

1 **Balancing Ambitions and Realities: Stakeholder Perspectives on Jurisdictional**

2 **Approach Outcomes in Sabah’s Forests**

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23

24 **ABSTRACT**

25 The jurisdictional approach concept emerged in response to the widespread failure of sectoral forest
26 conservation projects. Despite its increasing popularity, understanding jurisdictional approach outcomes is
27 challenging, given that many remain in either the formation or implementation stage. Furthermore, diverse
28 stakeholders hold different perspectives on what exactly a jurisdictional approach is intended to pursue. These
29 different perspectives are important to unravel, as having a shared understanding of the outcomes is important to
30 build the critical support needed for it. This study aims to add to the limited evidence with a case study in Sabah,

31 Malaysia, which is committed to addressing a leading deforestation driver (palm oil) through sustainability
32 certification in a jurisdiction. We used Q-methodology to explore stakeholder perceptions, revealing three
33 distinct perspectives regarding what outcomes jurisdictional approaches should pursue. We asked about
34 outcomes achievable within ten years (2022-2032) and considering real-world constraints. We found different
35 perspectives regarding economic, environmental, governance, and smallholders' welfare outcomes. However,
36 we found consensus among stakeholders about some outcomes: (i) that achieving zero-deforestation is
37 untenable, (ii) that issuing compensation or incentives to private land owners to not convert forests into
38 plantations is unrealistic, (iii) that the human well-being of plantation workers could improve through better
39 welfare, and (iv) the free, prior and informed consent given by local communities being required legally. The
40 findings offer insights into key stakeholders' perceptions of the deliverables of jurisdictional approaches and the
41 difficulty of achieving its objectives under real-world constraints.

42

43 Keywords: Jurisdictional approach, Q-methodology, oil palm certification, RSPO, Sabah, Malaysia Borneo

44 INTRODUCTION

45 The impacts of human-induced climate change – droughts, heatwaves, fires – have already caused widespread
46 harm to nature and people. With the observed increases in the frequency and intensity of climate and weather
47 extremes, the situation looks set to worsen (Portner et al. 2022). Policymakers are challenged to find effective
48 ways to address these threats while keeping societies and economies afloat and delivering on the quest for
49 growth (FAO 2022). Tropical forest ecosystems represent a type of frontier, increasingly under threat from
50 proximate and remote drivers of deforestation and degradation, in this process (Curtis et al. 2018; Pendrill et al.
51 2022). They are vital in climate regulation, biodiversity conservation, and human livelihoods and well-being
52 (Barlow et al. 2018; Pacheco et al. 2021). The global policy discourse has acknowledged the need for more
53 integrated solutions and holistic approaches to halt and reverse deforestation and forest degradation (Reed et al.
54 2020). Landscape and jurisdictional approaches are a solution that is becoming increasingly popular and
55 supported by the research community, donors, and governments (Carmenta et al. 2020; FAO 2022; Pedroza-
56 Arceo et al. 2022; Reed et al. 2020). Such approaches are seen as a potential alternative to traditional, sectoral
57 forest conservation and development strategies (Arts et al. 2017; von Essen and Lambin 2021).

58 Jurisdictional approaches originate from previous landscape approaches, Reducing Emissions from
59 Deforestation and Degradation (REDD+) projects and sustainable commodity production¹ (Boyd et al. 2018;
60 Fishman, Oliveira, and Gamble 2017; von Essen and Lambin 2021). The definition of a jurisdictional approach
61 is “governance initiatives that promote sustainable resource use at the scale of jurisdictions through a formalized
62 collaboration between government entities and actors from civil society and/or the private sector, based on
63 policies intended to apply to all affected stakeholders within the jurisdiction” (von Essen and Lambin 2021,
64 p.161). The main aim of a jurisdictional approach is to reduce, limit or address deforestation and, more broadly,
65 to secure the conservation of ecosystems. The theory is that this can be done by reconciling the multiple and
66 competing land uses within a clearly defined area (e.g., government administrative area) (Boyd et al. 2018;
67 Brandão et al. 2020; Houten and Koning 2018; Reed et al. 2020; Stickler et al. 2018; von Essen and Lambin
68 2021). The assumption is that a jurisdictional approach can pursue these aims through improved collective
69 action such that stakeholders can agree on common goals and deliberate acceptable losses, which in turn will
70 better align policies (Chervier, Piketty, and Reed 2020).

¹ Sustainable commodity production is a response to stop or reduce deforestation through supply chain-based initiatives such as large businesses pledging to zero deforestation in their supply chain, and by volunteering to achieve sustainability certification standards.

71 Jurisdictional approaches only started gaining recognition and appearing in literature at the beginning
72 of 2010 (Brandão et al. 2020; Seymour et al. 2020). The first few publications specific to jurisdictional
73 approaches were grey literature written on lessons learned from REDD+ and low-emission development efforts
74 and the feasibility of applying a jurisdictional approach to eliminating deforestation in agricultural commodities'
75 supply chains (Fishbein and Lee 2015; Paoli et al. 2016; Wolosin 2016). The literature on jurisdictional
76 approaches reveals a lack of empirical evidence on stakeholder perspectives on potential outcomes in the face of
77 real-world constraints. So far, empirical work has mostly focused on the challenges faced, enabling conditions
78 required, and the frameworks applied to jurisdictional approaches (Fishbein and Lee 2015; Fishman et al. 2017;
79 Seymour, Aurora, and Arif 2020; von Essen and Lambin 2021). Understanding stakeholder perspectives on
80 possible outcomes is important because most jurisdictional approaches have yet to progress through the entire
81 theory of change (Boshoven et al. 2021; von Essen and Lambin 2021). This study intends to provide evidence,
82 using stakeholders' perceptions, on how a jurisdictional approach can bring about improvements along its theory
83 of change (e.g., the intermediary outcomes) on reducing deforestation or biodiversity conservation in a real-life
84 setting. Perceptions are how "an individual observes, understands, interprets, and evaluates a referent object,
85 action, experience, individual, policy, or outcome" (Bennett 2016: 585). It is a form of evidence that is useful to
86 understand and to take into consideration as it reveals different ways of "doing" or "seeing" things among
87 individuals (Zabala et al. 2018). It is also important to consider and understand the anticipated outcomes of a
88 jurisdictional approach through the eyes of the stakeholders implementing it, as they have the highest stakes in
89 it. Hence, the research objective is to better understand the "outcomes" of jurisdictional approaches from the
90 stakeholders' perspective. Specifically, it is to investigate the congruence between perspectives of jurisdictional
91 approach stakeholders in relation to the pursued outcomes, with the added criteria of a 10-year time range and
92 considering the real-world constraints.

93 The Roundtable on Sustainable Palm Oil (RSPO)² Jurisdictional Approach to Certification (RSPO JA)
94 was selected for this study. It was conceptualized by the RSPO Secretariat³ in 2015. This jurisdictional approach
95 was selected for its influence and operationalization in a powerful commodity sector in a landscape of biological
96 and cultural diversity that has been undergoing rapid and drastic land-use change with the advent of oil palm,
97 especially in Southeast Asia (Gaveau et al. 2016; Pacheco et al. 2021). The RSPO JA seeks to address what
98 other interventions, such as REDD+, have failed to do, namely, deflecting the powerful drivers of land-use

² RSPO certification is a global standard certifying the sustainability of palm oil production.

³ 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.

99 change (in this case, forest conversion into oil palm plantations) while taking into account the political economy
100 of developing countries to address such problems (Karsenty 2021). This is done by addressing the limitations of
101 certifying individual plantation units by certifying a jurisdiction for maintaining its forest cover, supporting
102 wildlife conservation, improving local communities and plantation workers' well-being, and creating sustainable
103 and resilient businesses. The RSPO JA is completely voluntary. Three jurisdictions volunteered to pilot the
104 RSPO JA: Sabah, a state in Malaysian Borneo, and the district of Seruyan, Kalimantan, in Indonesia, at the sub-
105 national level, and Ecuador at the national level. We focused our research on Sabah because the state was
106 identified as using one of the most advanced jurisdictional approaches to supply chain sustainability, making it
107 an interesting case study (Wolosin 2016).

108

109 **CASE STUDY CONTEXT**

110 This section describes the importance of palm oil to Sabah's economy, why Sabah adopted the RSPO JA, and
111 how palm oil is governed in Malaysia (federal versus state). The last section addresses the complementary
112 policies and corporate commitments that can help Sabah achieve its aim of 100% RSPO certification by 2025.
113 Such details are provided because the RSPO standards, policies, and corporate commitments can influence
114 stakeholders' perspectives on the outcomes of the RSPO JA.

115

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

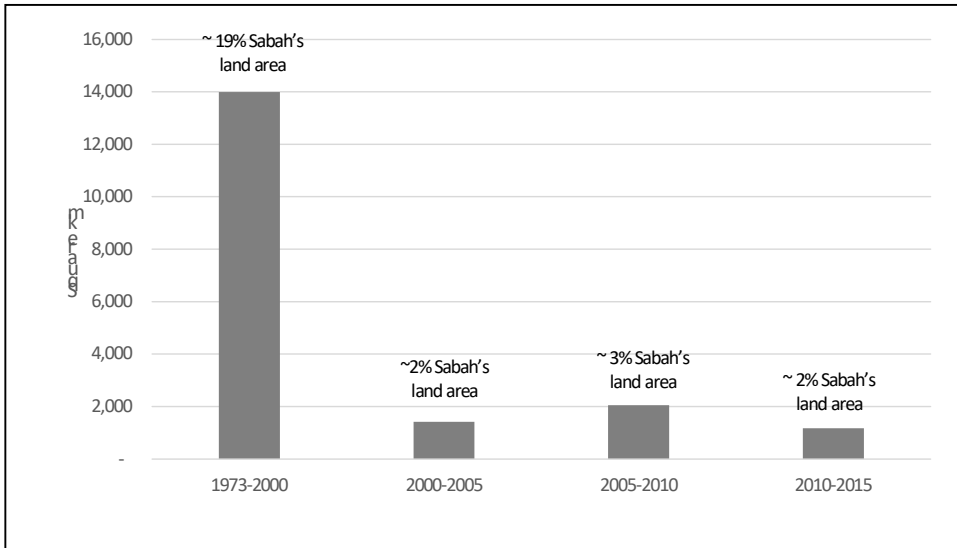
117 During the 1970s to 1980s, Sabah depended on its timber industry, which generated about 50% of the state's
118 revenue, before palm oil overtook it in the 1990s as the main revenue earner (Jomo et al. 2004; Pang 1989).
119 Figure 1 shows the forest area loss in Sabah for four periods between 1973 and 2015 (Gaveau et al. 2016). Most
120 striking is the amount of forest area lost between 1973-2000 (13,987 km² or 19% of Sabah's total land area of
121 73,966 km²), demonstrating the intensive logging activities and subsequent conversion of forest into oil palm
122 plantations during these periods. From 1990 onwards, oil palm cultivation in Sabah increased, with the total area
123 planted growing from 3,000 km², or 4% of Sabah's land area, to 15,400 km², which represents about 21% of the
124 land area, by 2019 (Figure 2) (MPOB 2019).

125

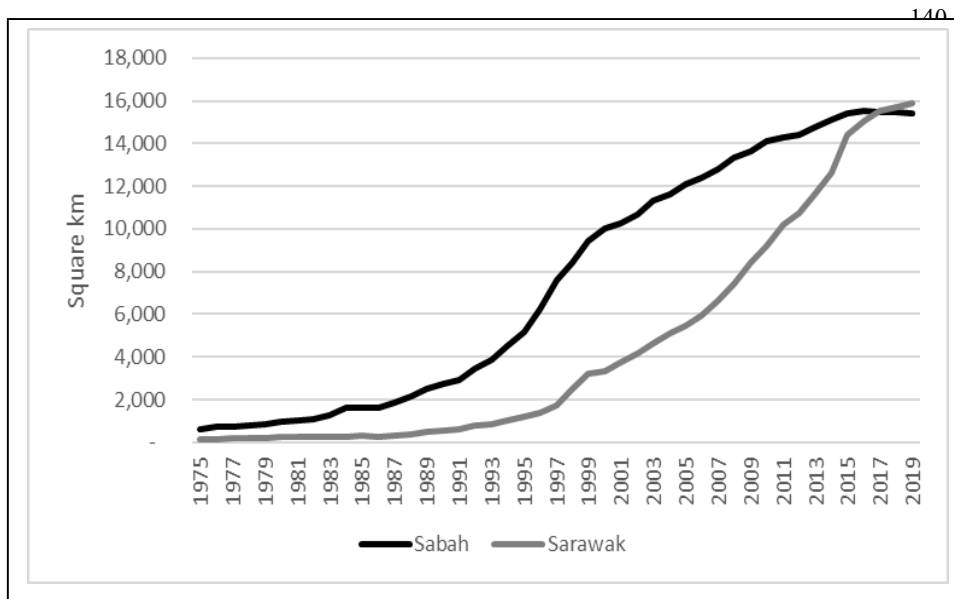
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128



139 **Fig. 1** Forest area loss in Sabah 1973-2015 (Gaveau et al. 2016)



151 **Fig. 2** Oil palm planted area in Sabah and Sarawak from 1975 to 2021 (MPOB 2019)

152 In addition, Sabah had the largest planted area in Malaysia until Sarawak overtook that position in 2017
 153 (Figure 2) (MPOB 2019). From the late 1990s until 2019, Sabah produced the highest volume of crude palm oil,
 154 with 5.03 million tons produced in 2019 alone. With 25% of Malaysia's production, it is Malaysia's most
 155 important palm oil-producing state (MPOB 2019). Sabah and its neighboring state, Sarawak, have the highest
 156 number of independent smallholders in Malaysia. Sabah's independent smallholders, which include more than
 157 32,000 individuals, occupy about 14% of the oil palm planted area in the state (Rahman 2020). Despite palm
 158 oil's importance to the state and Sabah being semi-autonomous from the federal government of Malaysia (i.e.,

159 land and forest are controlled at the state level), palm oil falls under the control of the Malaysian Palm Oil Board
160 – a federal government agency. All persons wanting to be involved in the palm oil business need to be licensed
161 by this agency, according to the Malaysian Palm Oil Board Regulations of 2005 (NEPCon 2017).

162 In 2015, Sabah announced the adoption of the RSPO JA, aiming for the production of palm oil in the
163 state to be 100% RSPO certified by 2025. Sabah made this decision because its economy largely depended on
164 palm oil exports - it would make good business sense to move toward the highest sustainability standard,
165 making it the preferred choice for buyers seeking certified sustainable palm oil (Ng et al. 2022). By choosing
166 RSPO standards, Sabah has taken a voluntary private certification scheme and turned it into a public policy
167 instrument, which has not often been done at the national or subnational jurisdiction level (Ng et al. 2022). One
168 of the first actions taken by the Sabah government to achieve state-wide certification was forming a multi-
169 stakeholder body in 2016 to govern and lead the RSPO JA. This body was named the Jurisdictional Certification
170 Steering Committee (JCSC) and consists of representatives from three sectors: the government (n = 5), industry
171 (n = 4), and civil society (n = 5), co-chaired by two government representatives, facilitated by a secretariat, and
172 supported by two technical advisors. The Sabah government did not include the federal government in the
173 JCSC, which created tension between them. Following this, the federal government announced its own
174 certification scheme in 2017, Malaysian Sustainable Palm Oil (MSPO), and made it mandatory for all palm oil
175 producers in Malaysia by 1 January 2020. Because of this, Sabah decided to go for RSPO or MSPO
176 certification, which inevitably created complications in implementing the RSPO JA, slowing its progress and
177 influencing the stakeholders' perspectives on the outcomes of its jurisdictional approach.

178

179 **Achieving RSPO JA Certification**

180 To become RSPO JA certified, Sabah needs to adhere to the RSPO Standards (Principles and Criteria for the
181 Production of Sustainable Palm Oil 2018) (RSPO 2021). For that, it uses the principle of “upward delegation”,
182 through which the responsibility for the RSPO Standards is delegated to a higher-level institution, the
183 Jurisdictional Entity⁴ (RSPO 2021). The essential RSPO Standards listed in the RSPO Jurisdictional Piloting
184 Framework⁵ are in Table 1.

185

⁴ 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.

⁵ This document provides guidance for a jurisdiction to be certified following RSPO standards.

186 **Table 1** Essential RSPO Principles and Criteria for RSPO JA Certification

RSPO Principles	Criteria
Principle 4: Respect community and human rights and deliver benefits	<p>Criteria 4.1 – 4.8</p> <p>This principle and associated 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)⁶ must be given first.</p>
Principle 6: Respect workers’ rights and conditions	<p>Criteria 6.1 – 6.7</p> <p>This principle and its criteria prohibit any form of discrimination toward 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 labor.</p>
Principle 7: Protect, conserve, and enhance ecosystems and the environment	<p>Criteria 7.7, 7.11 and 7.12</p> <p>This principle and the criteria forbid new planting on peat after 15 November 2018, the use of fire in preparing the land for planting, and land clearing that causes deforestation in High Conservation Value (HCV)⁷ and High Carbon Stock (HCS)⁸ forests. Since November 2005, land clearing should not damage primary forest or any area required to protect HCVs. Since 2018, land clearing should not damage HCV and HCS forests.</p>

187 Source: (RSPO 2018, 2021).

188

⁶ 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 et al. 2015).

⁷ An HCV area has 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).

⁸ The HCS approach is used to distinguish forest areas for protection from degraded lands with low carbon and biodiversity values that may be developed.

189 Besides meeting RSPO Standards, the jurisdiction should meet key performance requirements at
190 ecosystem and landscape levels in three steps as specified in the RSPO Jurisdictional Piloting Framework (see
191 Supplementary Material, Annex 1). As of October 2022, Sabah is still in Step 1, as it has met some of the
192 indicators (e.g., a JCSC-established multi-stakeholder group and a government statement of intent for 100%
193 RSPO compliance) and is progressing on others (e.g., formulating FPIC procedures, an indicative HCV and
194 HCS map of Sabah, and a legal gap analysis of differences between RSPO Standards and Sabah’s laws). The
195 principles and criteria in Table 1 define the broad outcomes of the RSPO JA, while the requirements in the
196 RSPO Jurisdictional Piloting Framework framed the intermediary outcomes.

197

198 **Policies in Sabah/Malaysia that Support Achieving the RSPO JA Standards**

199 The MSPO standards were first developed in 2013, and in 2019, the MSPO standards were reviewed, addressing
200 some of its previous weaknesses (e.g., introducing stricter criteria for deforestation and adding HCV forests),
201 and completed the revision in 2022. The revised MSPO Principles and Criteria 2022 complement the RSPO
202 Standards in achieving RSPO JA (see Supplementary Material, Annex 2), although the MSPO standards do not
203 incorporate HCS into its standards, unlike the RSPO standards and new plantings are still allowed on peatland
204 when it is permitted by the state authorities who have jurisdiction over their area. Because the mandatory MSPO
205 certification came after the RSPO JA, the state of Sabah decided to go for dual certification. However, the
206 certifications are led by different bodies: RSPO JA is coordinated by the entirely state-led JCSC, and MSPO by
207 the Malaysian Palm Oil Certification Council.

208 Several state policies support the RSPO JA. For instance, the Sabah Forest Policy 2018 commits to
209 sustainable forest management, maintaining 50% of Sabah’s landmass under forest reserves and tree cover,
210 having no less than 30% of Sabah under totally protected areas by 2025, and certifying all forest reserves in
211 stages (SFD 2018). These commitments will assist in reaching the RSPO JA goal of maintaining forest cover
212 and supporting wildlife conservation at the landscape level. At the same time, the Sabah Development Corridor
213 Blueprint 2.0 (2021-2030) reiterated Sabah’s commitment to sustainable production and consumption,
214 particularly to facilitate the sustainability certification of oil palm plantations. On the other hand, while there is a
215 move toward reducing deforestation in the oil palm sector, the state plans to develop 400,000 ha of industrial
216 forest plantations in its forest reserves to ensure the long-term supply of its timber production (Bernama 2022;
217 Ong et al. 2020). This means there will be continued forest conversion in Sabah for timber plantations.

218 Corporations also play an important role in reducing agriculture-driven deforestation, as 60% of the
219 global palm oil trade is covered by no deforestation commitments (Buchanan et al. 2019). One of the most
220 prominent private sector-driven initiatives is the voluntary No Deforestation, No Peat, and No Exploitation
221 commitment that started in 2013 (Buchanan et al. 2019). This commitment is a palm oil sourcing policy that
222 prohibits suppliers from clearing forests and peatlands, from exploiting workers and communities, and requires
223 that they respect local communities' land rights through FPIC. As of April 2020, about 83% of large companies
224 in Indonesia and Malaysia operating in the global palm oil supply chain have adopted this commitment (ten
225 Kate et al. 2020).

226 Like the RSPO requirements, the MSPO standards, Sabah's policies, and corporations' No
227 Deforestation, No Peat, and No Exploitation commitments helped to frame the broad and intermediary outcomes
228 of the RSPO JA.

229

230 **METHODOLOGY**

231 Q-methodology was applied as it affords a structured and holistic appraisal of the multifaceted nature of
232 stakeholder subjectivity (Zabala et al. 2018). It has been used widely to understand perceptions of natural
233 resource management (Astari and Lovett 2019; Buckwell et al. 2020; Carmenta et al. 2019). Q-methodology
234 proved useful in conflict resolution, as it helps to identify conflicting views – in this case, regarding the
235 outcomes of the RSPO JA. It can also identify unanticipated areas of consensus between outwardly opposing
236 stakeholders, potentially informing starting points for effective dialogue (Zabala et al. 2018). Q-methodology
237 can be divided into four stages: research design, data collection, analysis, and interpretation (results) (Watts and
238 Stenner 2012; Zabala et al. 2018).

239

240 **Research Design**

241 The research question: “What should be the outcomes of a jurisdictional approach in the near future (10 years),
242 taking into consideration the real-world constraints that you are familiar with?” was first identified. The
243 inclusion of a timeframe and reference to real-world constraints were chosen to encourage specific, realistic, and
244 pragmatic answers.

245 Next, a concourse of statements (Q-set) was created, expressing all existing perspectives of outcomes
246 (Watts and Stenner 2012; Zabala et al. 2018). The statements were drawn from interviews with current and ex-
247 JCSC members, government, civil society, and researchers working in Sabah who are knowledgeable on the

248 RSPO JA (n=29). These interviews were conducted in 2020 and 2021. In designing the statements, secondary
 249 sources were also used: reports, journals, the RSPO and MSPO standards, Sabah’s policies, and the No
 250 Deforestation, No Peat, and No Exploitation commitment.

251 A list of 29 statements was included in the final Q-set, and they were thematically arranged according
 252 to five jurisdictional approach outcomes, described in Table 2. However, it should be noted that the number of
 253 statements was not evenly distributed between themes (e.g., the Environment theme had 12 statements,
 254 plantation workers’ welfare theme only one statement) because both literature and the representative opinions
 255 given from the interviews were mainly focused on the environmental outcomes, particularly on what
 256 deforestation meant to respondents. This is perhaps because the jurisdictional approach was originally designed
 257 to reduce deforestation, although it is now broader in scope. The limitations of this will be further addressed in
 258 the Discussion section. The 29 statements were piloted with five respondents, who were not part of the research
 259 but were familiar with a jurisdictional approach, to ensure that the statements made sense and that any important
 260 outcomes were not missed. After the testing, adjustments were made.

261 **Table 2** Description of the five themes according to jurisdictional approaches’ outcomes and the number of
 262 statements per theme

Theme	Description
Economy	Focus on the possible outcomes of a jurisdictional approach in terms of monetary awards and foreign investments into Sabah and the business benefits to industrial oil palm companies (5 statements).
Environment	Focus on the possible outcomes of a jurisdictional approach in reducing or limiting deforestation and where it should be (e.g., forest reserves, HCV areas). Additionally looks at the outcomes of conserving ecosystems and wildlife habitats at a landscape level (12 statements).
Governance	Focus on the possible outcomes of a jurisdictional approach in formalizing operational rules in Sabah that support such an approach (5 statements).
Plantation workers’ welfare	Focus on the possible outcomes of a jurisdictional approach in improving the welfare of plantation workers in oil palm plantations (e.g., increasing wages, improving housing conditions, preventing child labor). These are employees of a plantation, which include migrants, contract workers, and

casual workers (RSPO 2018). Sabah is highly dependent on foreign labor in the oil palm industry, where they have one of the lowest wage rates in Malaysia, earning about USD 180 a month (Jasni and Othman 2016). In addition, the industry is plagued by human rights violations such as child labor and poor working conditions (Wahab 2020) (1 statement).

Smallholder workers' welfare Focus on the possible outcomes of a jurisdictional approach in improving the welfare of smallholders in oil palm plantations. These are local communities where many live under the national poverty line (USD 498) and earn an average of USD 360 a month (Rahman 2020) (5 statements).

263

264 **Data Collection**

265 The respondents were selected using expert sampling because, in Q-methodology, what matters is that the
266 respondents have a defined viewpoint to express based on the subject matter at hand (Watts and Stenner 2012).

267 The respondents were divided into two categories: (1) ex-JCSC members, current members, and actively
268 participating non-members working as JCSC secretariat staff and technical advisors (n=14), and (2) those that
269 were familiar with the RSPO JA concept in Sabah but were non-members who did not participate in the JCSC
270 meetings (civil society organizations, research institutions, and business and industry) (n=12). Of the civil
271 society organizations, eight were from the environmental sector, and four were from the social sector. For the
272 research institutions, one studies human impacts on forest landscapes in Sabah, and the other is an HCV expert.

273 The respondents were asked to rank the 29 statements on a forced normal distribution grid with columns called a
274 Q-sort. The Q-sort used for this research was a simplified bell-shaped curve with a nine-point distribution from
275 strongly disagree (-4) to strongly agree (+4). We conducted 26 Q-sorts; the number of respondents from each
276 sector is found in Table 3. In Q-methodology, the sample of respondents does not need to be large or
277 representative of the population, but it must be diverse, which we achieved (Zabala et al. 2018).

278 **Table 3** 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
(1) Civil society	7	5	12
(2) Business and industry	4	1	5

(3) Non-JCSC members			
who participate			
actively in the			
meetings	1	1	2
(4) Government	1	4	5
(5) Research institutions	1	1	2
Total	14	12	26

279

280 The Q-sorting was conducted between February and March 2022. It was done face to face and online
281 because of the Covid pandemic. In face-to-face meetings, Q-sorting was done by placing statements directly
282 onto a physical grid. For online sorting, we used easy-HTMLQ (<https://github.com/shawnbanasick/easy-htmlq>),
283 where the main researcher guided the respondent through the process using the Zoom platform. During the Q-
284 sorting, there would sometimes be dialogues between the researcher and the respondent on the person’s choice
285 of ranking. These dialogues were noted down for interpretation of the factors. Once the Q-sorting was
286 completed, the respondent was interviewed to discover why they had sorted the statements the way they had,
287 especially for those few placed at the extremes of the grid. Respondents were asked to give their personal views
288 (as opposed to those of their institution) and were assured confidentiality. Therefore, when reporting the results,
289 the respondents’ identities were purposely kept vague, without details of their background other than to which
290 sector they belonged.

291

292 **Q-analysis**

293 The criteria for analysis outlined by Watts and Stenner (2012) were followed. An open software Ken-Q Analysis
294 (<https://shawnbanasick.github.io/ken-q-analysis/#section1> Version 1.0.7) was used for the statistical analysis.
295 Initially, eight factors were extracted using Principal Component Analysis. These eight unrotated factors
296 indicated the initial association of each Q-sort with each factor. Factor extraction summarizes all Q-sorts (the
297 individual responses) into a few representative responses called “factors”. After the initial extraction of factors,
298 the next step was to decide how many factors to keep for rotation. Three factors were chosen by accepting those
299 factors that had two or more significant factor loadings at the 0.01 level, using the Humphrey rule that “a factor
300 is significant if the cross-product of its two highest loadings (ignoring the sign) exceeds twice the standard
301 error” (Brown 1980, p. 223; Watts and Stenner 2012). Factors 1 to 3 accounted for 43% of the total study

302 variance, and, according to Kline (1994), anything within the range of 35-40% or above would be considered a
303 sound solution based on common factors. Varimax was used to rotate the three factors. Respondents were
304 assigned to factors with a p-value of <0.05, using Ken-Q Analysis's auto-flag function. However, one
305 respondent (OT7) (see Supplementary Material, Annex 3 for the factor loadings) was manually flagged, as that
306 respondent was one of those who came up with the idea of the RSPO JA and, therefore, that person's opinion on
307 the outcomes was considered to be important.

308

309 **RESULTS**

310 Of the 26 respondents, 21 loaded onto three factors. Eight respondents loaded onto Factor 1, five onto Factor 2,
311 and eight onto Factor 3 (Supplementary Material, Annex 3). We found a low correlation between the three
312 factors: -0.2284 between F1 and F2, 0.2932 between F1 and F3, and 0.1877 between F2 and F3. The low
313 correlation showed that the factors were distinct (Webler et al. 2009). Table 4 shows the factor arrays (the ideal
314 Q-sort) for each of the three extracted factors. The factor scores and Z-score⁹ were used for the interpretation of
315 the results.

⁹ The weighted average of the scores given by the flagged Q-sorts to that statement (Zabala, 2014).

316 **Table 4** The three factor arrays arranged according to themes in a jurisdictional approach outcomes

Theme	Statement No.	Statement	Factor 1 – Favoring the environment and human rights group		Factor 2 - Favoring the economic and environmental 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 at a 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 of obtaining 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 are 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*

Theme	Statement No.	Statement	Factor 1 – Favoring the environment and human rights group		Factor 2 - Favoring the economic and environmental group		Factor 3 – The pragmatic group	
			Factor score	Z-score	Factor Score	Z-score	Factor Score	Z-score
	9	Crop expansion in HCV areas, biodiverse areas, and peatlands 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 who prioritize 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 institutionalized within the formal governance structure	1	0.805	3	1.389	-2	-0.873*
Plantation workers' welfare	24	Labor and living conditions of plantation workers will be improved	4	1.299	1	0.634	3	1.401

Theme	Statement No.	Statement	Factor 1 – Favoring the environment and human rights group		Factor 2 - Favoring the economic and environmental group		Factor 3 – The pragmatic group	
			Factor score	Z-score	Factor Score	Z-score	Factor Score	Z-score
Smallholders' welfare	26	Smallholders will be compensated by the government for the loss of cultivated area 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 forests 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 to forest	2	0.922*	-3	-1.244	-2	-1

317 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.
318 Although not always on the extreme ends of the scale, they are important for understanding a certain perspective. Sentences in **bold** are the **characterizing statements**,
319 which are statements that scored the highest or lowest in a certain factor.

320 **Factor 1 – Favoring the Environment and Human Rights**

321 Factor 1 accounted for 17% of the variance and emphasized benefits to the environment and plantation workers’
322 welfare as the main outcomes of a jurisdictional approach. Respondents loading on this factor did not prioritize
323 the economic outcomes of a jurisdictional approach.

324 Factor 1 strongly agreed that jurisdictional approach outcomes should cease “Crop expansion on HCV
325 areas, biodiverse areas, and peatlands” (+4/1.545). Respondents in this group felt that it was the most likely
326 outcome, as most large companies in the global palm oil supply chain have committed to the No Deforestation,
327 No Peat, and No Exploitation, and as MSPO does not allow it in most circumstances (see Supplementary
328 Material, Annex 2). However, one respondent voiced the concern that some licenses have already been given
329 out for palm oil activities in forest reserves that could be HCV areas and that it is difficult to cancel the license
330 agreement. Factor 1 was also linked to the jurisdictional approach outcome statement, “The landscape will
331 contain an adequate quantity and configuration of habitats to protect native biodiversity” (+3/1.125). Those who
332 agreed with this statement felt that Sabah was already going in the right direction, especially regarding the
333 almost-ready HCV/HCS map produced for the RSPO JA.

334 The other statement strongly aligning with Factor 1 was “Labor and living conditions of plantation
335 workers will be improved” (+4/.299). One respondent said, “This could be one of the strongest selling points, by
336 telling the world that when you buy our palm oil, you know for sure that it does not come from child labor and
337 that the workers are treated well”. Another jurisdictional approach outcome statement related to the rights of
338 local communities loading on Factor 1 was “FPIC will be required by law in the jurisdiction” (+3/1.029). There
339 were two opinions on this. Some respondents thought that elements of FPIC were already embedded into local
340 laws, which may explain the high scores on this statement. Sabah’s Land Ordinance 1968 has specific
341 provisions to address the regulation of the native customary land rights, such as consent by the native owner
342 being required before the person’s land is sold to a non-native. The term FPIC, though, is not specifically
343 mentioned in the ordinance. However, because aspects of native land rights are covered in this ordinance, some
344 respondents thought this counted as FPIC. On the other hand, some respondents felt that FPIC was one of the
345 most crucial criteria for the RSPO JA to work and, therefore, should be an outcome. Respondents loading on
346 Factor 1 also ranked the smallholders’ welfare statements “Smallholders will increase their technical capacities
347 in agricultural practices” (+2/0.945) and “Land tenure rights of smallholders will be clarified” (+1/0.798) higher
348 compared to those loading on Factors 2 and 3. Like FPIC, some respondents felt that increasing the technical

349 capacity of smallholders was a necessary outcome. As one respondent said, “They need incentives to become
350 certified”.

351 Factor 1 was in strong disagreement with the outcome statements that “Zero gross deforestation will be
352 achieved” (-4/-1.379) and “The jurisdiction will be carbon neutral” (-4/-2.097). Respondents felt that both
353 outcomes were unrealistic. For the carbon neutral outcome, respondents indicated that deforestation was not the
354 only activity emitting carbon and that reducing carbon would also require more effort in the energy and
355 transport sector, which was beyond the scope of the RSPO JA.

356

357 **Factor 2 – Favoring the Economy and Environment**

358 Factor 2 accounted for 13% of the variance. This factor focused on benefits to the state’s environment and
359 economy as the main outcomes of a jurisdictional approach.

360 Factor 2 strongly agreed with the outcome statement, “Preferential sourcing agreements will be secured
361 between the jurisdiction’s supplier and buyer companies outside of the jurisdiction” (+4/1.994). One respondent
362 said, “This is really what we are hoping for. It is easier to have an agreement with the whole state instead of
363 sourcing certified sustainable palm oil from individual companies.” This factor scored positively on all
364 economic statements, indicating that the respondents associated with this factor thought that a jurisdictional
365 approach should benefit the state’s economy. The economic statements with which this factor displayed higher
366 agreement than Factors 1 and 3 were “Business risk for the downstream industry will be reduced as the supply
367 will be deforestation-free” (+3/1.248) and “The cost to obtain sustainable certification for agriculture
368 commodities will be reduced” (+1/0.251).

369 Like Factor 1, Factor 2 strongly agreed with the jurisdictional approach outcome statement: “Crop
370 expansion on HCV areas, biodiverse areas, and peatland will cease” (+4/1.835). The reasons given were similar
371 to Factor 1. One respondent added, “This is the very likely outcome of the jurisdictional approach, and from the
372 palm oil growers’ perspectives, this is very achievable.” This was the only factor that scored highly on “The
373 jurisdictional approach will be institutionalized within the formal governance structure” (+3/1.389). One
374 respondent strongly opposed this, saying, “This must happen first. As long as there is no formal structure, the
375 RSPO JA will be unable to move”.

376 Factor 2 did not associate with statements that the jurisdictional approach outcomes would benefit
377 smallholders. As such, statements on smallholders’ welfare were strongly disagreed with, such as: “Land tenure
378 rights of smallholders will be clarified” (-4/-1.42), and “Smallholders will have the right to convert forest

379 outside of Forest Reserves/Estates into plantations for their livelihoods” (-4/-1.828). A respondent said, “The
380 state has the power and the law on its side to give out land titles or prevent any type of land use from happening.
381 The smallholders do not have the power to do so”. Other statements about smallholders that scored highly
382 negatively were, “Smallholders will have equitable access to critical natural resource stocks” (-3/-0.924) and
383 “Smallholders will be given the option to practice alternative livelihoods that will prevent them from converting
384 forest” (-3/1.244).

385 One out of the five respondents in Factor 2 (OT 19) was bipolar¹⁰ to this factor, most notably
386 concerning the person’s opinion of the economic benefits that the RSPO JA would bring to the state, where the
387 economic outcome statements scored negatively: “The jurisdiction will be able to sell its agricultural products
388 with premium price (S23/-4), “The jurisdiction will be a preferred choice for foreign investments” (S15/-3), and
389 “Preferential sourcing agreements will be secured between the jurisdiction’s supplier and buyer companies
390 outside of the jurisdiction” (S25/-3). This person believed that certified sustainable palm oil had already become
391 a norm globally, so there was no reason that Sabah would be preferred, as other countries were doing it too.

392

393 **Factor 3 – Pragmatism**

394 Factor 3 accounted for 13% of the variance. This factor shared similarities with both Factor 1 and Factor 2, but
395 it took a more pragmatic stance on what the jurisdictional approach outcomes should be.

396 Factor 3 showed similarity to Factor 2 in the economic outcomes. Like Factor 2, it strongly agreed with
397 the statement, “Preferential sourcing agreements will be secured between the jurisdiction’s supplier and buyer
398 companies outside of the jurisdiction” (+4/1.544). A respondent from the business sector remarked, “I
399 personally think this is the most important outcome.” Factor 3 also corresponded with Factor 2 regarding the
400 economic outcome statements: “The jurisdiction will be a preferred choice for foreign investments” (+3/+1.29)
401 and “The cost to obtain sustainable certification for agriculture commodities will be reduced” (+1/+0.596).

402 This factor displayed strong agreement with the environmental outcome statements: “The landscape
403 will continue to provide crucial ecosystem services” (+4/2.176) and “The landscape will contain an adequate
404 quantity and configuration of habitats to protect native biodiversity” (+3/1.105). However, respondents thought
405 Sabah already had the necessary laws and policies to deal with landscape connectivity matters. Therefore, these

¹⁰ 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 and Stenner 2012)

406 were seen as “low-hanging fruit”, which the RSPO JA could strengthen, but would happen with or without it.
407 Factor 3 showed similarity to Factor 1 for the two statements above, which also scored high in Factor 1.

408 Factor 3 was the only factor strongly associated with positive scores on “The agricultural industry will
409 fund forest conservation efforts” (+2/0.818). Some respondents agreeing with this statement wanted a tax levy
410 to be implemented, where the money would be invested back into conservation (e.g., forest restoration). For
411 example, the Sabah Forestry Department collects cess funds¹¹ from companies operating oil palm plantations in
412 forest reserves, amounting to USD 8.36 million in 2021 (SFD, 2021). The opinion was that this could be made
413 compulsory for all industrial oil palm plantations in Sabah, a kind of atonement for converting the forest at the
414 outset. Other respondents associated with this factor believed that the agriculture industry was already funding
415 conservation work, such as setting aside wildlife corridors, in partnership with government and civil societies.

416 Factor 3 was associated with negative scores on the outcome statement of halting forest conversion.
417 Unlike Factors 1 and 2, which had +4 scores on the statement, “Crop expansion in HCV areas, biodiverse areas,
418 and peatland will cease”, Factor 3 scored neutrally (0/-0.054), indicating that respondents associated with this
419 factor were not optimistic about ceasing expansion in HCV areas. In fact, they thought that “Smallholders will
420 have the right to convert forest outside of Forest Reserves/Estates into plantations for their livelihoods”
421 (+1/0.173). Factor 3 displayed strong disagreement with “Zero net deforestation will be achieved” (-4/-1.382)
422 and “There will be no more forest conversion for new plantations” (-4/-1.955). One respondent said, “Forest
423 conversion will always happen!” and another said, “This is my land; I can do what I want with it! Unless I get
424 compensated”. Both respondents, however, explained their views: that we needed to be realistic, as land in
425 Sabah had already been allocated for conservation, agriculture, and development, so the authorities should plan
426 their land use based on this allocation. The pragmatic perspective of Factor 3 was also reflected in the agreement
427 with “Deforestation will be reduced inside and outside Forest Reserves/Estates” (+1/0.296) – not so much
428 because of the RSPO JA initiative but because there is not much forest outside of forest reserves left to convert
429 and that 26% of Sabah’s forest will be locked up because of the state’s policy to make 30% of the land a
430 protected area.

431

432 **Consensus Statements**

433 Consensus statements are statements shared by all factors with similar rankings or those that do not distinguish
434 between any pairs of factors. Such statements are potential starting points for engagements (Buckwell et al.

¹¹ A form of tax often charged by governments for a social or environmental purpose.

435 2020). There were four jurisdictional approach outcome statements that all three factors disagreed would be
436 achieved. The first two were closely linked with each other and were “Incentives will be given to land users who
437 prioritize the activities that support the jurisdictional approach” (F1 (-3), F2 (-3), and F3 (-2)), and
438 “Smallholders will be compensated by the government for the loss of cultivated area onto which they might
439 have otherwise expanded” (F1 (-3), F2 (-1) and F3 (-1)). For incentives given out, one respondent explained that
440 it would be impossible for the government to reward all land users that supported the RSPO JA, and another
441 said, “The state is not looking into this at all; therefore, it will not happen”. Most respondents said that
442 smallholder compensation would never transpire, and one skeptical respondent said, “If they ever do get
443 compensation, it will take forever because of the bureaucracies.” The third statement, “Smallholders will have
444 equitable access to critical natural resource stocks” (F1 (-1), F2 (-3), and F3 (-3)), was, also, not an outcome most
445 respondents thought likely. The last statement had to do with deforestation, “Zero gross deforestation will be
446 achieved” (F1 (-4), F2 (-1), F3 (-3)). All three factors agreed that achieving this target would be impossible, as
447 Sabah still has about 63% of its land area (or 46,790 km²) under forest cover (SFD 2021).

448 There were two statements that all three factors *agreed* would be the outcomes for the RSPO JA. They
449 were, “Labor and living conditions of plantation workers will be improved” (F1 (4), F2 (1), F3 (1)), and “FPIC
450 will be required by law in the jurisdiction” (F1 (3), F2 (2), and F3 (1)).

451

452 **DISCUSSION**

453 This research was conducted to understand stakeholder perspectives on what should be realistic jurisdictional
454 approach outcomes to be achieved in 10 years. Utilizing Q-methodology, this study revealed three different
455 perspectives on the outcomes: “Favoring the environment and human rights” (Factor 1), “Favoring the economy
456 and environment” (Factor 2), and “Pragmatism” (Factor 3). The difference in perspectives on the outcomes was
457 because the RSPO JA is a new initiative that started without a proper framework in place – the RSPO
458 Jurisdictional Piloting Framework was only produced five years after Sabah adopted the RSPO JA.
459 Furthermore, the federal government made MSPO mandatory for the whole country after Sabah decided to use
460 RSPO, which created confusion among the Sabah stakeholders on which standards to use, and if it was still
461 necessary to follow the higher standards set by RSPO. In addition, the stakeholders are from different
462 backgrounds and have diverse expertise and values, contributing to the difference in perceptions. For example,
463 the business and industry stakeholders would have a better understanding of the RSPO standards and the actions
464 required to achieve them because they have experience certifying their entities. The diversity in perspectives

465 observed in this study helps highlight the need for a shared vision when a jurisdictional approach is used: one on
466 which all stakeholders can agree so that they can take a specific course of action to achieve a shared vision; thus,
467 policies can be better aligned to realize their vision (Principle 6 of the landscape approach) (Sayer et al. 2013).

468 In theory, a jurisdictional approach's focus is on reducing, limiting, or addressing deforestation and the
469 conservation of ecosystems (Boyd et al. 2018; Brandão et al. 2020; Houten and Koning 2018; Reed et al. 2020;
470 Stickler et al. 2018). This study found a general agreement between the three perspectives that jurisdictional
471 approaches would not achieve zero gross deforestation. This is because zero deforestation targets (gross or net)
472 are challenging to meet. They are seen as disadvantaging countries that depend on agriculture as their main
473 economic activity if it implies no expansion of infrastructure and agricultural production in native forest areas
474 (Brown and Zarin 2013). For example, even if oil palm expansion can be stopped as the RSPO JA takes effect,
475 other commodities, such as industrial timber plantations in a jurisdiction like Sabah, will continue to cause
476 forest conversion. This also raises the question of whether a single commodity approach like the RSPO JA could
477 work, as a jurisdictional approach is supposed to be cross-sectoral and integrated across multiple institutions.
478 However, this study found that a jurisdictional approach can stop the conversion of HCV areas, high
479 biodiversity forested areas, and peatlands and contribute to preserving an adequate quantity and configuration of
480 habitats to protect native biodiversity and ecosystem services. The RSPO JA and the HCV map produced for
481 Sabah, in principle, will change the common practice of individual oil palm estates managing HCV areas within
482 their own boundaries (which are not viable for wildlife in the long term) to planning at an ecosystem-level for
483 conservation (Jonas et al. 2017). Adequate habitats for biodiversity were also considered a potential outcome of
484 integrated landscape approaches in Indonesia (Riggs et al. 2021). Fishman et al. (2017) suggested the
485 continuous provision of ecosystem services as an outcome because a jurisdictional approach will align multiple
486 stakeholders around responsible commodity production, which will lead to a more resilient natural resource
487 base.

488 Other outcomes featured in the literature for jurisdictional approaches that were disagreed with in this
489 study were: (i) incentives provided to land users for forest conservation and sustainable agricultural practices
490 (Chervier et al. 2020; Denier et al. 2015; Fishman et al. 2017); (ii) a governance mechanism in place to ensure
491 concerted land-use planning (Fishman et al. 2017; Paoli et al. 2016; Piketty et al. 2017); (iii) smallholders have
492 equitable access to critical natural resource stock (Denier et al. 2015); and (iv) smallholders' land tenure rights
493 clarified (Denier et al. 2015; Ng 2021; Pacheco et al. 2020; Paoli et al. 2016). The outcome of incentives is
494 deemed unfeasible because there is currently no indication by the Sabah government that it is moving toward

495 this type of compensation policy. This is unlike other jurisdictional approaches, for example, in Liberia, where
496 smallholders are given incentives for forest conservation, and Acre, Brazil, which set up a System of Incentives
497 for Environmental Services to support sustainable agricultural practices (Fishman et al. 2017). Carrying out
498 concerted land-use planning was identified as one of the key difficulties in the Wardell et al. (2021) study
499 regarding jurisdictional approaches. The authors reported that it is difficult to create new regulations linking the
500 environmental sector with the economic sector to achieve the paradigm shift needed for a jurisdictional
501 approach to happen, especially with today's diverse societal demands. The outcome of smallholders having
502 equitable access was disagreed with because, in reality, smallholders do not often get optimal land for palm oil
503 cultivation. Studies have shown that they are pushed to marginal land, with problems of soil erosion, limited
504 water resources, and poor water quality, which contribute to lower oil palm yields (Ogahara et al. 2022). The
505 outcome of smallholders clarifying their land tenure rights was disagreed with because, in the case of Sabah,
506 independent smallholders often grow oil palm on lands they claim under their customary rights, but the state
507 government does not recognize this. The state will only recognize the claim when such lands are titled under the
508 Sabah Land Ordinance 1968 as Native Titles, which sometimes takes many years to achieve because of the long
509 and bureaucratic process (Cooke et al. 2018). This was, unpredictably, not an outcome that came out strongly. In
510 fact, the "Favoring the economy and environment" (Factor 2) perspective totally disagreed with it. This is
511 surprising, especially for the business and industry stakeholders, as they hoped that implementing the RSPO JA
512 would provide a platform for resolving land issues in Sabah, which was identified as a challenge for
513 smallholders to achieve certification (Ng 2021).

514 The social outcomes that all three perspectives agreed would likely happen were: (i) FPIC will be
515 required by law in Sabah, and (ii) labor and living conditions of plantation workers will be improved. These
516 outcomes are prominent palm oil issues featured in the MSPO and RSPO certification standards. Both outcomes
517 were deemed likely to happen because there were previously initiated policy changes or available legislation,
518 independent from the RSPO JA, that were underway or had already been implemented (i.e., RSPO and MSPO
519 have specific criteria on FPIC and workers' rights, and corporates have committed to the No Deforestation, No
520 Peat, and No Exploitation). This is a crucial institutional factor. A study by Korhonen-Kurki et al. (2014)
521 showed that countries with already established legislation or policies on forest governance are more likely to
522 achieve successful REDD+ outcomes. Buchanan et al. (2019) suggested that building on current policies and
523 legislation will help avoid the perception that sustainability is somehow additional or beyond what governments
524 should already be doing.

525 As a means of achieving deforestation-free commodities, an outcome featured in jurisdictional
526 approaches literature is that preferential sourcing agreements, in particular supply chain commitments and long-
527 term contracts with buyers, are given to a jurisdiction (e.g., Sabah) (Boshoven et al. 2021; Buchanan et al. 2019;
528 Paoli et al. 2016). This outcome was deemed very important for the two perspectives: “Favoring the economy
529 and environment” (Factor 2) and “Pragmatism” (Factor 3). This was seen as more important than selling
530 certified palm oil at a premium price (Buchanan et al. 2019) as Sabah hopes to attract investments and gain
531 secure access to environmentally-sensitive markets in the European Union and other northern countries.
532 However, it should be noted that if there are cross-commodity leakages (and continued deforestation), some
533 concerned oil palm buyers could decide to reduce their sourcing from Sabah, despite RSPO JA certification.

534 Some limitations of this study should be taken into account. First, the Q-methodology took a
535 “snapshot” of opinions on jurisdictional approach outcomes at the specific time when the research was
536 conducted. Therefore, if conducted again, perhaps one year later, the expected outcomes could be different
537 (Cross 2005; Molenveld 2020). In addition, the results of this study cannot be generalized to a particular
538 population based on the respondents’ sectors; the results only apply to those who took part in the study
539 (Molenveld 2020). It is also important to bear in mind the possibility of biases in the responses because the
540 statements were developed based on the themes and how the question was asked to the respondents to sort the
541 statements. The 29 statements were not evenly distributed between each theme, and this may be seen as an
542 unfair or narrow focus on one theme over the others, especially that of “plantation workers’ welfare”, which
543 only had one statement. As such, further studies are recommended to focus on social issues in jurisdictional
544 approaches, as the possibilities of a jurisdictional approach benefitting plantation workers and even smallholders
545 are many and could not be covered in this study. In relation to the second bias, the question posed included the
546 10-year timeframe and consideration of real-world constraints. As such, the results could be the intermediate
547 outcomes and not the final ones because a jurisdictional approach is a lengthy process, and people often find it
548 difficult to have such a long-term view. In addition, because respondents were asked to be realistic, the answers
549 given could be considered cautious and, perhaps, unambitious.

550

551 **CONCLUSION**

552 The findings of this study provide a better understanding of what key stakeholders consider attainable from a
553 jurisdictional approach, and the findings warn of the difficulty of achieving aims under real-world constraints.

554 The study identified three perspectives on jurisdictional approach outcomes related to economic, environmental,

555 smallholders' welfare, and governance themes. The difference in perspectives was caused by the RSPO JA
556 being a new initiative and the respondents having different values and expertise. There was a general agreement
557 between the three perspectives that jurisdictional approaches would not achieve zero- deforestation, but what
558 was deemed more achievable was stopping the conversion of HCV areas, high biodiversity forested areas, and
559 peatlands, and that a jurisdictional approach could contribute to protecting the habitats of native biodiversity and
560 ecosystem services in that landscape. The most agreed-upon outcomes by all three perspectives were related to
561 human well-being and the needs of the palm oil industry: that FPIC will be required by law in Sabah and that
562 plantation workers' welfare in the plantations will improve. The perspectives on the possible outcomes given
563 above were attributed to the already existing policies on forest conservation in Sabah, Malaysia's commitment
564 to becoming 100% MSPO certified, and oil palm companies' commitments to No Deforestation, No Peat, and
565 No Exploitation. However, another plausible reason may be that, because of the way the question was posed
566 during the study (i.e., a timeframe of 10 years and outcomes must be realistic), the answers obtained were more
567 on the cautionary side and lacked additionality (i.e., they follow the existing policies), and/or were more
568 intermediary than final outcomes.

569 Taken together, the results of this study suggest that stakeholders in the RSPO JA should take an
570 immediate step forward to agree on its intermediary and final outcomes. A shared understanding of the
571 outcomes is important as it will build the critical support and the enabling environment needed among the
572 stakeholders to continue collaborating and investing their time and resources. The different stakeholder
573 perspectives on the RSPO JA outcomes should be deliberated on and communicated clearly so that everyone
574 agrees on a shared vision. A recommendation would be to start with the agreed consensus view that zero-gross
575 deforestation is unrealistic. From there, the stakeholders should come to an agreement on what would be
576 realistic yet additional and fulfill the international standards of sustainable commodity production. This is
577 crucial as it would manage expectations locally and globally.

578 This study also raised important questions about the feasibility of implementing a jurisdictional
579 approach just for a single commodity. This is because one of the objectives of this particular jurisdictional
580 approach is to reinforce Sabah's sustainably produced palm oil viability in international markets. However,
581 there will be continued cross-commodity deforestation (tree plantations expansion at the expense of so-called
582 degraded natural forests) in Sabah. Therefore, RSPO certification may not be the most appropriate for a
583 jurisdiction as some concerned palm oil buyers may reduce their sourcing from Sabah, despite the RSPO JA,
584 because of other commodities causing deforestation in the state. Instead, the more appropriate path to take for a

585 jurisdiction would be a (net) “zero-deforestation territory” beyond a specific commodity chain. This is another
586 important consideration for Sabah. But, to do this, buyer countries must recognize and reward the efforts made
587 by producers like Sabah and help the state make sustainable production of its commodities part of its agenda.

588

589

590 **Declaration**

591 **Conflicts of Interest**

592 The authors have no relevant financial or non-financial interests to disclose.

593 **Author Contributions**

594 JNSC, CC, RC, and AK contributed to the study design and conception. JNSC conducted the interviews,
595 performed data analysis, and prepared the first draft of the paper. All authors provided revisions and comments
596 to previous versions of this paper and approved the final manuscript.

597

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