" (-4/-1.955). One respondent said, "*Forest conversion will always happen!",* and another respondent said, "*This is my land, I can do what I want with it! Unless I get compensated*". Both respondents however explained their stands, that we need to be realistic, as land in Sabah has already been allocated for conservation, agriculture and development, so the authorities should plan their land use based on this allocation. Another point on being the pragmatic group, Factor 3 agree that "Deforestation will be reduced inside and outside Forest Reserves / Estates" (+1/0.296). But this is not so much because of the RSPO JA initiative, but rather, they reasoned that deforestation outside of forest reserves will definitely reduce because there is not much forest outside of forest reserves left to convert, and that 26% (soon to be 30%) of Sabah's forest will be locked up because of the state's policy to keep 30% protected areas.

4.4.4 Consensus Statements

Consensus statements are statements shared by all factors within a single score of each other, or those that do not distinguish between any pairs of factors, and is a potential starting point for engagements (Buckwell et al., 2020). There are four statements that all three factors *disagree* would be the outcomes of the jurisdictional approach. The first two are closely linked with each other and they are "Incentives will be given to land users that prioritize the activities that support the jurisdictional approach" (F1 (-3), F2 (-3) and F3 (-2)), and "Smallholders will be compensated by the government for the loss of cultivated area onto which they might have otherwise expanded" (F1 (-3), F2 (-1) and F3 (-1)). For incentives given out, one respondent explained that it is quite impossible for the government to reward all land users that support the RSPO

JA, and another said, "*The state is not looking into this at all, therefore it will not happen*". For smallholders' compensation, most respondents said this will never happen, and one cynical respondent said, "*If they ever do get compensation, it will take forever because of the bureaucracies*". The third statement, "Smallholders will have equitable access to critical natural resource stocks" (F1 (-1), F2 (-3) and F3 (-3) was also not an outcome most respondent think will happen. The last statement had to do with deforestation, "Zero gross deforestation will be achieved" (F1 (-4), F2 (-1), F3 (-3)). All three factors agreed that it will be quite impossible to achieve this target, as Sabah still has about 63% of its land area (or 4.679 million hectares) of forested area (SFD, 2021).

There are 2 statements that all three factors *agree* will be the outcomes for the RSPO JA. They are, "Labour and living conditions of plantation workers will be improved" (F1 (4), F2 (1), F3 (1)), and "FPIC will be required by law in the jurisdiction" (F1 (3), F2 (2), and F3 (1)).

4.5 Discussion and Conclusion

This research was conducted to understand stakeholder's perspectives on what they think should be the jurisdictional approach outcomes, with two criteria in place, which are that the outcomes must be realistic and it should be achieved by 10 years. Utilising the Q-methodology, this study revealed three different perspectives on the outcomes; which are Factor 1 "Favouring environment and human rights", Factor 2 "Favouring

economy and environment", and Factor 3 "The pragmatic group". Unlike the literature, whose jurisdictional approach's main outcome is to reduce, limit or address deforestation, and for the conservation of ecosystems (Boyd et al., 2018; Brandão et al., 2020; Houten & Koning, 2018; Reed, Ickowitz, et al., 2020; Stickler et al., 2018), we found that the most strongly featured outcomes that all three factors think will happen are on human well-being interests, with mixed perspectives towards the economic, environment and governance outcomes. We discuss these matters in the following sections. But before proceeding, we would like to point out that the main limitation to this study is that the Q-methodology takes a "snapshot" of the topic at the specific time the research is conducted. Therefore, if conducted again, perhaps like one year later, the expected outcomes could be different (Cross, 2005; Molenveld, 2020).

4.5.1 Jurisdictional Approach Expected Outcomes

4.5.1.1 The Jurisdictional Approach Outcomes that All Three Factors Agree Will Most Likely Happen

The outcomes that all three factors agree will likely happen are: (i) FPIC will be required by law in Sabah, and (ii) labour and living conditions of plantation workers will be improved. Both outcomes are deemed likely to happen because there were already initiated policy changes or available legislations independent from the RSPO JA that is under way or already implemented. This is a crucial institutional factor where a study done by Korhonen-Kurki, Sehring, Maria, & Di Gregorio (2014) showed that countries with already established legislations or policies on forest governance are more likely to achieve successful REDD+ outcomes. Buchanan et al.,

(2019) suggested that by building on current policies, and legislation, it will help avoid the perception that sustainability is somehow additional or beyond what governments should already be doing. On the other hand, if the state is to be truly transformational, stakeholders will need to think out of the box and do the "additional". This means not only relying on the already established policies, but be more innovative in making new policies for the RSPO JA to work.

In Sabah, the Land Ordinance 1968 has specific provisions to address the regulation of the native customary land rights, such as consent by the native owner is required before the person's land is sold to a non-native. The term "FPIC" though is not specifically mentioned in the ordinance. But because aspects of native lands are covered in this ordinance, some respondents think that this is counted as FPIC. Adding to the argument on why respondents are confident that FPIC will happen is that the RSPO and MSPO have specific principles and criteria on FPIC, and since Sabah intends to achieve 100% RSPO certification, and Malaysia made MSPO certification mandatory, it would be a likely outcome. Furthermore, the No Deforestation, No Peat, No Exploitation commitment have added to the confidence of the respondents that this outcome is well under way.

Violations of human rights in oil palm plantations have been one of the critical negative consequences of this business (Wahab, 2020). Among them are child labour, the use and abuse of illegal migrants and poor working conditions. There are also negative environmental externalities from palm oil production that can affect the workers, such as the overuse of agrochemicals causing pollution to their water source

(Qaim, Sibhatu, Siregar, & Grass, 2020). Matters concerning labour in Sabah are regulated under the Sabah Labor Ordinance (CAP.67). A report by TFT (2017) cite that one of the root causes of plantation workers' rights being violated is that there are gaps in the national laws and policies, and monitoring of its implementation, as it requires regulatory and policy changes which are the responsibility of governments. For this reason, with the implementation of the RSPO JA, which is adopted and led by the state, the mandatory MSPO certification, and the No Deforestation, No Peat, No Exploitation commitment, all three factors think that the labour and living conditions of plantation workers should improve.

4.5.1.2 Reducing and stopping deforestation as a jurisdictional approach outcome, what does it really mean to the stakeholders?

There is not much optimism when it comes to halting deforestation as an outcome of the RSPO JA. "Zero deforestation" target has many definitions (Brown & Zarin, 2013) and our research tried to get a better understanding on what the stakeholders think can be a realistic outcome for the jurisdictional approach, in stopping or reducing deforestation, which in the literature, is the main goal of a jurisdictional approach.

There is an overall agreement by the three factors that the jurisdictional approach will not achieve zero gross deforestation. In addition, respondents think that forest conversion will still continue for new plantations, but perhaps only for the larger corporations because they are politically connected, as Factor 1 and 2 disagreed that smallholders can continue to convert forest into plantations for their livelihoods. Zero deforestation targets (whether it is gross or net) is challenging to meet, and is seen as

inequitable when it cannot accommodate any expansion of infrastructure and agricultural production in native forest areas, especially in countries that depend on agriculture as their main economy (Brown & Zarin, 2013). For Sabah's case, even though this research is about the RSPO JA and palm oil, but because a jurisdictional approach considers the whole landscape for its land use planning, respondents think that even if forest conversion can be stopped for oil palm, other commodities can cause conversion (i.e., industrial tree plantations). Indeed, Sabah Forestry Department targets 400,000 ha of forest plantations by 2035, which will mostly be in Sabah's forest reserves that are designated for production (Bernama, 2022; Ong, Salleh, & Lohuji, 2020). A study by Aidenvironment in Indonesia, and Sarawak, Malaysia, showed that palm oil refiners have business partners in the tree plantation sectors that continue to convert forest, even though these refiners have subscribed to No Deforestation, No Peat, No Exploitation policies. As such, it suggests the palm oil refiners to adopt cross-commodity no-deforestation policies in order to address zero deforestation as whole (Kate et al., 2021), much like the Forest Stewardship Council's Policy for Association.

What is seen as more feasible by respondents from Factors 1 and 2 is that forest conversion can continue, but the crop expansion will not happen in HCV areas, high biodiversity forested areas, and in peatland. Factors 1 and 3 are also optimistic that Sabah's landscape will contain an adequate quantity and configuration of habitats to protect native biodiversity and that the landscape will continue to provide crucial ecosystem services. The optimism for the three statements above is attributed to the already existing policies that Sabah have on forest conservation, and that oil palm companies have committed to No Deforestation, No Peat, No Exploitation. The RSPO JA and the HCV map produced for Sabah in principle will change the common practice

of individual oil palm estates managing HCVs within their own boundaries (which are not viable in the long term for wildlife), to planning at an ecosystem-level approach for conservation (Jonas, Abram, & Ancrenaz, 2017). The landscape having adequate habitats for biodiversity is also found by Riggs et al. (2021) as a potential outcome for integrated landscape approach in Indonesia. The landscape will continue to provide crucial ecosystem services is suggested as an outcome by Fishman et al. (2017), because the jurisdictional approach will align multiple stakeholders around responsible commodity production which will lead to a more resilient natural resource base.

4.5.1.3 Incentives outside the jurisdiction needed

Preferential sourcing agreement, in particular supply chain commitments and long term contracts from buyers, were noted as one of the most important outcomes that should happen to attract a jurisdiction to move towards deforestation free commodity production (Boshoven et al., 2021; Buchanan et al., 2019; Paoli et al., 2016). This is seen as more important than selling the certified palm oil with premium price (Buchanan et al., 2019), but instead the jurisdiction hopes to attract investments and secure access to premium markets, such as from the European Union and North America (von Essen & Lambin, 2021). However, it should be noted that if there are cross-commodities leakages (and continued deforestation), some concerned oil palm buyers could decide to reduce their sourcing from Sabah, despite RSPO JA certification. Incentive does not only need to come from commodity sourcing agreement, but instead could include complementary sources such as producers gaining access to new markets because of the reputation it built as a sustainable production jurisdiction (Boshoven et al., 2021; von Essen & Lambin, 2021). It could

also create the confidence for a buyer to invest in that particular region because of its improved governance (Buchanan et al., 2019).

4.5.1.4 Compensation by the jurisdiction government is unrealistic

For the case of Sabah, all three factors do not think that the government will provide incentives to land users that prioritise the activities that support the RSPO JA. This in unlike other jurisdictional approaches, for example in Liberia where smallholders are given incentives for forest conservation, and in Acre, Brazil, that set up a System of Incentives for Environmental Services to support sustainable agricultural practices (Fishman et al., 2017). Chervier et al., (2020) and Denier et al. (2015) reported that the main contribution of jurisdictional approaches is developing a consistent framework of operational rules such as incentives and laws. But this was not seen as outcome for the jurisdictional approach in Sabah. Respondents' views were negative towards this statement because the government did not give any indications that Sabah is moving towards such a policy, and preferred to use a top-down approach.

In addition, all three factors are sceptical that smallholders will be compensated by the government for the loss of cultivated areas onto which they might have otherwise expanded for oil palm. The respondents are in the opinion that because the land is a person's property (when it is owned legally), they can do whatever they want with it, and that the government would have no funds for such a high-cost project. This would bring up the issue of the RSPO certification Criterion 7.12, as an area cannot be certified if HCV or HCS forest is cleared for new planting of oil palm plantations after

15 November 2015. This matter needs to be looked into, as smallholders are often left little choice on where to farm because the more suitable land have already been taken up by larger plantation companies, and therefore, they need assistance to meet the RSPO JA standards (Fishman et al., 2017; Majid Cooke, 2012). Paying land owners to not convert their forest is something that could be done. Such programmes had been implemented in Costa Rica under its Payment for Ecosystem programme, where payment is offered to private land owners for reforesting, protecting forest or managing their forest, and in Mexico with annual payments given to landowners that maintain existing forest (Porras, Barton, Miranda, & Chacon-Cascante, 2013; Sims & Alix-Garcia, 2017).

4.5.1.5 Smallholders, will they benefit from the RSPO JA?

Jurisdictional approach is said to improve smallholders' welfare because they often cannot get certified because of cost and capacity constraints, and so, by implementing this approach, they will be helped by the government to do so (Birn et al., 2021; Buchanan et al., 2019; Denier et al., 2015; Fishman et al., 2017; Paoli et al., 2016; Stickler et al., 2018). However, our research showed otherwise when it came to stakeholders' perception of what could be better for smallholders. All three factors disagree that smallholders will have equitable access to critical natural resource stocks. This is because smallholders do not often get optimal land for palm oil cultivation and thus are pushed to marginal land, with problems of soil erosion, limited water resources, and poor water quality, which contributes to lower oil palm yields (Ogahara et al., 2022). The only outcome that the three factors were positive would happen would be that smallholders will increase their technical capacities in agricultural

practices. Respondents agreed that smallholders will improve their technical capacity because of the government's commitment in achieving MSPO certification. Programmes have been set up to assist smallholders in improving their practices (e.g. Sustainable Palm Oil Clusters by Malaysian Palm Oil Board) (Senawi, Rahman, Mansor, & Kuntom, 2019). On top of the MSPO certification, with Sabah committing to the RSPO JA, the Sabah government will have to put in much effort to help smallholders achieve RSPO certification. This along with local non-governmental organisations (e.g., Forever Sabah and Wild Asia) that work specifically with smallholders to assist them in getting RSPO certification, have helped them improved their capacity. Similar initiatives have also been done in Ecuador, where smallholders are grouped together with government sponsorship for capacity building (Birn et al., 2021).

Another smallholder's outcome that featured strongly in the jurisdictional approach literature is that land tenure rights of smallholders will be clarified (Denier et al., 2015; Ng, 2021; Pacheco, Schoneveld, Dermawan, Komarudin, & Djama, 2020; Paoli et al., 2016). This was unexpectedly not an outcome that came out strongly, which Factor 2 totally disagreed with. This is somewhat surprising, especially for the business and industry stakeholders, as they hope that by implementing the RSPO JA, it will provide a platform for resolving land issues in Sabah, which was identified as a challenge for smallholders to achieve certification (Ng, 2021). In Sabah, insecure land tenure is a reoccurring problem, where independent smallholders grow palm oil on lands they claimed under customary rights (Cooke et al., 2018). However, the state will only recognize the claim when such lands are titled under the Sabah Land Ordinance 1968 as Native Titles, which sometimes take many years to achieve because of the long and

bureaucratic process, and therefore, smallholders often cultivate oil palms on untitled land.

4.5.1.6 Improved governance in the jurisdictional approach

Statements on having a clear land use plan for future development, and governance mechanism in place to ensure a concerted land use planning did not feature strongly as an outcome for all three factors, even though it was identified as an outcome in jurisdictional approach literature (Fishman et al., 2017; Paoli et al., 2016; Piketty, Poccard-Chapuis, Garcia-Drigo, Gomes, & Pacheco, 2017). However, there was more optimism for the jurisdictional approach being institutionalised within formal governance structure, with Factor 1 and 2 ranking it positively. This was perhaps because there were already discussions among the JCSC members to draft an enactment regarding the powers of the JCSC members as a board leading sustainable palm oil development in Sabah. For the jurisdictional approach to withstand government changes and to ensure its sustainability, one of the suggested jurisdictional approach outcomes in the literature is that the jurisdictional approach is institutionalise within formal governance structure, which may include enacting new regulations for it (Denier et al., 2015; Paoli et al., 2016; Wardell et al., 2021). Chervier et al. (2020) also argued that direct outcome of a jurisdictional approach is the formalisation of a consistent and locally adapted rules. Respondents' perspectives towards improved governance of the jurisdictional approach as an outcome was not quite positive because the respondents did not think that the government understood the concept of the jurisdictional approach, and that there is simply not enough commitment by the state itself to do this. In Indonesia, commitment by provincial governments was cited as an

issue in jurisdictional approaches because of the lack of leadership, as well as the government's inability to coordinate between government institutions (Buchanan et al., 2019). In fact, this was one of the key difficulties reported of the jurisdictional approach by Wardell et al. (2021), which is creating new regulations that link different economic sectors and diverse societal demands in order to achieve the paradigm shift that is needed for the jurisdictional approach to happen.

4.5.2 Way Forward

Having shared understanding on the outcomes of the RSPO JA is important as that will build the critical support and the "win-win" situation needed among the stakeholders for them to continue collaborating and investing their time and resources in. The different perspectives of the stakeholders on the RSPO JA outcomes should be deliberated and communicated clearly so that everyone is on the same page. This is crucial as it would manage expectations locally and globally.

If the ultimate objective of the jurisdictional approach is to stop/reduce deforestation and obtain preferential sourcing, we would like to point out that perhaps there is a contradiction in certifying a territory with a commodity standard. One of the main issues in Sabah is the cross-commodities deforestation (tree plantations expansion at the expense of so-called degraded natural forests), and therefore, RSPO certification may not be the most appropriate for a jurisdiction. Since one of the objectives is to reinforce the acceptance of Sabah's palm oil on the international markets, cross-commodities leakages (and continued deforestation), could lead to some concerned

palm oil buyers to reduce their sourcing from Sabah, despite the RSPO JA. Instead, the more appropriate path to take for a jurisdiction would be a (net) "zero-deforestation territory" beyond a specific commodity chain. Attempts to design territorial certification standards are currently being worked out, notably in the Amazon (Pacheco et al, 2016). Combining a net zero-deforestation policy at state level and commodity chains certifications (that require gross zero-deforestation corporate policies, such as the HCS Approach adopted by the RSPO) would be a potentially effective policy. From there, the jurisdictional approach label could be reinforced by specific commodities' standards like RSPO.

CHAPTER 5

5.0 CONCLUSION

This thesis provided a better understanding and a likely view of how the jurisdictional approach (JA) brings about change. This was done by first setting the scene of deforestation and its proximate and underlying causes in Sabah; understanding the deforestation responses, especially the certification standards used to address them; and by answering the three objectives' questions. The main findings of the three objectives are summarised in Figure 8, along with providing an overall view of the contribution to filling up the gaps between theory and practice of the JA, which are explained in detail in the following sub chapters.

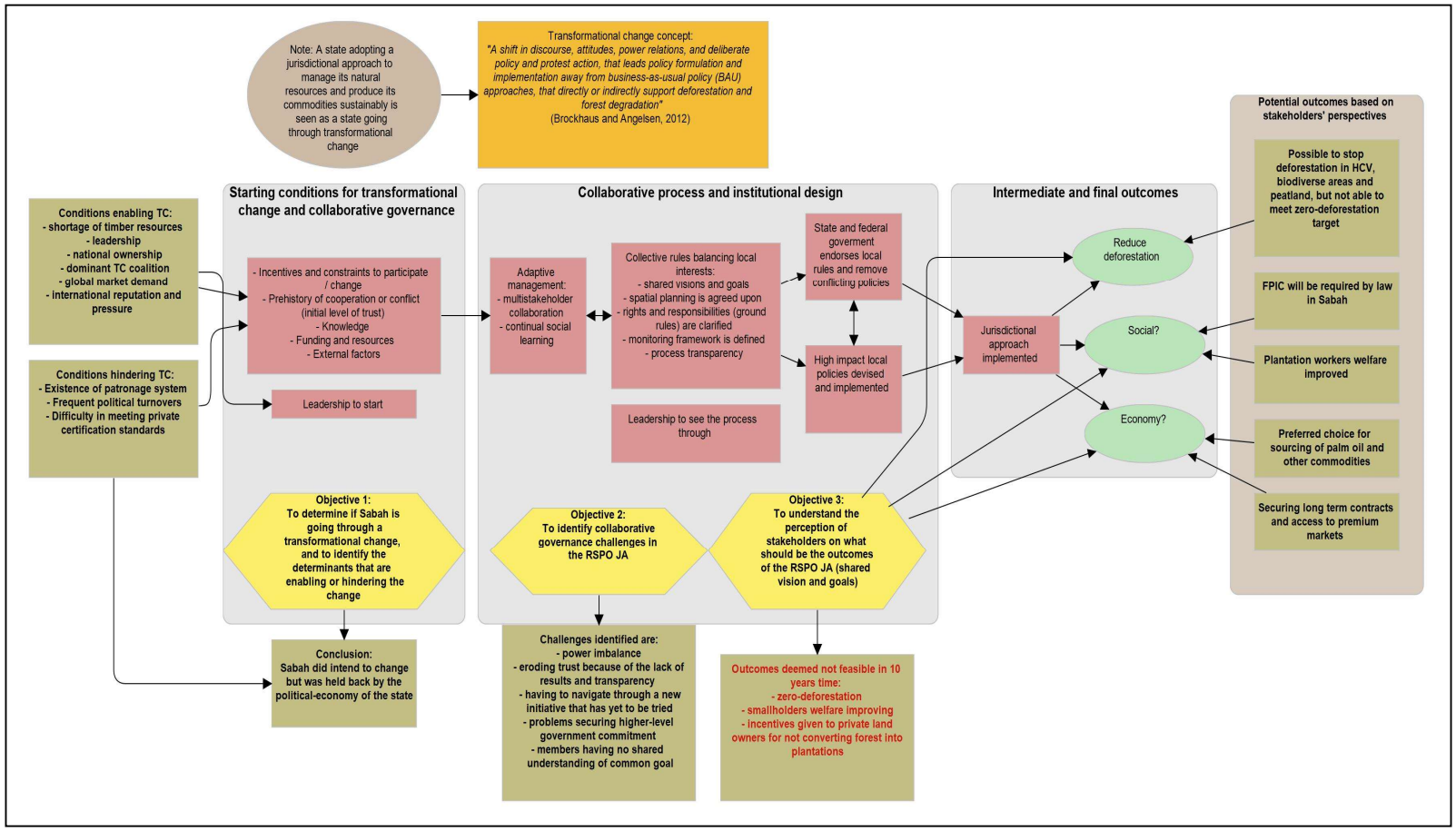

Figure 8. A summary of the main findings of the thesis and how it contributed to filling in the gaps for the jurisdictional approach theory of change

5.1 Objective 1: Main Findings and its Significance

The first objective is "*to determine if Sabah is going through a transformational change, and to identify the determinants that are enabling or hindering the change*". The hypothesis was tested by using Brockhaus & Angelsen (2012) REDD+ TC concept. The first objective covers the start of the theory of change, showing the emergence of the JA that is crafted through a longer process of institutional change, where I researched if Sabah is transforming, the reasons Sabah decided to transform, and its enabling or hindering conditions.

The conclusion was that Sabah did intend to transform because of two bold and innovative moves made. The first was it decided to adopt international voluntary private standards, instead of Malaysia's national standards, which were FSC instead of MTCS for timber certification, and RSPO instead of MSPO for sustainable palm oil production. The second was it volunteered to implement a new initiative, which is the RSPO JA. The main drivers for its change were local leaders' visions that shaped and supported the policies, and a dominant civil society coalition lobbying for it. But there were also other influences, one of them being the catalyst for the start of its ambitious policies, which is a shortage of timber resources, leaving the state no choice but to improve its forest management practices. External influences also played a role, although there was no strong injunction from the international community with the promises of big funding, unlike in other countries like Indonesia with the REDD+ funds. Instead, Sabah decided to change because of international pressure to keep a good reputation, and more importantly, the promises of economic returns through the

global market demand for sustainably produced palm oil. Sabah's decision to use RSPO instead of MSPO, could be a show of defiance towards the federal government, reflecting Sabah's sentiments of wanting to be autonomous. But this defiance is something that could not prove in this research, other than what was said in the media.

Despite the positiveness of Sabah's policy direction towards the TC, there were uneven implementations of its policies. The state struggles to achieve what it set out to do (i.e. only 22% of its forest are certified[38], and the RSPO JA's progress is slow[39]). The research findings indicated that even in situations where policy changes are mostly driven by internal factors, opposition to change arises and impacts policy implementation, which is typical of a nation that is dependent on its natural resources for its main economy. The reasons for the not full implementation are linked to the power relations in Sabah; which is the patronage system that is still prevalent in the state. Actors, often in seat of power and wealth, are afraid of losing their benefits from BAU activities. When policies supporting transformational change are introduced, these actors use their existing patronage links with the authorities to be exempted from the rules. Such practices are admittedly common in Southeast Asia (Fukuyama, 2013; Ingalls et al., 2018; Kong et al., 2019). Moreover, political transitions can impede policy implementation by causing delays or total abandonment of new policies. This is due to the need for the new government to be won over and supportive, or worse, the transformative policy changes introduced by the previous administration may be shelved. Lastly, Sabah faced difficulties in adhering to international benchmarks like

[38] The % is for both FSC and MTCS-PEFC certification as of 2019

[39] The progress is considered slow because it is still in Step 1 of the RSPO Jurisdictional Piloting Framework (there are 3 steps), after six years since it was initiated. Detailed explanation is given in Chapter 3.

FSC and RSPO, as it pursued a more ambitious approach. These high standards made it challenging for the state to implement its policies, a situation that was also observed by Geist & Lambin (2002) and McCarthy & Tacconi (2011) who analysed the political-economic aspects of deforestation. But even though international standards are harder to implement, the fact remains that it should not be the sole reason for the lack of implementation as a lot of it depends on the political will and leverages among the different actors at play, as explained above.

This research confirmed that the drivers enabling and hindering TC are similar to what was found in the literature (see Sub Chapter 1.8.1 Transformational Change (TC) for the list). However, this research used a unique way of deciding if Sabah is transforming, by first determining if the policies were ambitious and innovative by international standards (and as such worthy of being called transformational), and then by comparing the policies Sabah adopted with similar policies adopted by other states in Malaysia to gauge the level of ambitiousness, and finally by checking the level of implementation of its ambitious policies. Oftentimes in the REDD+ TC literature, none of the above are used but instead studies used discourses, attitudes, and power relations (as well as policy change away from BAU activities which I used) to determine TC. This method of determining TC is particularly useful when it is difficult to compare the before and after data on discourses, attitudes and power relations to proof the change.

5.2 Objective 2: Main Findings and its Significance

The second objective, "*To understand stakeholders' perspectives on the collaborative governance challenges of a jurisdictional approach, taking the case of the RSPO JA in Sabah, Malaysian Borneo*" used the concept of collaborative governance (CG). This is because the JA shares common principles with other CG strategies to landscape management such as it is multi-stakeholder, all stakeholders are supposed to engage in decision-making, it is formally organised, decision making is by consensus, and it is in the pursuit of meaningful and effective institutional integration and actor interaction across various ecological, social and political levels (Buchanan et al., 2019; Hovani et al., 2018; Seymour et al., 2020; von Essen & Lambin, 2021). The second objective covers the middle part of the theory of change (Figure 8), which is termed the "collaborative process". This is where the consensus building and negotiations takes place, before the policy development and decision making.

At the time of writing, the RSPO JA is in this "collaborative process" and the second objective researches on understanding the challenges of this process, using the perspectives of the stakeholders involved. Examples of the problems Sabah is facing in its RSPO JA collaborative process are four members of its committee had resigned, and that there is lack of progress in its workplan since its inception six years ago. The second objective found three different perspectives for the collaboration challenges: - the first, members view that they do not have the mandate to make decision; the second, members view there is non-accountability to the RSPO JA progress; and the third, members view that they do not have a common understanding of the goals of the

RSPO JA. These challenges identified are all inter-related. It shows that that different perceptions exist when it comes to power, where the less powerful members believe there is an imbalance although the more powerful members (government sector) do not. And as such, the less powerful members do not dare question the more powerful members when progress is slow (leading to non-accountability of the RSPO JA progress). This will lead to the trust among the members eroding if the collaboration does not produce results, and when it is not governed transparently with proper procedures in place. The perspective that the members do not have the mandate to make decisions has to do with securing higher-level political commitment, which is a CG challenge specific to a JA. The reason to this is because the political leaders and government officials are considered the more "powerful" actors in the RSPO JA policy network. They ultimately are the actors that can ensure that the RSPO JA is successful. However, political leaders may not want the RSPO JA to work because they are afraid of losing their patronage-client privileges and their vested interest in the palm oil business. As such, they can purposely delay the RSPO JA implementation by avoiding making decisions, or delaying activities.

The federal-state relationship also plays a role, as the state is "forced" to use MSPO or risk angering the federal government. Such predicament, "to use RSPO or MSPO" makes it difficult to carry out the initial plan to be 100% RSPO certified by 2025. To add to that, the RSPO JA is a new initiative, and therefore the state could not progress as it should, largely because nobody knew (including the RSPO secretariat that introduced the idea) how to achieve 100% RSPO certification at a landscape level instead of at a plantation unit. Adding to the challenges is that the stakeholders do not have a shared understanding of the common goals, which created frustration and

confusion among members (and thus leading to some resigning from the committee), and the slow progress. Questions of no more deforestation (in HCV and HCS areas) or even zero-deforestation (because of the NDPE commitment) in a landscape came up. Do the members have a shared vision of stopping deforestation and BAU practices? How can no more deforestation be achieved at a landscape level and is this even possible?

Objective 2 contributed to the literature in two discourses, the first on CG challenges and the second on JA challenges. To my knowledge, no one has studied the RSPO JA before using collaborative governance as a framework, and applying a mix qualitative – quantitative method, the Q-methodology. However, even when using a novel method, the results from Objective 2 showed that the identified challenges are similar to what was identified in the literature of CG and JA challenges (refer to Sub Chapter 1.8.2 Collaborative Governance (CG)). The results from Objective 2 also confirmed the conclusions made in Objective 1, which are on the challenges of obtaining political commitment to implement the RSPO JA, and that using a voluntary private certification like RSPO for the JA is perceived by some respondents as too high a standard to be met, because it could affect some powerful vested interest.

5.3 Objective 3 Main Findings and its Significance

The third objective, "*To investigate the different or similar perspectives of jurisdictional approach stakeholders on what should be its outcomes*" used literature

from the landscape and jurisdictional approaches. Like Objective 2, it also researches the middle part of the TOC (Figure 8), specifically on the "shared vision" of the collaborative process. Two criteria were used to find out the perspectives of stakeholders involved in the JA on what they think should be the outcomes of the RSPO JA, which were: - in ten years' time and it should be realistic. The two criteria were added to ensure that the answers are specific, and for it not be a wish list. The results from the third objective helped illustrate one of the findings from the second objective, which is that there is no "shared understanding" of the goals of the collaboration. Three different perspectives for the JA outcomes were found among the RSPO JA stakeholders. The perspectives varied in terms on what they think should be the outcomes for the environment, economy, governance and smallholders' welfare. For the environment, two perspectives expect that crop expansion will cease in HCVs, biodiverse areas and peatlands, while one perspective remained neutral as they think landowners have the right to convert forest even if it is on HCV areas, as it is on private land. While for the economic outcomes, two perspectives expect that preferential sourcing agreements will be secured between the jurisdiction's supplier and buyer companies outside of the jurisdiction, while one perspective remained neutral.

Notwithstanding, all three perspectives do have agreements on the JA outcomes that **will not happen** in **ten years' time**. One is that it is not feasible to achieve the "zero-deforestation" goal, which Sabah needs to do if it strictly follows the RSPO Principles and Criteria to be 100% RSPO certified. Second, they think that compensation and incentives will not be given to private land owners that avoid forest conversion into plantations, which is one of the JA outcomes mentioned in the literature (Chervier et al., 2020; Fishman et al., 2017). Lastly, they do not think that smallholders welfare

will improve in terms of having equitable access to critical natural stocks, and their land tenure rights be clarified, which were featured strongly in the literature as the outcomes for smallholders if a JA was to be applied (Denier et al., 2015; Ng, 2021; Pacheco et al., 2020; Paoli et al., 2016).

Interestingly, all three perspectives agree that the **most likely outcomes** are (i) FPIC will be required by law in Sabah, and (ii) labour and living conditions of plantation workers will be improved. These perspectives on the JA outcomes were very much influenced by the already established legislations, policies or commitments made in Sabah and Malaysia. These institutional factors created the enabling conditions for the outcomes to happen. Korhonen-Kurki, Sehring, Maria, & Di Gregorio (2014) had similar results where their research showed that countries with already established legislations or policies on forest governance are more likely to achieve successful REDD+ outcomes.

The last objective provided a better understanding of the commonly viewed outcomes for the JA, which are to reduce or limit deforestation, and when it is a "RSPO" JA, it also means no more forest conversion of HCVs and HCS areas (Boyd et al., 2018; Brandão et al., 2020; Houten & Koning, 2018; Stickler et al., 2018). The research helped clarified what was deemed feasible compared to these commonly viewed outcomes. The research found that forest conversion will continue in forest reserves (state owned) and privately owned land, but it will reduce (not stop) in HCV areas, high biodiversity forested areas and in peatland. As it is, almost 30% of Sabah's forest

are gazetted as protected areas[40] (and most of these are HCV areas in Sabah), and therefore, the possibility of them being converted is low. However, HCV areas found in Sabah's production forest[41] may be converted into industrial timber plantations, and even into oil palm plantations. Industrial timber plantations are part of the state's plan to revive the failing timber industry, while one of the reasons there is continued conversion of forest to oil palm plantations in production forest reserves is due to the vested interest of the political elite described earlier (i.e. the excuse given is that licenses have already been given out before the announcement of the RSPO JA). What was just explained in this paragraph, is the possibility of deforestation in **state-owned land**. It is different for **privately-owned land**, meaning land whose title has been given out to private owners or companies for agriculture purposes. Forest conversion will continue to happen in this privately-owned land. This is because the land has been alienated for agriculture purpose by the Sabah Land Ordinance 1968, and thus the owners legally have the right to work on them.

5.4 Overall Conclusion

My research contributed to understanding the JA on its expected outcomes, and the institutional/political challenges faced to operationalised this type of approach. It tells about how and why it happened and the challenges it faced to achieve its objectives, and suggestions to move forward. The results and conclusion of this research will help

[40] Classified as Class I, VI and VII Forest Reserve under Sabah Forest Enactment 1968, and as Parks under Sabah Parks Enactment 1984
[41] Classified as Class II Forest Reserve under Sabah Forest Enactment 1968

other regions interested in implementing the JA, as it will be an important resource to learn from, since the JA is gaining much popularity.

Sabah, Malaysia Borneo was used as a case study because the state had an interesting history of forest exploitation and unsustainable agriculture expansion, but tried to redeemed itself by adopting policies that were considered ambitious even by international standards. The start of the research (first objective) considered the possibility of Sabah going through a transformational change because the state adopted the RSPO JA. It questioned the reasons Sabah decided to transform, and if so, how is the state actually performing? The second objective examined the reasons why the RSPO JA's progress is slow, focussing on the challenges of the collaboration and its operationalization. The third objective exemplifies the challenges identified in the second objective by further clarifying on the JA's main goal of reducing or stopping deforestation, and what does it mean on the ground realistically.

This PhD research has proven that applying the JA in a tropical forested landscape is a complex exercise because there are many political-economy factors that can affect its implementation and success. Limited concrete results have been achieved to date after six years since its inception, with the state now suggesting that deforestation can continue. The research has shown that at each stage of the TOC, there are significant challenges that need to be taken into consideration before the JA is able to proceed to the next one, and reach its full potential. In theory, it is suggested that the JA is multi-stakeholder and decisions are made by consensus, but the fact remains that the political leaders and their clients are the more powerful actors, and therefore, such power

asymmetries need to be taken into account. This is because oftentimes, their interest can be at odds with the JA goals. This creates a situation where the JA thus lacks political will to move forward, which brings us back to one of the core criteria of the JA, which is the much-needed supporting policies or enabling conditions that only governments can give. This research also shows that implementing a JA is a long-term endeavour, and Sabah's stakeholders can be said to be "muddling through" it because no one really knows in reality how to make a JA work. Therefore, the JA should not be seen as a linear process, but an iterative one, where adaptive management needs to be applied when things are not moving. Lastly, trade-offs between people and nature will happen in a JA and this needs to be acknowledged by all parties. This inevitably affects the "zero-deforestation" or "reduce deforestation" goals of a JA, and how achievable it is.

5.4.1 Policy Recommendations

Based on the above arguments, one can ask how can the RSPO JA work in this landscape, when not all palm oil produced is guaranteed to be free from deforestation? The recommendation is for the state to own up that is it not possible to stop deforestation completely in the whole landscape, and clearly communicate it to the rest of the world. This means, the stakeholders in Sabah, need to come back to the drawing board, and decide what they want to achieve collectively (i.e. 100% RSPO certification? Stop at 100% MSPO certification? Stop clearing HCV forest?). Clarifying goals and objectives however may pose a risk, whereby if some members disagree with it, they may leave the collaboration to avoid being held accountable or as a matter of principle. In addition, Sabah can continue to help guide the RSPO

Jurisdictional Piloting Framework[42], by providing their experience on how to make it work. Sayer's Principle 4 for the LA is used here, which is that a landscape is multifunctional and therefore, trade-offs exist. Sabah can provide solutions in identifying these trade-offs, and feed it into the Framework and its own goals. However, there is the concern of the relative power of the actors involved in this type of trade-off solutions, and the potential exclusion of the less powerful actors (i.e. smallholders or marginalised groups). Safeguards need to be put in place where the voices of the minority are taken into consideration and are heard. Notwithstanding, this recommendation also depends on the acceptance by countries demanding for palm oil that is deforestation free (i.e. European Union).

Besides the renegotiation of the RSPO JA's goals, Sabah needs to also rethink its strategy especially if it wants continued access to the environmentally sensitive countries' markets (which initially was its main driver). A recommendation is to go for a "zero-deforestation territory". This is a step up from the RSPO JA. The reason this is recommended is because one of the main issues in Sabah is the cross-commodities deforestation (tree plantations expansion at the expense of so-called degraded natural forests), and therefore, RSPO certification may not be the most appropriate for a jurisdiction. Cross-commodities leakages (and continued deforestation), could lead to some concerned palm oil buyers to reduce their sourcing from Sabah, despite the RSPO jurisdictional certification. As such, combining a net zero-deforestation policy at state level and commodity chains certifications (that require gross zero-deforestation corporate policies) would be a potentially effective

[42] This framework was developed by the RSPO Jurisdictional Working Group to guide jurisdictions that aims to go for the RSPO JA

policy. From there, the JA label could be reinforced by specific commodities' standards like RSPO and FSC.

The "zero-deforestation territory" is ideal but it is not easy to achieve. One way to move it along, is to make it more compelling for the political leaders to want it. This means, consumer countries should not have a narrow view on just reducing deforestation, but instead view such initiatives more holistically. As it is, smallholders roughly produce 40% of palm oil globally, and they will continue to need the income from their plantations for their livelihoods. Banning palm oil completely will not help their case. Instead, these buyer countries should recognise and reward the efforts made by producer countries to improve, and help them achieve a more sustainable and equitable national economy. This would include preferential sourcing agreement, in particular supply chain commitments and long-term contracts from buyers, and buyers investing in the jurisdiction (i.e. funds for PES, REDD+, building capacity and infrastructure for sustainable agriculture-food systems). Only by recognising efforts, rewarding producer countries for good behaviour, and working together with them on an agreed common agenda, would a producing state make sustainable production of commodities as part of their broader institutional structure.

5.5 Limitations of the Study and Recommendations for Future Research

One of the limitations of the study is the interpretation of the data. The first objective used qualitative data, which depended on asking the right questions and correctly

interpreting the respondents' perspectives or views without biasness. I used to work for WWF-Malaysia in Sabah, and have collaborated in projects or sat in meetings with most of the respondents I interviewed. This may affect the findings as it could be subjected to some biasness because of my past affiliations. Notwithstanding, measures have been taken to address these limitations, by following guidelines in social science methodology textbooks such as pilot testing the research questionnaires, and cross-referencing the data collected with secondary data to validate the assumptions.

For the second and third objective, a mixed method was used; Q-methodology, which is part qualitative and quantitative. This provided a more systematic way in capturing respondents' perspectives and analysing it. However, the Q-methodology is not time sensitive and only captures the perspective of the respondent at the time the person is sorting the statements in the Q-sort. As such, the perspectives of this person can change, and they may sort the statements differently in a month or years' time. Additionally, for Objective 3, the question posed for the JA outcomes gave the criteria of 10 years' time and it should be based on reality. Therefore, the outcomes discussed in Objective 3 could be the intermediate outcomes, and not the final outcomes, as the JA is a lengthy process, and not many people are so far-sighted. The answers given could be cautious and perhaps unambitious, as respondents were asked to be realistic. However, I would like to highlight that if the respondents are in the opinion that Sabah cannot achieve zero-deforestation in 10 years' time, it is most likely that Sabah will not achieve zero-deforestation in 20- or 30-years times. This is because halting deforestation is a complicated matter, and if there is no intention to stop it now, there is no reason for the state to want to stop it in coming years.

Similar research on the JA outcomes should be conducted in 2025, which is at the end of the 10-years period of the RSPO JA. It would be interesting to understand the perspectives of the challenges at the end of the initiative, and what the stakeholders perceived could be achieved in 2021 compared it to what have already been achieved in 2025. The JA process is dynamic and thus is it important to document the whole process from the start to the end.

The third objective on the possible JA outcomes lacked the perspective of smallholders. To interview smallholders, it is necessary to meet them face to face in the plantations where they work, as they would be ill equipped to use the Zoom platform. But I was not able to do so because of the Covid pandemic. At the time when I was supposed to conduct my data collection, Malaysia was in a strict lockdown (late 2020, early 2021), and travel to my study site was not possible. No one could predict when the restrictions would end and therefore, I abandoned the idea of interviewing smallholders because of the time constraint to finish collecting data. As such, potential research for the future could be understanding the perceptions of smallholders on: - (i) if they are aware of the RSPO JA in Sabah, (ii) its dynamics with the MSPO certification, (ii) what they think would be the benefits or disbenefits, and (iii) how they think they can better participate in it.

The RSPO JA is being conducted in three pilot sites (Sabah, Seruyan and Ecuador) but this PhD only conducted research in just one site, because of limited time, resources, access to individuals, language, etc. Both Seruyan in Indonesia and Ecuador started the RSPO JA about the same time as Sabah. Therefore, it would be interesting to

compare similar studies with the other two sites on the challenges they face and what they think are the potential outcomes. After 2025, a comparison can also be made on the success for each site, and what were the drivers of its success. As the RSPO JA is considered a new initiative, the information obtained would add to the literature of using a voluntary and private certification standard as a public policy instrument. Such research is rare because there are not many jurisdictions that have done this before. It would also contribute to the understanding of the jurisdictional approach / landscape approach theory of change.

This PhD research was unable to study the identified CG challenges in depth because of time and resource constraint. One challenge suggested for more research which will lead to the better understanding of the JA collaborative process, is the power imbalance in the RSPO JA. This is proposed because all collaborative and multistakeholder governance involves power, and the use or abuse of power can affect its success (Morrison et al., 2019). A study can be conducted to understand the power dynamics of the collaboration (e.g. use a policy network analysis). Having insights of power dynamics is central to understanding the way a CG work (Brockhaus, Di Gregorio, & Carmenta, 2014). It will provide a better understanding on how stakeholders exercise power and influence through interactions in the policy processes, for such power can encourage or stop the policy changes. For example, when we know the power dynamics, we can use it as an advantage to move forward the agenda of the CG, such as utilising the various forms of power to improve transparency and accountability of the collaboration (Morrison et al., 2019).

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APPENDICES

Appendix A. Number of respondents according to sectors interviewed for the three objectives.

	Government	Civil Society	Business & Industry	Others (non-members of JCSC but who actively participate in it)	Research Institution	Total
No. of respondent interviewed for Objective 1	8	13	4	2	2	29
No. of respondent that conducted the Q-sort for Objective 2	5	4	3	2	0	14
No. of respondent that conducted the Q-sort for Objective 3	5	12	5	2	2	26

The above respondents were from:

Sector	Department / Organisation
Government	Sabah Forestry Department, Department of Agriculture, Environment Protection Department, Land and Survey Department, Natural Resource Office, Sabah Foundation
Civil Society	Forever Sabah, WWF-Malaysia, Hutan-Kinabatangan, UNICEF, PONGO Alliance, Sabah Environmental Trust, UNDP, Bringing Back Our Rare Animals (BORA), INOBU Foundation, Copenhagen Zoo, PACOS Trust
Others	RSPO Secretariat, JCSC Secretariat
Research Institution	Southeast Asia Rainforest Research Partnership (SEARRP), independent researcher from local university
Business and Industry	PPB Oil Palms, Sime Darby Plantations, Sawit Kinabalu, HSBC Bank, Wild Asia, Koperasi Landskap Kelapa Tawau

Note: (i) The respondents from the three objectives overlaps, and (ii) I did not specify the names of the respondent because I promised the respondents anonymity

Appendix B. Semi-structured questionnaire for Objective 1

Research topic:

An analysis of transformational change on forest governance and sustainable palm oil production using the jurisdictional approach: A case study in Sabah, Malaysia

Respondent information

Respondent number:

Name: Date:

Organization/Department: Was verbal consent given to be recorded: Y/N

Interview by: Zoom

The Questions

Easy question to put the person at ease	1. Opening question	Please tell me more about yourself and what you do.
Category	**Item no**	**Question**
Section 1 Confirmation questions Sabah's transformation	1. Confirmation of Sabah's transformation	Let me just define transformational change as how I understand it, "*It is a shift of paradigm that pushes policies and ground implementation on forest management and development away from business as usual such as on forest conversion. This also includes a shift in power and how decisions are made*".

		In your perspective, is Sabah moving towards the transformational change on reducing deforestation. Probe: - If yes, on which aspects do you think it is transforming? (e.g. *stance on policy issues, beliefs expressed, formal institution set up, who is in power (?), inclusive multi stakeholders (no dominance by one actor), information exchange*) - Do you see the RSPO JA as part of the process? - **If no, what do you think are the key steps the state should take?** - What remains to be done or improved? (e.g. *transfer of power, more transparency, information exchange, change in attitudes, better monitoring of indicators*, etc.)
	2. The start of the transformation (ask if they say yes Sabah is transforming)	In your perspective, when do you think Sabah started transforming towards reduced deforestation? (reconfirm the answers from above)
	3. Drivers of transformation	Can you let me know what made Sabah move towards this transformation?
	4. Policies that influenced the transformation process	Can you share your perspective of policies (past and present) that influenced Sabah's move towards the transformation? Probe: - Colonial policies? - Malaysia Plans? - Sabah Conservation Strategy 1992 – 2000 - Sabah Development Corridor: The Socio- Economic Blueprint 2008-2025 - Sabah Biodiversity Strategy 2012-2020 - Sabah Structure Plan 2033 (SSP2033) - Federal policies like the National Policy on Biodiversity 2016-2025
	5. SFM question (go to this question from #1 if they say no, Sabah is not transforming)	Sabah adopted the Sustainable Forest Management Policy in 1997. Would you see it as a move towards better management of its forest? Probe: - What about a move towards reduce deforestation? - What do you think were the key steps for them to improve their SFM? - What were the drivers to the SFM policy being introduced?
<u>Section 2</u> Confirmation questions on Sabah's	6. Why the RSPO JA was adopted	The RSPO JA is a very ambitious initiative by the state of Sabah.

decision to adopt the RSPO JA		Can you share with me your perspective on how the concept of RSPO JA in Sabah began?
	7. External factors that shaped JA	In your opinion, what were the external factors (e.g. global market demand) that influenced the decision for Sabah to go for the RSPO JA?
	8. Policies that shaped the JA	Can you share with me your perspective of the policies (present and the past) that shaped or encouraged the JA in Sabah? Such as the SFM 1997 policy.
	9. Structural factors	Based on your knowledge, are there part of Sabah's economy or institutional structure (e.g. the state's revenue, federal-state relationship, management structure, employment in the palm oil sector) that helped shaped the state to move towards JA?
<u>Section 3</u> Questions on successful implementation of the RSPO JA	10. Successful RSPO JA	Can you share with me your idea of what a successful RSPO JA mean, on the ground and at the governance level?
	11. Trade off	What are you ready to trade off to achieve this success? What are the consequences to this trade off?
	12. Milestones to be achieved	The whole JA is in the process of being developed and organised at the moment. In your opinion, during the process of setting up the JA what are the important milestones to achieve? -
	13. Barrier to the JA	Can you share with me what are the challenges that the JA is currently facing? How can it be solved/overcome?
<u>Section 4 (only for JCSC members)</u> Questions on the JCSC participation and interaction	14. Reasons for joining the JCSC	The Jurisdictional Certification Steering Committee (JCSC) is the multi stakeholder board for the RSPO JA. Can you tell me why your department/organization joined the JCSC?
Question targeted to SEPA, HSBC and UNICEF only	15. Reason for resigning from the JCSC	Can you tell me why your department/organization resigned from the JCSC? Probe: - What was the challenge? - What would it take for you to rejoin?
	16. Power	Can you share with me your perspective on who are the most influential stakeholders in the RSPO JA and in the JCSC?
	17. Actors interactions	Among the JCSC members, which member do you interact more with, inside and outside the JCSC meetings?

	18. Actors inclusiveness	Can you think of any other stakeholders/sectors that should be included in the JCSC? Or later on in the process?
	19. Successful collaboration	How do you think the collaboration could have been better?
	20. Factors / conditions	What do you think are the factors or conditions that will help facilitate a successful JCSC collaboration?
Final question 1	21. Anything else?	Is there anything else you would like to mention about Sabah's transformational change, the RSPO JA or the JCSC?
Final question 2	22. Snowball sampling	Do you have suggestions on who else I should interview to get a good perspective on transformational change and / or the RSPO JA?

Appendix C. Identified themes for collaborative governance challenges of a jurisdictional approach, and the sources for each theme

Theme	Sources
1) Trust When there is no trust or when a member has had negative past experience working with another member, the willingness to collaborate is attenuated. Members will need to invest more time and energy to re-build trust.	(Agrawal, 2014; Ansell & Gash, 2008; Bodin, 2017; Coleman & Stern, 2018; Emerson et al., 2012; Margerum, 2016; Memon & Weber, 2010; Olsson, Folke, & Berkes, 2004; J. Sayer et al., 2013) Interviews
2) Shared understanding When members have different understandings of the objectives and solutions, and there is no common language used in the collaboration, members will be less likely to commit.	(Adams et al., 2003; Ansell & Gash, 2008; Davies & White, 2012; Ingold & Fischer, 2014; Jones & White, 2022; Margerum, 2016; Reed, Ickowitz, et al., 2020; J. Sayer et al., 2013; Uetake, 2015; Ullah & Kim, 2020) Interviews
3) Power imbalance When there are differences in power to influence the goals and processes, such as experience, expertise, resources and even the power to delay, the effectiveness of the collaboration will be limited, and members will be wary of participating if they feel they are at a disadvantage.	(Arai et al., 2021; Jones & White, 2022; Kallis et al., 2009; Margerum, 2016; Morrison et al., 2019; Paoli et al., 2016; Purdy, 2012; Thondhlana et al., 2015; von Essen & Lambin, 2021) Interviews
4) Support from higher level government When leaders of the state do not provide the stamp of approval or are reluctant to do so, because they are used to a top-down approach (among many other reasons), members may be reluctant to commit because the group has no mandate to make decisions, to change policies, etc.	(Fish et al., 2010; Fishman et al., 2017; Hossu et al., 2019; Margerum, 2016; Paoli et al., 2016; von Essen & Lambin, 2021). Interviews
5) Unchartered territory When there isa lack of knowledge around implementing a new initiative (i.e. RSPO JA), and it being governed in a new way (i.e. collaborative governance vs top-down), the progress can be slow, and members may feel lost and unmotivated.	(Davies & White, 2012; Fish et al., 2010; Reed, Ickowitz, et al., 2020) Interviews
6) Leadership	(Ansell & Gash, 2008; Bodin, 2017; Davies & White, 2012; Emerson et al., 2012; Heikkila &

When there is no leader to start the collaboration, to sustain it and push for its outcomes, members will be lost and the collaboration will dissipate over time. In addition, there is need for diversity of leaders so as not to be too dependent on just one person.	Gerlak, 2005; Margerum, 2016; McIntyre & Schultz, 2020; Memon & Weber, 2010; Uetake, 2015; Ullah & Kim, 2020; Vodden, 2015). Interviews
7) Participant factors Members may not be effective or interested in the collaboration if the 'core business' in their own organisations are not the same as the collaboration's objectives, and when the anticipated cost of deliberation, and the time needed to deliberate, outweighs the benefits of collaboration.	(Fish et al., 2010; Jones & White, 2022; Margerum, 2016; Memon & Weber, 2010; Ullah & Kim, 2020; von Essen & Lambin, 2021). Interviews
8) Process transparency When members do not have confidence that the collaboration process is fair, equitable and open (e.g. have clear ground rules, a designated coordinator who maintains procedural integrity), they will quit for fear that the collaboration is used for private backroom deals.	(Ansell & Gash, 2008; Crona & Parker, 2012; Davies & White, 2012; Emerson et al., 2012; Paoli et al., 2016; J. Sayer et al., 2013; Sullivan et al., 2019; Uetake, 2015; Ullah & Kim, 2020) Interviews
9) Collective decision making Because decisions are made by consensus in a collaboration, the deliberative nature of the process can create a deadlock, which some members prefer, as it would maintain the status quo. In addition, members tend to avoid bringing up important issues that will provoke serious disagreements so that the collaboration remains on good terms.	(Kallis et al., 2009; Margerum, 2016) Interviews
10) Funding Collaboration involves transaction costs like time, money and staff resources to sustain its activities and interactions, while deliberations and obtaining the results take time. Unfortunately, funding is usually given within a short term, and funders often demand results prematurely. Therefore, the collaboration may end because of insufficient money to continue.	(Fishman et al., 2017; Margerum, 2016; Paoli et al., 2016; Vodden, 2015; von Essen & Lambin, 2021; Zanzanaini et al., 2017). Interviews

Appendix D. Factor loadings for each respondent's Q-sort

Q SORT	FACTOR 1	FACTOR 2	FACTOR 3
CV1	-0.1804	**0.5916**	-0.0596
BI2	-0.0811	-0.1409	**0.5376**
NM3	0.2505	**0.6837**	0.0628
GM4	**0.4561**	0.1706	0.0637
CV5	0.322	**0.6341**	0.1221
BI6	**0.8369**	-0.3103	-0.0106
GM7	**0.7985**	0.3183	-0.0307
NM8	**0.5402**	-0.1644	-0.0181
GM9	0.3151	0.3638	-0.4583
CV10	0.1811	0.0003	**0.5674**
GM11	**0.5488**	0.0712	0.4843
CV12	-0.2185	**0.7774**	-0.1392
NM13	0.1547	0.0005	**0.7533**
BI14	-0.1491	0.3732	**0.6612**
%EXPLAINED VARIANCE	18	17	15

Appendix E. The three factor arrays arranged by themes for each of the extracted factors

CG challenges category	Statement no.	Statement	Factor 1 – Stakeholder representation and mandate		Factor 2 – Accountability and power		Factor 3 – Unclear goals	
			Factor scores	Z-scores	Factor scores	Z-scores	Factor scores	Z-scores
Trust	8	We are suspicious of each other	-3*	-1.23	0	0.11	1	0.54
	14	We had bad experience working in the past	-1	-0.56	-2	-0.74	1*	0.36
Shared understanding	**7**	**We do not have the same level of understanding on the severity of the environmental problem**	**-4***	**-1.49**	3*	1.18	-1*	-0.52
	21	**The goals of the JCSC are too ambitious or unachievable**	2*	1.18	**-4***	**-1.87**	-2*	-0.95
	17	**We cannot agree on the JCSC common goals**	-2	-0.89	-2	-0.93	**4***	**1.56**
Power imbalances	27	Decisions are made by the more powerful members of the JCSC	-2*	-1.05	3*	1.14	0*	0.06
	22	Some members are afraid of making their opinion known as it would put them at a disfavour with the more powerful members	-2*	-0.76	0	0.25	0	0.04
	2	Some members voices are not heard	-3	-1.24	2*	0.56	-2	-0.91

Support from higher level government	13	Lack of recognition of the JCSC by higher levels of the government	3	1.18	1	0.48	3	1.1
	6	**Some members do not have the mandate to make the decisions**	**4***	**1.73**	2*	0.89	-1*	-0.38
Unchartered territory	29	The RSPO JA is new and therefore no one has experience in its process and implementation	3	1.48	2	1.01	3	1.35
	30	We have limited experience making decisions in a multi-stakeholder collaboration	-1	-0.69	2*	0.78	-3	-1.21
Leadership	**16**	**There is no clear leadership that can steer the JCSC**	0*	-0.01	-2*	-0.66	**-4***	**-1.59**
Participant factors	26	**Some members cannot give enough attention and time**	2	1.1	**4**	**1.44**	1	0.6
	18	**Important stakeholders are not sitting on the JCSC**	**4***	**1.72**	-3	-1.13	-1	-0.89
	19	Some organisations do not send the same person for the JCSC meetings	3*	1.3	0*	0.23	-2*	-0.98
	12	Potential benefits from the JCSC are just too long term and vague	0	-0.18	-3*	-1.5	0	0.28
	23	Our organisations' purposes are just too different	2*	1.01	-1	-0.42	-2	-1.01

	9	Some members are in competition with each other for funding or market access	-1*	-0.32	1	0.33	2	0.95
Process transparency	**1**	**The JCSC workplan lacks clearly defined goals and milestones to guide us**	-1*	-0.61	**-4***	**-1.82**	**4***	**1.72**
	25	**No accountability for the lack of progress of the workplan implementation**	0*	-0.07	**4***	**1.82**	1*	0.62
	24	Lack of processes/mechanisms on how to address conflicts among members	2	0.67	-2*	-0.78	3	1.07
	5	Lack of clear internal rules about how the JCSC should be governed	1*	0.04	-3*	-1.36	2*	0.94
	20	Lack of transparency on how decisions are made	-3	-1.07	-1	-0.58	-3	-1.19
	28	Lack of ability to adapt the JCSC workplan to changing circumstances and failures	1	0.05	1	0.36	2	0.88
	15	Scientific conclusions are not taken seriously and used to inform policy decisions in this collaboration	0	-0.24	-1	-0.33	-1	-0.61
Collective decision making	4	We tend to avoid discussing issues that will provoke serious disagreement	-2	-0.99	1*	0.51	-3	-1.33

	11	We do not have enough time to meet and deliberate on challenging issues during JCSC meetings	1	0.64	0	0.13	0	0.17
Funding	10	We cannot secure long term funding	1	0.59	3	1.37	2	0.85
	3	**Funds are used on unimportant activities**	**-4**	**-1.31**	-1*	-0.45	**-4**	**-1.55**

Note: Distinguishing statements are noted for each factor with a * if significant at $p<0.05$ and $p<0.01$. Distinguishing statements are significantly different compared to other factors. Although not always on extreme ends of the scale, they are important for understanding a certain perspective. Sentences in **bold** are the characterizing statements, which are statements that scored the highest (+4) or lowest (-4) in a certain factor.

APPENDIX F. RSPO's stepwise approach for jurisdictional approach certification requirements

	Step 1	Step 2	Step 3
System Performance Indicators	1. Multi-stakeholder group established with government mandate. 2. Statement of intent to achieve 100% RSPO compliance made public by government. 3. Plan developed for: a. establishment of the Jurisdictional Entity. b. relevant policies, system, procedures to support JA. c. spatial mapping of all producers, millers, refinery and crushers, HCV/HCS and other relevant information. d. database of information on producers, processors, and supply chain actors within the jurisdiction.	1. Jurisdictional Entity is legally established with a Multi-stakeholder Board in place. 2. Jurisdictional Entity Internal Control System developed. 3. Oil palm planted areas and land bank of all producers, millers, refineries and crusher and refinery facilities spatially mapped. 4. Database compiled on producers, processors, and supply chain actors within the jurisdiction. 5. Jurisdictional Entity becomes an RSPO member.	1. The Jurisdictional Entity Internal Control System is functioning. 2. Quality control system and policy framework in place. 3. Plan in place to establish Internal Grievances, Complaints & Appeals Mechanisms. 4. Financing viability and transparent accounting procedures in place. 5. Oil palm planted areas and land bank of Jurisdictional Entity members, and a detailed database required for RSPO certification in place.
Landscape Performance Indicators	Plan developed to conduct and/or develop jurisdictional level: 1. Procedures for FPIC and for recognition of land rights formulated. 2. Indicative HCV and HCS mapping (in alignment with RSPO requirements),	1. Indicative map of peatlands, HCV and HCS areas available. 2. Jurisdictional level 'No-go' zones (for conservation and protection) mapped. 3. Land Use Change Analysis completed with (potential) liability declared and made publicly available.	1. FPIC and land rights recognition procedures and guidelines are in place and being implemented. 2. Spatial planning is in place, including HCV, HCS, and peatland, and Remediation and Compensation Procedures requirements are being implemented.

	includes mapping of peatlands. 3. Historical Land Use Change Analysis in accordance with RSPO Land Use Change Analysis guidance document. 4. Legal gap analysis of differences between RSPO P&C and jurisdiction law and policies. 5. Regulation on use of fire, fire prevention and control measures.	4. Procedures for recognition of land rights developed. 5. FPIC procedure and guidelines completed for the jurisdiction. 6. Regulation on use of fire, fire prevention and control measures in place. 7. System developed and fully operating at a jurisdictional level to monitor, detect and verify deforestation, hotspots/ burning and conversion of peatlands, HCV areas, HCS areas and other 'no-go' zones, including social risks and impacts. 8. Legal gaps identified on the differences between RSPO P&C and jurisdiction law and policies and the necessary regulations or procedures developed. 9. Assessment of disqualifying social and environmental issues and steps taken to address them including no conversion of HCV, HCS or peatlands, and serious human rights violations and systemic land grabbing.	3. Social and Environmental Impact Assessment procedures and guidelines are being implemented. 4. Remediation and Compensation Procedures approved (for conservation liability(s) identified in Step 2) and in implementation 5. New Planting Procedures as per RSPO requirements implemented. 6. Enforceable regulations or procedures adopted and applied to overcome gaps with RSPO P&C. 7. Disqualifying social and environmental issues are addressed or certification cannot proceed. 8. System developed and fully operating at a jurisdictional level to monitor, detect and verify deforestation, hotspots/burning and conversion including social risks and impacts.

Adapted from RSPO (2021)

APPENDIX G. The MSPO Principles and Criteria 2022 that complements the RSPO Standards

MSPO Principles / the RSPO Principle it complements	Criteria
Principle 1: Management commitment and responsibility Complements RSPO Principle 7: Protect, conserve, and enhance ecosystems and the environment (Note: HCS not mentioned and new planting on peat can still be done)	*Criterion 2: New planting* A comprehensive HCV, environmental and social impact assessments should be undertaken prior to new planting. New plantings on peatland are prohibited unless permitted by the state authorities that have jurisdiction over land matters. No new plantings are carried out on customary land without the owners' FPIC. There should be no conversion of natural forest, protected areas and HCV area after 31 December 2019.
Principle 3: Compliance with legal and other requirements Complements RSPO Principle 4: Respect community and human rights and deliver benefits	*Criterion 2: Rights to use of land* To cultivate oil palm, there must be proof of ownership such as land title, lease or joint venture agreement with indigenous peoples. *Criterion 3: Native customary rights* Customary rights shall not be threatened or reduced. Any conflict or land disputes shall be resolved in accordance with an FPIC process.
Principle 4: Responsibility to social, health, safety and employment conditions Complements RSPO Principle 6: Respect workers' rights and conditions	Criterion 3: Employment conditions A policy on respecting human rights shall be established, and implemented. The policy shall be in line with the Federal Constitution, the UN Declaration on Human Rights and the ILO Decent Work Agenda. There shall be no forms of forced/trafficked labour, child labour, and discrimination/harassment. *Criterion 4: Living conditions* When housing is provided, decent living conditions, including clean water for domestic use are provided to employees and families.

Principle 5: Environment, natural resources, biodiversity and ecosystem services Complements RSPO Principle 7: Protect, conserve, and enhance ecosystems and the environment	*Criterion 6: Environmental conservation and protection* Information shall be collected within or adjacent to the management area and appropriate measures are taken for the protection of the species or habitat following the HCV approach and relevant local authorities' requirements. *Criterion 7: Zero burning practices* There shall no open burning, except in situations under the legal framework (e.g. in areas where no other effective measures exist like stopping the disease spread to the next crop)

Source: Adapted from (Anon, 2022a) and (RSPO, 2018)

APPENDIX H. Factor loadings for each respondent's Q-sort

Q sort	Factor 1	Factor 2	Factor 3
CV1	**0.5615**	0.1904	-0.0057
CV2	**0.5755**	-0.376	-0.1062
CV3	0.2296	-0.1501	**0.7639**
BI4	0.3423	-0.0669	0.0206
GM5	-0.0624	0.0878	**0.4264**
CV6	**0.4856**	0.2078	0.2618
OT7	0.4534	**0.5681**	0.3457
GM8	-0.0511	**0.5997**	-0.1127
CV9	**0.7225**	0.1485	0.148
BI10	**0.7075**	-0.1419	0.1403
CV11	0.5083	0.1251	**0.5738**
GM12	0.6112	-0.095	0.3607
GM13	0.1959	0.2041	**0.4802**
RI14	0.0283	-0.0005	**0.6851**
CV15	0.2514	**0.6973**	0.0371
GM16	**0.5654**	0.0562	0.0077
CV17	**0.6741**	0.442	0.0351
CV18	-0.041	0.4068	**0.5588**
OT19	0.2129	**-0.6724**	0.0743
CV21	-0.1198	0.4194	**0.4467**
RI22	0.3846	0.4014	-0.2391
CV23	**0.6442**	-0.1743	-0.3003
CV24	0.0481	-0.1417	-0.1301
BI25	-0.0021	0.3279	0.1904

BI26	0.2666	**0.6051**	0.2213
BI27	0.133	-0.3551	**0.6083**
% Explained Variance	17	13	13

Note: CV – civil society, BI – business and industry, GM – government, OT – others, RI – research institution.

Title: THE THEORY OF CHANGE FOR LANDSCAPE APPROACHES AND ITS IMPLEMENTATION IN SABAH, MALAYSIA BORNEO

Keywords: jurisdictional approach, deforestation, palm oil, collaborative governance, transformational
change, Borneo

Abstract :

The jurisdictional approach is a relatively new concept and only gained popularity in the early 2010s, and as such, there is no one jurisdiction that have actually progressed through the entire theory of change (TOC). This thesis will make the contribution of providing a better understanding of the TOC for the jurisdictional approach, and its practical implementation on the ground. It uses a potentially influential jurisdictional approach, the Roundtable of Sustainable Palm Oil Jurisdictional Approach (RSPO JA) implemented in Sabah, a state in Malaysia Borneo, as a case study. The objectives are to determine if Sabah is undergoing a transformational change through the RSPO JA, to identify its collaborative governance challenges, and to understand the perception of stakeholders on what should be the outcomes of the RSPO JA. The transformational change theory using a political-economy lens, collaborative governance theories, and the literature on landscape and jurisdictional approaches were used. Data collection drew primarily from (i) interviews with 29 respondents from the government, civil society, business and industry, and the research sectors, and supplemented by (ii) the review of grey literature such as policy documents, reports, and newspaper articles. The first objective used a case study method while for Objectives 2 and 3, the Q-methodology was used. The first objective concluded that Sabah did intend to transform but struggled to implement its ambitious policies because of the patronage system that is still very much in existence. The second objective examined the challenges of the RSPO JA. Securing higher-level political commitment, and the stakeholders not having a shared understanding of the common goals, which was attributed to the RSPO JA being a new initiative, were identified as the main challenges. The third objective helped illustrate the second objective on the “no shared understanding”, as three different perspectives for the jurisdictional approach outcomes pertaining to the environment, economy,

governance and smallholders' welfare were found. Notwithstanding, all three perspectives agreed that one of jurisdictional approach outcomes that will not happen in ten years' time, is achieving the "zero-deforestation" goal. In conclusion, for Sabah to access the environmentally sensitive countries' markets, the state needs to go for a "zero-deforestation territory". This is because one of the main issues in Sabah is the cross-commodities deforestation (tree plantations expansion at the expense of so-called degraded natural forests), and therefore, RSPO certification may not be the most appropriate for a jurisdiction. However, "zero-deforestation" in a large landscape is not easy to achieve. In moving forward, consumer countries should not have a narrow view on just reducing deforestation, but instead view such initiatives more holistically and recognise the efforts of producer countries and reward them. Only then would a producing country make sustainable production of commodities as part of their political agenda.

Titre : LA THÉORIE DU CHANGEMENT POUR LES APPROCHES PAYSAGISTES ET SA MISE EN ŒUVRE À SABAH, MALAISIE BORNEO

Mots-clés : approche juridictionnelle, déforestation, huile de palme, gouvernance collaborative,
changement transformationnel, Bornéo

Résumé :

L'approche juridictionnelle est un concept relativement nouveau et n'a gagné en popularité qu'au début des années 2010, et à ce titre, aucune juridiction n'a réellement complétement mis en œuvre l'ensemble de la théorie du changement (TOC). Cette thèse vise à atteindre une meilleure compréhension de la réalité de la mise en œuvre de la TOC des approches juridictionnelles. Elle porte sur un cas d'approche juridictionnelle mise en œuvre par la Table ronde sur l'huile de palme durable à Sabah (RSPO), un État de Bornéo en Malaisie. Les objectifs sont de déterminer si la RSPO JA s'inscrit dans un réel processus de changement transformationnel autour de la gestion des terres à Sabah, d'identifier les défis de gouvernance collaborative posés par la mise en œuvre de cette approche et de comprendre la perception des parties prenantes sur ce que devraient être les résultats à moyen-terme de la RSPO JA. L'approche en économie politique du concept de changement transformationnel, les théories de la gouvernance collaborative et la littérature sur les approches paysagères et juridictionnelles ont été utilisées pour construire le cadre conceptuel et analytique de la thèse. La collecte des données s'est principalement appuyée sur (i) des entretiens avec 29 répondants du gouvernement, de la société civile, des entreprises et de l'industrie, et des secteurs de la recherche, et a été complétée par (ii) l'examen de la littérature grise. Le premier objectif a utilisé une méthode d'étude de cas tandis que pour les objectifs 2 et 3, la méthodologie Q a été utilisée. Le premier chapitre empirique de la thèse montre que Sabah avait bien l'intention de se transformer mais a globalement du mal à mettre en œuvre ses politiques ambitieuses en raison du système de clientélisme toujours très présent. Le deuxième chapitre empirique montre que l'obtention d'un engagement politique au plus haut

niveau et le fait que les parties prenantes n'ont pas une compréhension partagée des objectifs communs figurent comme les barrières au succès de la RSPO JA. Le troisième chapitre empirique a permis d'étudier plus en avant cette « absence de compréhension partagée » et a révélé l'existence de trois perspectives différentes concernant les objectifs environnementaux, économique, sociaux et de gouvernance de la RSPO JA. Néanmoins, les trois points de vue ont convenu qu'il est irréaliste d'atteindre l'objectif de « zéro déforestation » à moyen terme. En conclusion, pour que Sabah accède aux marchés des pays écologiquement sensibles, l'État doit opter pour un "territoire zéro déforestation". En effet, l'un des principaux problèmes à Sabah est la déforestation inter-produits (expansion des plantations d'arbres au détriment des forêts naturelles dites dégradées), et par conséquent, la certification RSPO n'est peut-être pas la solution la plus appropriée pour cette juridiction. Cependant, l'objectif de « zéro déforestation » n'est pas facile à atteindre à large échelle. Pour aller de l'avant, les pays consommateurs ne devraient pas avoir une vision étroite de la simple réduction de la déforestation, mais plutôt envisager ces initiatives de manière plus globale et reconnaître les efforts des pays producteurs et les récompenser. Ce n'est qu'alors qu'un pays producteur intégrerait la production durable dans son agenda politique.

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