# Exploring the collaborative functionings of the informal collaboration for sustainability of forest resources in Indonesia

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### **Abstract**

**Background:** The sustainability of the world's forest resources is under threat from unsustainable agricultural practices. One of the main examples of this can be seen from Indonesia, where the agricultural practices (especially palm oil) combined with the poor enforcement of forest laws creates problems concerning the sustainability of forest resources. With no formal collaboration to achieve forest sustainability, analyzing the informal collaboration between stakeholders is of relevance.

**Research objectives:** This study sought to explore whether collaboration can contribute to sustainability of forest resources in Indonesia. This is done through analyzing the informal collaborative functionings between all relevant stakeholders concerning the sustainability of forest resources in Indonesia. Additionally, this study sought to find out how interactions between these stakeholders affect the well-being of local communities and indigenous people.

**Data collection and analysis:** This is a qualitative study. Research was conducted using three forms of data: literature, documents, and documentary films. The research design of this thesis is an intrinsic case study. This choice is grounded in the researcher's wish to better understand one particular case. The data were coded in NVivo and analyzed using thematic network analysis.

Findings: This study found that there are multiple relevant stakeholders that are situated in a complex informal collaboration. The most noticeable stakeholders being the government of Indonesia (GOI); palm oil producers, both large-scale palm oil companies (LPOCs) and palm oil smallholders (POS); the international funders Reducing Emissions from Deforestation and forest Degradation (REDD+) and the Roundtable on Sustainable Palm Oil (RSPO); local communities and indigenous people. An emerging finding was that there are doubts surrounding the GOI's commitment to enabling sustainable forest management. Even as many of their laws and communication on the international level present positive signs of wanting to achieve sustainability of forest resources, their actions do not fulfill the needs to achieve this. They have, however, a positive relationship with REDD+, which provides economic incentives to handle the forest more sustainably. Other findings show the vulnerability concerning the well-being of local communities, indigenous people, and POS, in relation to the collaborative functionings. This became especially clear for the POS, who lack the needed support to

beneficially change their forest clearing methods towards more sustainable and more socially accepted ways.

Conclusion: In conclusion, I find that collaboration among stakeholders not only contributes to sustainability of forest resources, but is also a necessity. On their own, each stakeholder would struggle to make progress towards the mission of the collaboration, mainly because of the amount of relevant stakeholders on different levels (international, national, local). The complexity of this case requires collaboration to efficiently reach goals of sustainability.

*Key words:* forest sustainability, palm oil, Indonesia, well-being, informal collaboration, palm oil smallholders

# List of acronyms and abbreviations

**AVM** Audio-Visual material as Medium

BMCF Bergen Model of Collaborative Functioning
CBFM Community Based Forest Management
UN Climate Change Conference number 26
CSPO Certified Sustainable Palm Oil (RSPO)
EIA Environmental Investigation Agency

**EU** European Union

**FAO** Food and Agriculture Organization of the United Nations

**FLEGT** Forest Law Enforcement, Governance, and Trade

GOP Gross Domestic Product
GOI Government of Indonesia

**HAkA** Hutan, Alam dan Lingkungan Aceh (Forest, Nature & Environment Aceh)

HCS High Carbon Stock (Forest areas with high carbon stocks)HPFCC International Indigenous Peoples Forum on Climate Change

IO International Organizations

**ISPO** Indonesian Sustainable Palm Oil (GOI)

LPOCs Large-scale Palm Oil Companies
NGO Non-Governmental Organizations

PMRV Participatory Measurement, Reporting and Verification system

**POS** Palm Oil Smallholders

**REDD** Reducing Emissions from Deforestation and forest Degradation

**REDD**+ + Conservation, sustainable management, and enhancement of forest carbon

stocks

RSPO Roundtable on Sustainable Palm Oil SDGs Sustainable Development Goals

**SF** Social Forestry

**SPOM** Sustainable Palm Oil Manifesto

SWB Social Well-Being UN United Nations

**UNFCCC** United Nations Framework Convention on Climate Change

**WALHI** Wahana Lingkungan Hidup Indonesia (Indonesian Forum for the Environment)

WHO World Health Organization

# 1. Introduction

### 1.1. Introduction to the study

The sustainability of the world's forest resources is under threat from unsustainable agricultural practices (Jhariya et al., 2019, p. 4). The Food and Agriculture Organization of the United Nations (FAO) presents statistics showing that globally, agriculture accounts for more than one third of the total land area (FAO, 2016, p. 12). Agricultural practices are of course highly needed, however, conducting these practices sustainably is essential. There are several Sustainable Development Goals (SDGs) that explicitly refers to the need for forest sustainability and sustainable agricultural practices, most relevant: SDG 2 "End hunger, achieve food security and improved nutrition and promote sustainable agriculture", and SDG 15 "Protect, restore and promote sustainable use of terrestrial ecosystems, sustainable manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss" (United Nations, 2017, p. 2 & 16).

The main reason for the global importance of forest sustainability, is based on its role in climate change mitigation (Bright et al., 2015; Davies-Barnard et al., 2015). This is especially relevant when analyzing the collaboration for forest management, as forests contributes a significant amount towards climate change mitigation. This significance is based on the forests' ability to function as carbon sinks, making them able to decrease greenhouse gases in the atmosphere and reducing the global average temperature (Favero et al., 2018, p. 1; UNECE, n.d.). Because of this ability, large rainforests are often called the lungs of the planet (UK Centre for Ecology & Hydrology, n.d.). These benefits that forests provides can be seen as an essential tool for climate change mitigation in a world where the earth's temperature rises each decade (Lindsey & Dahlman, 2022). The global temperature rise is a well-documented problem originating from climate change and can have dire consequences for millions of people worldwide. Examples of some of these consequences can be seen from Jakarta, which is the capital and largest city of Indonesia. Jakarta has experienced problems of continuous floodings and sinking into the ground. Every year, Jakarta is sinking between 1-15 cm on average, and about half the city is currently below sea level (Lin & Hidayat, 2018). The most mainstream imagery, however, which has been popularized through the media, evokes images of a polar bear floating alone on a single block of ice that has not yet melted. If we analyze these

challenges within the context of the global north or countries on the equator, either way, the global temperature rise can be seen as an integral challenge made possible by global warming. The forests climate change mitigation abilities function as a helpful tool to combat challenges like these.

Because of the forest's climate change mitigation abilities, sustainable forest management is essential to be able to fully utilize these beneficial aspects of forests. However, successfully managing forest areas have shown to be difficult, especially concerning the hindering of deforestation. This challenge is acknowledged by the UN, where both SDG 15.3 & 15.5 covers the need to combat deforestation (United Nations, 2017, p. 17)<sup>1</sup>. Still, there are instances where large-scale acts of deforestation still occur.

### 1.2. Background to the study

One of the main examples of deforestation, which is based on poor agricultural management, can be seen from the government of Indonesia (GOI), which is why, in this thesis, the spotlight will be directed towards the case of Indonesia. Indonesia has experienced damaging acts towards the sustainability of their forests, which is mainly grounded in their poor management of forest areas and their insufficient enforcement of forest laws. Bakker and Moniaga (2010, p. 200) state that "law, in Indonesia, is a contested value by itself". Because of the lack of efficient enforcement of laws and poor forest management, deforestation is an integral issue. This is eminent in statistical data on the Indonesian forest areas, which is experiencing a steady decline; in 1990, forest areas covered 65% of all land area, whilst in 2020, the number have declined to 49.1% (World Bank, n.d.-b). Corresponding to a loss of about 264 000 km² of forest (World Bank, n.d.-c). To put this into context, since 1990, the size of Indonesia's forest loss has been greater than the size of the United Kingdom (World Population Review, 2022).

Then the question arises, what is the reason for this decline of forest? There could be a multitude of answers to this question, however, this thesis will focus on the agricultural industry. Agricultural land covered 24.9 % of all land area in Indonesia in 1990. In 2020, the percentage of land that are covered by agricultural land increased to 33.2% (World Bank, n.d.-a). In this thesis, the focus will be directed towards the palm oil industry, based on its central

(United Nations, 2017, p.17).

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<sup>&</sup>lt;sup>1</sup> SDG 15.3: "By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, draught and floods, and strive to achieve a land degradation-neutral world". SDG 15.5: "Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species".

role in the agricultural field in Indonesia (Wicke et al., 2011). Because of the massive investments, Indonesia is now the world's leading producer of palm oil (Dib et al., 2018, p. 828; Rist et al., 2010, p. 1010). The palm oil industry is especially beneficial for Indonesia's economic development, in some cases functioning as an instrument for national poverty alleviation (Rist et al., 2010, p. 1019). The industry contributes around 4.5% of Indonesia's gross domestic product (GDP), providing jobs to over 3 million people (Green Commodities Programme, 2019), and are most likely the reason for its rapid and continuous development (Prabowo et al., 2020, p. 158). Unfortunately, despite the obvious economic benefits of the palm oil industry, the trade-off is that the forest sustainability is diminishing.

There are a lot of research conducted on the palm oil industry's effect on forest sustainability. Because of the amount of land that has been transformed from natural forest to palm oil plantations, the problem of deforestation is relevant. Often, the focus is on the acts of deforestation by burning forest. The choice of clearing forest by burning is grounded in this forest clearing methods availability and affordability. Often performed by palm oil smallholders (POS), but in some cases also large-scale palm oil companies (LPOCs), the act of burning forest can be argued to damage the sustainability of future forests more than clearing forest using appropriate machinery, because of its negative effects on future regrowth of forest (Uhl et al., 1982, p. 319). In this thesis, I will look at both general deforestation and forest clearing by burning, since both forms of forest clearance are prevalent in the literature.

#### 1.3. Problem statement

Multiple different stakeholders have conflicting ideas about how the forest resources in Indonesia should be used: Indigenous people often want to defend the forests because of its helpful resources concerning shelter and food; POS and LPOCs want to use forest areas to house plantations of palm oil; the GOI has previously presented conflicting ideas about forest management, based on the oil's positive effect for the national economy conflicting with the wish to preserve forest; International climate change experts and international funders generally agree that the sustainability of forest resources (no matter where) is of great importance; and local communities may also possess conflicting ideas, based on the palm oil industry's benefit of improving infrastructure versus forest fires potential effect on their health. In the context of these conflicting interests, the problem being addressed is whether it is possible for the conflicting stakeholders to collaborate to ensure the sustainability of forests and well-being of people living close-by forests. One important obstacle in this case is that there is no formal

collaboration between all these stakeholders. In some cases, there are formal collaboration on forest sustainability between pairs of stakeholders, but not any collaborations which connects everyone. With a lack of a formal collaboration, how well does the informal collaboration between all the relevant stakeholders function?

### 1.4. Purpose statement

The main purpose of this study is to analyze the collaborative functioning's of forest sustainability in Indonesia. This will be done using the Bergen Model of Collaborative Functioning (BMCF). By examining the collaborative functions of this informal and complex collaboration for forest sustainability, concerning multiple stakeholders at different levels, the study provides support to the environmental collaboration discourses. More specifically, it will provide findings that contributes to the mapping of the stakeholders' roles in this informal collaboration. This mapping could be helpful for further research, decision-making, and policy implementation.

This study also focuses on how these interactions between the stakeholders can affect the well-being of local communities, palm oil smallholders and indigenous people. This is significant for the field of health promotion, which emphasizes the importance of various environmental, social and economic aspects for health (Nutbeam & Kickbusch, 1998, p. 351).

# 1.5. Research objectives

#### **Research objective:**

To explore whether collaboration among stakeholders can contribute to sustainability of forest resources in Indonesia.

#### **Research questions:**

- i. How is the issue of sustainability of forest resources addressed in Indonesian laws and international agreements and communicated to all stakeholders?
- ii. What are the roles of the other stakeholders (local communities, palm oil producers, etc.)?
- iii. How does interaction between stakeholders impact the well-being of local communities and indigenous people?

# 1.6. Key concepts

### Health promotion

As this thesis is situated within the field of health promotion, it is important to explain and place the topic of Indonesian forest sustainability in the context of health promotion. The world health organization (WHO) define health as "a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity" (World Health Organization, 1948). To achieve this state of health, the WHO presented the Ottawa Charter for Health Promotion in 1986. Here, they define health promotion as "the process of enabling people to increase control over, and to improve, their health" (World Health Organization, 1986). The charter define five action areas which will benefit health promotion: 1) the creation of healthy public policy, 2) creating supportive environments, 3) strengthening community action, 4) development of personal skills, and 5) reorienting health services towards the pursuit of health (World Health Organization, 1986). In this study, the action areas which holds the most relevance are 1, 2, and 3. Firstly, healthy public policies are relevant when analyzing the GOI's documents, especially the forest law. Creating supportive environments is integral when analyzing an informal collaboration, such as the collaboration for forest sustainability in Indonesia. And lastly, the strengthening of community action is relevant when discussing strategies like communitybased forest management (CBFM).

#### Well-being

What is especially relevant in this case, when connecting the case to health promotion, is well-being. This study will utilize Bakar's et al. (2015, p. 287) definition of well-being:

"Wellbeing is a positive physical, social and mental state which stems from a host of collective goods and relations with people and places. It requires basic needs to be met and enhanced by conditions that include supportive personal relationships, community empowerment, financial security, rewarding employment, good health, and a healthy and attractive environment."

This definition draws inspiration from the foundation of WHO's definition on health, referring to physical, social, and mental well-being. It places focus on multiple scenarios that are relevant in the case of forest sustainability in Indonesia, such as community empowerment, financial security, rewarding employment, good health, and a healthy environment. Another interesting

view on well-being, that are closely aligned with Baker et al. (2015) definition, is presented by Dodge et al. (2012, p. 230) definition of well-being in form of a figure:



Figure 1: Dodge et al. (2012) definition of well-being.

The figure is following Bakar et al. (2015) definition in that they recognize that the three same aspects of well-being is integral: physical, social, and mental (psychological). These three aspects are generally agreed upon in the literature on well-being (White, 2010, p. 161). However, what makes this definition different is that the figure places importance on the balance between the amount of challenges that one currently face, and the resources to combat these challenges (Dodge et al., 2012, pp. 229-230). I believe that this definition of well-being can be used alongside the general definition provided by Bakar et al. (2015). Well-being will be discussed complementary when discussing local communities, indigenous people, and POS.

#### Sustainability

The concept of sustainability has a long-term relevance and is a concept that has been pondered on by thinkers, experts, and philosophers for decades. One of the first times where the problem of unsustainable behavior is discussed is found all the way back in ancient Greece. The earliest known work covering human ecology is presented by Hippocrates in his book "Air, Waters and Places", from about year 400 BC (Everts, 2020). In this period, people believed that sickness was caused by the gods, and them alone. Hippocrates changed this unanimous belief and managed to highlight the importance of the environment in which the people lived in (Hippocrates, 400 BC). This is not only the first time where the theme of sustainability is questioned, one could argue it is also the first sign of health promotion linked with the environment. Following Hippocrates, Plato surveyed the unsustainable damages done to their forests and land, around year 360 BC: "By comparison with the original territory, what is left now is, so to say, the skeleton of a body wasted by disease" (Plato, 1989, pp. 1216-1217). This

imagery of a forested area unsustainably handled to look like a skeleton of a have-been forest can be compared to David Attenborough's observation of the palm oil's effect on forested areas in Indonesia:

"... you see this curtain of green with occasionally birds in it, and you think it's perhaps okay. But if you get in a helicopter, you see that that is a strip about half a mile wide. And beyond that strip, there is nothing but regimented rows of oil palm."

(Fothergill et al., 2020, 00:33:30)

The first time the concept and term sustainability were acknowledged on the international political arena, were in 1987 in the Brundtland report. It stated the importance of sustainability to secure a healthy world for future generations (World Commission on Environment and Development, 1987). This study follows this reports importance of sustainability. Based on this, sustainability (and sustainable development) can be seen as "the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987).

#### 1.7. Definitions of terms used

**Large-scale palm oil companies (LPOCs) -** LPOCs are large-scale companies. This term will be used when addressing companies within the field of palm oil, that have multiple people working under them and own more than 50 hectares land of planted palm oil. When using the acronym "LPOCs", I refer to these companies plurally.

**Local communities** - When discussing local communities, I refer to the Indonesian people living close by forested areas (and who are not partaking in the business of palm oil).

Palm oil smallholders (POS) - People that work as a POS. The Roundtable on Sustainable Palm Oil (RSPO) define smallholders as "farmers who grow oil palm, alongside with subsistence crops, where the family provides the majority of labour and the farm provides the principal source of income, and the planted oil palm area is less than 50 hectares" (RSPO, n.d.-b). I discuss this stakeholder from their perspective as a POS, not as a local as well.

#### 1.8. Outline and structure of thesis

The thesis is organized in eight chapters. Chapter 1 introduces the context and the research objective of the study. Chapter 2 explains the theoretical framework that will guide this study, the BMCF. Chapter 3 presents a literature review on research covering collaboration for forest sustainability. Chapter 4 presents the methodology that have been utilized in this study. Chapter 5 explains the findings gathered from the research data. Chapter 6 discussed the findings in relation to the BMCF, the Ottawa Charter for Health Promotion, the SDGs, and existing literature. Chapter 8 draws conclusions related to the study objectives and provides recommendations for policy and need for further research.

# 2. Theoretical framework

### 2.1. The Bergen Model of Collaborative Functioning

The BMCF is a product of optimalization of previous research within the field of collaborative functioning. Alter & Hage (1993) present one of the earlier works on collaborative functioning, where they introduced systemic production collaboration, essentially showcasing the basics behind stakeholders working together to produce something together. Following this, Mitchell & Shortell (2000) investigated the role of governance and their management and leadership role, and discovered that these factors are important based on their effect on the collaboration's strategies and capabilities. This paper is of relevance for this study, as I believe that the GOI will possess an integral role steering the collaboration for forest sustainability. Most central for the creation of the BMCF is a study by Wandersman, Goodman and Butterfoss (1997, p. 296) where they present a model on "An open systems framework of organizational characteristics related to coalition funding". When viewing this model, it is clear that this was the main inspirations for the BMCF, as it possesses similar terminology<sup>2</sup>. However, Corbin (2006, p. 14) stated some criticism of Wandersman, Goodman & Butterfoss' model, mainly being that their

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<sup>&</sup>lt;sup>2</sup> Similar terms being "Input", "Throughput", "Output", "Maintenance", "Production", "Member resources (Partner resources)", "Environment" (Wandersman et al., 1997).

model presents complex collaborative functioning in separate boxes connected by one-way arrows. Based on this criticism, Corbin created the BMCF:

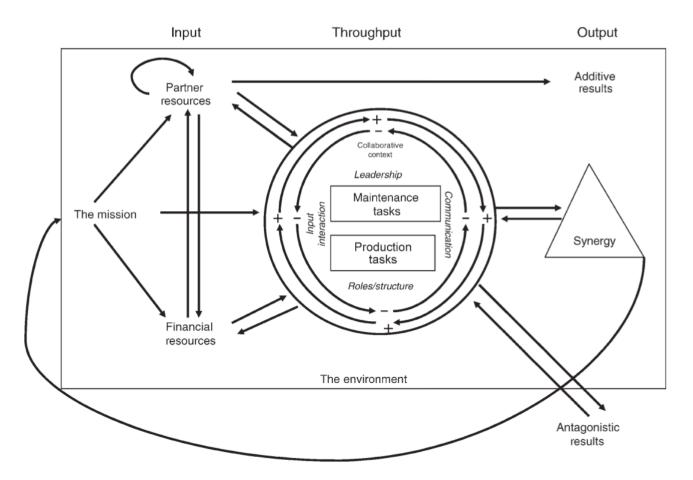


Figure 2: The Bergen Model of Collaborative Functioning. (Corbin & Mittelmark, 2008, p. 369)<sup>3</sup>.

To my best knowledge, the BMCF is the first model on collaborative functioning to recognize the complexity of the interactions between inputs, throughputs, and outputs within a collaboration. This is because the BMCF presents a more complex vision of a collaborative functioning, using more arrows covering multiple trajectories, and clearly showing the complex aspects of the collaborative context. The BMCF has mainly been applied in cases of collaboration specifically for health purposes, especially in the field of health promotion. This

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<sup>&</sup>lt;sup>3</sup> I chose to use Corbin's BMCF model from 2008 instead of her first use of it in 2006, as the older version did not show an arrow pointing from "synergy" to "the mission", essentially showcasing the possibility of achieving a positive feedback loop.

study will also be based within health promotion health promotion. However, where this study differs to the others, is that, to my best knowledge, there is no other studies that use the BMCF in analyzing a multi-levelled informal collaboration for ecological sustainability. Because of the lack of BMCF usage covering ecological cases, this study will, in a way, function as a test of the model and its uses.

### 2.2. Terminology within the research field on collaboration

Before describing the BMCF, it is important to recognize the varying terminology that exist within the study field on collaboration. To state the terminology one uses is important to help the reader achieve a thorough understanding of research. There seem to be no consensus within academia on which terms to use to describe different aspects of collaborative functions. Huxham (2003, p. 402) shares the same view on this, and recites different uses of the term collaboration: "partnership", "alliance", "network" or "inter-organizational relations". Lank (2005, p. 6) adds to this list with more synonym terms, some being "coalition", "group" or "cooperative". In this study, the term "collaboration" will be used. Another term which also could cause confusion is the term stakeholder, which will be used in this study. Usual synonyms used for this term include "partner", "associate", "participant", "ally" etc. This different terminology is important to acknowledge as Corbin usually use the terms "partnership" and "partner", while I will be using "collaboration" and "stakeholder" throughout the study. I will, however, use her terminology when discussing her work directly.

# 2.3. Description of the collaborative functions

2.2.1. Input

The input section of the BMCF covers three different aspects which will be implemented into a partnership: the mission, partner- and financial resources.

*The mission* refers to "the agreed-upon approach of the partnership to address a specific problem, issue or situation" (Corbin & Mittelmark, 2011, p. 52). In other words, it is the mission statement of the collaboration, the sole reason why the collaboration was established in the first place (Corwin et al., 2012, p. 3). Huxham (2003, p. 404) notes that the mission of a collaboration (or in his words, the "common aims") is a necessity if stakeholders are to work together beneficially. The mission in this case is to achieve sustainability of forest resources.

Partner resources refers to the stakeholder's attributes that can contribute to the collaboration. These attributes can be applied through expertise, commitment, knowledge, connections, power etc. (Corbin et al., 2012, p. 52; Corbin & Mittelmark, 2011, p. 52). In this study, a couple of relevant partner resources might include the commitment given by all the stakeholders, knowledge on forest sustainability (both knowledge gained from previous experience of forest initiatives from the government, and forest knowledge that local communities and indigenous people possess), connections and power from the government and major funders like Reducing Emissions from Deforestation and forest Degradation (REDD+)<sup>4</sup> etc.

Financial resources support the partnership's process to be able to achieve the mission statement by providing necessary funding to do the work (Corbin, 2006, p. 41). Poor financial resources can complicate the partnership, as the partnership then demands more voluntary contributions of time and effort from the stakeholders (Corbin et al., 2012, p. 52). The main source of financial resources in this study will, most likely, be REDD+, and their funding towards the Indonesian government. Because of this, one could argue that the government possesses a noticeable source of financial resources, as they have the power of delegating where the financial resources should be applied.

The BMCF show these inputs as follows: the mission is the starting point and in a way the fuel for the partnership. The partner- and financial resources affect each other, and ultimately function as the foundation for the rest of the model.

#### 2.2.2. Throughput

The throughput section of the BMCF consists of production- and maintenance tasks, which occur within the collaborative context. *Production tasks* are tasks that directly lead to the results of the partnership. In other words, tasks that produce the results. In this case it is either tasks that monitors the development of forest resource management, or tasks that directly reduces deforestation. *Maintenance tasks*, on the other hand, are tasks which maintain the collaborative environment between all membership stakeholders. Corbin (2006, p. 4) stated that "Depending upon how these elements interact, positive and/or negative loops of interaction are created which shape the partnership context". In this case, maintenance tasks can be monitoring the work done for forest sustainability and reporting it, regular meetings between relevant

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<sup>&</sup>lt;sup>4</sup> The "+" in REDD+ refers to the addition of "Conservation, Sustainable management, and Enhancement of forest carbon stocks".

stakeholders etc. I will now further investigate the different aspects which are presented within the throughput of the BMCF, as these will play an integral role in this study.

Input interactions refers to engaging of the input themselves (Corbin & Mittelmark, 2011, p. 52; Corwin et al., 2012, p. 8). These interactions are important for the partnership as they create positive and/or negative cycles of interactions that can either support and/or hinder the collaborative functioning (Corbin, 2006, p. 64). An example of a possible input interaction in this case could be the interactions between the stakeholders and the mission (partner-mission interactions), as it could be that the international funders (like REDD+ and RSPO) have different motivations compared to palm oil companies. Another input interaction that may be worth exploring is the interactions between stakeholders (partner-partner interactions), looking at the relationships between stakeholders. One such interaction could be the sometime troublesome relationship between LPOCs and the local communities and indigenous people trying to maintain their forests resources.

Roles and structure are important aspects within the analysis of a collaboration, as the structure of a collaboration often determines whether it is successful or not (Pan & Michalski, 2019, p. 268; Samii et al., 2002, p. 1002). Corbin (2006, p. 10) states that partnerships are seen as complex structures and, in the field of development, usually exist between non-governmental organizations (NGOs), governments, private sectors, donors etc. In this study, the different roles of the stakeholders and the collaboration's structure are perceived as complex. There are relevant stakeholders covering multiple levels (locally, nationally, globally). As the collaboration is multi-levelled, a close-to realistic mapping of the roles and structure is highly important, to achieve trustworthy conclusions and recommendations.

Leadership refers to the ability of any stakeholder to take on the leadership role within the collaboration. Corbin (2006, p. 37) states that the aspect of leadership has the ability to shape the context of the collaboration through either positive or negative interactions. Positive interactions include: good values, efficiency, skills for resolving conflict, openness etc. She also states that an important aspect to be able to achieve these positive interactions and maintain a balance, is that the other stakeholders respect the leader (Corbin et al., 2012, p. 53). In this case, the Indonesian government will, most likely, possess the leadership role. Bowen & Ebi (2015, pp. 80-83) state that it is necessary for a government to be responsive and supporting for a collaboration to function to its fullest degree. McAllister & Taylor (2015, p. 87) generally agree with this, adding that it is important that the government function as an overseer of the collaboration and are willing to seek the act of "greening" their regulatory framework.

Communication is the medium in which exchange happens within a collaboration, and is integral for a collaboration's success (Corbin, 2006, p. 45; Corbin et al., 2012, p. 52). This part of the model covers all forms of communication within the partnership. Good communication is especially important for the stakeholders with a leadership role in a collaboration, as they have a responsibility to make all other stakeholders aware of the situations and future goals. Then the question arises: how does a stakeholder accomplish good communication? Corbin (2006, p. 45) recites four different qualities that are essential to accomplish good communication: it must be purposeful, frequent, recognizable, and lastly, it must facilitate exchange. In this case, the communication which will be analyzed will be between all of the relevant stakeholders, but most noticeably the stakeholders possessing leadership qualities.

#### 2.2.3. Output

The last section of the BMCF show different outputs (results) which occur in the studied collaboration. In Corbin's (2006) first use of the BMCF, she found that there were three different outputs that could be observed: additive results, antagonistic results, and synergy.

Additive results are outputs which the stakeholders of the collaboration could just as well have achieved on their own. In other words, it is outcomes that have not been enhanced or affected at all by the partnership interactions (Corbin, 2006, p. 54). These additive outputs are neither positive nor negative, as even if the outputs of the collaboration are sub-optimal, there are still no disadvantages in being a member. Mathematically, these outputs can be perceived as 2+2=4 (Corwin et al., 2012, p. 3).

Antagonistic results are outputs that are being negatively affected by the collaboration. In other words, something a stakeholder would achieve in a higher grade outside of the collaboration. Examples of an antagonistic result could be that the stakeholders see their efforts and economic investments as a waste of time and resources (Katisi & Daniel, 2018, p. 2). Mathematically, antagonistic outputs can be perceived as 2+2=3 or 2+2=0 (Corbin, 2006, p. 13). However, important to note is that an antagonistic result is not necessary a crucial and negative outcome for a collaboration. If the stakeholders reflect on the reasons for their antagonistic results, these results can turn into a learning curve which in the end may improve the functioning's of the collaboration (Katisi & Daniel, 2018, p. 2).

**Synergy** (or synergetic results) are outputs where the stakeholders are able to achieve more within the framework of the collaboration than they would without the collaboration

(Corbin et al., 2012, p. 51). Synergetic outcomes functions as an antonym of antagony and can be perceived mathematically as 2+2=5 (Corbin, 2006, p. 13; Corwin et al., 2012, p. 3). It is important to note a point made by Huxham (2003, p. 421) that sometimes stakeholders can experience synergy even if the collaboration did not necessarily result in progress of the aims of the collaboration. Synergy can also be experienced through non-obvious forms where, for example, the relationship between stakeholders is developed and become more positive than before. This could lead to progress of the aims of the collaboration on a later stage.

# 3. Literature review

#### 3.1. Introduction

In this chapter I will review literature on collaboration of forest sustainability and its effect on well-being. As this study focuses on these questions in the context of Indonesia, and because a focused literature review will be used as a method for data collection afterwards (see section 4.2.2.), this chapter will present these themes in a more international context. And in the sections where I cover literature on the national level, I will accept literature on other countries than Indonesia. It is still relevant to look at previous studies covering these themes in other geographical locations, as it could bring a comparative viewpoint of collaboration for forest sustainability.

The literature review will start with an introduction of literature covering collaboration for forest sustainability. This will be done first, as this literature covers the foundation that this study is built upon. As Indonesia will not be in the spotlight in this section (as stated above), I will look at current trends within the collaboration of forest sustainability. This may or may not differ from the situation in Indonesia, however, I assume that many of the forms of collaboration utilized globally will match those of Indonesia. In this section I will look for are initiatives or arenas for collaboration that is multi-levelled, or located either on the international level, or the national lever.

The second section will explore the relationship between forests and their resources, and human well-being. Here I seek to find studies showcasing the interaction and relationship between forests and well-being. The term "forests" in this setting can seem a bit unclear, as it could cover both the benefits for well-being that are accomplished by just experiencing forests, or forest programs and initiatives affecting well-being. I will attempt to cover both dimensions, where the length of each section will be based on the amount of literature found on each specific forest dimension.

### 3.2. Literature review search process

The review draws upon peer-reviewed articles. The three websites utilized for this review are Web of Science (Core Collection), Oria (University of Bergen's online library), and Google Scholar. The keywords used when searching were; "collabora\* OR partnership OR cooperation", "sustainab\*", "forest\*", "well-being OR wellbeing OR quality of life" "ecolog\* OR climate OR environment\*". This systematic search was limited to literature published in English, from the time period of 2010 to 2022. The reference lists from found articles were also used to discover articles of relevance.

# 3.3. Collaboration for forest sustainability

Many attempts of collaboration to achieve forest sustainability have been established worldwide. In this section I will cover literature showing various forms of collaboration, whether it is internationally, nationally or a mix of both.

#### 3.3.1. International level

There are various forms of collaboration for forest sustainability on the international level. However, one stakeholder that stood out and got referred to a lot, was REDD+. REDD+ is a climate change mitigation solution developed by the United Nations Framework Convention on Climate Change (UNFCCC) (UN-REDD programme, n.d.). More specifically, the organization functions as a mechanism to provide developing countries with finance and result-based payments, for reducing their greenhouse gas emissions deriving from forest loss (Bastos Lima et al., 2017, p. 590). Even as REDD+ is not, in a way, a "form" of collaboration, they seem to possess the important role of a collaborator that more often than not is the stakeholder initiating a collaboration. There have been several studies looking at the effectiveness of REDD+ (Kashwan & Holahan, 2014; Kim et al., 2016; Lederer, 2011; Nathan & Pasgaard, 2017).

However, what is especially relevant to review in the context of this study is literature on REDD+ interaction with other stakeholders. A study conducted by Bastos Lima et al. (2017) analyzed potential synergies between REDD+ and the SDGs, and discovered multiple opportunities to achieve said synergies based on REDD+ and the SDGs unified aim of redirecting current unsustainable forest practices. The relationship between these two will be

analyzed in the discussion (see section 6.3.1.). Tegegne et al. (2018) followed up on this by also looking at possible synergies between two separate stakeholders within the forest sustainable field, REDD+ and the European union (EU) action plan on Forest Law Enforcement, Governance, and Trade (FLEGT). One concluding recommendation relevant to this study was that individual stakeholders, such as governments, international organizations (IO), and civil society organizations, should pursue autonomous management of the political space between the regional and national levels. Based on the amount of literature I chose to cut this part short, as I will be reviewing more articles on REDD+ in Indonesia as a part of the methodology of this study.

#### 3.3.2. Multi-levelled arena

An important dimension within this field of study is collaboration happening on several different levels, which can be called multi-levelled collaborations. One example of this is the interactions between REDD+ and the Indonesian government, or the governments interactions with local communities etc.

In a study conducted by Lambin & Thorlakson (2018), a multi-levelled collaboration on voluntary sustainability standards concerning forestry were analyzed. This collaboration featured stakeholders from private, public, and civil society. Here they found that despite the unequal power level, NGOs and private companies depend on each other to achieve sustainable results from sustainability programs. It was also discovered that governments are increasingly engaging with forest sustainability initiatives designed by NGOs and companies. Both findings show that there is often a complex structure within a collaboration.

Another arena, where opportunities exist to achieve further development on forest sustainability, is located within companies' supply chains. This is explored by Rueda et al. (2017) who states that the decided-upon commitments are tailor-made depending on the context of their geographical location, and end up as either very loose or highly ambitious. Both too loose and too ambitious can produce antagonistic results. If the commitments are too loose it the results of the commitments would probably not further develop a sustainable handling of forest resources. If the commitments are too ambitious, the plan and motivation to reach the goal could weaken. Continuing this, Lambin et al. (2018) conducted a study on these recent commitments to eliminate the need for further deforestation, and found that these initiatives rarely function on their own and therefore need help from governments to create incentives and threat of sanctions. Gibbs et al. (2015) follows the same opinion, in that governance assistance

is needed to achieve forest sustainability in supply chains. As the palm oil industry is a noticeable economic resource in the context of Indonesia, it will be interesting to see whether this industry and their supply chains show signs supporting the opinions of Rueda et al. (2017), Lambin et al. (2018) and Gibbs et al. (2015).

#### 3.3.3. National level

The last arena where the literature showed collaboration was on the national level. By this I refer to all forms of collaboration that are based within a country.

A literature review conducted by Johansson (2018) found that the most efficient way for a national collaboration to generate legitimacy, is for the collaboration to include a "large constituency of concerned stakeholders". She also states the importance for communication between said stakeholders, highlighting the need for clarity of the collaboration's purpose, principles for participation, and general rules. One article showed a collaboration, performed without the help from the international level. Xi et al. (2014) conducted this study, where they reviewed six of the major forest restoration and conservation programs in China. Here they concluded with stating the importance of governmental enforcement of forestry laws and regulations, and the need for collaboration with IOs and other concerned countries. Both articles mentioned here presents the beneficial sides of having more stakeholders rather than fewer being a part of the collaboration.

A central form of collaboration for forest sustainability discovered on the national level was the community empowerment strategy called CBFM. This strategy emphasizes positive participation and collaboration of communities when managing forest resources (Chen et al., 2013, p. 67). A study conducted by Pokharel (2015) et al. explores the progress that different forms of CBFM has towards sustainable forest management. Chen's et al. (2013) study also covers the level of sustainability, but is, in addition, looking at potential social and economic outcomes of CBFM for the communities participating. They conclude their study by stating that "Solutions to problems will require positive cooperation among stakeholders" (Chen et al., 2013, p. 74). One of these stakeholders is the government, who they state, needs to adjust their CBFM designs to adapt to the realities of the communities, and to avoid a one-size-fits-all strategy of CBFM. Through the literature search process, I also found some articles discussing the collaboration importance of a health community capacity when using a CBFM strategy (Bizikova et al., 2012; Pujo et al., 2018). Concerning this, Pujo et al. (2018, p. 120) state several necessities to achieve a high-functioning CBFM strategy: providing economic support to local

communities, exchange costs of forest conservation, continued access to forest resources. They believe that these dimensions are crucial and is the only way to achieve sustainable practices of CBFM.

# 3.4. Forests and well-being

Forests, and nature in general, play an important role for many people's well-being. However, the link between forests and well-being may seem unclear or complex based on the many different factors that play in. In a literature review conducted by Cruz-Garcia et al. (2017) where the aim were to explore the link between ecosystem services (in this case forests) and human well-being, they concluded with the fact that there are various understudied areas covering this link, and that further research should be conducted. This research gap could perhaps make it more difficult to describe the complex link between forests and human well-being. I will start of this section by reviewing literature on the links between well-being and forests. Afterwards I will go through literature on the effects that forest programs and initiatives have on well-being.

#### 3.4.1. Well-being from the forest itself

There are multiple articles proclaiming the positive effects that forests can have on human well-being from spending time within a forest. Sarris et al. (2019, pp. 2-3) states that humans experience mental health benefits from "direct exposure to earth/soil and flora, [and] time spent in nature". A review conducted by Oh et al. (2017) supports this claim, and shows that numerous previous studies show positive health and well-being outcomes for participants spending time in a forest. Here they presented a list of observed therapeutic benefits of forest exposure on physical and psychological conditions, some benefits being that the forest helps against stress, anxiety, depression etc. (Oh et al., 2017, p. 9). These findings are backed up by other literature as well, showing that this specific beneficial effect on well-being achieved by spending time within forests, is a well-covered area of research (Lackey et al., 2021; Meyer-Schulz & Bürger-Arndt, 2019).

Connected with this, an activity called "forest bathing", or "shinrin-yoku" in Japanese, was discovered to provide a positive link between forests and well-being. Forest bathing is an approach to obtain well-being benefits from simply being in forests, sensing the nature (Antonelli et al., 2021; Hansen & Jones, 2020). This approach is deeply rooted in spirituality and would most likely not be further discussed or applied in this study. However, I found this research interesting to mention, as it could perhaps explain some antagonistic results concerning

the well-being of indigenous people, after they experience deforestation of forest either previously lived in or lived close by.

#### 3.4.2. Well-being from forest initiatives

A second strand of literature focuses on the effect that forest programs and initiatives have on well-being. Firstly, there are some studies covering the effect that forest conservation- and restoration initiatives have on well-being. Kilpatrick et al. (2017) conducted a study on how conservation of biodiversity within forests could affect human health and well-being, and conclude that conservation interventions could, potentially, be turned into public health tools. The arguments for this are based upon quantitative research on questions like: "Is there a [...] causal relationship between biodiversity and pathogen transmission?" and "Do the net benefits of biodiversity conservation to human well-being outweigh the benefits that biodiversitydegrading activities [...] provide?" (Kilpatrick et al., 2017, pp. 2-6). The results of this research showed causal relationships to these questions, highlighting the possibility of using forest conservation as a human well-being strategy. They also stated that further research on these phenomena is needed. Erbaugh & Oldekop (2018) present a study on how forest restoration initiatives may positively affect livelihoods and human well-being. Their study indicated that if restoration initiatives are done correctly, sufficiently integrating socioeconomic and political data into the planning of these initiatives, it can empower local communities and provide beneficial result for livelihoods, well-being, and climate change resilience. In a study conducted by Takahashi et al. (2021), they generally agree with the positive role that forest restoration initiatives can have on human well-being. However, they also describe that when policy makers establish such initiatives, the enhancement of human well-being is, more often than not, even being considered as a goal. They also state that they have identified significant inequalities amongst relevant stakeholders. Because of this, they propose that "a direct measurement of well-being (e.g., forest SWB [Social Well Being]) is preferable over an indirect measurement (e.g., GDP), for policymaking processes related to forests" (Takahashi et al., 2021, p. 1).

Secondly, literature concerning the subject of CBFM and well-being is reviewed. A study by Diansyah et al. (2021) reviews current studies on CBFM in Southeast Asia, ant its impact on biodiversity conservation and livelihood quality. In this case, "livelihood quality" can be perceived as "well-being". They conclude with suggesting that CBFM empowers the local communities and help indigenous people with their well-being connected to their homeforests.

All the literature covered in this section agree on the fact that forest initiatives can positively affect human well-being. Especially, they agree that this positive affect concerns the people living close by or within a forest. There is, however, consensus on the need to apply these initiatives in the right way, for the initiatives to achieve these wanted effects.

# 3.5. What this study will add to existing knowledge

This study will contribute to the mapping of the complex structure of the informal collaboration on forest sustainability in Indonesia. This will be done through analyzing the roles of relevant stakeholders within the collaboration. In addition, this study will contribute to the general field of environmental collaborations, especially concerning informal and multi-levelled collaborations for forest sustainability, by analyzing the roles, structure, communication, and interactions of multiple relevant stakeholders. Finally, it will also add to the limited literature on the effects that this type of collaboration has on the well-being of local communities, indigenous people, and POS.

# 4. Methodology

This chapter will present the methodology used in the study. First, I will justify there the use of a qualitative approach. Secondly, the research design will be accounted for, and its role in this study explained. Then, the different forms of data used will be thoroughly explained. Since this study uses three different forms of data analysis (document analysis, a focused literature review and analysis, and documentary analysis), the term "triangulation" will also be described. Thirdly, the process of the data collection will be discussed, focusing on searches, criteria for selected material, and data management. To contribute to the credibility of the findings, the coding of the data material will also be described and reflected upon. Lastly, I will go through the different criteria to achieve quality in research and discuss the ethical considerations in this study.

The term method can be understood in several different ways. Bryman (2008, p. 160) views methods as "the techniques that researchers employ for practicing their craft. With this statement he refers to the different forms of data collection one uses, the process of sampling, and the tools for analyzing the data. This view of methods covers a lot of ground, and whilst Grønmo (2016, pp. 41-43) agrees to the previous mentioned uses of methods, he also stresses the methods importance of ensuring quality and relevance in the study. This study will follow

Grønmo's view on the term method, as I will be highlighting all the study areas that Bryman mentioned, but also the steps taken to ensure research quality. In addition, as previously mentioned, I will include ethical considerations under the term methods, as it is seen as a consistent factor in the planning and conducting of a research project (Punch, 2014, p. 36).

Within social science there is a divide between qualitative and quantitative methods. Qualitative research uses non-numerical data, which helps the researcher achieve an understanding of social phenomena (Thagaard, 2018, p. 11). This could be achieved through interviews, observations, or in this case, analysis of documents, literature, and documentaries (Thagaard, 2018, p. 12). In contrast, quantitative research targets numerical and quantitative data, which will be better suited to help the researcher understand the magnitude of what is being studied (Punch, 2014, p. 3). This is done by looking at variables, measuring them and study the relationship between them (Punch, 2014, p. 206). Punch (2014, pp. 3-4) also points out that these different forms of data that are being collected are not the only divide between qualitative and quantitative methods, they are also entirely different ways of thinking.

The choice to utilize qualitative methods for this study was based on the case which I wanted to study. I want to explore analyze the current collaboration for sustainability of Indonesian forest resources. A quantitative study, concerning this topic, would likely seek to find answers on questions such as "What amount of forest area is managed under sustainable initiatives?" or "What is the percentage of local communities and indigenous people feeling negative effects on their well-being, based on deforestation?". Questions like these are, of course, highly relevant and interesting. However, to find answers to my research objective and questions, a qualitative study seems to be best suited to find answers on the complexities of a collaboration.

# 4.1. Research design

Before specifying the methods of data collection, it is important to mention what kind of research design the researcher is utilizing in the study because of its effect on the questions the researcher seeks to answer and their understanding of the findings (Thagaard, 2018, p. 33). Punch (2014, p. 114) recognizes that the term research design, helps situating the researcher in the empirical world, and connecting research question to data. Following this, we can say that one's research design is the basic plan for the research project (Punch, 2014, p. 114). The research design that is used in this study is a case study approach.

#### 4.1.1. Case study

Using a case study approach to research involves focusing on one or more cases (Creswell, 2018, p. 96). This type of research is conducted to achieve as full an understanding of a case as possible (Punch, 2014, p. 120). Since the research question of this study seeks to find information on whether or not collaboration between stakeholders can contribute to sustainability of forests in Indonesia, a case study appears as a natural choice for the research design. There are different views on whether or not case studies can be seen as a type of methodology, based on the fact that it is a research design. However, Creswell's (2018, p. 96) viewpoint is that a case study is a methodology that may be an object of study as well as a product of inquiry, on the basis that the researcher explores a contemporary, bounded case through detailed, in-depth data collection involving multiple types and sources for information. This view was adapted in this study.

There are multiple ways to conduct a case study. The three most central forms that can be utilized by a researcher being either an instrumental, intrinsic, or collective case study (Creswell, 2018, pp. 98-99). In this study, an intrinsic type of case study was used. Thagaard (2018, p. 121) explains the intrinsic case study as a study that is undertaken because the researcher wants a better understanding of one particular case. This is usually because the case is of interest and/or represents an special situation (Punch, 2014, pp. 51-52). The central point of this type of case study is that the focus of the research is on the case itself, rather than a researcher wanting to know more about an issue or concern, then selecting on case that fits the issue (Creswell, 2018, pp. 98-99). What is of interest in this study, is the case of the informal collaboration for sustainability of forest resources in Indonesia.

This is a complex case and mapping the collaborative functioning's will be challenging. Normally, qualitative research involves the producing of primary data from interview, observations etc. However, because of the potential language barrier and the covid-19 travel restrictions, different forms of data were chosen (discussed further in section 6.6.). To achieve results and findings which will represent this complexity in the most covering way, I choose to utilize three methods of data analysis: Document analysis, focused literature review, and literature film analysis.

#### 4.2. Methods of data collection

#### 4.2.1. Documents

Studies of documents have long traditions within the field of qualitative research, which Thagaard (2018, p. 118) defines as all public sources which are available for the researcher to analyze. Documents are seen as rich sources in that they can provide the researcher with an abundance of data (Punch, 2014, p. 158). In the last decade, the method of document analysis has provided countless opportunities for research. The digitalization of official documents has helped tremendously with the availability during the collection phase of research. On this point Bowen (2009, p. 31) refers to an argument that the action of "locating public records is limited only by one's imagination and industriousness", and an important maxim to keep in mind is that if a public event has ever happened, it is almost always guaranteed that an official record of it exists.

As previously mentioned, a qualitative approach will be taken in this study, as it will help me get a more in-depth view on whether or not collaboration among stakeholders can contribute to sustainability of forest resources in Indonesia. The main way to find answers on the first research question (RQ1: *How is the issue of sustainability addressed in Indonesian laws and international agreements – and communicated to all stakeholders?*) is to analyze documents, especially since this question puts the spotlight on laws and international agreements, something that is well documented. Document analysis of GOI documents have therefore been applied to analyze Indonesian forest laws and regulations and their official communications on the sustainability of forest resources to collaborating international political bodies.

Inclusion criteria for the collection of documents is an important tool for limiting the number of formal documents analyzed. The first inclusion criterion for the collection of documents, is that they must hold historical importance to the sustainability of forest resources. The remaining criteria cover the availability of the documents: the documents are all digital, and that they have an official English-translated version. This helps both the availability of the documents for the researcher but also for the readers of the study. The documents that were analyzed are presented below (see Table 1).

Table 1: Governmental Documents Analyzed (Sorted by year published).

Name of Document	Year	Type of Document	In-text Citation
	Published		
The 1945 Constitution of the Republic of Indonesia.	1945	Constitution.	GOI, 1945
Law of the Republic of Indonesia Number 41 of 1999	1999	Law set.	GOI, 1999
Regarding Forestry.			
Indonesia's Forestry Long Term Development Plan 2006-	2006	Development Plan.	GOI, 2006
2025.			
Indonesia Second National Communication Under the United	2010	Communication to UN	
Nations Framework Convention on Climate Change		/ Development Plan.	GOI, 2010
(UNFCCC).			
Indonesia – High-level Segment Statement COP 26.	2021	Indonesian COP26	GOI, 2021
		statement.	

#### 4.2.2. Focused literature review

The second method for data collection is a focused literature review. Using a focused literature review as a research method is useful when the aim of the study is to provide an overview of a certain issue, in this case the issue of collaboration on forest sustainability in Indonesia (Snyder, 2019, p. 334). Based on this, I chose to conduct a scoping literature review in this study, which aims to identify all empirical evidence that fits the pre-specified inclusion criteria of the research objective and questions (Snyder, 2019, p. 334).

Since the first research question was covered by a document analysis method, research question two (RQ2: What are the roles of the other stakeholders (local communities, palm oil producers, etc.)?) and three (RQ3: How does interaction between stakeholders impact the well-being of local communities and indigenous people?) provided the focus for the literature review. To explore these questions thoroughly, three separate searches were made. By the first search I wanted to specifically find the roles of the stakeholders, in correlation with forest resources in Indonesia. The second search sought to explore instances of collaboration between the stakeholders. Lastly, the third search explores how well-being might have been affected by this collaboration<sup>5</sup>. The literature chosen for analysis was found through searching the Web of Science database (Core Collection) and Google Scholar with case-relevant keywords (see appendix 1).

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<sup>&</sup>lt;sup>5</sup> When searching for how the well-being might have been affected by the collaboration, it became clear that there is a gap in the literature. Because of this, I decided to continue with the same search, but excluding the need for the literature to cover Indonesia specifically.

The first inclusion criterion was that all the articles' abstracts were relevant to this case. The second inclusion criterion for the collection of literature, was that all articles have been published after 2010. This exclusion choice was based on the fact that the collaboration between Norway and Indonesia was established in 2010, in the form of REDD+ (Royal Norwegian Embassy in Jakarta, n.d.). I thought that it would be most relevant to review literature after this establishment of the collaborative relationship between Indonesia and REDD+, as this is a major form of collaboration. The literature that was reviewed is presented below (see Table 2).

Table 2: Literature Reviewed (sorted alphabetically by authors and divided into the different searches made).

Authors	Title	Year Published	
Search 1: Stakeholder's roles			
Hein, L. & Van Der Meer, P. J.	REDD+ in the context of ecosystem management	2012	
Ivancic, H. & Koh, L. P.	Evolution of sustainable palm oil policy in Southeast Asia	2016	
Meijaard, E. & Sheil, D.	The Moral Minefield of Ethical Oil Palm and Sustainable Development	2019	
Sada, C., Alas, Y. & Anshari, M.	Indigenous people of Borneo (Dayak): Development, social cultural perspective and its challenges	2019	
Searc	ch 2: Collaboration among stakeholders in Indonesia		
Apriani, E. et al.	Non-state certification of smallholders for sustainable palm oil in Sumatra, Indonesia	2020	
Boissiere, M. et al.	Participating in REDD plus Measurement, Reporting, and Verification (PMRV): Opportunities for Local People?	2014	
Bong, I. W., Felker, M. E. & Maryudi, A.	How Are Local People Driving and Effected by Forest Cover Change? Opportunities for Local Participation in REDD plus Measurement, Reporting and Verification	2016	
Harbi, J. et al.	Three Generations of Forest Peoples' Empowerment in Indonesia: Process Towards Sustainable and Equitable Forest Management	2020	
Hiratsuka, M. et al.	An approach to achieve sustainable development goals through participatory land and forest conservation: a case study in South Kalimantan Province, Indonesia	2019	
Milne, S. et al.	How is global climate policy interpreted on the ground? Insights from the analysis of local discourses about forest management and REDD plus in Indonesia	2016	
Reiss-Woolever, V. J. et al.	Systematic mapping shows the need for increased socio- ecological research on oil palm	2021	
Riggs, R. A. et al.	Governance Challenges in an Eastern Indonesian Forest Landscape	2018	

Snashall, G. B. &	Oreos Versus Orangutans: The Need for Sustainability	2021	
Poulos, H. M.	Transformations and Nonhierarchical Polycentric		
,	Governance in the Global Palm Oil Industry		
Widayanto, B. et al.	Model of Sustainable Private Forest Management in	2019	
	Yogyakarta Special Regency, Indonesia		
Yuliani, E. L. et al.	Keeping the land: indigenous communities' struggle over land	2018	
	use and sustainable forest management in Kalimantan,		
	Indonesia		
Search 3: Well-being			
Jones, R.	Climate change and Indigenous Health Promotion	2019	
Laudares, H. &	Is Deforestation Spreading COVID-19 to the Indigenous	2020	
Gagliardi, P. H. peoples?			
Wani, K. A. &	Impact of Climate Change on Indigenous People and	2018	
Ariana, L.	Adaptive Capacity of Bajo Tribe, Indonesia		

#### 4.2.3. Documentary films

The last method for data collection that was utilized was the analyzing of documentary films. Bleiker (2001, p. 510) argues for the need to validate new approaches within the research field of international relations. Here, he specifically mentions aesthetics, like poetry, art, and films. These alternative sources of data help the researcher to understand international relations (Callahan, 2015, p. 895). There are not many examples of articles using documentary films as a method for data collection, nonetheless articles using this method when analyzing collaboration for sustainability of forest resources. Belk (2011, pp. 404-405) comments that the use of documentary films for research purposes is underutilized and should be seen as scholarly resources in the same way as books and journal articles. Because of the research gap concerning documentary film analysis, and the fact that travelling-restrictions made travelling to Indonesia to experience the situation in the field, I chose to conduct a documentary film analysis. More specifically, I chose to conduct a content analysis of the documentary films.

In this study, I decided to analyze the documentaries through an AVM approach. AVM stands for audio-visual material as a medium, and is an interactionally oriented method (Strauss & Corbin, 1990, p. 104). This approach is used to analyze social phenomena through a "window" or "lens", and points the researcher's attention towards the actions and interactions of the people that is being filmed (Figueroa, 2008, pp. 3-4). Therefore, through the use of an AVM approach, I sought to find new viewpoints on the collaboration for forest resources in Indonesia, some that may never have been present before in an academic text on this subject. An initial difficulty that arose were that it was difficult to find existing articles suggesting specific observation guides to follow whilst analyzing documentary films. Because of this, I made an observation guide that was specifically meant for me to find answers to the research

objective and questions (see Appendix 2).

The use of documentary film analysis was grounded on the belief that they could give new and interesting findings on research question number two and three, basically functioning as an extension of the literature review. I searched for these documentary films trough several streaming services (like Netflix, HBO Nordic, Viaplay etc.). I also used a VPN service to get access to documentary films that are not originally available in Norway. The inclusion criteria for selecting the documentary films were that they had to have an official English translation, and they had to be relevant for this case. In some instances, I used the whole length of a film as data, whilst for other films, containing just a small section on Indonesian forests, I used only the relevant snippet. The table showing the documentary films that were analyzed is presented below (see Table 3).

*Table 3: Documentary films analyzed (sorted by year published).* 

Name of Documentary	Year Published	Minutes of Relevance	Language
The Burning Season	2008	Min. 0-90 (whole film)	English
Sumatra Burning - The	2015	Min. 0-30 (whole film)	English
Heart of Palm Oil			
Before the Flood	2016	Min. 45-51 (6 min.)	English
David Attenborough: A	2020	Min. 30-35 (5 min.)	English
Life on Our Planet			

#### Sources:

- The Burning Season (Henkel, 2008)
- Sumatra Burning The Heart of Palm Oil (Coconuts TV, 2015)
- Before the Flood (Stevens, 2016)
- David Attenborough: A Life on Our Planet (Fothergill et al., 2020)

# 4.3. Data management and analysis

After I decided that I was done with the collection of data (five documents, eighteen articles, and four observation guides from the documentary films), I uploaded them all into the qualitative software tool NVivo 12. This is a software that assists with the storing and helps organizing the coding of data. I split the data onto two separate NVivo projects. One project containing the documents, and the other containing the articles and documentary film observations. I decided to split these in two as I believed that the findings gathered from these

forms of data would not provide codes that functions applicably towards each other. To assist with the analysis of the data, I followed Attride-Stirling's six steps in employing thematic networks (Attride-Stirling, 2001, p. 391). The first thing I did, before starting to code, was to read through all the data and familiarize myself with it. Afterwards, I started the first round of coding. This was done in an inductive way, where I coded segments of text into codes. After this first round of coding, I started to find patterns throughout the data. Using NVivo, I sorted, merged, and clustered the patterned codes in into themes. I started with establishing the basic themes found evident within the data. Afterwards, I categorized these themes into more abstract organizing themes. And, in the end, I again categorized these organizing themes into global themes. I identified 47 codes, 17 basic themes, five organizing themes, and two global themes, in total (see appendix 3).

# 4.4. Quality of research

To ensure that the study will contribute new knowledge on the case being studied, it is important for the researcher to not be too comfortable on one's pre-existing knowledge on the case studied, but to be open for new and sometimes unexpected knowledge. Another important part is that the researcher does not let their pre-existing knowledge to influence the research progress, but rather uses it deliberately to form a foundation for the study. To achieve this, it is a necessity that the researcher presents their pre-understanding of a subject to the reader (Postholm, 2010, p. 128). The quality of research comes from the researcher's ability to be critical to sources and findings (Thagaard, 2018, pp. 199 & 181-182). To ensure the trustworthiness and quality of this study, Guba's four criteria for trustworthiness were followed (Shenton, 2004, pp. 63-64):

- i. Credibility (Internal validity)
- ii. Transferability (External validity/generalizability)
- iii. Dependability (Reliability)
- iv. Confirmability (Objectivity)

# **Credibility (Internal validity)**

*Credibility* is seen as one of the most important factors when establishing trustworthiness (Shenton, 2004, p. 64). Credibility refers to the process of ensuring that the study explores what it actually is intending to explore (Shenton, 2004, p. 64). A benefit with conducting analysis on

documents, literature and documentaries is that the findings are grounded on the process of triangulation. Another positive ability of these forms of data are their availability. All the sources used in this study are public domain, which is obtainable without the authors permission. This makes these types of analyses attractive for qualitative research (Bowen, 2009, p. 31). This could also hurt the credibility of the research if the criteria for selecting sources is not clearly mentioned. Since this study is utilizing three different forms of data sources, this point of concern is one that has been focused on throughout the data selection and collection progress. To minimize the chance of this negatively affecting the credibility of the research, I have established specific criteria for data selection (as mentioned in each method's description).

Another potential issue that can occur when conducting analysis of documents, literature and documentaries is that the sources that are being analyzed are originally made for other purposes. If this is the case, the sources used would not provide sufficient findings to answer the research question (Bowen, 2009, pp. 31-32). This problem is combated throughout the data collection by selective coding (Punch, 2014, p. 176). For text to be coded, it must answer either the research objective or has any relevance to the research questions. This selective coding strengthens the credibility of the findings.

## **Transferability (External Validity/Generalizability)**

Transferability refers to whether or not the findings of one study can be applied to other situations (Shenton, 2004, p. 69). There are different views on the point of transferability, as one could argue that it is impossible to show that the findings are applicable in other situations. However, I agree with Stake and Denscombe's belief that transferability should not be immediately rejected (Shenton, 2004, p. 69). Thagaard (2018, p. 200) supports this view of transferability and refers to the importance of the researcher's discussion on the ways their study findings might be applicable to other studies. I would argue that this study's findings will be transferable, as it tackles the relationships and collaboration between stakeholders for forest sustainability through triangulation and thick descriptions. The findings could be relevant for studies of the same sort on different cases. The finding on how the Indonesian laws affect this collaboration is also of value, especially for studies on the effect of other state's laws on in-land sustainability of forest. This study can also contribute to knowledge on which types of collaboration works, and which does not, as the BMCF as a model is currently not much used and tested in the view of in-state collaboration over the sustainability of forest resources.

#### **Dependability (Reliability)**

Dependability refers to how similar the results of research would be if it was repeated with the same exact context and methods (Shenton, 2004, p. 71). In theory, if the research was done perfectly, then the same results would be obtained, and the research would be reliable. In this way, the research design can be viewed as something that strives to be the "prototype model" (Shenton, 2004, p. 71). To strengthen the dependability of this study, I have accounted for the study's research design, approach for data collection and management, and the choices that have been made whilst coding and analyzing. What also helps the study's dependability is that all the data sources are public, which means that the exact same study could be completed again.

## **Confirmability (Objectivity)**

Confirmability is the last criteria for trustworthiness. It refers to the objectivity that one's research is based on the findings, rather than the characteristics and preferences of the researcher (Shenton, 2004, p. 72). One of the most important ways of achieving this is that the researcher admits hers or his own predispositions, like beliefs, background etc. (Shenton, 2004, p. 72).

Through my background as a student with an international relations bachelor and currently working on a masters on global development theory and practice, I have obtained knowledge on various political fields. The field that has been of the most interest has throughout the years of studying been the environment and the problems surrounding climate change. This is the reasoning for the choice of this case study. Pre-existing knowledge and assumptions have contributed to the choice of model and methods used and the case itself. To be aware of these presumptions is important, and I have therefore focused on discovering findings that contradict these original views.

Something that can challenge the confirmability is that the documentary films are actively trying to make a point. There is always a reason for a documentary film to be filmed and published, it is to provide a viewpoint, a story, an opinion. I am aware of this, and I am trying to stay objective throughout the research process.

## 4.5. Ethical considerations

On the background of my choice of using only publicly available data, there is no need to ask for permission from NSD on the ethics of the project. Adding to this, the documents that were analyzed are public. Therefore, consent and similar ethical questions, that are a necessity when conducting observations and interviews, are not needed in this case.

However, there are other ethical issues that must be recognized, the most obvious one being plagiarism, which of course is unacceptable. This is essentially an indisputable rule amongst researcher, which this will guarantee that the authors mentioned in different research papers will be the true author (Thagaard, 2018). Another point of relevance which I as the researcher must acknowledge is that there is a language barrier. Most of the Indonesian national documents have English versions and finding literature and documentaries in English was not a problem. But, because of the language barrier, there could be some relevant literature with a new point of view which will not reach me.

# 5. Findings chapter

## 5.1. Introduction

There are two global themes: Stakeholder's roles in the collaboration for sustainability of forest resources; and Stakeholder's impact on community well-being. The findings are presented following the structure that emerged from the thematic network analysis (see appendix 3 for the thematic table).

# 5.2. Stakeholders' roles in the collaboration for sustainability of Indonesian forest resources

This global theme has four organizing themes that are related to the most relevant stakeholders found in the data, namely the GOI, local communities, LPOCs, and international funders.

#### 5.2.1. The GOI

This section starts off by presenting the findings gathered from official Indonesian documents, to find how the sustainability of forest resources is mentioned in the laws. These are laws that state the GOI intentions and plans. Afterwards, findings from the literature and documentaries will be presented in the finding on deficient governmental factors affecting sustainability, the government's actual actions for sustainability of forest resources, and lastly their communication on sustainability.

#### 5.2.1.1. Laws covering forest sustainability

In general, the laws covering forest sustainability are divided into two basic themes, where the first grouping is "laws securing forest", and the second grouping covers "laws on forest management".

Under the category of laws securing forest, terms like protection, rehabilitation and supervision are frequently mentioned. The protection of forest resources is a central point mentioned in the Indonesian Forestry Law of 1999. Whilst most findings of these laws are quite broad, Article 50 § 3 fundamentally summarizes the part of the forestry laws on forest protection and nature conservation. It proclaims that "No one shall: a. exploit and or use and or occupy forest illegally; b. encroach forest area; c. fell vegetation in forest area [...] d. burn forest; e. fell vegetation or harvest or collect forest produces in forest illegally;" (GOI, 1999, Article 50 § 3). The relevance of this article is grounded in the difficulties that the government has experienced with the problem of deforestation by burning. This article forbids it, in addition to the felling of vegetation. In response to situations where forest have already been damaged, there are laws surrounding forest rehabilitation. Article 41 state that "Forest and land rehabilitation shall be made through the following activities: a. afforestation, b. reforestation, c. maintenance, d. vegetation enrichment [...]", whilst also referring to the importance that this is "implemented primarily by participatory approach to develop potential and empower community" (GOI, 1999, Article 41 § 1-2). Connected to the governments wish for the community to play a central role in forest rehabilitation, they continue this view in laws on forestry supervision. Article 60 state that "(1) The government and local administrations shall exercise forest supervision. (2) The community and or individuals shall play their role in forest supervision." (GOI, 1999, Article 60 § 1-2). However, what 'supervision' entails is not specifically described in the laws.

These laws do not cover as much in terms of length of text as the laws securing forest. Nevertheless, these laws are important as they express the GOI's view of the future of forest management. Article 22 presents the GOI's wish for conducting stronger management over forests, saying that "Forest arrangement shall be made for more intensive forest area management to obtain more optimum and sustainable benefits" (GOI, 1999, Article 22 § 1). Another law that is of relevance to the research objective is presented in article 56, concerning the extension of forestry. "Extension on forestry shall be conducted by the Government,

business world, and community." (GOI, 1999, Article 56 § 2). This article essentially establishes the template of which stakeholders play a role in forest management (see sections 5.2.1., 5.2.2., 5.2.3. & 5.2.4.)

## 5.2.1.2. Population-directed Forest laws

Another form of forest laws is discovered to be laws concerning the population of Indonesia. The first pattern of laws is those that covered the populations' role in the forest, the second concerning community participation in forestry, and the last section of laws cover forest information.

The first group of the Indonesian population that is referred to in the forestry law of 1999 is the indigenous community. Article 37 indicates the legal rights of indigenous forests, "(1) Indigenous forest shall be utilized by the relevant indigenous law community, according to its function. (2) Indigenous forest with protection and conservation functions can be utilized provided not disturbing its function." (GOI, 1999, Article 37 § 1-2). This securement of indigenous rights over their forests is also backed up in the section on human rights in the constitution of Indonesia from 1945, claiming that "Every person shall have the right to live in physical and spiritual prosperity, to have a home and to enjoy a good and healthy environment [...]" (GOI, 1945, Article 28H § 1).

Community participation is only mentioned briefly in the Indonesian forestry law of 1999. Article 69 places responsibility of forest maintenance on communities:

"(1) The community shall take part and keep as well as maintain forest area from disturbance and damage. (2) In conducting forest rehabilitation, the community can solicit for advocacy, service and support to non-government organizations, other parties or the Government." (GOI, 1999, Article 69 § 1-2).

In addition to give responsibility of forest maintenance to the communities, it also presents opportunities for advocacy and support from the government itself. To what degree this support is given, I will come back to this later (see section 5.2.1.4., 5.2.1.5. & 5.2.2.1).

Knowledge on forest sustainability is important if the government want the communities and smallholders to be up to date on what is needed for sustainability. One way to convey this much needed information is found in article 55 concerning education which states: "Forestry

research and development shall be aimed at establishing human resources who master and are able to use and develop science and technology in fair and sustainable forest management based on faith and piety to the One Supreme God." (GOI, 1999, Article 55 § 2). To obtain this information, research on the forested areas is needed. Here, the government has multiple laws telling of their long-time research plans. Article 53 state that: "Forest research and development shall be aimed at improving forest capability in materializing sustainable forest management and increasing forest produce added value." To conduct this research on forest sustainability, the government mentions that they will organize a cooperation with universities, business world and communities (GOI, 1999, Article 53 § 2-3).

#### 5.2.1.3. Long-term forest plans

Continuing the subject of long-term plans, both the document on Indonesia's long-term forestry development plan, and their official report presented to the UN, refers to plans which are made to sustain the forests. Their long-term forest plans can be seen grouped into two, the first group introducing their plans which directly affect the forests, whilst the second group includes plans that will function as indirect influences on sustainability of forest resources.

The first major long-term goal of the government is to achieve stabilization of the forested areas. This is to be done through numerous activities such as; creating a better system for mapping of forest resources, and development of information assessment systems, to mention some (GOI, 2010, p. V-20, Paragraph 5)<sup>6</sup>. The government seeks to achieve increased value and sustainable productivity of forest resources with this goal, as well as guaranteeing that these resources contribute to national development (GOI, 2006, p. 31, Paragraph B). In relation to this goal on stabilization, the government also place importance on rehabilitation of forest areas which are damaged. The keyword to achieve this, gathered from the documents, is "management". Better management of forest resources, self-management (local communities), national park management etc. (GOI, 2010, p. V-20, Paragraph 2-3). Interestingly enough, in Indonesia's COP 26 statement, the government stated that they had "begun the rehabilitation of mangrove forests covering an area of 600,000 ha by 2024, the largest in the world" (GOI, 2021, p. 2). Another goal the government has set which fits under "better management", which is the last finding on the direct long-term forest plans, is combating illegal logging. This is

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<sup>&</sup>lt;sup>6</sup> Since the document provided by the GOI, under the UNFCCC meeting, is so lengthy, they have divided their paging into different parts, following roman numbering. In this case, this reference is from page 20 under section V.

sought to be achieved through "(i) securing forest areas and (ii) controlling forest product administration;" (GOI, 2010, p. V-20, Paragraph 1).

On indirect long-term forest plans, the Indonesian government firstly focuses on the creation of strong forest institutions (GOI, 2006, p. 31, Paragraph A). This goal is closely linked with the "better management" goal mentioned above, in that the creation of more efficient institutions will be able to incubate the possibilities of better management. The second indirect long-term goal of the government is found to be the increasing of economic funding towards forest to achieve sustainability to an improved extent. To achieve this, the government has presented different sources that could help with this, for example private national investment, grants through bilateral and multilateral channels, funding from REDD, to name a few (GOI, 2010, pp. V-23 & V-24). This increasing of funding is sought after for attaining more sustainable forest management and to empower the national economy.

#### 5.2.1.4. GOI actions for sustainability of forest resources

The governmental actions taken for sustainability of forest are not found in the documents, but rather the literature and in the documentaries. This is because the showcasing of the government's actual actions should not only be highlighted by themselves, but also by critical outsiders looking in. The findings present three kinds of actions: actions taken for hindering further deforestation, actions taken to help POS, and the establishment of Indonesian Sustainable Palm Oil (ISPO).

One legal action to stop deforestation revealed itself to be the inauguration of moratorium on logging. This was shown in practice from one of the documentaries where there was discussion between governors about the subject. "In Bali, the governors of three Indonesian provinces, Aceh, Papua, and West-Papua, meet to take action. They want to find ways to stop logging and burning in their provinces" (Henkel, 2008, 00:09:25). In the end, all of the governors present at the meeting signed a commitment to prevent all logging in their provinces (Henkel, 2008, 00:13:03).

Another occasion of the government actions to minimize future deforestation was the creation of a platform for POS in 2015, when Indonesia, in collaboration with Malaysia, established the Council of Palm Oil Producers Companies (Ivancic & Koh, 2016, p. 7). This council

organization is intergovernmental and was established to "make it easier for smallholders to persist under intense competition from larger growers" (Ivancic & Koh, 2016, p. 7). While the link between the establishment of this organization and forest sustainability cannot be seen as direct, it positively affects the POS' economic structure which will give them the possibility of choosing more sustainable ways to manage their patches of forest. For example by having access to better quality seeds and fertilizers, and buying/renting equipment to clear some patches of forest (that is already intended for palm oil) instead of using fire (Ivancic & Koh, 2016, p. 7). Another essential benefit of this council organization is that it will hopefully slow down the expanse of virgin forest being removed for palm oil plantations. If the organization's focus is to make it easier for smallholders to persist under immense competition, the desire to remove more forest will be decreased. This type of a helping hand from the governmental bodies towards the POS is also observed in one of the documentaries.

"Jackman [Narrator]: The machine to help Ahmadi [Local Smallholder] clear his land has arrived, but it won't be effective for anything more than small saplings. The government's pilot plan may still need fine tuning but Ahmadi and his family and now committed to doing things differently" (Henkel, 2008, 01:18:00).

In this instance the governmental body promised directly to the smallholder that they were planning to start a pilot project where they promised smallholders incentives and equipment as alternatives to burning forest. This helps the sustainability of forest, as even if the smallholders are still removing virgin forest, not burning it gives the possibility to rehabilitate cut-down forests in the future (further discussed in section 6.4.1.). It is important to note here that the decision made by the governmental worker in this instance could be affected by the documentary film, as everything was said and agreed on camera, which places the local government in a positive spotlight.

Another initiative established by the government was the ISPO scheme (Meijaard & Sheil, 2019, p. 10). This scheme is closely related to another international scheme on sustainable palm oil called the RSPO, which will be covered later (see section 5.2.4.2.). "Amidst movements by NGOs, the Indonesian government introduced its own sustainable palm oil scheme in 2011. Indonesian Sustainable Palm Oil (ISPO) is a national interpretation of the international RSPO scheme" (Ivancic & Koh, 2016, p. 6). The ISPO functions as a mandatory oil palm certification that all smallholders are required to obtain, to ensure a higher grade of sustainability (Apriani et al., 2020, p. 14). "It is legally binding to all palm oil plantations within Indonesia and involves fines and sanctions" (Ivancic & Koh, 2016, p. 6). In this way, the government is trying

to achieve more sustainable ways of harvesting palm oil. However, the ISPO has received criticism. One such criticism is presented by Meijaard & Sheil (2019, p. 10): "ISPO are generally viewed as a means to gain greater control over the definition and marketing of certified palm oil and to do so while making it simpler and cheaper to achieve, meaning that standards are low".

#### 5.2.1.5. GOI deficiencies affecting forest sustainability

The governments initiatives to achieve more sufficient forest management and a more sustainable business on palm oil are all highly dependent on the government's ability to act on what is being promised. How strong is their power of action? In this section of the findings, I will cover two areas where the literature and documentaries point out weaknesses in the government's process towards forest resource sustainability: the first deficiency being their inadequate law enforcement, and the second being instances of corruption.

The concern on the issue of inadequate law enforcement and a non-working legal system is voiced by an environmental conservationist in the documentary film "the Burning Season": "Using fire to clear forest is illegal under Indonesian law, but the legal system doesn't work here." (Henkel, 2008, 00:17:20). Several pieces of literature mention inadequate law enforcement as one of the most crucial problems hindering forest sustainability. The main field of law that is found to be poorly enforced is the laws concerning land use and land rights. This is discovered in a dialogue with a palm oil company representative: "A specific legal issue, raised repeatedly, was the government's inability to manage conflicts between communities and concession holders." (Milne et al., 2016, p. 7). This discrepancy between de facto and de jure has proliferated in recent years, causing weakened trust between stakeholders connected to the forests (Riggs et al., 2018, pp. 2-7)<sup>7</sup>. Weakened trust can negatively affect the sustainability of forest, as Riggs et al. (2018, p. 11) discovered through their research on this subject: "Our results show that unclear regulations and tenure conflicts encourage people of East Lombok to exploit resources opportunistically and this leads to degradation of their environment.". This illustrates the importance of not only reviewing documents, but also the findings from outsiders looking in.

<sup>&</sup>lt;sup>7</sup> "De jure" describes practices that are legally recognized, regardless of whether the practices exist in reality.

<sup>&</sup>quot;De facto" describes the situation of how the practices really are.

Another deficient governmental factor is the willingness to perform actions based on corruption. Corruption is not mentioned in many pieces of literature but are mostly highlighted in documentaries. Farwiza Farhan, an Indonesian conservationist, states that "Indonesia is one of the most corrupt countries in the world. Companies bribe government officials to issue a permit for them to start burning the land." (Stevens, 2016, 00:48:28). This is a serious accusation that needs to be considered, even if it is mentioned only a few times in the data.

## 5.2.1.6. Governmental communication concerning sustainability

A central role for the government regarding forest sustainability is their communication about the subject outwards, to relevant stakeholders (local communities, POS, and LPOCs etc.). The three key points of interest found from the data are: the government's effort to communicate the importance of the climate to stakeholders, public actions taken by government members, and lastly instances of politicians talking directly to the people.

The findings on the government's effort to communicate the importance of climate and forest sustainability is all found from the documents, whereas most is found in the Indonesian official communication report under the UNFCCC (GOI, 2010). I choose to present these findings first as it makes it easier to see if there is any contrast between their presented efforts of communication and what is de facto achieved. In this UNFCCC report, the government addresses four different forms of communication: Information sharing, Training activities and capacity building, Workshops, and lastly Raising awareness through education. All these different forms of communication are described as something the government already is doing (GOI, 2010). Whether this is wholly truthful or not is unclear.

The next form of communication found in the literature and documentaries is the governmental public actions. These public actions can be speeches, or symbolically "on-the-ground" actions taken. One instance of this, found in the literature, shows "...a government official from Aceh Tamiang in Indonesia publicly cut down an oil palm whilst announcing the need for removal of illegal plantations before planting a native tree in its place" (Ivancic & Koh, 2016, p. 7). This can be seen as a form of communication because of the power of symbolics in politics, essentially it presents the government's serious intent on sustainable forestry. Another sign of the government's seriousness when it comes to forest sustainability is found in one of the documentaries, where Joko Widodo (president of Indonesia) made this statement: "We all know

the problem. Everybody knows the problem. Experts, government, law enforcers, corporations know the problem. It all boils down to one question: Do we have the will? Are we serious? I am. I am very serious." (Coconuts TV, 2015, 00:29:14).

The last form of communication is instances where governmental officials have spoken directly to the people. These findings are only discovered in the documentaries, where the videos show the dialogue between the government officials and other stakeholders. One such dialogue appears between Irwandi Yusuf (governor of Aceh province) and a group of local smallholders:

Jackman [Narrator]: "It's early on a Sunday morning, the governor heads out for a remote village to confront illegal loggers. The intent is to personally enforce his commitment to stop logging".

Yusuf talking directly to locals: "Don't open new land, but bring the neglected land back to life. If new forests are opened up, I'll thrash you [locals laughing]. (Henkel, 2008, 00:26:00).

Another meeting occurring between two local POS and Zulkifli Nurdin (previous governor of Jambi), organized by the conservation group WALHI, where they talked about the local communities' forest problems (Henkel, 2008, 00:55:55) (further discussed in section 5.3.1.2.)

#### 5.2.2. Local communities

The second organizing theme found through the analyzing of data, is the local communities. They play an integral role as a stakeholder in the big picture of forest sustainability. The findings in this section are gathered from the literature and documentary films, as these forms of data depict the local community's role in a more accurate and precise way than what the national documents could. The basic themes which are covered in this section include community and their land, communities' role in sustainability of forest resources, and the communities' role in the palm oil industry.

#### 5.2.2.1. Community and land

In this section I will present the findings covering the role of communities and their land. These findings can be split into three: the general importance of local land ownership, communities defending of owned land, and experiences of pressure to sell land.

Throughout the literature the emphasis of the importance of local landownership is thoroughly explained. In one article about climate change and indigenous health promotion in general, Jones (2019, p. 75) states the international rights indigenous people have over their historically owned forests: "The United Nations Declaration on the Rights of Indigenous Peoples acknowledges that 'Indigenous peoples have the right to the lands, territories and resources which they have traditionally owned, occupied or otherwise used or acquired". This landownership in Indonesia also plays a cultural and ancestral role, as explained by Widayanto et al. (2019, p. 68): "In the community's view, the existence of private forest is an ancestral heritage that must be preserved. Giving the private forest to the next generation is a way of looking at the community providing lessons on responsibility for sustainability." Considering this, we can conclude that the communities have a substantial connection to their local forests, both on a legal and a cultural level. In addition to this, in some instances, the communities could also be highly dependent on the resources that are available to harvest from the forests (Riggs et al., 2018, p. 7). This is illustrated by a comment from a local living in Empakan, in West Kalimantan:

"The most important thing for us is to hand over a good inheritance to our descendants: land for rice and cashcrops cultivation, timber to build their own houses, clean water, and effective income sources. Those good things would perish if we let the oil palm take over our village." (Yuliani et al., 2018, p. 8).

Because of the importance the of the forests for the communities, they sometimes must defend the land from large industries, and in this thesis, especially the LPOCs. In the documentary film "The Burning Season" they show a village close to the forest, which stands up against a large-scale palm oil company:

"This is one of the four villages here that is against the company, the plantations. They're against the plantations. They write [sic] a letter to the Minister of Forestry and to the President of the Republic of Indonesia, asking them to stop the company clear up their forest." (Henkel, 2008, 00:40:16).

There are also signs of communities defending their land found in the literature. When local village elites got approached by large-scale palm oil producers, some elites responded in interviews saying that "We'd rather live with economic limitations than surrender our land for oil palm." (Yuliani et al., 2018, p. 7).

With some communities choosing to keep defending their land, they will sometimes experience pressure from neighboring villages to sell their land, as the neighboring villages will likely earn

more for their own land if this happens and have more work opportunities for the LPOCs. This pressure was experienced by a village in Empakan who faced many challenges and criticism from the other people in the area. This village was in the minority in this case, as all of the neighboring villages had sold their land (Yuliani et al., 2018, pp. 2-3). A study done on how the pressure affects the decisions to keep or sell land found that "farmers with elite political and corporate relationships are significantly more inclined to convert marginal land and engage in high-risk land clearing than all other farmer groups combined" (Snashall & Poulos, 2021, p. 3).

## 5.2.2.2. Communities' role in the sustainability of forest resources

Forests are not only important for the communities, but communities are also important for the sustainability of forests as well. In this section I present the findings on the communities' role in sustainability of forest resources. Two codes will be presented: the importance of local knowledge on forest sustainability, and CBFM.

Indigenous communities hold valuable knowledge that will benefit forest sustainability. The International Indigenous Peoples Forum on Climate Change (IIPFCC), which is under the UN Framework Convention on Climate Change, agrees with this and claims that "the indigenous knowledge of local peoples in adapting to climate change play important roles in the need for providing evidences [sic] and for integrating higher level policy formulation" (Wani & Ariana, 2018, p. 307). However, even if this type of knowledge is valued at the international level, a community representative from Papua claimed that local knowledge is less respected now than before: "In the past, local knowledge about forest management was held in high esteem and respected by parties managing the forest, including the community. Local knowledge is less respected now..." (Milne et al., 2016, pp. 7-8).

Communities also play a central role in forest management. Widayanto et al. (2019, p. 69) found that "local residents can be considered as one of the stakeholders of conservation activities and are designed i[n] a participatory community-based forest management (CBFM) strategy that balances the conservation and use of forest products.". This strategy of CBFM has been an important role for communities over three generations, empowering communities living around forest areas (Harbi et al., 2020, p. 93). The effect of CBFM on the communities is also vital for some, as one study presents that "Over 70% of case studies that reported human welfare

indicated that CBFM had a positive impact on subsistence, 25% reported positive savings outcomes, and 48% reported positive income outcomes." (Harbi et al., 2020, p. 98). In recent years, the government noted the success of CBFM and committed to their own form of community management of forest, called Social Forestry (SF):

The Indonesian Government is committed to assigning 12.7 million ha of forest to SF (also referred to as Community Forest, CF) through local community management by 2019 ... and is implementing the approach to accelerate the adoption of sustainable forest management .... (Hiratsuka et al., 2019, p. 559).

The literature and documentaries reviewed in the data collection of this thesis do not show any results of the SF, maybe because of its recent establishment. However, there are clear signs of the positive effects of CBFM on the communities living close by forests.

## 5.2.2.3. Community and palm oil

The last basic theme in this section covers the link between communities and the palm oil industry. There are three codes that presents themselves from the findings: palm oils effects on smallholders, smallholders' willingness to become more sustainable, and lastly community members working in large-scale palm oil plantations.

The development of palm oil in Indonesia, based on its rising global demand, provides a new way for smallholders to earn a living. The economic benefits from palm oil are underlined by Apriani (2020, p. 3): "In general, oil palm adoption has shown positive impacts on smallholders' livelihoods ..., especially for those with more land and capital....". However, even if the economic benefits are in place, the palm oil's effect on local smallholders well-being has to be studied as well (Apriani et al., 2020, p. 3) (see section 5.3.).

The second finding, discovered from the documentaries only, is the POS' willingness to act more sustainably. Many of the POS would like to clear forest without burning it, as the burning destroys the peatlands and sends hazy smoke to nearby housing. In one documentary film, a local smallholder says this: "I'd really like the Governor or the District Head or WALHI – the NGOs, to meet with us farmers. Perhaps the Governor can provide a solution so the community can have their plantations without smoke" (Henkel, 2008, 00:44:46). Later, he states his willingness to manage his owned forest areas in a more sustainable way: "I want to find a way to overcome the smoke problem. [...] After meeting with the Governor, and sharing stories, we

[...] became interested in overcoming the problem of the smoke" (Henkel, 2008, 00:57:50). This example does not show the smallholder willing to stop completely with the palm oil plantation. However, it shows his willingness to do it in a more sustainable way if they are offered economic help to achieve this.

The last finding which was emphasized in the data (mainly the documentaries), is the fact that a lot of local communities are working under large-scale palm oil management from substantial international companies. In one of the documentaries a man goes undercover to an oil palm plantation, where he asks the plantation workers about their job. He summarizes their answer as "I know it's wrong, we're destroying the forest, we're destroying the nature but... we are only the workers, the decision is not with us. There is a big invincible hand, a powerful invisible hand, it's the money" (Henkel, 2008, 00:39:50). This answer shows that many of the workers do not like the fact that there is such a high level of forest clearing, but that they are only the workers, and do not possess any managerial decision-making rights. Even if they have mixed feelings about their job, they still need the wage. Continuing this point, another documentary film shows an interview between the narrator of the documentary film and a local that is working in a large-scale palm oil plantation. When asked about the payment for their work, she said: "My salary is small. We only get Rp. 3000 [0,21\$] per sack. It's just enough to feed the kids. I feel it in my bones. We work hard. The workers here work long hours" (Coconuts TV, 2015, 00:20:24). The findings show that even if some workers are unhappy with the actions of their job, their wage is highly needed, even if the amount is low. I will come back to this point (see section 5.2.3.1.).

#### 5.2.3. LPOCs

The third organizing theme and relevant stakeholder when discussing the sustainability of Indonesian forest resources, is the LPOCs. These producers of palm oil differ from the local smallholders in that these companies usually are multinational/international and are of much greater size in general than the smallholders. The four basic themes discovered that cover large-scale palm oil producers are both the positive and negative effects of these companies, community land disputes, and the large-scale companies' efforts for sustainability.

#### 5.2.3.1. Positive effects of LPOCs

In this section I present the findings on the positive effects of the large-scale palm oil industry. These findings can be split into their improvement of economy, their employment offers to local communities, and lastly their improvement of infrastructure.

The first finding that is discovered is the argument that the palm oil industry contributes to the national economy. On this point, Reiss-Woolever et al. (2021, p. 2) refer to a study which is "highlighting the positive impact both large and small-scale cultivation has provided to rural and national economies....". This positive impact is illustrated more numerically in another referred study, concluding that "the Indonesian palm oil sector lifted around 2.6 million rural Indonesians from poverty this century ..." (Meijaard & Sheil, 2019, p. 5). Because of numbers like these, showing such positive signs of poverty eradication, Meijaard & Sheil (2019, p. 11) note that palm oil can therefore be seen as a "vital tool in the poverty eradication toolbox" for governances. This is likely one of the main reasons for the political acceptance of the palm oil in Indonesia.

Continuing the same strand of argument, concerning economic benefit, another finding is the palm oil industry's contribution to employment. Yuliani et al. (2018, p. 6) find that most local communities (in this instance local communities from Empakan and Riu) first heard about and became familiar with palm oil through relatives who were working in palm oil plantations in Malaysia. This shows that most local communities hear about the job opportunity before hearing about palm oil from the media. This point can be linked to the finding mentioned previously where the plantation workers said that they did not enjoy destroying forest, but they had to because they needed wages (see 5.2.2.3.). "Forest plays an important role in the household income for subsistence and cash across all the study villages." (Bong et al., 2016, p. 6). Reiss-Woolever et al. (2021, p. 2) note that "A growing number of rural communities work on these plantations, with the oil palm industry providing employment for over 4.5 million farmers in Southeast Asia alone ...". Whilst this statistic does not specify for Indonesia alone, it still shows the contribution to employment that the palm oil industry can provide.

The last main finding on the positive effects of the palm oil industry is their improvement of infrastructure. Milne et al. (2016, p. 8) reports that "logging and plantation companies in Papua argued that their activities were creating new roads" amongst other infrastructural implementations. Continuing this argument; "Anecdotal information indicates that many forest

people value the changes brought about by oil palm, such as new roads that provide better access to markets, schools, and health facilities." (Meijaard & Sheil, 2019, p. 6). Due to the significant infrastructural improvement that the palm oil industry is providing, palm oil can be seen as an important and profitable source for achieving more sufficient infrastructure for local communities (Ivancic & Koh, 2016, p. 2).

#### 5.2.3.2. Negative effects of LPOCs

I now present the findings on negative effects connected to large-scale palm oil industries. The main findings discovered were the increase of deforestation and forest burnings, negative effects on local culture, and its effect on humans and wildlife.

"And you see this curtain of green with occasionally birds in it, and you think it's perhaps okay. But if you get in a helicopter, you see that that is a strip about half a mile wide. And beyond that strip, there is nothing but regimented rows of oil palm." (Fothergill et al., 2020, 00:33:30).

This is David Attenborough's observation of his first experience of deforestation in Borneo (Indonesia). He later goes on to explain the importance of keeping natural forest, and that these "regimented rows of oil palm" do not function as sufficient forest areas for animals to live in. This is just the human experience of deforestation, but what are the numbers telling? Hiratsuka et al. (2019, p. 559) state that "In Indonesia, severe deforestation and forest degradation have occurred. Between 1990 and 2015, forest cover decreased from 118,545 thousand ha (69.0%) in 1990 to 91,010 thousand ha (53.0%) ... ". Since it is not mentioned whether this is a direct result from deforestation for palm oil or not, we can see this as a general statistic on deforestation. However, it is most likely strongly linked with the palm oil industry. Connected to this, in one of the documentary films an Indonesia conservationist and the leader of Forest, Nature & Environment Aceh (HAkA) stated that "The expansion of palm oil industry in Indonesia has taken over about 80% of our forest.", essentially supporting the trend Hiratsuka's et al. states (Stevens, 2016, 00:48:20).

"Over the years, large areas of primary and secondary forest have been cut or burned down to make way for oil palm plantations, particularly in Indonesia and Malaysia, the two countries which produce [the] majority of the world's palm oil ..." (Ivancic & Koh, 2016, p. 2). The burning of forest is explained throughout the literature as one of the most used methods of forest clearing, whether it is by local farmers (see section 5.2.2.3.) or by LPOCs. Forest burning is

much more damaging than deforestation done in a more environmentally friendly fashion, as the fires can hurt animals and create hazy smog damaging nearby local communities (see section 5.3.1.1.). Another factor which makes it more unsustainable than other forest clearing methods is that it is often performed on peatlands, which are especially vulnerable to fires. Hein & van der Meer (2012, p. 606) pointed out that "Much of the deforestation takes place on peatlands, which suffer from a deforestation rate almost twice the national average .... Peatland degradation leads to substantial CO2 emissions owing to fires and oxidation of peat following drainage."

A third finding on negative effects of LPOCs is its effect on local culture. One article mention that "the values that are lost, such as graves, sacred sites and others, may not be not apparent to outsiders ..." (Meijaard & Sheil, 2019, p. 6). It is here referred to unlawful deforestation performed by palm oil companies, on sacred sites. Instances like this are not widely addressed in the literature but is still worth mentioning. Another finding on negative impacts on local culture are found by Reiss-Woolever (2021, p. 2) when searching for the negative effects of local communities working in large-scale plantations: "negative impacts have also been recorded on social themes such as gender inequality ..., and rights of indigenous people....".

The last finding on negative effects of the large-scale palm oil industry is their disruption of the natural habitats of Indonesian wildlife. Reiss-Woolever et al. (2021, p. 2) find that there has been a 35% reduction in species richness in areas where palm oil plantations have been established. Another article notes the dangers of destroying the wildlife habitats: "human-wildlife conflict often increases following the establishment of largescale plantations, with species like orangutans and tigers being displaced when forests are cleared, causing conflict with people, and concurrent harm to animals." (Meijaard & Sheil, 2019, p. 2). All the documentary films analyzed provide some examples of the wildlife being negatively affected by the palm oil industry, however the documentary film "The Burning Season" is most interesting in this case, as they are in contact with a man who had gone undercover in a large-scale plantation. He had this to say: "With their habitats destroyed, displaced orangutans wander into palm oil plantations looking for food. Some killed by the workers machetes. Other are sold or kept as pets. The lucky ones are rescued..." (Henkel, 2008, 00:19.42).

#### 5.2.3.3. Community-land disputes

In this section I will present the findings on community-land disputes, linked with the large-scale palm oil industry. These findings are split into persuasion for land, tricking communities for land, and violence for land.

The first finding discovered from the literature is the companies attempt to persuade local leaders to give up their land. Yuliani et al. (2018, p. 7) shared an experience of persuasion happening to some local leaders:

"The company focused on influential individuals such as customary leaders and administrative leaders, offering them cash incentives and other gifts on condition they would try to convince other community members to accept oil palm development. The company also promised them employment and partnerships, and even took them by aeroplane to visit an oil palm plantation in Sumatra that showed wealthy farmers."

Cases like this are mentioned a few of times throughout the literature, and, like this example, the other examples of persuasion are also fueled by economic incentives.

The second finding on community-land disputes presents the palm oil industry's attempt at tricking local communities for land. One article mentions this problem in connection to the native group of Borneo, the Dayaks<sup>8</sup>.

"The Dayaks have the basic attitude that, so long as other racial groups do not disturb or harass them physically, they are prepared to accept any group in their midst. So tolerant are the Dayaks, I must say, that at times some people had taken advantage of them, especially on land matters. A perception of the Dayak who are easily influenced becomes one of the reasons to approach them." (Sada et al., 2019, p. 5).

Another example of the palm oil companies tricking local communities for land matters is shown in the documentary film "Sumatra Burning". Here they show that "...the big palm oil companies pay local communities to set the fires, then if the government comes to them (and ask) why is there a fire that has started in their concession? They will blame the community." (Coconuts TV, 2015, 00:13:40). In this way, the company tricked the local communities to get their land burned and ready to plant palm oil, whilst the local communities got the blame for it. A positive development to cases like these is presented by Yuliani et al. (2018, p. 6), where

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<sup>&</sup>lt;sup>8</sup> The Dayaks are a large indigenous group of Borneo, Indonesia. They are highly dependent on the forested areas which they live by/in, as they have traditionally used forested areas for sources of food, timber for housing, and resources to earn a living (World Directory of Minorities and Indigenous Peoples, 2018).

they point out that in some places, the local communities of one village have learned from the neighboring villages mistakes of being tricked by palm oil companies, and in that way have been able to stand up against this.

The last finding on community land-disputes is the companies' use of violence for land-matters. This is not heavily mentioned in the literature nor the documentary films but is still worth noting. In the documentary film "Sumatra Burning", the director of WALHI state that some of the LPOCs "...hire thugs to intimidate us." (Coconuts TV, 2015, 00:09:20). This is not directly towards land-matters, but more the act of silencing an organization campaigning against their unsustainable ways of running palm oil plantations. I will end this section with a statistic that is presented by Meijaard & Sheil (2019, p. 10): "According to Global Witness there were two hundred confirmed murders of environmentalists and indigenous leaders trying to protect their land in 2016 ....". They then ask the question: "Where governance is weak and money talks, crime and intimidation are likely to be widespread. Is oil palm adding to such problems or solutions? It seems possible it could do either.".

#### 5.2.3.4. LPOCs efforts for sustainability

The last basic theme is the LPOCs efforts for sustainability. These are not findings which are widely emphasized, but still relevant when assessing the palm oil companies' role in the collaboration for sustainability. In this section I will present the findings on Wilmar's zero deforestation policy, the sustainable palm oil manifesto (SPOM), and the criticism the companies have been receiving arguing that these efforts for sustainability are mainly based on the companies trying to achieve a more sustainable picture of themselves without acting on it.

In 2013 Wilmar International, one of Asia's largest palm oil companies, adopted a "zero deforestation" policy. This happened most likely after pressure from environmentalists and consumers as the problem of deforestation was in the international spotlight (Ivancic & Koh, 2016, p. 6). Other large consumer companies followed suit and banned their suppliers from converting forest and peatlands to new palm oil plantations (Ivancic & Koh, 2016, p. 6). On this, Ivancic & Koh (2016, p. 6) note that:

"These developments demonstrate the level of influence that the general public as consumers have on companies' behaviour. This type of industry action has proven to be effective since suppliers need to sell their produce to make profit, and without their usual buyers they would

suffer losses. Some experts believe that industries are ahead of governments in terms of sustainable palm oil actions".

One year after Wilmar's "zero deforestation" effort for sustainability, some of the world's largest palm oil companies created together their own sustainable palm oil criteria to follow, called the SPOM (Ivancic & Koh, 2016, p. 5). The main criterion to which they have to follow is to determine the definition of HCS<sup>9</sup> forests, and then refrain from removing forest in those areas (Ivancic & Koh, 2016, p. 5). Whilst the initiative is a step in the right direction, they have received criticism from environmental groups "for not stopping deforestation until they have defined HCS areas and for having various loopholes within the criteria...." (Ivancic & Koh, 2016, pp. 5-6).

Continuing this criticism, the literature provides more examples of criticism towards the LPOCs efforts for sustainability, essentially saying that the main reason why they are implementing these types of initiatives is to get a better "image". One example is provided by Milne et al. (2016, p. 6) saying that "some of them [the palm oil companies] claimed to be implementing participatory partnerships with communities and environmental management practices that were achieving "sustainable results.". The keyword in this is "claimed", as Milne et al. (2016) hint to the possibility that these participatory collaborations have not necessarily been realized. I will end this section with a concern voiced by Meijaard & Sheil (2019, p. 10) on LPOCs "no deforestation" commitments:

"When companies make No Deforestation commitments, but give themselves several years to comply, they may then accelerate forest clearance while they can so as to avoid remaining with stranded assets in the future (i.e., forested lands that they cannot use)."

#### 5.2.4. International funders

The fourth organizing theme is the role of the international funders and agreements as a stakeholder. The basic themes that will be explored in this section are the roles of REDD+ and RSPO in the collaboration for sustainability of forest resources in Indonesia.

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<sup>&</sup>lt;sup>9</sup> High Carbon Stock (HCS) refers to forest areas able to absorb a considerable amount of carbon.

#### 5.2.4.1. REDD+

The first basic theme that will be presented is the role of REDD+. This UNFCCC initiative was formally recognized by all the world leaders attending the Paris Climate Agreement meeting in 2015 (Ivancic & Koh, 2016, p. 5). The findings on the role of REDD+ are split into three different findings: REDD+ in Indonesia, Community data collection, and lastly, criticism REDD+ has received.

REDD+ main goal is to incentivize developing countries to sustainably manage and conserve their forests (Milne et al., 2016, p. 1). To achieve this, they help with the funding to implement these initiatives. REDD+ have been particularly active with this type of funding in Indonesia: "Indonesia has received unprecedented international investment in REDD+ and other climate interventions. Indeed, by 2009, Indonesia boasted the largest number of REDD+ pilot activities globally ..." (Milne et al., 2016, p. 2). Although the number of pilot activities and the amount of funding is significant, Hein & van der Meer (2012, p. 607) voice their concerns about REDD+ in Indonesia: "A situation often faced by REDD+ projects in Indonesia and elsewhere is that forest conservation needs to compete with alternative land uses such as oil palm plantations, which can be highly profitable.". This tells us that because of the significance of palm oil in Indonesia, REDD+ could experience a weakened feasibility when it comes to realizing their pilot activities.

Data are a necessity for the REDD+ initiative to function to its fullest degree, and Indonesia is regarded as one of the REDD+ participant countries with sufficient quantitative data (Bong et al., 2016, p. 2). Even if the coverage of quantitative data is good, it could always be better. One way of achieving more coverage and more frequent data is by community participation, as the UNFCCC already are aware of: "The United Nations Framework Convention on Climate Change (UNFCCC) recognizes the need for local community participation in carbon stock estimations ..." (Boissiere et al., 2014, p. 1856). Throughout most of the literature addressing this community participation of data collection, it is referred to as PMRV<sup>10</sup> (Participatory Measurement, Reporting, Verification), so this is the term that will be applied in this thesis as well. As mentioned above, the including of local communities to PMRV is based on the possibility to create greater coverage and a better frequency of data collection. However,

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<sup>&</sup>lt;sup>10</sup> In some articles they chose to use only "MRV" instead of "PMRV" when addressing community data collection and participation. However, I choose to apply refer to it as "PMRV" as it is more clearly presenting the idea of community participation.

Boissiere et al. (2014, p. 1872) remind us that it is not clear that the local communities would want to perform these PMRV without any incentives.

"There is more likelihood of villagers participating in a project if there is some form of benefit for the individual or group .... Incentives can be financial, political (e.g., empowerment, participation in decision making), or indirect benefits. The latter could involve sustainable forest management, for example community forestry. The locals could use PMRV to monitor changes in the forests for which they are responsible.".

Unfortunately, there were no reports on the early implementation of PMRV in any of the literature, documentary films, nor the documents.

The last main finding which are relevant for the problem research objective and research statements is the different forms of criticism that REDD+ has received. I will not be able to present all critical views of REDD+, however, I will try to present the most relevant ones for this thesis. Widayanto et al. (2019, p. 74) present their critical view of REDD+ and their handling of stakeholders:

"The main challenge for Reducing Emissions from Deforestation and Forest Degradation (REDD) in developing countries is to balance the strengths of various stakeholder [sic] in decision making. Research ... found that the role of stakeholder in decision making is not balanced. All stakeholders must have the same knowledge and understanding of existing issues and produce collective policies...".

Following this criticism on their handling of relevant stakeholders, Riggs et al. (2018, p. 3) adds that "REDD+ ... activities in Indonesia have largely failed because of lack of coordination among sectors and across governance scales ....". In both of these criticisms their handling of stakeholders is central, however, Hein & van der Meer (2012, p. 609) are critical on whether REDD+ incentives for keeping forest are enough for palm oil farmers: "In many cases, payments for carbon storage alone may be insufficient to compete with alternative land uses, such as oil palm on mineral soils in Kalimantan ...".

#### 5.2.4.2. RSPO

The next international stakeholder discovered from the data is the RSPO. The RSPO "is a non-state certification program that seeks to address global palm oil sustainability" (Apriani et al., 2020, p. 2). The findings on the role of the RSPO are split into three: The role of the RSPO, their effect on local POS, and lastly criticism that RSPO has received.

As RSPO is a NGO, it seeks authority by bringing together multiple relevant stakeholders in their process of implementing strategies regarding sustainable palm oil (Ivancic & Koh, 2016, p. 3). Their goal is ultimately to get most palm oil producers under the label of CSPO (Certified Sustainable Palm Oil). Apriani et al. (2020, p. 2) reports that "By June 2019, 3.89 million hectares of oil palm plantations, worldwide, had become RSPO certified [CSPO].... More than 50 % of this area, or 1.97 million hectares, is located in Indonesia, and mostly as industrial plantations.". However, then the question arises on how a palm oil producer can achieve this CSPO. This is not expressed thoroughly in the data, but in the documentary film "Sumatra Burning", the narrator explains that "To have a seat at the table and get their palm oil RSPO certified, companies must pledge to meet certain criteria, such as refraining from clearing out virgin forest." (Coconuts TV, 2015, 00:22:20).

Because of RSPO's wish to collaborate with all relevant stakeholders when it comes to sustainability of palm oil production, the local smallholders play a central role. However, Apriani et al. (2020, p. 7) report on some difficulties that smallholders are experiencing when it comes to achieving CSPO: "Lack of organizational and managerial skills of independent smallholders (e.g. documenting, record keeping, reporting) was cited as one of the major barriers to certification in previous literature ... ". This could refer to, for example, difficulties with proving their land ownership, their progress of sustaining virgin forest, etc. Nevertheless, when smallholders achieve a membership in RSPO, and their palm oil become certified, positive financial benefits are documented. But, not from the palm oil itself, rather the RSPO credits<sup>11</sup>. "The majority of smallholders we surveyed confirmed that they received benefits from sales of RSPO credits (94 %). The profits from the sales were often shared among members through distribution of meat, rice, and vegetable oil..." (Apriani et al., 2020, p. 8). To access and sell these RSPO credits, the smallholders have to use a marketplace that RSPO have created, called PalmTrace (Apriani et al., 2020, p. 13). Other than this financial benefit, Apriani et al. (2020, p. 9) also provides a quote from one governing member of RSPO saying: "... the economic improvement [from certification] was not that significant; however, we experienced significant improvement in terms of knowledge, .... knowledge in managing oil palm plantation, choosing good seeds and [in the use of] personal protective gear...".

<sup>&</sup>lt;sup>11</sup> An RSPO credit is created by independent smallholders when they have produced one tonne of CSPO. In essence it functions as a proof that the one tonne of palm oil produced were certified by the RSPO (RSPO, n.d.).

The last finding on the role of RSPO is the criticism the organization have received. One of the criticisms were based on RSPO's weak authority over the organization's members:

"In the decades of the group's creation ..., deforestation for palm oil has only gotten exponentially worse. Critics have accused the RSPO of not even enforcing its own membership requirements. And in 2015 Greenpeace even released maps which showed fires on land owned by three major member companies."

(Coconuts TV, 2015, 00:22:38).

Another crucial criticism that the RSPO received, is that they have been accused of covering up dishonesty of assessments of the organization's members, which Ivancic & Koh (2016, p. 4) believes is a crucial problem that needs improvement: "The Environmental Investigation Agency (EIA), London, found that the RSPO was involved in dishonest and falsifying assessments of palm oil companies that resulted in hidden breaches of sustainability standards ...". The last criticism found relevant is questioning RSPO's practices entirely:

"All these advances have their critics, and some are undoubtedly justified. For example, the RSPO may eliminate some of the very worst practices, but evidence for social and environmental benefits remains limited ... and standards can be portrayed rather as a public relations tool designed to help defend the industry from criticisms..."

(Meijaard & Sheil, 2019, p. 10).

# 5.3. Stakeholders impact on local communites' well-being

The second and final global theme concerns the stakeholder's impact on community well-being. The findings on this point are limited to the effect that deforestation and the palm oil industry have on well-being.

5.3.1. Well-being of local communities in relation to deforestation and the palm oil industry This section will start by presenting the findings of the palm oil industry's physical effects on community well-being. Afterwards, findings on problems connected to mental health and well-being will be explored briefly. The forms of data which are used in this section are about evenly shared between literature and documentary films.

## 5.3.1.1. Effects on local communities' physical well-being

The findings on physical effects on community well-being affected by the palm oil industry can be split into three: Smoke-induced respiratory illnesses caused by forest burning, deforestation effect on community food security, and lastly deforestation's role in the increased spreading of COVID-19.

The most mentioned effect that deforestation has on the community's physical well-being, in the literature and in the documentary films, is the forest burnings correlation with smokeinduces respiratory illness.

"... over 100,000 human lives were lost from direct wildfire destruction and smoke-related respiratory illnesses due to fires in Indonesia's South Sumatra Province, where 80% of palm plantations illegally use industrial logging and slash-and-burn land clearing to grow oil palms on protected lands." (Snashall & Poulos, 2021, p. 6).

The experience of smoke affecting health is documented in the documentary film "Sumatra Burning", where one local tells us about her struggles with the decreased air quality:

"I have two children; three years old and six years old. It's very hard for them, because we have an air problem. My children also have breathing problems, because the air is not good, because there are so many burning fires in the palm oil tree areas." (Coconuts TV, 2015, 00:10:11).

Later on in the same documentary film, a local living close to fires from forest burning, also expresses difficulties that she and her baby had experienced connected to smoke-induced respiratory illness, the main problem being difficulties with breathing (Coconuts TV, 2015, 00:16:22).

The second finding looks at food security. Wani & Ariana (2018, p. 306) states that "Climate variation destabilizes food security by impacting the availability and access, contamination, storage and confidence in the safety of traditional foods.". This could be applied to the destabilization of food security for local communities that can occur while, or after, deforestation of local forests. Snashall & Poulos (2021, p. 5) puts the spotlight on a different kind of food security problem that occurs when palm oil consumption is too high: "Palm oil consumption worldwide, and especially in urban and rural food deserts and developing

countries where food security and sovereignty are threatened, drives cardiovascular disease<sup>12</sup> and mortality rates ...".

The last finding on effects that deforestation have on the physical well-being of local communities are that it is increasing the spreading of COVID-19. Laudares & Gagliardi (2020, p. 22) reports that there is "... a positive and statistically significant relationship between deforestation and the transmission of COVID-19 in indigenous communities. This correlation, when using hospitalization as a proxy of COVID-19 incidence, was not found in other ethnic groups." Later in the report they present a finding showing that "... deforestation explains about 22% of all COVID-19 cases confirmed in indigenous populations." (Laudares & Gagliardi, 2020, p. 22). These numbers are based on the fact that in the process of deforestation, many people circulate in the area. Since medical resources, either vaccines for COVID-19 or treatment after being infected by the virus, are limited in many of these areas, local communities and indigenous people are truly exposed for COVID-19 to affect them badly.

## 5.3.1.2. Social problems connected to well-being

A couple of instances where the community's mental health has been affected by deforestation and the increase of palm oil producers also emerged from the data. These findings are both from the literature and the documentary films.

The first finding covers the role of deforestation over indigenous people mental health. For indigenous people, land plays a central role in their life. Jones (2019, p. 75) states that "Land and its associated natural systems are connected to health through a variety of pathways, providing cultural, spiritual, social, and economic benefits for well-being ...". Because of the importance of homelands, deforestation can badly affect the mental health of indigenous people and communities living close by, in a way experiencing their "home" being destroyed. On this point, Wani & Ariana (2018, p. 306) state that "Indigenous communities are particularly vulnerable to mental health impacts because of the importance of place. Many tribes experience historical grief associated with loss of homelands, traditional way of life ...".

The last finding on the effects that deforestation and the palm oil industry have on well-being, is showing the effect that people's general negative perception on palm oil has on smallholders.

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<sup>&</sup>lt;sup>12</sup> Cardiovascular disease is a general term for conditions affecting the heart or blood vessels (NHS, n.d.).

This finding is discovered from the documentary film "The Burning Season", where a local smallholder experienced a breakdown of emotions straight after burning his forest for palm oil:

"Achmadi: [He is crying and looking distressed]. "What am I going to do? And who cares about me? The small farmers like me are only trying to earn a living. They talk about arrest, and bans on burning the forest, I'm already scared of losing my head. Dear God, show me a way, for the sake of survival of the man Achmadi"." (Henkel, 2008, 00:50:57).

This feeling of distress that the smallholder felt is only shown in this one occasion from the data but is more than likely felt by smallholders all over Indonesia. Important to note here is that he is distressed on the background of how society and the legal frameworks will judge him, not necessarily directly because of palm oil. But then one could also argue that he, as a palm oil smallholder, must burn the forest to clear it, as every other way of forest clearing is too expensive. Considering this, the link between this finding and the question "how is palm oil affecting smallholders" is relevant on the background of social pressure.

# 6. Discussion

## 6.1. Introduction

Collaboration is a necessity for achieving goals on sustainability, and to achieve legitimacy as a collaboration, a large constituency of concerned stakeholders are needed (Johansson, 2018). An ideal collaboration harvests beneficial resources from the different perspectives and knowledge that each stakeholder brings, while at the same time offers synergetic benefits to all involved (Lozano, 2007, p. 372). In the case of sustainability of forest resources, there is especially a need for collaboration. This is based on the variety of stakeholders, and their relation to the forest resources. A government must collaborate with relevant stakeholders at different levels to achieve this, as forest sustainability is close to impossible to achieve by the government alone. This multi-levelled collaboration is crucial to achieve a consensus on the strategies and plans for achieving forest sustainability, especially since the collaboration is of an informal nature, meaning there are no single collaborative body in which the stakeholders have an arena to discuss and present their view for all other stakeholders. Because of the informality of the collaboration, potential risks such as not being able to coordinate, not being able to agree on the division of costs despite agreeing on the action, and the risk that once the

mission is agreed upon, some stakeholders may not prioritize the mission and therefore freeride through the collaboration's processes (Feiock, 2013, p. 408).

This chapter discusses the findings framed by the theoretical model BMCF, where the discussion will be structured through the model's input, throughput, and output tabs. Afterwards, I will be discussing the findings' implications for health promotion and sustainable development, analyzing the findings through the context of the Ottawa Charter. Thereafter, the limitations of this study will be discussed. And lastly, I will present recommendations based on the findings and provide a concluding summary.

# 6.2. Input

According to the BMCF there are three main inputs in a collaboration: the mission, partner resources and financial resources. However, I will only discuss the mission of the collaboration in this section. The partner- and financial resources will be discussed throughout the discussion and will therefore not be presented as separate sections here.

#### 6.2.1. The mission:

The mission of a formal collaboration refers to the agreed-upon approach to address to a specific problem (Corbin & Mittelmark, 2011, p. 52). However, because of the informal nature of the collaboration analyzed in this study, it is unlikely to find a determined mission that is agreed by all stakeholders. Even if there are no specific agreed-upon mission, we can see signs of commitment from each stakeholders concerning the wish to achieve sustainability of forest resources. This will therefore be seen as the mission which this collaboration is based upon. The goal of achieving forest sustainability is a problem which is often stated on the international level as a pressing issue (United Nations, n.d.). SDG 15 highlights this importance by stating the need to "Protect, restore and promote sustainable use of terrestrial ecosystems", and the need to "sustainably manage forests ..." (United Nations, 2017, p. 16). Building on this, the UNFCCC initiative REDD+ sees this as its main point of focus, as their goal is to incentivize developing countries to manage and conserve their forest more sustainably (Milne et al., 2016, p. 1). Because of the REDD+ tie to the UN, the mission of REDD+ automatically gets a spotlight on the international agenda. Another international funder which plays a central role in the collaboration of forest sustainability in Indonesia is the RSPO, especially relevant in relation to the palm oil sector (Brandi et al., 2015, p. 293). Their mission is in the same lane as REDD+, however with a focus on the palm oil industry specifically. Their goal is to get most palm oil

producers under the label of CSPO, which the palm oil producers must pledge to certain criteria to obtain (Coconuts TV, 2015, 00:22:20; Ivancic & Koh, 2016, p. 3). The mission statements of these international funders show that both main international funders, which were frequently mentioned in the literature and documentary films, see the purpose of this collaboration for managing forest resources more sustainably, where RSPO has a more specific focus on the palm oil industry. The effect of this goal being highlighted on the international level is that the world's governments receive increased pressure to handle their forests sustainable. An example of this could be seen in 2019, where because of the international spotlight in the burning of the Amazon rainforest, Brazil received immense international pressure to stop their continuous run of deforestation (Strassburg, 2019, p. 508). And, as the findings from the Indonesian long-term forest plans discovered, it is a central mission for the Indonesian government as well.

Looking at Indonesia's legal framework for sustainability of forest resources, and their population-directed forest laws, we can observe numerous laws that seek to protect the forest and the people living in forest areas (see section 5.2.1.2.). The laws protecting the forest seek to do so through securing and managing existing forests. However, it is important to mention that there seems to be a general perception that the legal system does not work to its fullest extent (Henkel, 2008, 00:17:20; Milne et al., 2016, p. 7; Riggs et al., 2018, pp. 2-7).

# 6.3. Throughput

The throughput of a collaboration covers two types of tasks: production tasks and maintenance tasks (Corbin et al., 2017, p. 37). The production tasks involve collaborative actions that directly related to the mission of the collaboration, in this case, productive actions taken for the mission on sustainability of forest resources in Indonesia. The maintenance tasks involve activities that contribute to the maintaining of the collaboration itself (Corbin et al., 2012, p. 51). One of the main aspects that the throughput section of the model seeks to present, is the collaborative context. This context is determined from four aspects: input interactions, roles and structure, leadership, and communication (Corbin, 2006, p. 37). These four aspects of the collaboration could also be seen as aspects affecting the maintenance of the collaboration, as the context and the maintenance of a collaboration are closely intertwined.

#### 6.3.1. Input interactions:

In this section I will look at how the inputs interact with each other. When inputs interact with each other, in order to achieve the common mission of the collaboration, it may involve trade-

offs (that could lead to antagony) or mutual benefits (that could lead to synergy) between the stakeholders (Corbin et al., 2017, pp. 37-38). The first interaction that will be discussed is the Partner-Mission interactions, then the Partner-Partner interactions.

#### Partner-Mission interactions.

The first input interaction is the Partner-Mission interaction. These interactions influence the collaboration for forest sustainability. Each of the stakeholders have different goals they want to achieve, so the question then arises: are the stakeholders unified regarding the mission? I will discuss factors and underlying goals of each stakeholder that can affect the collaboration in this section and look at the possible clashing of goals<sup>13</sup>. This will be discussed in this section by the following order: international funders, the GOI, palm oil companies and smallholders, and local communities and indigenous people.

#### International funders

The relevant stakeholders at the international level were found to be REDD+ and RSPO. These international funders embody different forms, as REDD+ are state-oriented, meaning that their focus is on developing forest sustainability within states (Lederer, 2012, p. 108; Moeliono et al., 2020). RSPO, on the other hand, is company-oriented, seeking to develop more sustainable forest practices through palm oil companies and supply-chains (Ruysschaert & Salles, 2014, p. 439). Both organizations self-stated primary goal is generally to achieve more sustainable practices. REDD+ want to incentivize developing countries to sustainably manage and conserve their forests, whilst the RSPO places all its focus on the palm oil industry, trying to get most of the large companies in the industry to follow certain criteria and thereby be allowed under the label CSPO. These goals are the types of goals which the organizations want to display outwards, to the global audience. However, what is interesting is to apply the criticism which each organization has received and try to seek out any further (unstated) goals of the collaboration. REDD+ have received its fair share of criticism (see section 5.2.4.1.). Most frequently, the criticism focuses on the organization's insufficient actions to protect the forests, stating that there should be noticeable improvements to their plan of action (Riggs et al., 2018, p. 3; Widayanto et al., 2019, p. 74). Another criticism which often is given to REDD+, is that their efforts are ineffective and cut short of the mission, because of their "projectification" of a

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<sup>&</sup>lt;sup>13</sup> By "underlying goals" I refer to secondary goals which may not be stated by the stakeholder. These underlying goals may be hidden and can affect the main mission of the partnership as it is not stated clearly for all the other stakeholders to see (Bryan, 2004).

complex case (Moeliono et al., 2020, p. 10)<sup>14</sup>. As shown here, most criticism is based on their sometime ineffective solutions to achieve forest sustainability. However, there are not presented many criticisms which would entail that REDD+ have any secondary motives for the mission of the collaboration. In other words, there are no signs of REDD+ having any underlying goals that would clash with the mission of forest sustainability.

For RSPO, on the other hand, the criticism that the organization has received could possibly paint a different picture of their goals of the collaboration than what the organization originally stated (see section 5.2.4.2.). The majority of the criticism is based on their dishonesty, where investigations from the Environmental Investigation Agency (EIA) show that there have been cases where the RSPO's falsified assessments of several palm oil companies that ultimately resulted in hidden breaches of sustainable standards (Ivancic & Koh, 2016, p. 4). This raises the question "what does the RSPO get from falsifying these assessments?". If we apply Meijaard & Sheil's (2019, p. 10) view on this, the RSPO can be seen as a public relations tool designed to help defend the industry from criticism. If the organization's unstated goal within the collaboration is to publicly boost the green image of palm oil companies rather than seeking more sustainable ways of palm oil production, the act of falsifying assessments makes sense. Performing these falsifying acts could be perceived as greenwashing, which can have several detrimental repercussions for the collaboration<sup>15</sup>. If an act of greenwashing is discovered, it could increase distrust between the stakeholders of the collaboration and ultimately decrease the environmental legitimacy of the collaboration (Pizzetti et al., 2019, p. 23).

Based on these findings, the RSPO might be assumed to have underlying goals of the collaboration; increase the green image of palm oil companies and increasing their sale of CSPO.

#### The Indonesian government

The Indonesian government interactions with the mission of the collaboration can be seen from the findings on their long-term forest plans, their actions for sustainability of forest resources, and lastly their deficiency when it comes to applying more sustainable practices (see section 5.2.1.3., 5.2.1.4., 5.2.1.5.)

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<sup>&</sup>lt;sup>14</sup> "Projectification is a process through which plans for systematic, long-term change collapse into incremental, simplified solutions flung rather haphazardly at complex socio-ecological problems" (Li, 2016).

<sup>&</sup>lt;sup>15</sup> I follow Delmas & Burbano's (2011, p.65) defining of the term greenwashing: "the intersection of two firm behaviors: poor environmental performance and positive communication about environmental performance".

The long-term forest plans stated by the government shows that they have ambitions to further pursue a more sustainable form of forest management overall. It also mentions their need for the creation of stronger forest institutions (GOI, 2010; GOI, 2006). Also, the government aim to increase funding towards the actions taken for sustainability of forest resources, through national investments, grants, funding from REDD+ etc. (GOI, 2010, pp. V-23 & V-24). All these long-term goals stated by the government tie into the main mission of the collaboration, being the search for more sustainable handling and management of forest resources. However, there are multiple factors and unstated goals that can affect the Indonesian government's interactions with the main mission of the collaboration.

One secondary goal that the government most likely would want to achieve, is to boost their green image internationally. Even as countries possesses sovereignty over its own borders, global acceptance is sought after. This is the case because, even as the concepts of states and sovereignty are mutually constitutive, states usually act against the sovereignty ideal of nonintervention and end up intervening in each other's affairs (Biersteker, 2002, p. 245 & 252). This is especially true when it's covering the environment- and climate debate, which is heavily discussed internationally, as many national environmental disasters may have an effect crossborders (Galaz et al., 2012, p. 81). The GOI seeking of a green image might be linked with their receiving aid from REDD+. An study conducted by Magesan (2013) found that, in some cases, countries used the participation in the United Nations Human Rights Treaties as a smokescreen to take the spotlight off their bad behavior. The findings implied that aid donors were rewarding behavior which, in actuality, worsened human rights. Could this be the case with the GOI and the receiving of aid to achieve forest sustainability? Based on this, one underlying goal of the GOI enrollment into REDD+ could be based around a wish to be perceived as a "greener" country that places efforts into the goal of forest sustainability.

A second underlying goal that affects the Partner-Mission interactions is the economic profit that either the governmental workers, or the government, can obtain through corruption. Eldeeb et al. (2015, p. 120) contend that the amount of money that governmental official have received from corruption, linked with the forestry sector in Indonesia, is generally unclear, but is most likely leaning towards billions of dollars. Therefore, the establishment of new natural resources (like palm oil plantations) functions as a never-ending income for corrupt governmental officials (Eldeeb et al., 2015, p. 121). Historically, corruption have been prominent since the decentralization process of Indonesia, which started in 1999. This happened because of the increased power that the district received during this process, where acts of deforestation that was considered illegal by the national government was made legal by the

leaders of the districts (Alesina et al., 2018, p. 35). Whilst the problem of corruption is only mentioned a few times in the data, it still needs to be considered (see section 5.2.1.5.). In the documentary film "Before the Flood" a Indonesian conservationist mentioned that there are multiple instances where palm oil companies bribe government officials to issue a permit for them to start burning land (Stevens, 2016, 00:48:28). Another conservationist mentioned that there are many flaws in the Indonesian legal system, which would ultimately assists the continuation of the acceptance of bribery within the government (Henkel, 2008, 00:17:20). This will potentially have an antagonistic affect in their interaction with the mission of the collaboration, as certain government officials have the ability to accept actions that is contradicting the collaboration's mission for their individual economic gain.

One last underlying factor that can affect the Partner-Mission interactions is the government's pursuit of public support. Public support is perhaps the most crucial goal of a government within a democracy. The government want the people's votes so they can stay in charge, have the ability to implement future policies, distribute spendings etc. (Rudolph & Evans, 2005, pp. 661-662). The findings on local communities working under LPOCs show that many workers are unhappy with the low wages they earn of their work (Coconuts TV, 2015, 00:20:24). However, it also shows that whether they are unhappy with the job or not, it is still much needed (Henkel, 2008, 00:39:50). This demand for jobs could possibly affect the interaction the government have with the mission of the collaboration, since the people's job demand is a highly relevant factor for reaching high numbers of public support.

#### LPOCs & POS

Out of all the case-relevant stakeholders, the palm oil companies and smallholders are the ones which could be seen having to make the biggest trade-offs to achieve the mission of the collaboration. Their goals often being in a noticeable contrast to the collaboration's mission. This is mainly based on the industry's need to survive.

If a production company wants to prosper, it must meet the demand for the product. This is the same for palm oil companies. And since the demand is increasing both domestically and globally, the expansion of the palm oil production is a necessity for the companies (Khatiwada et al., 2021, p. 135). This factor of prospering economically will without a doubt have a crucial effect on the palm oil companies' interactions with the collaborations mission. These economic incentives for continuing expanding the palm oil fields and produce an even greater amount of palm oil makes their interaction with the collaborations mission complex. Another way of looking at the same underlying goal through a different lens, can be seen from the term

"economic security" <sup>16</sup>. This view favors the underlying economic goals of both the large-scale companies and the smallholders. Economic security implies that the reason to seek economic profit is to attain security (Hacker et al., 2014). This goal of security is relevant for large-scale companies and crucial for many smallholders. An implication of the pursuing of economic security is that large-scale companies and smallholders which is in dire need of the economic resources achieved through the sale of palm oil, may be more willing to break forest laws, and therefore work against the collaboration.

Another underlying factor of both the large-scale companies and smallholders is the payment of workers. Linked with the previous economic factor, the payment of wages plays an important role in the palm oil producing stakeholders' decision-making. Historically, in the early 1970s, the palm oil sector presented itself as a new way of promoting economic development and alleviating poverty (Yacob, 2019, p. 909). To this day, the palm oil sector's continuing role in bringing a positive impact to poverty eradication in Indonesia is well documented through the literature (Meijaard & Sheil, 2019, p. 5; Reiss-Woolever et al., 2021, p. 2). The statistics on this cover both the large-scale companies and the smallholders. This responsibility that the industry may feel towards its workers could be a central factor affecting their interaction with the mission, and it links with the GOI goal of employment of their citizens as well. It is important to note that one finding from the documentary film "Sumatra Burning" showed that the wages received from working under one specific large-scale palm oil company were insufficiently aligned with the economic needs of the workers (Coconuts TV, 2015, 00:20:24). This finding could stall the effect that the action of paying wages has on the collaboration's mission, in that some LPOCs does not prioritize the "responsibility" of paying fair wages.

The last underlying goal that the palm oil industry has that may interfere with the collaboration's mission is the wish to be perceived with a more positive image. Both the large-scale companies and smallholders hold this wish, even as it is based on different foundations. For the large-scale companies, a more positive image, in this case a greener image, is sought after. This is because consumer concern for the environment is crucial, and if a green image is achieved, it would ultimately assist the economic goals of companies (Manrai et al., 1997, p. 512). By looking at industry-made initiatives critically, Wilmar's zero deforestation policy and

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<sup>&</sup>lt;sup>16</sup> "Economic Profit" refers to the act of seeking increased economic resources to grow a business, whilst "Economic Security" refers to the economic resources that are needed to live sufficiently. For a company, economic security may mean the survival of the company, whilst for local communities it refers to the economic resources that is needed to afford living sufficiently.

SPOM could be seen as initiatives created by the industry to try to achieve this green image (Ivancic & Koh, 2016, pp. 5-6; Meijaard & Sheil, 2019, p. 10; Milne et al., 2016, p. 6). These initiatives work in the same lane as the collaboration's mission in that they seek more sustainable industry practices, even as the basis of the initiatives leans on the egocentric and economic goals. However, even if the establishment of these initiatives is based on results that will mostly gain themselves, it still helps in the big picture of the whole collaboration. However, for the POS, the wanting for a better image could perhaps be more based on the wish to avoid stigmatization rather than economic profit. This problem is presented in the documentary film "The Burning Season", where a local smallholder expresses his distress of the stigmatization received (Henkel, 2008, 00:50:57). This may be one of the main reasons why smallholders are more aligned and willing to follow the collaboration's mission, if governmental help is received (Henkel, 2008, 00:44:46).

#### Local communities & Indigenous people

The last group of stakeholders which will be discussed in relation the collaboration's mission are the local communities (not working with palm oil) and indigenous people. Their interaction is generally perceived as positive and supporting towards the mission.

The first factor which is central to their belief in the collaboration's mission, is that they want to avoid further health damages from deforestation. In the case of Indonesia, these damages come from smoke-induced respiratory illnesses from forest burning (Coconuts TV, 2015, 00:16:22; Snashall & Poulos, 2021, p. 6) and air pollution (haze) from forest burning (Marlier et al., 2021, p. 3)<sup>17</sup>. This problem affects both indigenous people and local communities living near forests. Based on the literature, I perceive this as the most important factor to positively affect the local communities and indigenous people's interaction with the collaboration's mission.

Another important factor, better explained in this case as a goal, is the defending of their home. Also linked with deforestation and forest burning, this factor is especially relevant for the indigenous people living within forested areas. Wani & Ariana's (2018, p. 306) term of "historical grief" comes in play here, as the loss of homeland most likely will negatively impact people's mental health. As the point above, this will positively affect the indigenous people, and local communities living near forests, interaction with the collaboration's mission.

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<sup>&</sup>lt;sup>17</sup> The peatlands that usually are burned to establish new palm oil plantations, contains large amounts of fuel and, therefore, releases a significant amount of PM2.5 (fine particle matter less than 2.5 microns in diameter). This air pollution particle is estimated to be the world's fifth-ranking mortality factor (Marlier et al., 2021).

The last factor is in the same lane as both factors above, in that it will positively affect the interactions with the mission. This factor is food security. This is, again, the most relevant for either indigenous people or local communities living near forests, as close-by food sources could be a necessity. An example of this dilemma can be seen from the rice production in West Java. Because of intensive burning and agricultural business, the insufficient status of soil fertility in West Java have had an impact on the local rice production (Kurniawan & Kurniawan, 2022, p. 2). Another example can be seen from West Papua, where many rural communities highly value the forest because of its availability of plants and animals to hunt (Pattiselanno, 2004). These examples show that the variations of the climate that forest burning creates are often too strong and in turn destabilize the food security for people that depends on food sources from the forests (Wani & Ariana, 2018, p. 306). Aligned with the factors mentioned above, this will affect the interactions with the mission positively.

#### Clash of goals

From the Partner-Mission interactions, multiple clashes of underlying goals are discovered. These interactions vary between all the stakeholders that are part of this study. Interestingly, many of the goals clashing are goals that are both held by one stakeholder. In other words, instances where a stakeholder's goals are working against itself in an antagonistic way. In this section I will briefly discuss these clashes of goals, and their implications for the mission. I will also apply relevant SDGs in the discussion, as many of these goals also have conflicting qualities when compared with each other<sup>18</sup>.

There have been written many articles on the interactions between different SDGs. There is generally a consensus on what kinds of interactions that can take place, these interactions being either synergy or trade-offs (Kroll et al., 2019; Pradhan et al., 2017; Scherer et al., 2018; Singh et al., 2018). Here, Synergy would refer to progress towards one SDG also favors progress in another, whilst trade-offs refer to cases where progress in one SDG hinders progress in another (Pradhan et al., 2017, pp. 1169-1170). In this section, the trade-offs between SDGs will be in the center of the discussion, as this will best visualize the clash of goals.

The first clash of goals can both be seen from the RSPO. This is a clash between the goal of achieving more sustainable handling of forest, and the goal of increased sales of CSPO. The goal of forest sustainability and the urgent need to achieve this is voiced in SDG 13,

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<sup>&</sup>lt;sup>18</sup> All SDGs discussed are from the UN report on goals and targets from the 2030 Agenda for Sustainable Development. Citation: (United Nations, 2017).

proclaiming the need to take urgent actions to combat climate change and its impacts. More specifically, as the RSPO are representing multiple LPOCs internationally, SDG 12.6 is of relevance. As SDG 12 covers the topic of sustainable consumption and production patterns, SDG 12.6 state the need to encourage large-scale and transnational companies to adopt sustainable practices. The indicator for this goal is the "Number of companies publishing sustainability reports" (United Nations, 2017, p. 13, Indicator 12.6.1). The link between SDG 12.6 and the RSPO can possess a synergetic value, as the membership criteria, for the palm oil companies that want to get their palm oil CSPO certified, will ideally encourage the companies to adopt more sustainable practices (Koh et al., 2010, p. 70)<sup>19</sup>. However, as the main goal of the RSPO is pointed towards further developing sustainability of forest resources within the palm oil industry, the RSPO's wish for increased sales of CSPO could be working against this goal of sustainability. The most relevant example here is their actions of falsely assessing membership companies. False assessments of palm oil companies make more companies' palm oil viable for the CSPO label, which in turn increases sales of CSPO products. The actuality of the act of falsifying assessments is well documented in the EIA report on RSPO and their "continuing incompetence". They discovered that less than 20 percent of the RSPO members had achieved full their CSPO status (Environmental Investigation Agency, 2019, p. 22). This clash of goals is something that will work against itself and SDG 12.6, especially if there is a continuation of falsifying assessments. There is a need to establish a carefully crafted method of balancing these goals to achieve both further development of forest sustainability and increased sales of CSPO.

The second clash of goals is represented by the need for further fulfilling national job demand, and forest sustainability. The goal of fulfilling job demand can be seen from the palm oil companies, but also the government who is supporting this beneficial side of the industry. The palm oil industry have created millions of jobs in Indonesia, and in that sense functions as a generator of employment (Manik et al., 2013, p. 1391). SDG 8.5 is covering this, as it focuses on sustainable economic growth, employment, and decent work for all. This goal's connection to the existing work environment within the palm oil industry could be discussed, as there are findings documenting local communities that is having to work too much for their own good, whilst only to receive insufficient wages (Coconuts TV, 2015, 00:20:24). Nevertheless, the fact is that besides the underpaying work that many must endure, the palm oil industry is producing

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<sup>&</sup>lt;sup>19</sup> As of 2020, 5914 independent smallholders are members of RSPO in Indonesia (RSPO, 2020).

work and offers, as of 2013, around 1.7 to 3 million people jobs (Manik et al., 2013, p. 1391). The goal of forest sustainability can be placed under the government, and REDD+ as well. The importance of forest sustainability can be seen from SDG 15, stating the need to protect, restore and sustainably manage forests. The clash between forest sustainability and the fulfillment of national job demand is a natural discrepancy that will occur in this case, as in many other environmental cases. There are no simple solutions to this dilemma as the goals clashing functions as the one mentioned above, a balancing act.

Continuing with goals that are clashing for the GOI, and very much in the same lane as the one mentioned above, we find the goals seeking a green image, and the wish for people's votes (especially votes from the people benefitting from the palm oil industry). These goals could work synergistically with each other, as many people of Indonesia would want to vote for governmental officials that state their intent in developing more sustainable forest management. On the other side however, since the palm oil industry provides a great number of jobs (Manik et al., 2013, p. 1391; Reiss-Woolever et al., 2021, p. 2), and is observed to create better infrastructure in nearby villages (Ivancic & Koh, 2016, p. 2; Milne et al., 2016, p. 8), there will be a noticeable percentage of people supporting this political side. Therefore, in this case, the clash of wanting to be presented by a greener image internationally, and the public support from people working within the palm oil sector, is complex. The complexity that this creates can without a doubt affect the mission of the collaboration, as one of the main stakeholders (the GOI) will possibly favor one goal over the other. In addition, the governmental workers that sometimes act out of self-interest, in the case of corruption, may also affect this clash of industry versus green image. As mentioned in the documentary film "Before the Flood", corruption is a real problem in Indonesia (Stevens, 2016, 00:48:28). This is also covered by SDG 16.5, stating: "Substantially reduce corruption and bribery in all their forms" (United Nations, 2017, p. 19).

Another clash of goals is the companies' goals of economic profit, and local communities and indigenous people's goals of avoiding health damages and defending their land. This clash of goals is one of the most central complexities researched in this study. As with many other environmental cases, the large-scale industries often affect the health of local communities living close by, for example through air pollution, overwhelming wastage etc. (Domingo & Nadal, 2009; Kampa & Castanas, 2008). There are also situations where negative actions from industries have polluted and affected people living further away, for example through smoke from forest burning crossing borders to other countries, acid rain etc. (Baylis et al., 2017, p. 387; Forsyth, 2014). In this case, this is seen usually from forest burning, where

the producing of harmful smoke is the damaging factor (see section 5.3.1.1.). This problem of smoke-induced respiratory illnesses is accounted for in SDG 3.9, stating: "By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination." (United Nations, 2017, p. 4). The local's goal to protect their forest is also central here. As mentioned in the findings chapter, there have been several instances where the palm oil industry "took" the owned forests of local communities, either through trickery, bribery, or physical threats (see section 5.2.3.3.). This problem is also referred to by the UN, in a section of SDG 1.4. It states the goal of providing the poor and vulnerable with ownership over land and other forms of property. In this scenario, I would consider many local communities as "vulnerable", as the findings show that there is almost no way for local communities to have any saying or effect on the LPOCs' decision-making. Because of the complexities of this clash, it is difficult to solve with a synergetic result.

The last clash of goals discovered from the Partner-Mission interactions is one that affects the POS. This interaction is between the underlying goals of economic security and the wish to avoid stigmatization. As seen from the findings covering the affect that the negative perception on palm oil has on POS farmers, we can see that this is a real problem that is affecting the well-being of smallholders (see section 5.3.1.2.) (Henkel, 2008, 00:50:57). However, their choices of how to combat this problem are not many. For many smallholders, the income from selling palm oil is an absolute necessity (Rist et al., 2010, pp. 1010-1011). SDG 9.3 acknowledges this, as it states the importance of increasing the access of small-scale enterprises (in this case the POS) into value chains and markets. The problem is that, for many, the only way to clear forested areas, without owning heavy forest machinery, is by burning. This is the basis of why they may be perceived in a bad way, as the forest burning created heavy smoke over neighboring houses or villages. This vicious circle is damaging the mental well-being of smallholders, that wish to do no harm, but must burn forested areas for their economic security. Their only way to escape out of this vicious circle of public stigmatization is either to quit the business of palm oil, or clear the forest in another, less health damaging way. To achieve this, they will need help by the government or local NGOs, who could either fund them to obtain the machinery needed, or just send them the machinery directly (Henkel, 2008, 01:18:00). An example of a country assisting their POS in this way, can be seen from Ghana, where the government established an initiative where they would support their POS with improved palm oil varieties (higher yielding varieties than the POS currently work with) and help them with the adoption of better agricultural practices (Oosterveer et al., 2014, p. 223). Another example can be seen from Colombia. The Colombian government explored technological innovations

that could enhance monitoring and help providing economic support based on sustainable results. This tool was created through a mobile application where the POS were able to self-assess their level of sustainability (Jezeer et al., 2019, p. xvii). Both examples show signs of collaboration between the respective governments and their POS', which stands in contrast to the findings on the present situation for the Indonesian POS. This clash of goals will influence the collaboration's mission interaction, however, not necessarily in an antagonistic way. The implication of this problem is more directed towards the well-being of the smallholders rather than the mission. In the view of the mission, this shows that the smallholders working with palm oil have a real incentive to act more sustainable in their management of forest resources, to avoid further stigmatization

#### Partner-Partner interaction.

The second input interaction that will be discussed is the Partner-Partner interactions. These interactions show the either antagonistic or synergetic interactions that occur between the stakeholders.

The first Partner-Partner interaction is the interaction between REDD+ and the Indonesian government. These interactions are central to the collaboration's mission, as it concerns the "strongest" stakeholders within the collaboration. If we start by looking at what resources REDD+ has to offer within this interaction, the most central thing is funding. One could, in a way, view this funding to function as a compensation for governments reduced access to their forest resources (Vatn & Vedeld, 2013, p. 423). As seen from the findings, REDD+ have an active funding history with Indonesia, making them one of their main collaborators globally (Milne et al., 2016, p. 2). This interaction greatly benefits the collaboration's mission, as it allows the government to establish more projects and pilot activities to improve the sustainability of forest resources (Sanders et al., 2020, pp. 1-2). Another synergetic Partner-Partner interaction can be seen from the government supplying REDD+ with quantitative data. These data are needed for REDD+ to make its initiatives function to their fullest extent, and Indonesia is said to provide sufficient data (Bong et al., 2016, p. 2). Both of these Partner-Partner interactions strengthen the relationship between the RSPO and the Indonesian government, and therefore have a synergetic outcome.

The second Partner-Partner interaction shows the uncertainties connected to the Indonesian government's unity of purpose. By this I refer to the differences in findings that show some governmental officials willingness to work towards a more desired sustainability over forest resources, whilst other governmental officials act corruptly based on economic

incentives from LPOCs (Coconuts TV, 2015, 00:29:14; Henkel, 2008, 00:13:03; Pizzetti et al., 2019; Stevens, 2016, 00:48:28). This contradicting interaction makes the government work against itself, which in turn decreases the potential development of more sufficient forest resource management.

Another essential Partner-Partner interaction is the local communities' mistrust towards their own government. One of the reason for this mistrust is based on the government's discrepancy between de facto and de jure in the picture of forest sustainability (Riggs et al., 2018, pp. 2-7). This weakens the trust between the local communities and the government, as political accountability of the government is highly important to achieve a good and representative governance (Mechkova et al., 2019, p. 40). In the same lane as this interaction, we can see the smallholder's antagonistic relationship towards the government as they are threatened to stop clearing forest by burning, when they have no affordable alternative methods of forest clearing which is more sustainable. These interactions showing the mistrust that local communities experience towards the government encompasses only antagonistic values for the collaboration, as trust between stakeholders is imperative.

The last Partner-Partner interaction that will be discussed in this section is the multiple land conflicts between local landowners and LPOCs (see section 5.2.3.3.). Throughout the data there are shown different ways that LPOCs intend to obtain new land for palm oil, the most relevant ways being persuasion, tricking, and the use of violence. Even as there are forest laws concerning these matters, they are not always enforced as the government sometimes acts in the interest of the palm oil companies (GOI, 1945, Article 28H § 1; Hidayat et al., 2018; Jones, 2019, p.75; GOI, 1999, Article 37 § 1-2,). These interactions create an ongoing conflict, especially for the local landowners who refuse to sell their land (Henkel, 2008, 00:40:16; Yuliani et al., 2018, p. 7). In relation to the collaboration to achieve sustainability of forest resources, this interaction between the two stakeholders produces an antagonistic relationship between the local communities and the LPOCs, making collaboration difficult.

#### 6.3.2. Roles & Structure:

The next dimension of the maintenance tasks that affects the throughput is the roles and structure of the collaboration. I choose to interpret this part of the model as a show of the structure of power within the collaboration<sup>20</sup>. The power-dimension is not specifically

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<sup>&</sup>lt;sup>20</sup> With the use of the term "power", I refer to the stakeholder's ability to affect the output of the collaboration, either antagonistically or synergistically.

mentioned in the BMCF, as the model is mostly used to analyze formal collaborations. In an informal collaboration (such as the case of this study), however, where there is a lack of an arena where all stakeholders can meet and discuss the collaboration's functions, each stakeholder level of power becomes essential, to show their position in the power-structure of the collaboration. In other words, the amount of power that each stakeholder possess, essentially determines their roles in the structure of the collaboration. Based on this, it could be argued that the power-dimension is overlooked in the BMCF, when analyzing informal collaborations. Because of this, a ranking of the relevant stakeholders and their position of power within the collaboration will be presented, from most to least powerful. This power ranking of the relevant stakeholders is helpful when contextualizing the recommendations (see section 6.7.), as this is in essence showcasing one aspect of the collaborative context of the collaboration. It is also relevant in the discussion of the SDGs. Goal 16.6 proclaims the importance of developing effective, accountable and transparent institutions at all levels. Consecutively, Goal 16.7 seeks responsive, inclusive, participatory and representative decision-making at all levels (United Nations, 2017, p. 19). The ranking is based on the findings gathered from the data, and will be briefly discussed:

- I. The Government: The Government seem to contain the most power in this collaboration, the main reason for this being their sovereignty over their country (Litfin, 1997, pp. 184-185). In some cases, they act corruptly or favor palm oil companies, mainly because of their economic strength and support for the national job market (Stevens, 2016, 00:48:28). However, under international pressure, they have been able to create laws and systems which deaccelerate deforestation. It is important to note that even though they have been successful in deaccelerating deforestation through new laws, they have received criticism on their flawed legal system when it comes to actually enforcing the new laws and managing conflicts that arises from them (Brockhaus et al., 2012, p. 36; Henkel, 2008, 00:17:20; Milne et al., 2016, p. 7; Riggs et al., 2018, p. 11). This flawed system is negatively affecting the power that the government possesses. However, they still retain the most power within the collaboration, as a governments decisions concerning a case within its borders, is crucial.
- II. *International Funders*: The international funders main power comes through the channeling of international pressure on the problem of deforestation. This international pressure could function as an effective tool to hinder further deforestation within a country, that in essence can decide themselves how they want to handle the forest

resources within their borders (Büscher & Fletcher, 2018, p. 108). They also possess economic power from funding, in this case especially through REDD+ (Milne et al., 2016, p. 2). However, as the international funders are "outsiders", they are lacking the decision-making power over cases concerning forest sustainability within the Indonesian borders. And, as their wish for forest conservation needs to compete with alternative land uses, most prominently the highly profitable palm oil plantations, they often experience weakened feasibility of their goals (Hein & van der Meer, 2012, p. 607 & 609).

- III. *LPOCs*: LPOCs possesses financial power through; Improving national economy (Meijaard & Sheil, 2019, p. 5; Purnomo et al., 2020, p. 1; Reiss-Woolever et al., 2021, p. 2), improving infrastructure (Ivancic & Koh, 2016, p. 2; Meijaard & Sheil, 2019, p. 6; Milne et al., 2016, p. 8), creating jobs (Bong et al., 2016, p. 6; Yuliani et al., 2018, p. 6), and farming a product which have a high international demand. These financial dimensions positively correlating with the governmental wishes of development, make their relationship with the government a positive one (Mukherjee & Sovacool, 2014, p. 8). In turn, this positive relationship with the government helps their feasibility of creating new palm oil plantations. It also helps when they experience land disputes with local communities, where bribery comes in play. Summarized, their power is based on their economic abilities, interacting as a beneficial partner to the government.
- IV. Local communities: Under the collaboration of forest management (CBFM & SF), the local communities have gained some power in the relationship of stakeholders (Chen et al., 2013, p. 67; Harbi et al., 2020, p. 93; Widayanto et al., 2019, p. 69). The reason being that they have been delegated a specific role within forest management. However, they do not possess a lot of power when it comes to decision-making, where economic profits sometimes overrun the health of local communities, in the eyes of the government. There is also cases of local communities working for LPOCs, where they receive insufficient salaries and do not possess the power to even discuss the possibility of raising the salary (Coconuts TV, 2015, 00:20:24). Their main sources of power that the local communities possess is trough elections and demonstrations (Boudreau, 1999, p. 3; Casquete, 2006, p. 47). This is an important and powerful role, but when observing it through the lens of the collaboration on sustainability of forest resources, they do not possess any direct power, only long-term power.
- V. *POS*: The POS do not possess much decision-making power. They are often under scrutiny by government officials who want to develop more sustainable ways of forest

management (Henkel, 2008, pp., 00:26:00). Even as they are in the same marked as the large-scale companies, their road to appoint a meeting with governmental officials seems much more difficult. Compared to the local communities mentioned above, the people working as POS seem to possess less power because of the scrutiny they receive from both governmental officials and neighboring villages that are unhappy with the forest burnings.

VI. *Indigenous People*: Do not possess much power in the collaborative context at all. However, they are under protection of multiple sets of laws (GOI, 1945, Article 28H § 1; GOI, 1999, Article 37 § 1-2). These laws help defend their forests but does not assist their power within the collaboration. Even with laws on their side, there have been occasions where indigenous groups have been taken advantage of, as the Dayaks for example (see section 5.2.3.3.) (Sada et al., 2019, p. 5). Another form of power the indigenous people possess is the power of knowledge over sustainability of the forest, which could have played an integral part in the collaboration (Gadgil et al., 1993; Hidayat et al., 2018, p. 294). However, this knowledge on forest sustainability is not commonly acknowledged by the stakeholders with the most decision-making power (Milne et al., 2016, pp. 7-8).

This ranking of power within the collaboration shows how the power structure is presented in the data. It is, however, difficult to compare certain stakeholders, especially the international funders and the LPOCs. The power which these stakeholders possess applies differently. For example, both REDD+ and the LPOCs possess the power of pressure. Where it differentiates is when REDD+ are able to apply international pressure through pressing the issue of acting in more sustainable ways for the betterment of the globe, LPOCs have the ability of pressuring the need for national support to an industry that is needed for a big percentage of the Indonesian population. This is just one example, and because of the limitations of this thesis I will not dive any further into the differences of power between international "outsiders" and industry giants. What this ranking shows, however, is that the GOI potentially possesses the most power within this collaboration. To fully utilize this power, actively enforcing the commitments made for forest sustainability could be perceived as the main job for the leader of this informal collaboration. As the GOI possesses the most power within the collaboration, the other stakeholders must be compared to in what degree they are able to affect the decision-making of the government. Even as the data show that the international funders (especially REDD+) are the stakeholders who are able to affect this decision-making the most, the LPOCs seem neckin-neck. However, even if there are unequal power levels between the stakeholders, Lambin & Thorlaksons (2018) study show that the stakeholders depend on each other to achieve the sustainable results that are wanted. This need for a sufficient collaborative relationship is important to hinder stakeholders trying to apply and major usage of power to only benefit themselves.

#### 6.3.3. Leadership:

In this section I will be discussing the leadership role of the collaboration. First, the question of "who has the leadership role within the collaboration" will be discussed. Afterwards, the act of delegating responsibility will be looked at.

#### Who has the leadership role within the collaboration?

The role of leader could be detrimental to a collaboration, as the leader is the one who will be addressed if there occurs any problems or opportunities occur that need legitimate decisionmaking, as well as holding the responsibility to successfully launch and sustain the projects of the collaboration (Chinchilla-Rodríguez et al., 2019, p. 3). When discussing the roles and structure of the collaboration (see section 6.3.2.), it was argued that the government was the most powerful out of all the relevant stakeholders. Does this mean that they can be perceived as the leader of the collaboration? In the leadership's aspect of decision-making power, yes. As they are the most powerful stakeholder when it comes to decision making power and derive the beneficial aspects of sovereignty for their country, they should naturally be perceived as having a leadership role. However, in addition to the government there is also another stakeholder that possesses leadership qualities. This is the international funders, in this case REDD+ and RSPO. They possess a leadership role based on the unified recognition of all the world leaders attending the Paris Climate Agreement in 2015 (Ivancic & Koh, 2016, p. 5). Whilst they were argued to be under both the government and the LPOCs when it comes to direct power over the collaboration, these leadership qualities give them more of a leadership role rather than a strictly powerful decision-making role. Following this, I would argue that REDD+ has a leadership role, having a top-down functioning over the government. This is the case since the GOI is the main communication point for REDD+ within the collaboration, and REDD+ funds the GOI to establish and launch projects and programs for forest sustainability, and it is the GOI's responsibility to achieve the goals set by REDD+. The government, on the other hand, can be seen as a leader for the other relevant stakeholders (LPOCs, POS, local communities). RSPO

on the other hand does not have any particular leadership power over the government itself. Instead, their leadership power covers the palm oil industry (LPOCs and POS), especially based on their role in palm oil certification (Johnson, 2022).

#### Delegation of responsibility

One of the main qualities that one in a leadership position possesses is the ability to delegate responsibility (Wegner, 2016, p. 94). This is an action that both the government and the international funders can perform. As mentioned in the section on Partner-Partner interactions, REDD+ have delegated a part of the responsibility concerning the collection of quantitative data to the Indonesian government (see section 6.3.1.). This is, in a way, a part of the exchange, where the government produce quantitative data, and REDD+ send funding for sustainability of forest. Either way, as the need for quantitative data is a task that needs to be completed, delegating this responsibility shows leadership abilities. However, REDD+ have acknowledged that even as the data they receive from the government are sufficient, they could always be better and broader (Boissiere et al., 2014, p. 1856). Because of this, REDD+ have initiated community participation to achieve greater data collection. This is an interesting factor of the collaboration, but is not regularly mentioned in the data, making this finding a little ambiguous, disappointingly.

Following the delegation of tasks to the communities, the Indonesian government's implementation of CBFM and SF projects is showing the delegation of tasks on forest management to communities (Rumboko et al., 2013, p. 251). This delegation of responsibility is beneficial for the structure of the collaboration on forest sustainability, as it gives the local communities a stronger role within the collaboration (Widayanto et al., 2019). And, since all the sources of data analyzed unanimously present positive effects of the CBFM on communities living close by forests (concerning economic support, exchange costs of forest conservation, empowerment within the collaboration), this delegation of responsibility can be presumed to benefit the collaboration as a whole (Bizikova et al., 2012; Diansyah et al., 2021; Pujo et al., 2018).

Based on the stakeholders who hold a leadership role within the collaboration, and how they delegate responsibility to other stakeholders, the results of the leadership structure within the collaboration are summarized in the model shown below (see figure 2.).

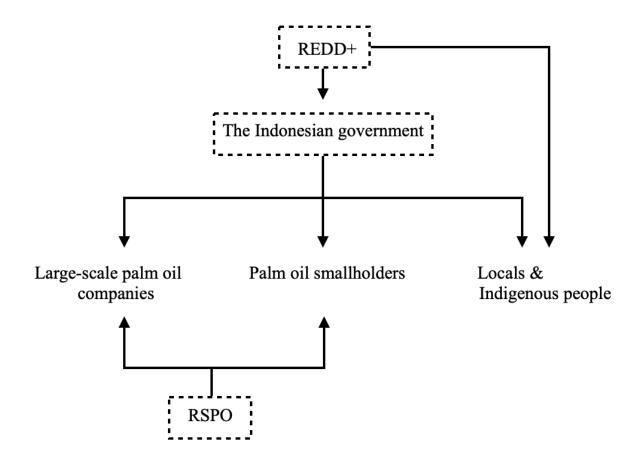


Figure 3: The leadership structure within the informal collaboration for sustainability of forest resources in Indonesia.

(Stakeholders that possess a leadership position is placed within the boxes).

#### 6.3.4. Communication:

The last throughput that will be assessed in correlation to the collaboration, is the communication. Communication within a collaboration is crucial for establishing well-working initiatives and programs, and to create a synergetic feedback loop (Balser et al., 2017, pp. 65-76; Johansson, 2018). In this section, I will discuss the degree of communication among the relevant stakeholders and the implications that this will have on the collaboration. I will also discuss the possibility of using documentary films as a communicative tool.

#### Communication on the mission of forest sustainability

Communication concerning the mission of forest sustainability is crucial to make sure that all stakeholders are on the same page (Bracken, 2007, p. 41). And to achieve this collectiveness, it is a necessity that the most "powerful" stakeholder's communication is sufficient (Alexander

et al., 2001, pp. 164-165). Based on the section on roles and structures within the collaboration (see section 6.3.2.), the Indonesian government will be perceived as the most powerful stakeholder in this case. Therefore, it is their communication that will be discussed the most.

The stakeholder with the most mentioned communication history is the government (see section 5.2.1.6.). This is perhaps based on their leadership role within the collaboration. Their efforts to communicate updates on the state of forest sustainability, their efforts to achieve greater results, and their long-term plans, are of great importance for the collaboration. The question then arises, how is this communicative process going? As presented in the findings, the Indonesian government have presented updates concerning the collaborations mission under the United Nations Framework Convention on Climate Change (GOI, 2010). Because of the limitations of this thesis, this is the only analyzed document which provides information of the sustainability of forest in Indonesia that is presented on the international level. However, I would argue that this does not harm the trustworthiness of the findings on this, as the government have made no clear signs of disinterest in sharing their forest updates. This does not necessarily mean that that all the statistics and statements they have shared are wholly truthful, as it is not an irregular situation for a country to greenwash their actions and development for the international audience.

The findings also show the government's communication inwards, with the people (see section 5.2.1.6.). These types of communication are observed through public actions and directly talking with the people. Public actions as a form of communication can often be viewed as symbolic actions. Blühdorn (2007, p. 252) states that it is widely believed that symbolic actions only reaches so far, and that there is a point when a crisis no longer can be concealed by symbolic actions. As this is most likely true in cases of crises, Wozniak (2021, p. 62) places the symbolic action's relevance in the possibility to potentially trigger behavioral and cognitive change in non-crisis situations. An example of symbolic action was covered in the findings, where a government official from Aceh publicly cut down an oil palm whilst stating the need for removal of illegal palm oil plantations. Following this, the government official planted a native tree in its place (Ivancic & Koh, 2016, p. 7). This particular action is framed in a blend of presenting a message through a known messenger, performing a symbolic action. This type of framing is important to communicate the message properly (Goodman et al., 2016, p. 680). On the other side of communication inwards, we can observe governmental officials talking directly with people. The documentary film "The Burning Season" shows multiple cases of this. Instances where this happens will be beneficial for the collaboration, as it can help strengthen the relationship and trust between one stakeholder that is possessing leadership qualities (the government), and one stakeholder that is functioning more as a follower of this leadership and lacking in decision-making power (local communities). The implications of the fact that these interactions are in a documentary film will be discussed below.

#### Documentary films as a communicative tool

Documentary films possesses a communicative role. Its goal of existence is to communicate a certain phenomenon or event to the viewers, and perhaps spark a debate or mold the public opinion (Figueroa, 2008, p. 3; Nisbet & Aufderheide, 2009, p. 450). Because of this, one of the most important factors to remember whilst analyzing documentary films in the manner which is done in this thesis, is that they are made to communicate. It could be either the documentary makers or the participants of the film that want to communicate something, or both. Looking at the reasons that the documentary makers have for creating these documentary films, one could assume that they want to present the case of forest unsustainability in Indonesia because they believe the case needs more exposure. Documentary films could also function as a communicative tool for the stakeholders that are a part of the collaboration. When observing the GOI communication with local communities, we see that there are several occasions where this takes place on film (Henkel, 2008, 00:26:00 & 01:18:00). The time it takes to set up meetings like these could be accelerated due to the positive exposure this would give the government, giving them the chance of seeming inclusive and approachable for local communities. Another example of documentary films functioning as a communicative tool can be seen from the local POS. As they already are struggling with stigmatization (see section 6.3.1), being a part of a documentary film provides the local POS with a chance to rewrite their negative perceived narrative. A prime example of this is observed in the scene where a local smallholder is burning forest whilst crying, showing that he does not like burning forest, but he have to continue for his and his family's economic security (Henkel, 2008, 00:50:57)<sup>21</sup>. In ways like these, the documentary films could be seen as an opportune chance to place oneself in a beneficial spotlight, and therefore function as a communicative tool.

<sup>&</sup>lt;sup>21</sup> During the forest burning the camera captures one local helping with the burning, wearing a terminator shirt. This is ironic, as previous scenes showed Indonesian politicians wanting to talk with Arnold Schwarzenegger, as he is known for his green politics. There is no way of knowing whether this irony was incidental or intentional.

## 6.4. Outputs

The last section of the BMCF discusses the different outputs that can emerge from a collaboration. These outputs come in the form of either additive results (not impacted), antagony (negative), or synergy (positive), (Corbin et al., 2017, p. 38).

#### 6.4.1. Additive and antagonistic outputs:

#### REDD+ lack of effective decision-making power.

For the collaboration's best interest, REDD+ would have possessed more decision-making power within the collaboration. This is especially relevant when analyzing the underlying goals of the stakeholders, and how these clash (see section 6.3.1.). Here it was discovered that the Government have multiple underlying goals that can work against the mission of the collaboration. Their positive relationship with the beneficial sides of the palm oil industry can also negatively affect the mission. In view of this, it could be argued that it would be beneficial for REDD+ to possess a larger amount of decision-making power in Indonesia, countering the economic incentives for the government to further deforestation.

#### Companies possess too much decision-making power when not functioning as a leader.

In the same line as the result above, a point could be made on the amount of power that the large-scale companies possess within the collaboration. As discussed in the ranking of power section (see section 6.3.2.), large-scale companies possess a noticeable amount of power within the collaboration, close to that of REDD+. This could negatively affect the collaboration, as one side you have an international organization, with its main purpose to successfully achieve the mission of the collaboration. Whilst on the other side you have private companies with economic incentives to continue with the expansion of palm oil, putting to risk forested areas. The economic incentives do not always overrun forest sustainability, as there are multiple instances where palm oil companies make zero deforestation commitments. However, these commitments often end up with very loose goals, making their level of efforts minimal (Rueda et al., 2017). It would almost seem unfair that the LPOCs possess as much decision-making power as they do currently, being that they do not function as a leader within the collaboration (see section 6.3.3.). I would still argue that this is an additive result and not an antagonistic one, as the power that the LPOCs possess currently would not be more noticeable outside of the collaboration.

#### Smallholders have a lack of support within the collaboration.

The third additive result is the fact that POS lack support within the collaboration. The documentary film "The Burning Season" shows two local smallholders' willingness to act more sustainably (see section 5.2.2.3.). Whilst they did not specifically state any wishes to stop deforestation for the expansion of their plantations, they were open for the idea of clearing forest without the use of fire (Henkel, 2008, 00:44:46). Clearing forest without burning is more sustainable in two ways: 1) it makes it possible for a greater potential of regrowth of forest (Uhl et al., 1982, p. 319)<sup>22</sup>, 2) it will not cause further smoke-induced respiratory illness for local communities living nearby. Despite their willingness to change their forest clearing ways, they lack the support that is necessary to achieve this transformation of forest clearing ways. Their route to obtain tools to cut down their forests, is too long. The findings refer to the Council of Palm Oil Producers Companies as an initiative that the GOI established in collaboration with the government of Malaysia to help with this. However, there are no findings on the actual progress of this council, which makes this finding's effect diffuse. This output is of an additive character, as the ones mentioned above, in that it would not be more beneficial for the smallholders to be outside of the collaboration.

However, the lack of support given to the POS also creates an antagonistic output. The lack of support in addition to expectations of sustainability, creates unfair expectations of smallholder's actions. These unfair expectations then translate to stigmatization for the smallholders, which can turn to major stressors (see section 5.3.1.2.). Expectations and pressure are effective remedies to change behavior, but then there is also a need for support to achieve this change. This output is antagonistic in the way that the smallholders that are expected an unrealistic degree of change towards sustainability, would not have been put to such a standard being an outsider of the collaboration.

#### 6.4.2. Synergetic outputs:

#### The benefitting relationship between REDD+ and the Indonesian government.

The first synergetic output is the positive relationship between REDD+ and the Indonesian government. This relationship is based on REDD+ funding governmental projects and pilot

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<sup>&</sup>lt;sup>22</sup> Uhl et al. (1982, p. 319) state that it is more sustainable if the forest is cut instead of both cut and burned. However, they also mention that if the forest were to be bulldozed, this would be the worst outcome, as bulldozing removes the topsoil together with its associated seed banks, living stumps, and roots, essentially eliminating the main avenues of forest regeneration. I decided not to mention this directly in the text, as the findings only show smallholders clearing forest in ways other than bulldozing.

activities, in exchange for governmental pledge to their cause and the providing of quantitative data (see section 5.2.4.1.). This output does not only function as a synergetic result of the collaboration, but it is also, in essence, the pillar which the whole foundation of the collaboration is supported on. This synergetic output could be perceived as the 2+2=5. I believe this to be the case based on the several synergetic outputs that are created on the basis of this relationship. The expected output for this relationship is that each stakeholder receives what they expect from the other (funding and quantitative forest data). The "5" in this case, the added synergy, is that it creates a collaborative foundation for forest sustainability, where other stakeholders also receive roles and tasks.

#### The positive implications of community forest management.

Strategies on community forest management are found to affect the collaboration in more than one synergetic way (see section 5.2.2.2.). First off, the implementation of CBFM and SF is discovered to have a positive impact on the local's role within the collaboration. As the findings show, this community forest management strategy lifts the local's role and make them a relevant stakeholder (Widayanto et al., 2019, p. 69). Secondly, it could help with forest sustainability. Hiratsuka et al. (2019, p. 559) stated that when the government implemented the SF strategy, they in turn implemented an approach to accelerate the adoption of sustainable forest management. Both outcomes of the implementation of both CBFM and SF have a synergetic value regarding the mission and the structure of the collaboration.

#### Palm oil companies see the economic benefits of palm oil certification schemes.

Another synergetic output discovered are the effect that the ISPO and the CSPO have on the palm oil industry (see section 5.2.1.4. & 5.2.4.2.). Both of these palm oil certification schemes have received criticism, either from incidents where they have falsified assessments of membership companies (Ivancic & Koh, 2016, p. 4), or criticism condemning the reason for establishing such schemes, stating that the main reason for establishment is to achieve greater control of the market (Meijaard & Sheil, 2019, p. 10). However, these criticisms can affect the collaboration synergistically through a positive feedback loop. An instance where this have proven true is when the RSPO responded to the original report that exposed their acts of falsifying the assessments. Here, the RSPO acknowledged that the report's criticism was fair and stated that they would incorporate much of the suggestions from the report (RSPO, 2019). Continuing with the synergetic outputs of the certification schemes, these schemes show is that there is a market for certified sustainable palm oil and palm oil companies are willing to act

more sustainably to be allowed access within this market. Therefore, even if the implementation of these schemes has not been optimal, in relation to the mission of the collaboration, it still is a synergetic outcome, as it is showing of willingness for further development of sustainable palm oil.

#### Signs of communication that have changed perceptions.

The last synergetic outcome that was found are there are signs of instances where communication has changed the perception on forest sustainability. Communication is an integral part of the CBFM, as in order for a collaboration to create a positive context for their mission, communication needs to me purposeful and frequent (Corbin, 2006, p. 45). An instance where this can be seen is in the documentary film "The Burning Season" where the film started by showing a smallholder planning to burn forest to extend his current palm oil plantation. However, after talking directly with the Governor of his province, he showed more willingness to manage this forest clearing in a more sustainable way (Henkel, 2008, 00:57:50). This is a synergetic discovery of the possibilities for further development of sustainable management of forest resources owned by smallholders, based on purposeful and frequent communication between the smallholders and governmental employees.

## 6.5. Outputs' implications for health promotion

This section will discuss the implications that the outputs have on the field of health promotion.

The first output which is relevant in the discussion of health promotion is the lack of support which are given to the POS. This is an output that essentially works against the Ottawa Charter's goal of creating supportive environments, where there is focus on working conditions (World Health Organization, 1986, p. 2). Both the problems of not getting support in the form of machinery and tools to clear forest more sustainably, or being stigmatized by unfair expectations, are working against this Ottawa charter goal which stands of importance to health promotion.

However, most of the outputs show synergetic implications for health promotion. One output of major relevance to health promotion being the implementations of CBFM and SF. This empowerment of the local communities gives them more ownership and control of their own land (World Health Organization, 1986, p. 3) This can, in turn, positively affect their health, as more control over close by forest means less illegal fires. This is supported by the Ottawa Charter's part on enabling health promotion, where they state that "people cannot

achieve their fullest health potential unless they are able to take control of those things which determine health" (World Health Organization, 1986, p. 1), in this case nearby forests. These community forest management strategies also function as a representation of the Ottawa Charter's goal on public participation, stating the need to "develop flexible systems for strengthening public participation and direction of health matters" (World Health Organization, 1986, p. 3).

The last major implication that the outputs have on the field of health promotion, is the positive relationship between REDD+ and the Indonesian government. Not only is this output showing that there is a reciprocal relationship between two of the most powerful stakeholders within the collaboration, but it is also showing the collaboration between the international and national level. The last point referred to in the Ottawa Charter is the call for international action, where the conference calls on international organizations to advocate health promotion and to support countries in setting up strategies and programs for health promotion (World Health Organization, 1986, pp. 4-5). This support is given by REDD+ to Indonesia, in exchange for quantitative statistics on forest sustainability (see section 5.2.4.1.).

### 6.6. Limitations of study

This section of the study presents some limitations that were discovered throughout the study process. Some limitations and challenges include challenges with only analyzing secondary data, challenges from utilizing the limited studied methodology of documentary film analysis, the language barrier, and lastly, challenges with the usage of different terms within the collaborative field of research. This section also provides suggestions that possible could have enhanced the study.

Because of COVID-19 travel restrictions and an existing language barrier, I chose to only use secondary data analysis. A common challenge with this, is that often the objective of documents, literature, and documentary films, does not necessarily align with your study's aims and objectives (Kothari, 2004, p. 111). It was particularly difficult to find answers to the third research question (RQ3: *How does interaction between stakeholders impact the well-being of local communities and indigenous people?*), as this is not heavily covered within the literature concerning collaboration of Indonesian forest resources. However, the documentary films helped with this, as they presenter multiple interviews with local communities and indigenous people concerning this.

There are a limited number of studies utilizing documentary film analysis. Because of this, a challenge that appeared early in the data collection phase was that there were no tried and tested templates for the observation guide. Because of this, after watching the documentary films one time through, different segments of the original observation guide had to be changed. I believe that this did not harm the data collection phase, however, it made it difficult (see Appendix 2 for the final observation guide). Because of the lack of templates for what is needed to look for when analyzing documentary films, it became natural to choose the AVM analysis approach. Based on this, a suggestion for further research to gain a more critical view of the documentary films as an object of analysis, is to apply an AVO (audio-visual data as the object of analysis) approach (Figueroa, 2008, p. 3).

A third limitation in this study is the language barrier. Since I cannot speak or read Indonesian, documents, literature, and documentary films in Indonesian is not present. The lack of representation of data forms in Indonesian may exclude a viewpoint which would be relevant. I tried to combat this by using official English translated documents. I also used documentary films containing people talking in Indonesian, coding the English subtitles provided. There is, however, always a chance that the translations (in both documents and films) do not exactly mirror what is said/written originally.

Throughout the study, I use multiple terms that are much discussed within different research fields. Terms like well-being, collaboration, stakeholder etc. have many different definitions from researcher to researcher, which may cause confusion for the readers. I tried to combat the possibility of confusion by defining the terms early on and explaining why I did not use other terms (for example, see chapter 2.2.).

## 7. Conclusion

This section of the thesis firstly presents the study's main findings concerning the research questions and objective. Secondly, recommendations for further research and recommendations for policymakers are shared.

## 7.1. Key findings in relation to the research questions

RQ1: "How is the issue of sustainability of forest resources addressed in Indonesian laws and international agreements – and communicated to all stakeholders?"

The findings ultimately reveal that the role of the GOI is complex. On one side, de jure, they have numerous laws which, by themselves, look supportive of the collaboration's mission of sustaining forest resources. On the other side, de facto, there are findings showing their willingness to act in favor of the LPOCs, because of the economic benefits for the country's GDP and for the vast number of jobs they offer the people of Indonesia. Continuing this duality, on one side, there is showed footage from the documentary film "The Burning Season" where governmental communication and help made a couple of local POS' strive to change their unsustainable ways. On the other side, other findings argue that actions like these are based on them trying to establish a greener image of themselves. These findings present a government within a leadership role that sometimes show positive mission-defining moments within the collaboration, but, more often than not, presents mostly vague and uncoordinated efforts of communication towards the rest of the stakeholders composing the collaboration, where the differences between de jure and de facto becomes clear.

RQ2: "What are the roles of the other stakeholders (local communities, palm oil producers, etc.)?"

Based on my understanding of the roles in this informal collaboration, looking at the power and leadership qualities that the stakeholder possesses are relevant. The role of the stakeholders is generally split into two categories, the ones possessing a noticeable amount of power, and those who does not. When analyzing the roles and structure of the stakeholders, the findings pointed to the GOI, unsurprisingly, as the most powerful stakeholder. Other stakeholders that I would also define as possessing a noticeable amount of power are the LPOCs and the international funders (especially REDD+). However, the power they possess is applied differently in that REDD+ power comes through funding and international pressure, whilst the LPOCs possess more of a national form of pressure, because of all the benefits they provide to the government. Through the usage of the BMCF, I also analyzed the stakeholder's possibility of having a leadership role within the collaboration. The main "leader" of the collaboration is the GOI. However, the findings also showed that REDD+ possesses multiple leadership qualities and can thereby be seen as a leader as well, just not as powerful as the government.

On the other side of the power spectrum, the stakeholders possessing a low amount of

power, within the collaboration, are presented. These stakeholders are the local communities, POS, and indigenous people. None of these stakeholders were found to possess any direct power over the collaboration, only soft long-term power (through elections and demonstrations). Out of these three stakeholders, the local communities possess the most power and the higher role within the collaboration, based on the implementation of CBFM and SF strategies. These strategies give them work that is directly affecting the collaboration's mission. POS, on the other hand, lack this power. The findings show that they often are under scrutiny of governmental officials and, in some instances, local communities living close by. This unpopularity makes it more difficult for them to appoint meeting with governmental officials, than it is for LPOCs. The least powerful stakeholder is found to be the indigenous people. Ideally, they would get more of a say in decisions, especially concerning close-by forest, based on their knowledge of forest sustainability, assembled through centuries of living in forests. unfortunately, they do not possess such power. However, they are, at least, under the protection of multiple sets of laws.

RQ3: "How does interaction between stakeholders impact the well-being of local communities and indigenous people?"

One interesting finding here, that I did not originally account for in this research question, is the findings on the interactions effect on the well-being of POS. Multiple interactions between stakeholders were found to impact the well-being of local communities, indigenous people, and POS. One interaction benefitting the well-being of local POS, is the support given from the government. This finding is not mentioned many times throughout the data; however, I find it significant. This finding showing the government providing local POS with tools and machinery to help them achieve more sustainable handling of their owned forest areas, helps the smallholders avoiding stigmatization, which can be a major stressor in their life. It directly helps with avoiding stigmatization from neighboring local communities complaining about the problem of smoke, but also showing the smallholders governmental support rather than governmental stigmatization. This interaction does not seem to happen regularly, however, it proves to be a synergetic interaction that should be further explored.

Another important interaction that influences local communities' well-being, is the interaction between local communities and the strategy of CBFM. CBFM is not a stakeholder per se, but functions as a bridge between the local communities and stakeholders possessing a higher level of power within the collaboration. CBFM also helps empowering the local communities within the collaboration. The strategy gives them the role of managing forest

resources, helping them with potential food security and defending of indigenous people's ancestral home-forests. Another indirect effect that the CBFM has, is that the forests they manage does not become illegally burned down by smallholders willing to break the laws. This, in turn, lead to the local communities being free of nearby fires that can cause respiratory illnesses.

The last interaction found is the interaction between local communities and LPOCs. Findings show that the work that is provided by the palm oil industry in general, even if the wages are not always sufficient, can be seen as a governmental tool for poverty eradication. The providing of jobs and providing of economic stability for many local communities can be seen as a synergetic interaction between local communities and LPOCs. This provides a duality of outcomes for the well-being of local communities. From one viewpoint, the local communities working in the plantations of LPOCs can feel that their wages are insufficient compared to the amount of labor they undertake. Following Bakar's et. al. (2015, p. 287) definition of well-being, this findings does not comply with the need for "rewarding employment". From the other viewpoint, this interaction, eves as the wages can be insufficient, can provide financial security to the workers, which is also a central need to accomplish well-being (Bakar et al., 2015, p. 287).

## 7.2. Summary in relation to the overall research objective

Research objective: "To explore whether collaboration among stakeholders can contribute to sustainability of forest resources in Indonesia."

In conclusion, based on the findings, I find that collaboration among stakeholders not only contributes to sustainability of forest resources, but is a necessity. Numerous findings show this. On their own, each stakeholder would struggle to make progress towards the mission of the collaboration, mainly because of the amount of relevant stakeholders on different levels (international, national, local). The complexity of this case requires collaboration to efficiently reach goals of sustainability. The findings show, however, that there exists no formal collaboration. There is no overarching collaboration in which all relevant stakeholders may debate or present their own opinion. Because of this informality of the collaboration, the findings on the most efficient way for a stakeholder to achieve one's goals, especially goals where there are required trade-offs in relation to other stakeholders, is highly connected with their power level. Using power, stakeholders get increased attention and gain leverage in the

discussions of the collaboration. This can negatively affect the stakeholders possessing lower levels of power (like POS and indigenous people), in that their road to achieving their goals, in the context of the collaboration, is much more difficult. To tone down or eradicate this challenge, a formal collaboration with all relevant stakeholders as members is needed. However, since this is not the case currently, the stakeholders with lower levels of power must endure trade-offs that may not be beneficial. This is especially prevalent for the POS, who experiences antagonistic trade-offs no matter what their decision are concerning forest management. If continuing unsustainable practices, like forest burning, they will secure economic security. However, the trade-off is that they will experience stigmatization by multiple stakeholders. On the other hand, if they want to change their practices into more sustainable forest clearing methods, the trade-off is that they will have to buy expensive equipment which they may not afford. This is just one example of a trade-off discovered through the findings. However, with the continuation of an informal collaboration where power is used as a tool to achieve goals, the more difficult trade-offs will most likely occur.

#### 7.3. Recommendations

#### 7.7.1. Recommendations for policymakers

- I. The GOI is strongly encouraged to continue their collaboration with REDD+, as this is seen to be one of the most integral relationships within the informal collaboration of forest sustainability in Indonesia and could perhaps be the start of a more formal collaboration in the future.
- II. The GOI is also recommended to provide more frequent help towards POS' wanting to change the handling of their forest resources to more sustainable ways. This help will assist the health promotion action areas 1 (creation of healthy public policy) and 2 (creating supportive environments).
- III. The RSPO is recommended to strengthen their membership criteria and seek methods to hinder future acts of falsifying assessments of membership companies.

#### 7.7.2. Recommendations for further research

I. Further research on the mental health effect that stigmatization by neighboring local communities and governmental officials have on POS would be beneficial to

- understand how this affects their well-being and their actions concerning their owned forest areas more accurately.
- II. Research on the progress of PMRV and the Council of Palm Oil Producers Companies, and the effect it has on the well-being of local communities are needed. This is especially needed to achieve more reliable findings concerning health promotion action area 3 (strengthening community action).
- III. Concerning the BMCF, further research is recommended to investigate ways in which the dimension of power could be implemented into the model. This need is especially prevalent when analyzing informal multi-levelled collaborations.

### Literature list:

- The 1945 Constitution of the Republic of Indonesia (1945). <a href="https://jdih.bapeten.go.id/unggah/dokumen/peraturan/116-full.pdf">https://jdih.bapeten.go.id/unggah/dokumen/peraturan/116-full.pdf</a>
- Alesina, A., Gennaioli, C., & Lovo, S. (2018). Public Goods and Ethnic Diversity: Evidence from Deforestation in Indonesia. *Economica*, 86, 32-66. <a href="https://doi.org/10.1111/ecca.12285">https://doi.org/10.1111/ecca.12285</a>
- Alexander, J. A., Comfort, M. E., Weiner, B. J., & Bogue, R. (2001). Leadership in Collaborative Community Health Partnerships. *Nonprofit Management and Leadership*, 12(2), 159-175. <a href="https://doi.org/10.1002/nml.12203">https://doi.org/10.1002/nml.12203</a>
- Alter, C., & Hage, J. (1993). Organizations Working Together. Sage Publications.
- Antonelli, M., Donelli, D., Carlone, L., Maggini, V., Firenzuoli, F., & Bedeschi, E. (2021). Effects of forest bathing (shinrin-yoku) on individual well-being: an umbrella review. *International Journal of Environmental Health Research*, 1-26. https://doi.org/10.1080/09603123.2021.1919293
- Apriani, E., Kim, Y. S., Fisher, L. A., & Baral, H. (2020). Non-state certification of smallholders for sustainable palm oil in Sumatra, Indonesia. *LAND USE POLICY*, 99, 1-16. https://doi.org/10.1016/j.landusepol.2020.105112
- Attride-Stirling, J. (2001). Thematic networks: an analytic tool for qualitative research. *Qualitative Research*, *I*(3), 385-405. <a href="https://doi.org/10.1177/146879410100100307">https://doi.org/10.1177/146879410100100307</a>
- Bakar, A. A., Osman, M. M., Bachok, S., Ibrahim, M., & Mohamed, M. Z. (2015). Modelling economic wellbeing and social wellbeing for sustainabilty: a theoretical concept. *Procedia Environmental Sciences*, 28, 286-296.
- Bakker, L., & Moniaga, S. (2010). The Space Between: Land Claims and the Law in Indonesia. *Asian Journal of Social Science*, 38, 187-203. https://doi.org/10.1163/156853110X490890
- Balser, T. J., Grabau, A. A., Kniess, D., & Page, L. A. (2017). Collaboration and Communication. *New Directions for Institutional Research*, 2017(175), 65-79.
- Bastos Lima, M. G., Kissinger, G., Visseren-Hamakers, I. J., Braña-Varela, J., & Gupta, A. (2017). The Sustainable Development Goals and REDD+: assessing institutional

- interactions and the pursuit of synergies. *International Environmental Agreements: Politics, Law and Economics, 17*(4), 589-606. <a href="https://doi.org/10.1007/s10784-017-9366-9">https://doi.org/10.1007/s10784-017-9366-9</a>
- Baylis, J., Smith, S., & Owens, P. (2017). *The Globalization of World Politics: An Introduction to International Relations* (7 ed.). Oxford University Press.
- Belk, R. (2011). Examining Markets, Marketing, Consumers, and Society through Documentary Films. *Journal of Macromarketing*, 31(4), 403-409. <a href="https://doi.org/10.1177/0276146711414427">https://doi.org/10.1177/0276146711414427</a>
- Biersteker, T. J. (2002). State, Sovereignty, and Territory. In *Handbook of International relations* (pp. 245-272).
- Bizikova, L., Nijnik, M., & Kluvanková-Oravská, T. (2012). Sustaining Multifunctional Forestry Through the Developing of Social Capital and Promoting Participation: A Case of Multiethnic Mountain Communities. *SMALL-SCALE FORESTRY*, 11(3), 301-319. <a href="https://doi.org/10.1007/s11842-011-9185-8">https://doi.org/10.1007/s11842-011-9185-8</a>
- Bleiker, R. (2001). The Aesthetic Turn in International Political Theory. *Journal of International Studies*, 30(3), 509-533.
- Blühdorn, I. (2007). Sustaining the unsustainable: Symbolic politics and the politics of simulation. *Environmental Politics*, 16(2), 251-275. <a href="https://doi.org/10.1080/09644010701211759">https://doi.org/10.1080/09644010701211759</a>
- Boissiere, M., Beaudoin, G., Hofstee, C., & Rafanoharana, S. (2014). Participating in REDD plus Measurement, Reporting, and Verification (PMRV): Opportunities for Local People? *FORESTS*, 5(8), 1855-1878. https://doi.org/10.3390/f5081855
- Bong, I. W., Felker, M. E., & Maryudi, A. (2016). How Are Local People Driving and Affected by Forest Cover Change? Opportunities for Local Participation in REDD plus Measurement, Reporting and Verification. *PLOS ONE*, 11(11), 1-17. <a href="https://doi.org/10.1371/journal.pone.0145330">https://doi.org/10.1371/journal.pone.0145330</a>
- Boudreau, V. (1999). Diffusing democracy? People power in Indonesia and the Philippines. Bulletin of Concerned Asian Scholars, 31(4), 3-18. https://doi.org/10.1080/14672715.1999.10415762
- Bowen, G. A. (2009). Document Analysis as a Qualitative Research Method. *Qualitative research journal*, 9(2), 27-40. <a href="https://doi.org/10.3316/QRJ0902027">https://doi.org/10.3316/QRJ0902027</a>
- Bowen, K. J., & Ebi, K. L. (2015). Governing the health risks of climate change: towards multisector responses. *CURRENT OPINION IN ENVIRONMENTAL SUSTAINABILITY*, 12, 80-85. https://doi.org/10.1016/j.cosust.2014.12.001
- Bracken, S. J. (2007). The importance of language, context, and communication as components of successful partnership. *New Directions for Community Colleges*, 2007(139), 41-47. <a href="https://doi.org/https://doi.org/10.1002/cc.291">https://doi.org/https://doi.org/10.1002/cc.291</a>

- Brandi, C., Cabani, T., Hosang, C., Schirmbeck, S., Westermann, L., & Wiese, H. (2015). Sustainability Standards for Palm Oil: Challenges for Smallholder Cerification Under the RSPO. *Journal of Environment & Development*, 24(3), 292-314. <a href="https://doi.org/10.1177/1070496515593775">https://doi.org/10.1177/1070496515593775</a>
- Bright, R. M., Zhao, K., Jackson, R. B., & Cherubini, F. (2015). Quantifying surface albedo and other direct biogeophysical climate forcings of forestry activities. *Global Change Biology*, 21(9), 3246-3266. <a href="https://doi.org/10.1111/gcb.12951">https://doi.org/10.1111/gcb.12951</a>
- Brockhaus, M., Obidzinski, K., Dermawan, A., Laumonier, Y., & Luttrell, C. (2012). An overview of forest and land allocation policies in Indonesia: Is the current framework sufficient to meet the needs of REDD+? *Forest Policy and Economics*, *18*, 30-37. <a href="https://doi.org/10.1016/j.forpol.2011.09.004">https://doi.org/10.1016/j.forpol.2011.09.004</a>
- Bryan, T. A. (2004). Tragedy Averted: The Promise of Collaboration. *Society & Natural Resources*, 17(10), 881-896. <a href="https://doi.org/10.1080/08941920490505284">https://doi.org/10.1080/08941920490505284</a>
- Bryman, A. (2008). Of methods and methodology. *Qualitative Research in Organizations and Management*, 3(2), 159-168. <a href="https://doi.org/10.1108/17465640810900568">https://doi.org/10.1108/17465640810900568</a>
- Büscher, B., & Fletcher, R. (2018). Under Pressure: Conceptualising Political Ecologies of Green Wars. *Conservation and Society*, 16(2), 105-113. <a href="http://www.jstor.org/stable/26393321">http://www.jstor.org/stable/26393321</a>
- Callahan, W. A. (2015). The Visual Turn in IR: Documentary Filmmaking as a Critical Method. *Journal of International Studies*, 43(3), 891-910. <a href="https://doi.org/10.1177/0305829815578767">https://doi.org/10.1177/0305829815578767</a>
- Casquete, J. (2006). The Power of Demonstrations. *Social Movement Studies*, 5(1), 45-60. <a href="https://doi.org/10.1080/14742830600621183">https://doi.org/10.1080/14742830600621183</a>
- Chen, H., Zhu, T., Krott, M., & Maddox, D. (2013). Community forestry management and livelihood development in northwest China: integration of governance, project design, and community participation. *Regional Environmental Change*, 13(1), 67-75. https://doi.org/10.1007/s10113-012-0316-3
- Chinchilla-Rodríguez, Z., Sugimoto, C. R., & Larivière, V. (2019). Follow the leader: On the relationship between leadership and scholarly impact in international collaborations. *PLOS ONE*, *14*(6), 1-18. <a href="https://doi.org/10.1371/journal.pone.0218309">https://doi.org/10.1371/journal.pone.0218309</a>
- Coconuts TV. (2015). Sumatra Burning The Heart of Palm Oil Coconuts TV. <a href="https://coconuts.co/singapore/news/sumatra-burning-heart-palm-oil/">https://coconuts.co/singapore/news/sumatra-burning-heart-palm-oil/</a>
- Corbin, J. H. (2006). INTERACTIVE PROCESSES IN GLOBAL PARTNERSHIP: A CASE STUDY OF THE GLOBAL PROGRAMME FOR HEALTH PROMOTION EFFECTIVENESS. *IUHPE Research Report Series*, *1*(1), 1-70.
- Corbin, J. H., Chu, M., Carney, J., Donnelly, S., & Clancy, A. (2017). Understanding Collaboration: A Formative Process Evaluation of a State-Funded School-University

- Partnership. School-University Partnerships, 10(1), 35-45. https://files.eric.ed.gov/fulltext/EJ1147232.pdf
- Corbin, J. H., Fisher, E. A., & Bull, T. (2012). The International Union for Health Promotion and Education (IUHPE) Student and Early Career Network (ISECN): a case illustrating three strategies for maximizing synergy in professional collaboration. *Global Health Promotion*, 19(3), 50-53.
- Corbin, J. H., & Mittelmark, M. B. (2008). Partnership lessons from the Global Programme for Health Promotion Effectiveness: a case study. *Health Promotion International*, 23(4), 365-371. <a href="https://doi.org/10.1093/heapro/dan029">https://doi.org/10.1093/heapro/dan029</a>
- Corbin, J. H., & Mittelmark, M. B. (2011). Mapping synergy and antagony in North–South partnerships for health: a case study of the Tanzanian women's NGO KIWAKKUKI. *Health Promotion International*, 28(1), 51-60. <a href="https://doi.org/10.1093/heapro/dar092">https://doi.org/10.1093/heapro/dar092</a>
- Corwin, L., Corbin, J. H., & Mittelmark, M. B. (2012). Producing Synergy in Collaborations: A successful Hospital Innovation. *The Innovation Journal: The Public Sector Innovation Journal*, 17(1), 1-16.
- Creswell, J. W. (2018). Five qualitative approaches to inquiry. In *Qualitative inquiry & research design : choosing among five approaches* (4 ed., pp. 65-110). Sage.
- Cruz-Garcia, G. S., Sachet, E., Blundo-Canto, G., Vanegas, M., & Quintero, M. (2017). To what extent have the links between ecosystem services and human well-being been researched in Africa, Asia, and Latin America? *Ecosystem Services*, 25, 201-212. <a href="https://doi.org/10.1016/j.ecoser.2017.04.005">https://doi.org/10.1016/j.ecoser.2017.04.005</a>
- Davies-Barnard, T., Valdes, P. J., Singarayer, J. S., Wiltshire, A. J., & Jones, C. D. (2015). Quantifying the relative importance of land cover change from climate and land use in the representative concentration pathways. *Global Biogeochemical Cycles*, *29*(6), 842-853. <a href="https://doi.org/10.1002/2014GB004949">https://doi.org/10.1002/2014GB004949</a>
- Delmas, M. A., & Burbano, V. C. (2011). The Drivers of Greenwashing. *California Management Review*, 54(1), 64-87. https://doi.org/10.1525/cmr.2011.54.1.64.
- Dewi, R. G., Boer, R., Wibowo, A., Suryahadi., Ardiansyah, M., Buono, A., Hidayeti, R., Hariati, F., Setyanto, P., Surmaini, E., Heryansyah, A., Kartikasari, K., Permana, I. G., June, T., Purwanto, Y. J., & Faqih, A. (2010). *Indonesia Second National Communication Under The United Nations Framework Convention on Climate Change (UNFCCC)*. <a href="http://unfccc.int/files/national\_reports/non-annex">http://unfccc.int/files/national\_reports/non-annex</a> i natcom/submitted natcom/application/pdf/indonesia snc.pdf
- Diansyah, W., Abas, A., & Sakawi, Z. (2021). A Systematic Review on Community Forest Management in Southeast Asia: Current Practices and Impacts on Biodiversity Conservation and Livelihood Quality of Local Communities. *Human Ecology Review*, 27(1), 3-21.
- Dib, J. B., Krishna, V. V., Alamsyah, Z., & Qaim, M. (2018). Land-use change and livelihoods of non-farm households: The role of income from employment in oil palm and rubber

- in rural Indonesia. *LAND USE POLICY*, 76, 828-838. https://doi.org/10.1016/j.landusepol.2018.03.020
- Dodge, R., Daly, A. P., Huyton, J., & Sanders, L. D. (2012). The challenge of defining wellbeing. *International Journal of Wellbeing*, 2(3), 222-235. <a href="https://doi.org/10.5502/ijw.v2i3.4">https://doi.org/10.5502/ijw.v2i3.4</a>
- Domingo, J. L., & Nadal, M. (2009). Domestic waste composting facilities: A review of human health risks. *Environment International*, 35(2), 382-389. https://doi.org/10.1016/j.envint.2008.07.004
- Eldeeb, O., Prochazka, P., & Maitah, M. (2015). Causes for Deforestation in Indonesia: Corruption and Palm Tree Plantation. *Asian Social Science*, 11(27), 120-124. <a href="https://doi.org/10.5539/ass.v11n27p120">https://doi.org/10.5539/ass.v11n27p120</a>
- Environmental Investigation Agency. (2019). Who Watches the Watchmen? 2. <a href="https://eia-international.org/wp-content/uploads/WWtW2-spreads.pdf">https://eia-international.org/wp-content/uploads/WWtW2-spreads.pdf</a>
- Erbaugh, J. T., & Oldekop, J. A. (2018). Forest landscape restoration for livelihoods and wellbeing. *CURRENT OPINION IN ENVIRONMENTAL SUSTAINABILITY*, *32*, 76-83. <a href="https://doi.org/10.1016/j.cosust.2018.05.007">https://doi.org/10.1016/j.cosust.2018.05.007</a>
- Everts, M. (2020). Green through time: Four historical figures who raised awareness of the environment. Europeana. <a href="https://www.europeana.eu/en/blog/green-through-time-four-historical-figures-who-raised-awareness-of-the-environment">https://www.europeana.eu/en/blog/green-through-time-four-historical-figures-who-raised-awareness-of-the-environment</a>
- FAO. (2016). State of the World's Forests Forest and agriculture: land use challenges and oppertunities. <a href="https://www.fao.org/3/i5588e.pdf">https://www.fao.org/3/i5588e.pdf</a>
- Favero, A., Sohngen, B., Huang, Y., & Jin, Y. (2018). Global cost estimates of forest climate mitigation with albedo: a new integrative policy approach. *ENVIRONMENTAL RESEARCH LETTERS*, 13(12), 1-13. https://doi.org/10.1088/1748-9326/aaeaa2
- Feiock, R. C. (2013). The Institutional Collective Action Framework. *Policy Studies Journal*, 41(3), 397-425. <a href="https://doi.org/10.1111/psj.12023">https://doi.org/10.1111/psj.12023</a>
- Figueroa, S. K. (2008). The Grounded Theory and the Analysis of Audio-Visual Texts. *International Journal of Social Research Methodology*, 11(1), 1-12. https://doi.org/10.1080/13645570701605897
- Forsyth, T. (2014). Public concerns about transboundary haze: A comparison of Indonesia, Singapore, and Malaysia. *Global Environmental Change*, 25, 76-86. <a href="https://doi.org/10.1016j.gloenvcha.2014.01.013">https://doi.org/10.1016j.gloenvcha.2014.01.013</a>
- Fothergill, A., Hughes, J., & Scholey, K. (2020). *David Attenborough: A Life on Our Planet*<a href="https://www.netflix.com/watch/80216393?trackId=13752289&tctx=0%2C1%2C23fac7a2f8aed25d8c7e5b0ba9e0d4f13c7580f6%3A2aaafbfd01e180418b113f32eb0bcfa05cb6c937%2C23fac7a2f8aed25d8c7e5b0ba9e0d4f13c7580f6%3A2aaafbfd01e180418b113f32eb0bcfa05cb6c937%2C%2C</a>

- Gadgil, M., Berkes, F., & Folke, C. (1993). Indigenous Knowledge for Biodiversity Conservation. *Ambio*, 22(2/3), 151-156. <a href="http://www.jstor.org/stable/4314060">http://www.jstor.org/stable/4314060</a>
- Galaz, V., Biermann, F., Crona, B., Loorbach, D., Folke, C., Olsson, P., Nilsson, M., Allouche, J., Persson, Å., & Reischl, G. (2012). 'Planetary boundaries'—exploring the challenges for global environmental governance. *CURRENT OPINION IN ENVIRONMENTAL SUSTAINABILITY*, 4(1), 80-87. https://doi.org/10.1016/j.cosust.2012.01.006
- Gibbs, H. K., Rausch, L. L., Munger, J., Schelly, I., Morton, D. C., Noojipady, P., Sores-Filho, B., Barreto, P., Micol, L., & Walker, N. F. (2015). Brazil's Soy Moratorium. *Science*, 347(6220), 377-378. <a href="https://doi.org/10.1126/science.aaa0181">https://doi.org/10.1126/science.aaa0181</a>
- Goodman, M. K., Littler, J., Brockington, D., & Boykoff, M. (2016). Spectacular environmentalisms: media, knowledge and the framing of ecological politics. *Environmental communication*, 10(6), 677-688. https://doi.org/10.1080/17524032.2016.1219489
- Green Commodities Programme. (2019). *Indonesia At A Glance*. <a href="https://www.greencommodities.org/content/gcp/en/home/resources/at-a-glance-country-guides/indonesia-at-a-glance.html">https://www.greencommodities.org/content/gcp/en/home/resources/at-a-glance-country-guides/indonesia-at-a-glance.html</a>
- Grønmo, S. (2016). Samfunnsvitenskapelige metoder (2 ed.). Fagbokforlaget.
- Hacker, J. S., Huber, G. A., Nichols, A., Rehm, P., Schlesinger, M., Valletta, R., & Craig, S. (2014). The Economic Security Index: A New Measure for Research and Policy Analysis. *Review of Income and Wealth*, 60(1), 5-32. <a href="https://doi.org/10.1111/roiw.12053">https://doi.org/10.1111/roiw.12053</a>
- Hansen, M. M., & Jones, R. (2020). The Interrelationship of Shinrin-Yoku and Spirituality: A Scoping Review. *The Journal of Alternative and Complementary Medicine*, 26(12), 1093-1104. <a href="https://doi.org/10.1089/acm.2020.0193">https://doi.org/10.1089/acm.2020.0193</a>
- Harbi, J., Cao, Y. K., Erbaugh, J. T., Widagdo, F. R. A., Mauri, J., Supriyanto, & Milantara, N. (2020). Three Generations of Forest Peoples' Empowerment in Indonesia: Process Towards Sustainable and Equitable Forest Management. *JURNAL MANAJEMEN HUTAN TROPIKA*, 26(2), 91-104. https://doi.org/10.7226/jtfm.26.2.91
- Hein, L., & van der Meer, P. J. (2012). REDD+ in the context of ecosystem management. CURRENT OPINION IN ENVIRONMENTAL SUSTAINABILITY, 4(6), 604-611. https://doi.org/10.1016/j.cosust.2012.09.016
- Henkel, C. (2008). *The Burning Season* https://www.docplay.com/player/the-burning-season
- Hidayat, H., Yogaswara, H., Herawati, T., Blazey, P., Wyatt, S., & Howitt, R. (2018). Forests, law and customary rights in Indonesia: Implications of a decision of the Indonesian Constitutional Court in 2012. *Asia Pacific Viewpoint*, 59(3), 293-308. <a href="https://doi.org/10.1111/apv.12207">https://doi.org/10.1111/apv.12207</a>
- Hippocrates. (400 BC). *On Airs, Waters, and Places* (F. Adams, Trans.). <a href="http://classics.mit.edu/Hippocrates/airwatpl.mb.txt">http://classics.mit.edu/Hippocrates/airwatpl.mb.txt</a>

- Hiratsuka, M., Nakama, E., Satriadi, T., Fauzi, H., Aryadi, M., & Morikawa, Y. (2019). An approach to achieve sustainable development goals through participatory land and forest conservation: a case study in South Kalimantan Province, Indonesia. *JOURNAL OF SUSTAINABLE FORESTRY*, 38(6), 558-571. <a href="https://doi.org/10.1080/10549811.2019.1598440">https://doi.org/10.1080/10549811.2019.1598440</a>
- Huxham, C. (2003). Theorizing collaboration practice. *Public Management Review*, 5(3), 401-423. https://doi.org/10.1080/1471903032000146964
- Ivancic, H., & Koh, L. P. (2016). Evolution of sustainable palm oil policy in Southeast Asia. COGENT ENVIRONMENTAL SCIENCE, 2(1), 1-10. https://doi.org/10.1080/23311843.2016.1195032
- Jezeer, R., Slingerland, M., van der Laan, C., & Pasiecznik, N. (2019). *Improving smallholder inclusiveness in palm oil production* a global review. <a href="https://library.wur.nl/WebQuery/wurpubs/fulltext/495720">https://library.wur.nl/WebQuery/wurpubs/fulltext/495720</a>
- Jhariya, M. K., Banerjee, A., Meena, R. S., & Yadav, D. K. (2019). Agriculture, Forestry and Environmental Sustainability: A Way Forward. In M. K. Jhariya, A. Banerjee, R. S. Meena, & D. K. Yadav (Eds.), *Sustainable Agriculture, Forest and Environmental Management* (pp. 1-31). Springer. https://doi.org/10.1007/978-981-13-6830-1
- Johansson, J. (2018). Collaborative governance for sustainable forestry in the emerging biobased economy in Europe. *CURRENT OPINION IN ENVIRONMENTAL SUSTAINABILITY*, 32, 9-16. https://doi.org/10.1016/j.cosust.2018.01.009
- Johnson, A. (2022). The Roundtable on Sustainable Palm Oil (RSPO) and transnational hybrid governance in Ecuador's palm oil industry. *WORLD DEVELOPMENT*, *149*, 1-13. <a href="https://doi.org/10.1016/j.worlddev.2021.105710">https://doi.org/10.1016/j.worlddev.2021.105710</a>
- Jones, R. (2019). Climate change and Indigenous Health Promotion. *Global Health Promotion*, 26(3), 73-81. <a href="https://doi.org/10.1177/1757975919829713">https://doi.org/10.1177/1757975919829713</a>
- Kampa, M., & Castanas, E. (2008). Human health effects of air pollution. *Environmental Pollution*, 151(2), 362-367. https://doi.org/10.1016/j.envpol.2007.06.012
- Kashwan, P., & Holahan, R. (2014). Nested governance for effective REDD+: Institutional and political arguments. *International Journal of the Commons*, 8(2), 554-575. <a href="https://doi.org/10.18352/ijc.450">https://doi.org/10.18352/ijc.450</a>
- Katisi, M., & Daniel, M. (2018). Exploring the roots of antagony in the safe male circumcision partnership in Botswana. *PLOS ONE*, 13(9), 1-21. https://doi.org/10.1371/journal.pone.0200803
- Khatiwada, D., Palmén, C., & Silveira, S. (2021). Evaluating the palm oil demand in Indonesia: production trends, yields, and emerging issues. *Biofuels*, 12(2), 135-147. <a href="https://doi.org/10.1080/17597269.2018.1461520">https://doi.org/10.1080/17597269.2018.1461520</a>

- Kilpatrick, A. M., Salkeld, D. J., Titcomb, G., & Hahn, M. B. (2017). Conservation of biodiversity as a strategy for improving human health and well-being. *Phil. Trans. R. Soc. B.*, 372, 1-9. <a href="https://doi.org/10.1098/rstb.2016.0131">https://doi.org/10.1098/rstb.2016.0131</a>
- Kim, Y.-S., Bae, J. S., Fisher, L. A., Latifah, S., Afifi, M., Lee, S. M., & Kim, I.-A. (2016). Indonesia's Forest Management Units: Effective intermediaries in REDD+ implementation? *Forest Policy and Economics*, 62, 69-77. <a href="https://doi.org/10.1016/j.forpol.2015.09.004">https://doi.org/10.1016/j.forpol.2015.09.004</a>
- Koh, L. P., Ghazoul, J., Butler, R. A., Laurance, W. F., Sodhi, N. S., Mateo-Vega, J., & Bradshaw, C. J. A. (2010). Wash and Spin Cycle Threats to Tropical Biodiversity. *Biotropica*, 42(1), 67-71.
- Kothari, C. R. (2004). Research methodology New Age International (P) Ltd., Publishers.
- Kroll, C., Warchold, A., & Pradhan, P. (2019). Sustainable Development Goals (SDGs): Are we successful in turning trade-offs into synergies? *Palgrave Communications*, *5*(1), 1-11. <a href="https://doi.org/10.1057/s41599-019-0335-5">https://doi.org/10.1057/s41599-019-0335-5</a>
- Kurniawan, T., & Kurniawan, E. (2022). Policy on Utilizing Indigenous Knowledge in Critical Land Rehabilitation and Fulfillment of Sustainable Food Security in Indonesia: Regrowing " Talun-Kebun" as Part of the Local Permaculture Model in West Java. *Environmental Sciences Proceedings*, 15(1), 1-9. <a href="https://doi.org/10.3390/environsciproc2022015002">https://doi.org/10.3390/environsciproc2022015002</a>
- Lackey, N. Q., Tysor, D. A., McNay, G. D., Joyner, L., Baker, K. H., & Hodge, C. (2021). Mental health benefits of nature-based recreation: a systematic review. *Annals of Leisure Research*, 24(3), 379-393. https://doi.org/10.1080/11745398.2019.1655459
- Lambin, E. F., Gibbs, H. K., Heilmayr, R., Carlson, K. M., Fleck, L. C., Garrett, R. D., le Polain de Waroux, Y., McDermott, C. L., McLaughlin, D., Newton, P., Nolte, C., Pacheco, P., Rausch, L. L., Streck, C., Thorlakson, T., & Walker, N. F. (2018). The role of supply-chain initiatives in reducing deforestation. *Nature Climate Change*, 8(2), 109-116. https://doi.org/10.1038/s41558-017-0061-1
- Lambin, E. F., & Thorlakson, T. (2018). Sustainability Standards: Interactions Between Private Actors, Civil Society, and Governments. *Annual Review of Environment and Resources*, 43(1), 369-393. <a href="https://doi.org/10.1146/annurev-environ-102017-025931">https://doi.org/10.1146/annurev-environ-102017-025931</a>
- Lank, E. (2005). Collaborative advantage: how organisations win by working together. Springer.
- Laudares, H., & Gagliardi, P. H. (2020). Is Deforestation Spreading COVID-19 to the Indigenous Peoples? *Working Paper Series*(8), 1-38. <a href="https://ieps.org.br/wp-content/uploads/2020/11/IEPS WP8.pdf">https://ieps.org.br/wp-content/uploads/2020/11/IEPS WP8.pdf</a>
- Law of The Republic of Indonesia Number 41 of 1999 regarding Forestry, (1999). https://orangutan.org/wp-content/uploads/2016/12/Indonesia ForestryLaw 1999.pdf

- Lederer, M. (2011). From CDM to REDD+ What do we know for setting up effective and legitimate carbon governance? *Ecological Economics*, 70(11), 1900-1907. https://doi.org/10.1016/j.ecolecon.2011.02.003
- Lederer, M. (2012). REDD+ governance. *WIREs Climate Change*, 3, 107-113. <a href="https://doi.org/10.1002/wcc.155">https://doi.org/10.1002/wcc.155</a>
- Li, T. M. (2016). Governing rural Indonesia: convergence on the project system. *Critical Policy Studies*, 10(1), 79-94. <a href="https://doi.org/10.1080/19460171.2015.1098553">https://doi.org/10.1080/19460171.2015.1098553</a>
- Lin, M. M., & Hidayat, R. (2018). *Jakarta, the fastest-sinking city in the world*. BBC Indonesia. https://www.bbc.com/news/world-asia-44636934
- Lindsey, R., & Dahlman, L. (2022). *Climate Change: Global Temperature*. <a href="https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature">https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature</a>
- Litfin, K. T. (1997). Sovereignty in World Ecopolitics. *Mershon International Studies Review*, 41(2), 167-204. https://doi.org/10.2307/222667
- Lozano, R. (2007). Collaboration as a Pathway for Sustainability. *Sustainable Development*, 15, 370-381. <a href="https://doi.org/10.1002/sd.322">https://doi.org/10.1002/sd.322</a>
- Magesan, A. (2013). Human Rights Treaty Ratification of Aid Receiving Countries. WORLD DEVELOPMENT, 45, 175-188. https://doi.org/10.1016/j.worlddev.2012.11.003
- Manik, Y., Leahy, J., & Halog, A. (2013). Social life cycle assessment of palm oil biodiesel: a case study in Jambi Province of Indonesia. *The International Journal of Life Cycle Assessment*, 18(7), 1386-1392. https://doi.org/10.1007/s11367-013-0581-5
- Manrai, L. A., Manrai, A. K., Lascu, D.-N., & Ryans Jr., J. K. (1997). How green-claim strength and country disposition affect product evaluation and company image. *Psychology & Marketing*, 14(5), 511-537. <a href="https://doi.org/10.1002(SICI)1520-6793(199708)14:5%3C511::AID-MAR5%3E3.0.CO;2-B">https://doi.org/10.1002(SICI)1520-6793(199708)14:5%3C511::AID-MAR5%3E3.0.CO;2-B</a>
- Marlier, M. E., Madrigano, J., Huttinger, A., & Burger, N. (2021). *Indonesian Fires and Haze*. RAND Corporation.
- McAllister, R. R., & Taylor, B. M. (2015). Partnerships for sustainability governance: a synthesis of key themes. *CURRENT OPINION IN ENVIRONMENTAL SUSTAINABILITY*, 12, 86-90. <a href="https://doi.org/10.1016/j.cosust.2015.01.001">https://doi.org/10.1016/j.cosust.2015.01.001</a>
- Mechkova, V., Lührmann, A., & Lindberg, S. I. (2019). The Accountability Sequence: from De-Jure to De-Facto Constraints on Governments. *Studies in Comparative International Development*, *54*(1), 40-70. <a href="https://doi.org/10.1007/s12116-018-9262-5">https://doi.org/10.1007/s12116-018-9262-5</a>
- Meijaard, E., & Sheil, D. (2019). The Moral Minefield of Ethical Oil Palm and Sustainable Development. FRONTIERS IN FORESTS AND GLOBAL CHANGE, 2, 1-15. https://doi.org/10.3389/ffgc.2019.00022

- Meyer-Schulz, K., & Bürger-Arndt, R. (2019). Reviewing the psychological and physical health effects of forests. *Santé Publique*, *31*(1), 115-134. <a href="https://doi.org/10.3917/spub.190.0115">https://doi.org/10.3917/spub.190.0115</a>
- Milne, S., Milne, M., Nurfatriani, F., & Tacconi, L. (2016). How is global climate policy interpreted on the ground? Insights from the analysis of local discourses about forest management and REDD plus in Indonesia. *ECOLOGY AND SOCIETY*, 21(2). <a href="https://doi.org/10.5751/ES-08363-210206">https://doi.org/10.5751/ES-08363-210206</a>
- Mitchell, S. M., & Shortell, S. M. (2000). The Governance and Management of Effective Community Health Partnerships: A Typology for Research, Policy, and Practice. *The Milbank Quarterly*, 78(2), 241-289. https://doi.org/10.1111/1468-0009.00170
- Moeliono, M., Brockhaus, M., Gallemore, C., Dwisatrio, B., Maharani, C. D., Muharrom, E., & Pham, T. T. (2020). REDD+ in Indonesia: A new mode of governance or just another project? *Forest Policy and Economics*, 121, 1-13. https://doi.org/10.1016/j.forpol.2020.102316
- Mukherjee, I., & Sovacool, B. K. (2014). Palm oil-based biofuels and sustainability in southeast Asia: A review of Indonesia, Malaysia, and Thailand. *Renewable and Sustainable Energy Reviews*, 37, 1-12. <a href="https://doi.org/10.1016/j.rser.2014.05.001">https://doi.org/10.1016/j.rser.2014.05.001</a>
- Nathan, I., & Pasgaard, M. (2017). Is REDD+ effective, efficient, and equitable? Learning from a REDD+ project in Northern Cambodia. *GEOFORUM*, 83, 26-38. <a href="https://doi.org/10.1016/j.geoforum.2017.04.020">https://doi.org/10.1016/j.geoforum.2017.04.020</a>
- NHS. (n.d.). Cardiovascular disease. https://www.nhs.uk/conditions/cardiovascular-disease/
- Nisbet, M. C., & Aufderheide, P. (2009). Documentary Film: Towards a Research Agenda on Forms, Functions, and Impacts. *Mass Communication and Society*, 12(4), 450-456. https://doi.org/10.1080/15205430903276863
- Nutbeam, D., & Kickbusch, I. (1998). Health promotion glossary. *Health Promotion International*, 13(4), 349-364. <a href="https://www.jstor.org/stable/45152457?seq=1">https://www.jstor.org/stable/45152457?seq=1</a>
- Oh, B., Lee, K. J., Zaslawski, C., Yeung, A., Rosenthal, D., Larkey, L., & Back, M. (2017). Health and well-being benefits of spending time in forests: systematic review. *Environmental Health and Preventive Medicine*, 22(1), 1-11. <a href="https://doi.org/10.1186/s12199-017-0677-9">https://doi.org/10.1186/s12199-017-0677-9</a>
- Oosterveer, P., Adjei, B. E., Vellema, S., & Slingerland, M. (2014). Global sustainability standards and food security: Exploring unintended effects of voluntary certification in palm oil. *Global Food Security*, *3*, 220-226. <a href="https://doi.org/10.1016/j.gfs.2014.09.006">https://doi.org/10.1016/j.gfs.2014.09.006</a>
- Pan, Z., & Michalski, A. (2019). Contending logics of strategic partnership in international politics. *Asia Europe Journal*, 17, 265-280. <a href="https://doi.org/10.1007/s10308-019-00553-3">https://doi.org/10.1007/s10308-019-00553-3</a>
- Pattiselanno, F. (2004). Wildlife utilization and food security in West Papua, Indonesia. SEARCA Agriculture and Development Seminar Series, SEARCA Los Baños,

- Pizzetti, M., Gatti, L., & Seele, P. (2019). Firms Talk, Suppliers Walk: Analyzing the Locus of Greenwashing in the Blame Game and Introducing 'Vicarious Greenwashing'. *Journal of Business Ethics*, 170, 21-38. https://doi.org/10.1007/s10551-019-04406-2
- Plato. (1989). The Collected Dialogues. Princeton University Press.
- Pokharel, R. K., Neupane, P. R., Tiwari, K. R., & Köhl, M. (2015). Assessing the sustainability in community based forestry: A case from Nepal. *Forest Policy and Economics*, *58*, 75-84. <a href="https://doi.org/10.1016/j.forpol.2014.11.006">https://doi.org/10.1016/j.forpol.2014.11.006</a>
- Postholm, M. B. (2010). Kvalitativ metode: en innføring med fokus på fenomenologi, etnografi og kasusstudier (2. utg. ed.). Universitetsforlaget.
- Prabowo, B. M. F., Hardyastuti, S., & Darwanto, D. H. (2020). The Performance Indonesian Crude Palm Oil Export. *Journal of Agricbusiness Management and Development, 1*(1), 158-166. https://journal.ugm.ac.id/v3/JAMADEV/article/view/971/320
- Pradhan, P., Costa, L., Rybski, D., Lucht, W., & Kropp, J. P. (2017). A Systematic Study of Sustainable Development Goal (SDG) Interactions. *Earth's Future*, *5*, 1169-1179. https://doi.org/10.1002/2017EF000632
- Pujo, Sofhani, T. F., Gunawan, B., & Syamsudin, T. S. (2018). Community Capacity Building in Social Forestry Development: A Review. *Journal of Regional and City Planning*, 29(2), 113-126. https://doi.org/10.5614/jrcp.2018.29.2.3
- Punch, K. F. (2014). *Introduction to Social Research Quantitative & Qualitative Approaches* (3 ed.). Sage.
- Purnomo, H., Okarda, B., Dermawan, A., Ilham, Q. P., Pacheco, P., Nurfatriani, F., & Suhendang, E. (2020). Reconciling oil palm economic development and environmental conservation in Indonesia: A value chain dynamic approach. *Forest Policy and Economics*, 111, 102089. https://doi.org/10.1016/j.forpol.2020.102089
- Reiss-Woolever, V. J., Luke, S. H., Stone, J., Shackelford, G. E., & Turner, E. C. (2021). Systematic mapping shows the need for increased socio-ecological research on oil palm. *ENVIRONMENTAL RESEARCH LETTERS*, *16*(6), 1-19. <a href="https://doi.org/10.1088/1748-9326/abfc77">https://doi.org/10.1088/1748-9326/abfc77</a>
- Riggs, R. A., Langston, J. D., Margules, C., Boedhihartono, A. K., Lim, H. S., Sari, D. A., Sururi, Y., & Sayer, J. (2018). Governance Challenges in an Eastern Indonesian Forest Landscape. *SUSTAINABILITY*, 10(1), 1-18. <a href="https://doi.org/10.3390/su10010169">https://doi.org/10.3390/su10010169</a>
- Rist, L., Feintrenie, L., & Levang, P. (2010). The livelihood impacts of oil palm: smallholders in Indonesia. *Biodiversity and Conservation*, 19(4), 1009-1024. <a href="https://doi.org/10.1007/s10531-010-9815-z">https://doi.org/10.1007/s10531-010-9815-z</a>
- Royal Norwegian Embassy in Jakarta. (n.d.). *Climate and forest*. <a href="https://www.norway.no/en/indonesia/values-priorities/deforestation-and-climate-change/">https://www.norway.no/en/indonesia/values-priorities/deforestation-and-climate-change/</a>

- RSPO. (2019). RSPO RESPONDS TO EIA REPORT. <a href="https://rspo.org/news-and-events/news/rspo-responds-to-eia-report">https://rspo.org/news-and-events/news/rspo-responds-to-eia-report</a>
- RSPO. (2020). *Indonesian Independent Smallholder membership up 167%*. <a href="https://www.rspo.org/news-and-events/news/indonesian-independent-smallholder-membership-up-167">https://www.rspo.org/news-and-events/news/indonesian-independent-smallholder-membership-up-167</a>
- RSPO. (n.d.-a). RSPO Credits. https://www.rspo.org/rspo-credits/introduction
- RSPO. (n.d.-b). RSPO Smallholders. https://rspo.org/smallholders
- Rudolph, T. J., & Evans, J. (2005). Political Trust, Ideology, and Public Support for Government Spending. *American Journal of Political Science*, 49(3), 660-671. <a href="https://doi.org/10.1111/j.1540-5907.2005.00148.x">https://doi.org/10.1111/j.1540-5907.2005.00148.x</a>
- Rueda, X., Garrett, R. D., & Lambin, E. F. (2017). Corporate investments in supply chain sustainability: Selecting instruments in the agri-food industry. *Journal of Cleaner Production*, 142, 2480-2492. https://doi.org/10.1016/j.jclepro.2016.11.026
- Rumboko, L., Race, D., & Curtis, A. (2013). Optimising Community-Based Forest Management Policy in Indonesia: A Critical Review. *Jurnal Ilmu Sosial dan Ilmu Politik*, 16(3). https://doi.org/10.22146/jsp.10906
- Ruysschaert, D., & Salles, D. (2014). Towards global voluntary standards: Questioning the effectiveness in attaining conservation goals: The case of the Roundtable on Sustainable Palm Oil (RSPO). *Ecological Economics*, 107, 438-446. <a href="https://doi.org/10.1016/j.ecolecon.2014.09.016">https://doi.org/10.1016/j.ecolecon.2014.09.016</a>
- Sada, C., Alas, Y., & Anshari, M. (2019). Indigenous people of Borneo (Dayak): Development, social cultural perspective and its challenges. *COGENT ARTS & HUMANITIES*, 6(1). https://doi.org/10.1080/23311983.2019.1665936
- Samii, R., Wassenhove, L. N. V., & Insead, S. B. (2002). An Innovative Public–Private Partnership: New Approach to Development. *WORLD DEVELOPMENT*, 30(6), 991-1008. <a href="https://doi.org/10.1016/S0305-750X(02)00015-3">https://doi.org/10.1016/S0305-750X(02)00015-3</a>
- Sanders, A. J. P., Ford, R. M., Keenan, R. J., & Larson, A. M. (2020). Learning through practice? Learning from the REDD plus demonstration project, Kalimantan Forests and Climate Partnership (KFCP) in Indonesia. *LAND USE POLICY*, *91*, 1-14. https://doi.org/10.1016/j.landusepol.2019.104285
- Sarris, J., de Manincor, M., Hargraves, F., & Tsonis, J. (2019). Harnessing the Four Elements for Mental Health. *Frontiers in Psychiatry*, 10, 1-9. https://doi.org/10.3389/fpsyt.2019.00256
- Scherer, L., Behrens, P., de Koning, A., Heijungs, R., Sprecher, B., & Tukker, A. (2018). Trade-offs between social and environmental Sustainable Development Goals. *Environmental science & policy*, 90, 65-72. <a href="https://doi.org/10.1016/j.envsci.2018.10.002">https://doi.org/10.1016/j.envsci.2018.10.002</a>

- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22, 63-75. <a href="https://doi.org/10.3233/EFI-2004-22201">https://doi.org/10.3233/EFI-2004-22201</a>
- Singh, G. G., Cisneros-Montemayor, A. M., Swartz, W., Cheung, W., Guy, J. A., Kenny, T.-A., McOwen, C. J., Asch, R., Geffert, J. L., Wabnitz, C. C. C., Sumaila, R., Hanich, Q., & Ota, Y. (2018). A rapid assessment of co-benefits and trade-offs among Sustainable Development Goals. *Marine Policy*, 93, 223-231. <a href="https://doi.org/10.1016/j.marpol.2017.05.030">https://doi.org/10.1016/j.marpol.2017.05.030</a>
- Snashall, G. B., & Poulos, H. M. (2021). Oreos Versus Orangutans: The Need for Sustainability Transformations and Nonhierarchical Polycentric Governance in the Global Palm Oil Industry. *FORESTS*, 12(2), 1-17. https://doi.org/10.3390/f12020252
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333-339. <a href="https://doi.org/10.1016/j.jbusres.2019.07.039">https://doi.org/10.1016/j.jbusres.2019.07.039</a>
- Stevens, F. (2016). *Before the Flood* F. Stevens & L. DiCaprio; https://viaplay.no/player/default/filmer/before-the-flood-2016
- Strassburg, B. B. N. (2019). Conservation provides multiple wins for Brazil. *Nature Ecology & Evolution*, 3(4), 508-509. <a href="https://doi.org/10.1038/s41559-019-0856-8">https://doi.org/10.1038/s41559-019-0856-8</a>
- Strauss, A. L., & Corbin, J. M. (1990). Basics of qualitative research: Techniques and procedures for developing grounded theory. Sage.
- Takahashi, T., Uchida, Y., Ishibashi, H., & Okuda, N. (2021). Subjective Well-Being as a Potential Policy Indicator in the Context of Urbanization and Forest Restoration. SUSTAINABILITY, 13(3211), 1-17. https://doi.org/10.3390/su13063211
- Tegegne, Y. T., Cramm, M., & Van Brusselen, J. (2018). Sustainable Forest Management, FLEGT, and REDD+: Exploring Interlinkages to Strengthen Forest Policy Coherence. SUSTAINABILITY, 10(12), 1-22. https://doi.org/10.3390/su10124841
- Thagaard, T. (2018). Systematikk og innlevelse En innføring i kvalitative metoder (5 ed.). Fagbokforlaget.
- The Ministry of Forestry of Indonesia. (2006). Indonesia's Forestry Long Term Development Plan 2006-2025. 1-71. <a href="http://foris.fao.org/static/pdf/nfp-and-forest-policy-documents/indonesia-forestry-long-term-plan-2006-25.pdf">http://foris.fao.org/static/pdf/nfp-and-forest-policy-documents/indonesia-forestry-long-term-plan-2006-25.pdf</a>
- Uhl, C., Jordan, C., Clark, K., Clark, H., & Herrera, R. (1982). Ecosystem recovery in Amazon caatinga forest after cutting, cutting and burning, and bulldozer clearing treatments. *OIKOS*, *38*(3), 313-320. https://doi.org/10.2307/3544671
- UK Centre for Ecology & Hydrology. (n.d.). *Tropical rainforests, 'lungs' of the planet, reveal true sensitivity to global warming*. <a href="https://www.ceh.ac.uk/news-and-media/news/tropical-rainforests-lungs-planet-reveal-true-sensitivity-global-warming">https://www.ceh.ac.uk/news-and-media/news/tropical-rainforests-lungs-planet-reveal-true-sensitivity-global-warming</a>
- UN-REDD programme. (n.d.). About REDD+. https://www.un-redd.org/about/about-redd

- UNECE. (n.d.). Carbon Sinks and Sequestration. <a href="https://unece.org/forests/carbon-sinks-and-sequestration">https://unece.org/forests/carbon-sinks-and-sequestration</a>
- United Nations. (2017). Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development. <a href="https://documents-dds-ny.un.org/doc/UNDOC/GEN/N17/207/63/PDF/N1720763.pdf">https://documents-dds-ny.un.org/doc/UNDOC/GEN/N17/207/63/PDF/N1720763.pdf</a>?OpenElement
- United Nations. (n.d.). Forests. <a href="https://sustainabledevelopment.un.org/topics/forests">https://sustainabledevelopment.un.org/topics/forests</a>
- Vatn, A., & Vedeld, P. O. (2013). National governance structures for REDD+. *Global Environmental Change*, 23(2), 422-432. https://doi.org/10.1016/j.gloenvcha.2012.11.005
- Wandersman, A., Goodman, R. M., & Butterfoss, F. D. (1997). Understanding Coalitions and How They Operate as Organizations. In M. Minkler (Ed.), *Community Organizing and Community Building for Health* (2 ed., pp. 292-314). Rutgers University Press.
- Wani, K. A., & Ariana, L. (2018). Impact of Climate Change on Indigenous People and Adaptive Capacity of Bajo Tribe, Indonesia. *Environmental Claims Journal*, 30(4), 302-313. https://doi.org/10.1080/10406026.2018.1504380
- Wegner, J. (2016). The Manifestations of Positive Leader Roles in Classical Theories of Leadership. *Journal of Corporate Responsibility and Leadership* 3(3), 91-105. https://doi.org/10.12775/JCRL.2016.018
- White, S. C. (2010). Analysing wellbeing: a framework for development practice. *Development in Practice*, 20(2), 158-172. <a href="https://doi.org/10.1080/09614520903564199">https://doi.org/10.1080/09614520903564199</a>
- Wicke, B., Sikkema, R., Dornburg, V., & Faaij, A. (2011). Exploring land use changes and the role of palm oil production in Indonesia and Malaysia. *LAND USE POLICY*, 28(1), 193-206. <a href="https://doi.org/10.1016/j.landusepol.2010.06.001">https://doi.org/10.1016/j.landusepol.2010.06.001</a>
- Widayanto, B., Karsidi, R., Kusnandar, K., & Sutrisno, J. (2019). Model of Sustainable Private Forest Management in Yogyakarta Special Regency, Indonesia. *JOURNAL OF AGRICULTURAL EXTENSION*, 23(2), 66-79. <a href="https://doi.org/10.4314/jae.v23i2.8">https://doi.org/10.4314/jae.v23i2.8</a>
- Widodo, J. (2021). *Indonesia High-level Segment Statement COP 26*. <a href="https://unfccc.int/documents/308983">https://unfccc.int/documents/308983</a>
- World Bank. (n.d.-a). Agricultural land (% of land area) Indonesia. <a href="https://data.worldbank.org/indicator/AG.LND.AGRI.ZS?end=2020&locations=ID&start=1990&view=chart">https://data.worldbank.org/indicator/AG.LND.AGRI.ZS?end=2020&locations=ID&start=1990&view=chart</a>
- World Bank. (n.d.-b). Forest area (% of land area) Indonesia. <a href="https://data.worldbank.org/indicator/AG.LND.FRST.ZS?end=2020&locations=ID&st">https://data.worldbank.org/indicator/AG.LND.FRST.ZS?end=2020&locations=ID&st</a> art=1990&view=chart

- World Bank. (n.d.-c). Forest area (sq. km) Indonesia. <a href="https://data.worldbank.org/indicator/AG.LND.FRST.K2?end=2020&locations=ID&st">https://data.worldbank.org/indicator/AG.LND.FRST.K2?end=2020&locations=ID&st</a> art=1990&view=chart
- World Commission on Environment and Development. (1987). *Our common future*. Oxford University Press.
- World Directory of Minorities and Indigenous Peoples. (2018). *Dayak*. <a href="https://minorityrights.org/minorities/dayak/">https://minorityrights.org/minorities/dayak/</a>
- World Health Organization. (1948). *Constitution of the World Health Organization*. https://www.afro.who.int/publications/constitution-world-health-organization
- World Health Organization. (1986). The Ottawa Charter
- World Population Review. (2022). Largest Countries in the World 2022. <a href="https://worldpopulationreview.com/country-rankings/largest-countries-in-the-world">https://worldpopulationreview.com/country-rankings/largest-countries-in-the-world</a>
- Wozniak, A. (2021). Just "performance nonsense"?: How recipients process news photos of activists' symbolic actions about climate change politics. *Nordic Journal of Media Studies*, 3(1), 61-78. <a href="https://doi.org/10.2478/njms-2021-0004">https://doi.org/10.2478/njms-2021-0004</a>
- Xi, W., Wang, F., Shi, P., Dai, E., Anoruo, A. O., Bi, H., Rahmlow, A., He, B., & Li, W. (2014). Challenges to Sustainable Development in China: A Review of Six Large-Scale Forest Restoration and Land Conservation Programs. *JOURNAL OF SUSTAINABLE FORESTRY*, 33(5), 435-453. <a href="https://doi.org/10.1080/10549811.2014.899503">https://doi.org/10.1080/10549811.2014.899503</a>
- Yacob, S. (2019). Government, Business and Lobbyists: The Politics of Palm Oil in US—Malaysia Relations. *The International History Review*, 41(4), 909-930. https://doi.org/10.1080/07075332.2018.1457556
- Yuliani, E. L., de Jong, E. B. P., Knippenberg, L., Bakara, D. O., Salim, M. A., & Sunderland, T. (2018). Keeping the land: indigenous communities' struggle over land use and sustainable forest management in Kalimantan, Indonesia. *ECOLOGY AND SOCIETY*, 23(4). https://doi.org/10.5751/ES-10640-230449

## **Appendices**

## Appendix 1: Literature search

Database: Web of Science (Core Collection)

**Date of search:** 13.09.2021

#### **Searches:**

1. General search about what roles stakeholders play in forest sustainability in Indonesia. (Only looking at peer-reviewed articles).

Link: <a href="https://www.webofscience.com/wos/woscc/summary/7aaa5a80-36ed-4f9d-b5dd-2dee23300c5a-0740bf08/date-descending/1">https://www.webofscience.com/wos/woscc/summary/7aaa5a80-36ed-4f9d-b5dd-2dee23300c5a-0740bf08/date-descending/1</a>

Topic: ("Sustainab\*")

**AND** 

Topic: ("Forest\*")

**AND** 

Topic: ("Local communit\*" OR "Indigenous people\*" OR "Indigenous group\*" OR "Palm oil" OR "Oil palm" OR "stakeholder\*" OR "local government\*" OR "united nations" OR "REDD+" OR "REDD")

AND

Topic: ("Indonesia\*")

Summary of search 1: 13 results, 9 added.

2. Search for collaboration among stakeholders in Indonesia

Link: https://www.webofscience.com/wos/woscc/summary/3a111721-c96a-4dbb-

Topic: ("Sustainab\*")

**AND** 

Topic: ("Forest\*")

**AND** 

Topic: ("Local communit\*" OR "Indigenous people\*" OR "Indigenous group\*" OR "Palm oil" OR "Oil palm" OR "stakeholder\*" OR "local government\*" OR "united nations" OR "REDD+" OR "REDD")

**AND** 

Topic: ("Indonesia\*")

AND

Topic: ("Collaboration" OR "Cooperation" OR "participation" OR "participatory" OR "community engagement" OR "community empowerment" OR "knowledge exchange\*")

Summary of search 2: 58 results, 33 added.

3. Search for well-being.

(Did not only look in Indonesia, as there is a gap in literature on this).

Link: <a href="https://www.webofscience.com/wos/woscc/summary/6b836450-e64b-4b91-8a80-2894952c01b8-0741161e/relevance/1">https://www.webofscience.com/wos/woscc/summary/6b836450-e64b-4b91-8a80-2894952c01b8-0741161e/relevance/1</a>

Topic: ("Sustainab\*")

AND

Topic: ("Forest\*")

**AND** 

Topic: ("Local communit\*" OR "Indigenous people\*" OR Indigenous group\*")

AND

Topic: ("Collaboration" OR "Cooperation" OR "participation" OR "participatory" OR "community engagement" OR "community empowerment" OR "knowledge

exchange\*")

**AND** 

Topic: ("well-being" OR "wellbeing" OR "quality of life" OR "human health")

Summary of search 3: 14 results, 2 WoS added, 3 Google Scholar added.

(Had to add some from Google Scholar as there were too few results. Used the same keywords).

# Appendix 2: Observation Guide for Documentaries

	-	y name:			
Direct	oublish or:	ed:			
Running time:					
	Relev	rant timestamps:			
Citatio	on:				
RQ1:					
•	Mentions of forest sustainability in Indonesian laws.				
•	Mentions of forest sustainability in international agreements.				
•	How these are communicated towards stakeholders.				
D.0.4					
RQ2:					
•	Stakeholders mentioned.				
•	Stakeholders' roles in forest sustainability:				
	(Power dynamics, Incentives, Goals etc.)				
	I.	International political bodies			
	II.	Government			
	III.	Palm oil producers			
	IV.	Local communities			
	V.	Indigenous groups			
RQ3:					
•	Interaction between stakeholders' impact on well-being of local communities and indigenous people.				
Addit	ional (	Questions:			
•		signs of:			
	I.	Collaboration			
	II.	Conflict			
Relev	ant qu	otes:			
•	• Important people:				
•	impo.	runt people.			

Literature list:

# Appendix 3: Thematic network analysis table

Global themes	Organizing themes	Basic themes
		Laws covering forest sustainability
	The GOI	Population-directed forest laws
		Long-term forest plans
		GOI actions for sustainability of
		forest resources
		GOI deficiencies affecting forest sustainability
		Governmental communication
		concerning forest sustainability
Stakeholders' roles in the informal	Local communities	Community and land
collaboration for sustainability of		Communities' role in the
Indonesian forest resources		sustainability of forest resources
		Community and palm oil
	LPOCs	Positive effects of LPOCs
		Negative effects of LPOCs
		Community-land disputes
		LPOCs efforts for sustainability
	International funders	REDD+
		RSPO
	Well-being of local communities	Effects on local communities'
Stakeholders impact on local	in relation to deforestation and the	physical well-being
communities' well-being	palm oil industry	Social problems connected to
		well-being