

Building an effective coalition to improve forest policy: Lessons from the coastal Tripa peat swamp rainforest, Sumatra, Indonesia



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ABSTRACT

In recent history, Indonesian forest policies have been dominated by deforestation in the name of economic progress. Many actors have expressed concerns about this trend and have tried to reverse it in favour of a more sustainable pathway. From 2004–2017, non-governmental environmental organisations fought for the case of the coastal Tripa peat swamp rainforest in the province of Aceh, Sumatra. Unique in Indonesian history, they managed halting and reversing the deforestation of an area. Their sustained action led the Indonesia state to cancel an oil palm plantation permit, with the plantation managers and owners facing heavy fines and prison terms. Our research seeks to understand the enabling factors making this success story possible. We used the Advocacy Coalition Framework for its capacity to deal with a complicated policymaking ecosystem whose decisions takes years for implementation.

Our analysis found four enabling conditions of success, which were the NGOs capacity to: 1) sustain action for over a decade and grasp four changing events (post-tsunami reconstruction, emerging connection between forests and climate change, governors' change, and use of digital technologies); 2) learn from own past failures marked by the evolution of their policy core beliefs, from 'conserving forest for biodiversity' to 'conserving forest for local livelihoods', and then to 'conserving forest to prevent climate change'. As a result, they could broaden their advocacy coalition, which grew to include diverse social actors from local to international levels, including the central state's REDD + Task Force; 3) take an advantage over economic power by acting strategically and timely when changes occurred; and 4) closely monitor and disseminate knowledge (fire events, deforestation trends and peat depth), supporting a simple causal deforestation model which allowed a high degree of policy-oriented learning, helping the coalition to change its behaviour and act strategically.

To sum up, the overall trend of rainforest destruction for agricultural extension in Southeast Asia, particularly in Sumatra, Indonesia, can be reversed, at least at the local level. Cautious not to overgeneralise, the Tripa case indicates that NGOs could improve forest governance by engaging in the long term, acting strategically, and building a broad socio-ecological and rights-based coalition.

1. Introduction

After the independence, President Suharto (1967–98) centralised the administration and the exploitation of natural resources, strengthening the Indonesian state. With the 1967 Forest Basic Law, the central state took control of all communally-managed forests, negating customary laws (Wrangham et al., 2002). The Forest Basic Law established a 'Forest State' covering more than 140 million hectares, or 75% of Indonesian land (Putri, 2008). This policy was completed by the Regional Governance Law (1974) and the Village Law (1979), extending the national state power at the local level through administrative

regionalisation, creating villages (*desa*) and marginalising traditional powers (Antlöv, 2003; Putri, 2008).

In the following two decades, two-thirds of the Forest State was distributed to economic actors and political leaders close to the regime in the name of development (Contreras-Hermosilla and Fay, 2005). Most of this land was converted into large-scale logging concessions or industrial plantations (timber, rubber, oil palm), enforced by the state's administrative and military support (McCarthy, 2000). Their establishment often went along with transmigration programmes (*Transmigrasi*) in which two million peasants were displaced from highly-populated Java to other islands, providing plantations with a workforce

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from the 1960s to the 1990s. Part of the Forest State was also allocated to national parks in cooperation with environmental NGOs and inter-governmental organisations, especially the FAO (MacKinnon, 1982; Ruysschaert, 2013). After the decentralisation process in 1999, the provincial and district levels also benefit from this plundering of the Forest State, as regionalisation law allowed their leaders to grant leases for smaller concessions (typically 1000 ha for governors and a few dozen hectares for district heads), keeping political peace at the expense of forests (Ruysschaert, 2013).

Like other provinces in Indonesia, Nanggroe Aceh Darussalam (hereafter referred to as Aceh) was directly affected. On the one hand, it lost about 23% of its forest cover between 1985 and 2007 mostly due to agricultural expansion (Laumonier et al., 2010; WWF, 2010). On the other hand, the state created the Gunung Leuser National Park in 1980, covering over 800,000 ha. The creation of the Leuser Ecosystem followed, on an even wider territory of 2.6 million hectares, through Presidential decree in 1998, as was the only place on earth where several flagship species co-exist (elephants, tigers, rhinoceros, orangutans) (Wich et al., 2011). Environmentalists successfully lobbied the central government to include the coastal Tripa peat swamp forest (hereafter referred to as Tripa) in the Leuser Ecosystem, on the basis that this area (as well as Kluit and Singkil) has the highest densities of orangutans in the world (Wich et al., 2008) (Fig. 1).

Tripa consists of three peat domes, often more than three metres deep and separated by two rivers. Established long ago, the villages of Kuala Seumayam, Alue Kuyun and Pulo Kruet, are located along those rivers. With Kluit and Singkil, Tripa is one of only three remaining peat swamp forests in Aceh (Fig. 1). In the 1990s, five large-scale palm oil companies began operating in Tripa. Each of these estates extends over 5,000–14,000 ha, together covering most of the peat area. They were supported by a transmigration programme, establishing new settlements in Tripa, with a total of around 1000 people. Between 1994 and 1999, 40% of Tripa forest was cleared, drainage canals were opened, and in some parts, oil palms were planted (PanEco and YEL et al., 2008).

In Aceh, the post-1967 exclusion of local people from their lands,

regionalisation and widespread deforestation fuelled the movement for independence, leading to the creation of the 'Free Aceh Movement' (*Gerakan Aceh Merdeka-GAM*) in 1976 and to a civil war that grew in intensity in the 1990s. As a consequence of the conflict, oil palm plantations in Aceh, including Tripa, were left abandoned and NGOs were prohibited from accessing the province.

All of this changed after the December 2004 tsunami, which claimed more than 168,000 lives in Indonesia. The world responded with unprecedented generosity, with individual donations of one billion USD to NGOs, as well as 650 million USD from governments, prompting the Indonesian Government to create the Agency for Reconstruction and Rehabilitation of Aceh and Nias (*Badan rekonstruksi dan rehabilitasi Aceh-Nias - BRR*) to channel the funds in close partnership with Aceh. Overall, this infamous tsunami allowed international NGOs to enter Aceh to rehabilitate the coastline with local communities, and prompted the state and Aceh separatist movement to negotiate a peace agreement. In 2006, the Indonesian Parliament approved the 'Law on Aceh Governance' (11/2006), granting a semi-autonomous status to the province, including control over its natural resources. In the field, large-scale oil palm growers resumed their operations with peace. In Tripa, only 40% (about 26,000 ha) of the original forest remained by 2008 (Ruysschaert et al., 2009), and only 20% remained by the end of 2011 (about 13,000 ha); drainage channels were established even on deep peat land (more than three metres high), and fires were widely used, with 548 peat fires recorded between January 2006 and December 2011 (Nowak, 2014; YEL, 2012). This oil palm expansion was part of a much broader trend in Sumatra and the rest of Indonesia. By 2010, the Sumatra island had lost 70% of its forests (Margono et al., 2012) and 72% of its original peat swamp forests (Miettinen et al., 2011). Peat swamp forests endured recently the worst deforestation, with rates of over 2% a year (Miettinen et al., 2016), and may as well disappear by 2030 (Miettinen et al., 2011), mostly due to oil palm plantations (Miettinen et al., 2012). This expansion happened despite the fact that Indonesia has many legal instruments to regulate agricultural expansion. This includes the requirement of environmental impact assessments and local community consultations (Government Regulation 27/

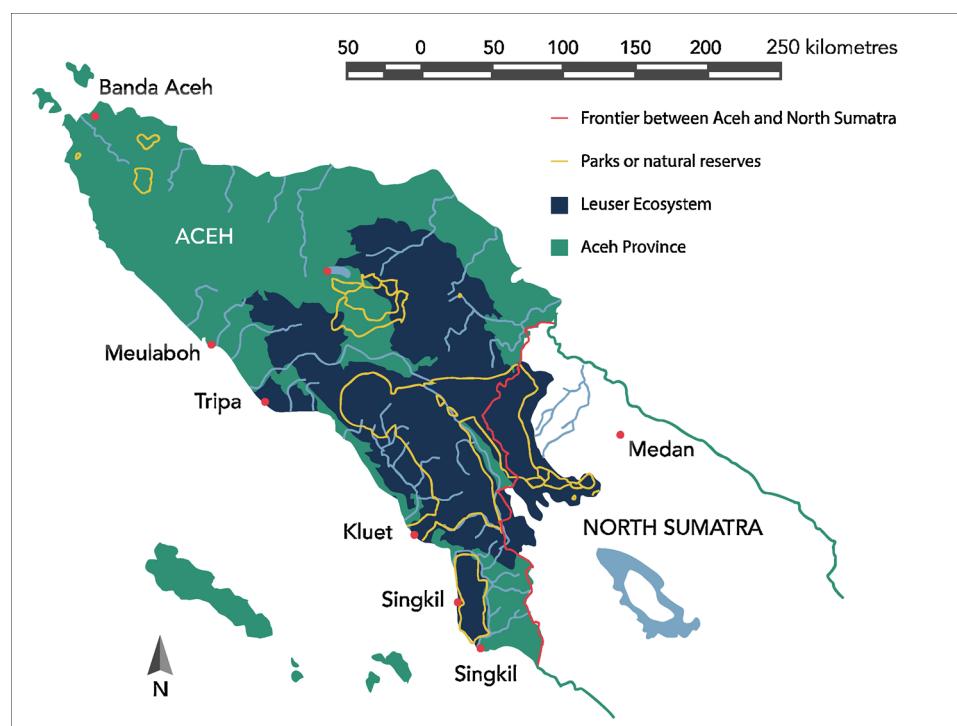


Fig. 1. Tripa and the Leuser ecosystem.

(Source: PanEco adapted by the authors)

1999), a ban on expansion on peat soil over three metres deep (Ministry of Agricultural Decree 14/2009), and a ban on clearing land by burning, punishable by criminal charges including prison sentences of up to ten years and fines up to 10 billion Indonesian Rupiahs (IDR) (770,000 USD) (National Law 32/2009 on the Protection and Management of the Environment) (Colchester et al., 2006; Ruysschaert, 2013).

At odds with this disturbing trend over Indonesian forests, environmental NGOs impeded oil palm expansion, succeeded in halting deforestation and obtained the restoration of a site in Tripa. In 2015, for the first time ever in Indonesia, their sustained action led the state to cancel a 1605-hectare oil palm concession, with the plantation managers and owners facing heavy fines and prison terms. Furthermore, the Supreme Court of Indonesia fined the firm involved, and forced it to compensate and reverse the environmental damage (Case registration No 19/G/2011/PTUN-Banda Aceh).

In this paper, our ambition is to understand what were the enabling conditions making this success story possible. This would be of interest to policymakers and stakeholders involved in similar cases in other parts of Indonesia or globally. Following a presentation of the analytical framework, we develop our analysis in three parts: 1) examining the root cause of the issue, why and how NGOs began to create their own advocacy coalition; 2) analysing the stable context and the events that have impacted Tripa management over time; and 3) looking at the way environmental NGOs built an effective advocacy coalition by grasping these events, revising their core belief, and acting strategically to impose a new forest policy that fulfil their own conservation goals.

2. Material and method

Within the context of political ecology (Gautier and Benjaminsen et al., 2012), we decided to use the Advocacy Coalition Framework (ACF) to study NGOs' actions in Tripa, because this approach can deal with a complicated policymaking environment which contains multiple actors and levels of government, which produces decisions despite high levels of uncertainty, and which takes years for policy changes (Sabatier, 1987).

ACF focuses on 'subsystems' or 'policy areas'. These are issue-specific networks of stakeholders (Sabatier, 1987). Within a subsystem, stakeholders aggregate into different 'advocacy coalitions'. Each of them is 'composed of peoples from various organisations who share a set of normative and causal beliefs and who often act in concert' (Sabatier, 1987: 652). Coalitions compete with others to dominate the policy making subsystem. They learn from policy implementation through the lens of their beliefs, selectively interpreting information and using it to exercise power. This political battle takes place within the wider real world. The 'relative stable' external factors, such as the cultural values and social structure, and the basic constitutional structures, describe the overall playing field. In turn, the 'external events', such as socio-economic changes, changes in government, or decisions in other subsystems, act in two ways. On the one hand, they prompt a coalition to revisit its policy core belief, strategies and actions, following the realisation by its some of its constituencies that the previous approach was not adequate to attain the desired policy change. This process is referred as 'policy-oriented learning'. On the other hand, it provides opportunities for a coalition to use the event to reinforce its position within the subsystem, largely by demonstrating that its belief system is best to solve the initial policy issue (Sabatier, 1987; Sabatier, 1988).

We investigated Tripa from the post-tsunami reconstruction in 2004 to 2018, and we analysed it as a case within the Indonesian forest subsystem, composed of the actors with an interest in the case at the local, provincial, national, or international levels (Fig. 2). We then assessed how these stakeholders aggregate into different advocacy coalitions. Furthermore, we detailed the contextual factors, with its stable and changing elements. Finally, we analysed how NGOs' coalition was

able to grasp external events to gain strategic advantages, adapt by revising its policy core belief, and finally impose its belief system.

The data are obtained from three main sources. First, we accessed information from in situ observation, as one of us was a staff member of one of the conservation NGOs involved from October 2006 to December 2011. The work included quarterly field visit in Tripa to engage with stakeholders: oil palm smallholders from the transmigration programme, head of Nagan Raya district, local senator of the west coast of Aceh, traditional leaders and members of communities affected by oil palm plantations, in particular from Kuala Seumayam. It also involved regular discussions with organizations from provincial to international scope, such as research centres (World Agroforestry Centre/ICRAF), environmental NGOs (PanEco, Greenpeace), social NGOs (WALHI, Yayasan Ekosistem Lestari-YEL) governmental institutions (BPKEP, Ministry of forestry at district and national level), and media. Then, we conducted semi-structured interviews with seven stakeholders from November 2011 to November 2014: Greenpeace, Leuser International Foundation, the Forestry Ministry at national level, PanEco Foundation, the local Senator on West coast of Aceh, Sumatran Orangutan Society (SOS) and YEL. Finally, we conducted Internet-based research between January 2012 and January 2018 to access reports, press releases and web pages from the stakeholders.

3. Results and discussion

3.1. Origin of the policy area in Tripa and the advocacy coalitions

Long-established international NGOs, such as WWF or PanEco, have traditionally focused on Sumatran orangutan conservation, rescuing individuals, providing them with care in quarantines and reintroducing them back into the wild. These organisations operate under a Memorandum of Understanding (MoU) with the Ministry of Forestry, defining their scope of action, which should be in support of Indonesian governmental operations. Even if the organisations perfectly understand that the pressure on orangutans is due to deforestation engineered by the very same ministry, they are extremely cautious. They avoid any frontal critique of Indonesian institutions as the Ministry of Forestry could prevent them from operating either by suspending their MoU or by cancelling work permits for foreigners. As a result, NGOs initial critiques were limited to some publications on orangutan trends due to deforestation in international academic journals, predicting extinction (Wich et al., 2003). They had little impact on the ground in Indonesia.

However, the NGOs started changing their attitude when they saw that the large-scale palm oil companies were starting their operations after the peace, while Tripa forest was naturally regenerating prior to that (PanEco and YEL et al., 2008). This was happening at the same time as the post-tsunami rehabilitation plan for Aceh. The destruction of Tripa ran against one of the objectives of the plan, which included establishing a protective green coastal belt (Indonesia, 2005). Moreover, the palm oil concessions in Tripa were also contravening many state policies and the Aceh governor's attempt to manage its forest sustainably. The governor and the BRR had gone even further in Tripa by providing supporting letters in favour of PanEco's project 'Restoration and protection of the last coastal peat swamp rainforests on the West coast of Aceh as an integral component of Aceh reconstruction, economic development and coastal security' to rehabilitate the area, which was ultimately turned down by the Indonesian state.

International NGOs, concerned by the protection of orangutans, felt that their concerns had been neglected in the post-tsunami reconstruction process. Their dissatisfaction with the *laissez-faire* approach, dominant in the forest Indonesian forest policy, became so intense that they created a policy area (or sub-system) in Tripa around the issue of the fate of these forests. In this sub-system, they built a 'Forest conservation coalition' with organisations that shared the policy core belief of 'forest conservation for biodiversity'. Initially, their pool of supporters was rather limited, counting some NGOs, a small number of

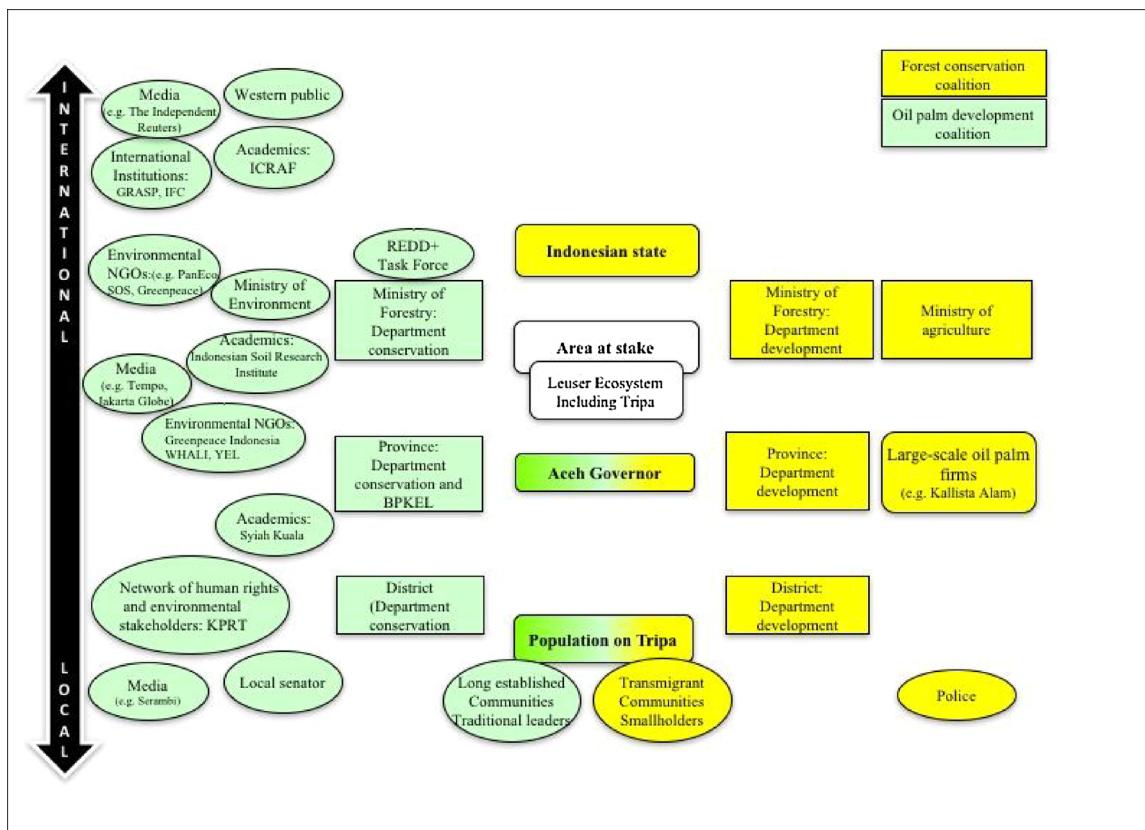


Fig. 2. stakeholders involved in Tripa forest policy.

(Source: authors)

international journalists and a global public concerned with the plight of the orangutans, as well as the national Department of Conservation, which was largely powerless as it depended hierarchically on the Ministry of Forestry. In short, this coalition was narrow, albeit well connected at the international level, politically weak and poorly rooted in Indonesia (Fig. 2, actors in green).

Not everyone agrees on conservation, and the ‘forest conservation coalition’ opposed to an ‘oil palm development’ coalition built around the policy core value of ‘forest conversion for economic development’ supported by mainstream Indonesian forest policy. This second coalition shares the normative belief that agricultural expansion is needed for Indonesian society. According to, this coalition uses strategies and actions to facilitate palm oil expansion over Tripa. This coalition regroups large-scale growers, various levels of the public administrations, politicians from the central government, and local people, especially the transmigrants, who benefit from the plantations (Fig. 2, actors in yellow). A key feature of these two coalitions is that their policy core values are mutually exclusive making a negotiated agreement unlikely (Sabatier, 1987).

3.2. Stable context and events affecting Tripa

The significance of the stable Indonesia forest policy was assessed for Tripa. We analyse the stable parameters that constrain the actors and explain why land use policy favours the conversion of forests against their conservation. Then we examine the events that both forced NGOs to revise their policy core belief and allowed NGOs to gain political advantage. These events are the rising political importance of the climate change issue, the emergence of digital technologies, the change of governor, and the peace building in the post-tsunami context.

3.2.1. Stable context in Tripa

In Aceh, forest land governance appeared to be directly affected by governmental decisions: palm oil plantations are long-term governmental leases, so is the Leuser Ecosystem, created by an executive decree. Furthermore, a nexus between political elites, different levels of administration and economic interests dominate the forest and palm oil sectors. Political power is highly centralised and large companies build on administrative support to expand plantations at the expense of communities who have little, if any, political power to voice their concerns. Overall, the state has pursued a consistent policy favouring extraction over conservation for decades: oil palm plantations lie at the core of its long-term economic plan (2005-25) (BAPPENAS, 2004). In addition, basic legal structure and their practical implementation favour economic interests over forest conservation. As such, third parties cannot access contracts between the state and the palm oil producers, on the grounds that they are private agreements, preventing NGOs or communities from obtaining the information needed to build legal cases. There exist many agricultural regulations to prevent oil expansions on forest, and especially on peat swamp forests. But, requirements are rarely implemented, with companies not usually punished for noncompliance.

3.2.2. Events impacting on the stability of Tripa: technology, climate change, governorship, and tsunami

Firstly, since 2005, forests have entered into the debates on climate change as a major issue. The *Stern Review on the Economics of Climate Change* (2006) hinted that deforestation, almost exclusively in the Tropics, may be responsible for as much as 18% of carbon dioxide emissions. A new mechanism called Reduced Emissions from Deforestation and Forest Degradation (REDD) under the United Nations Framework Convention on Climate Change (UNFCCC) emerged, where tropical countries would be financially rewarded for conserving carbon

in their forests and soils. REDD became a central topic of the climate negotiation in Bali in 2007. During the Climate Conference in Copenhagen in 2009, Indonesia pledged to reduce its greenhouse gas emissions by 26% by 2020 on its own, and by 40% with assistance. Most of Indonesian efforts would come from halting deforestation and oil palm plantations on peat lands, as these plantations release huge amounts of greenhouse gasses from the drained peat and peat fires. The Government of Norway pledged one billion USD to support Indonesia in implementing REDD. As a result, the President of Indonesia issued the Instruction No. 10/2011 (also known as the moratorium), which forbids the granting of new concessions on primary forests or peat lands. The central Government created a map showing areas where new concessions could not be granted, including the lands in Tripa that had not yet been allocated to palm oil production. It also established a special REDD + Task Force, reporting directly to the President, with an aim to create an institutional and legal framework for REDD + (REDD et al., 2016).

Secondly, new technologies have emerged in the last two decades, allowing actors to access increasingly accurate data on remote areas. With satellite imagery, NGOs can access near-instantaneous and accurate information on forest cover and fire hotspots¹, and therefore deforestation trends. Combining field assessment on peat depth and carbon stock in forests with digital mapping, they can also model carbon dioxide emissions relevant to the debate on climate. Technologies also allow actors to inexpensively disseminate knowledge, both locally and internationally, through the Internet and social media.

Thirdly, the first democratic provincial elections in Aceh led to a major change in the Government linked with the new political arrangement between the state and the province. In 2006, Yusuf Irwandi was elected for a five-year term. Ex-commandant of the GAM, trained as a veterinarian, the new governor was sensitive to wildlife conservation. He had previously worked for the British NGO Fauna & Flora International in Aceh. Interpreting the peace agreement in a radical manner, Irwandi considered that all forests were natural resources, and as such, under Aceh's sole control and ownership. He took some bold resolutions to implement this interpretation, establishing the Agency to Manage the Leuser Ecosystem (*Badan Pengelola Kawasan Ekosistem Leuser -BPKEL*), which challenged the central Government's authority in managing the Leuser ecosystem, including the Gunung Leuser National Park. He also issued a moratorium on logging primary forest (*Instruksi Gubernur NAD 5/2007*), created a team to develop a sustainable forest management plan (Strategic forest plan for the development of Aceh) and published an overall vision (Aceh Green) for sustainable resource management. These decisions relied on the assumptions that Aceh could receive sustainable funds from international donors for preserving its forests for climate. The governor soon became an iconic forest conservation leader in the UNFCCC conference in Bali in 2007 (Niles, 2007, GCP, 2008). BPKEL signed different agreements between 2008 and 2011 with financial brokers such as *Sustainable Forest Management*, *Global EcoRescue et Floresta*. However, Indonesian central state blocked all REDD + deals as it considered itself responsible as a national government and sole representative in the UNFCCC negotiations and REDD mechanism. Aceh could not even access voluntary funds from private donors, as the long-term fate of the forest remained uncertain for the investors (Niles, 2007). In August 2011, the Aceh governor was running for a second term after five unsuccessful years of searching for funds for forest conservation. Under pressure to show support to locals, he overrode its forest policy and started following the stable Indonesia state policy of converting forest for development (Bachelard, 2012). He signed a permit to the company PT Kallista Alam to establish a new

palm oil plantation of 1,605 ha on the remaining forest in Tripa, justifying its action as support for local economic development (Hidayat, 2012). In April 2012, Irwandi, who was running as an independent, lost the elections for governor to Zaini Abdullah from the Aceh Party, the political party of the defunct Free Aceh Movement (Kendal, 2012).

Finally, the peace and post-tsunami reconstruction context also affected overall forest policy in Aceh and Tripa for very practical reasons: NGOs could gain access to Aceh, which was previously forbidden to them, and participate in the coastline reconstruction process. As such, they could get access to ground information and build trust worth relationships with district leaders and the local population.

3.2.3. NGO building an effective coalition: grasping the event and policy-oriented learning

In the post-tsunami reconstruction, NGOs had to acknowledge that their approach solely focussing on biodiversity conservation was not effective to protect Tripa. They reflected on their practices and operated a strategic reorientation where forests would be conserved for local livelihood. This was a big step forward for NGOs initially focussing on conserving forest as habitat for orang-utans, PanEco's and its local counterpart YEL. Construction of the hospital in Nagan Raya and household next to Tripa is part of this change. The coalition had to revise its core policy to become 'forest conservation for local community well-being' and built new alliances based on his new belief. This overall value was broad and abstract enough to aggregate a large number of actors at various levels. Locally, it involved conservation NGOs concerned by the fate of orangutans, social NGOs that were supporting local communities in the post-tsunami reconstruction process, communities established prior to the plantations, the Department of Conservation within the Ministry of Forestry, BPKEL, the governor's Aceh Green team and researchers. Internationally, this included NGOs, multilateral agencies (UNEP-UNESCO Great Apes Survival Partnership - GRASP, the Biodiversity and Agricultural Commodities Programme (BACP) of the International Finance Corporation (IFC)), journalists and the general public (Fig. 2, actors in green).

These actors share the normative belief that Tripa provides key ecological functions to local people, providing livelihood (food, timber products) and regulating natural events (limiting flooding, storing carbon to prevent climate change). They also generally agree on the idea that replacing forest by oil palm plantations has a dramatic impact on these functions. For them, deforestation will reduce access to food and timber, increase exposure to freshwater flooding and to tsunamis, and contribute to climate change, as Tripa, by far, would become the largest carbon dioxide emitter in Aceh (PanEco and YEL et al., 2008; Tata et al., 2014).

The rising issue of protecting peat forests for climate and the new possibilities offered by technologies were two new events that the NGO coalition quickly grasped to gain political advantage. It allowed them to establish and monitor simple quantifiable causal factors (peat fires, deforestation rates, peat depth) of deforestation and its legality. Environmental NGOs partnered with research institutions (including the World Agroforestry Centre, the Indonesian Soil Research Institute and the University of Syiah Kuala in Banda Aceh) to provide scientific knowledge (Tata et al., 2014) and reports (PanEco and YEL et al., 2008). These led to further investigations, including one financed by the BACP which demonstrated the value of palm oil cultivation on degraded land (Ruysschaert et al., 2011), and one from the Great Apes Survival Partnership (GRASP), a UNEP-UNESCO initiative, assessing the REDD value of Tripa and other Sumatran orangutan habitats (Wich et al., 2011).

NGOs used this knowledge in a strategic way, providing information to local stakeholders, establishing and nurturing the Coalition Team for the Protection of the Tripa Peat Swamps (*Tim Kerja Penyelamatan Rawa Tripa - KPRT*), a network of local human rights and environmental NGOs. They also led an information campaign aimed at the population living around Tripa, including lectures with traditional community

¹ In particular, data for hotspots came from the Fire Information for Resource Management System (FIRMS), a joint programme from Marilyn University and NASA, providing almost-instantaneous locations for fires captured by Terra and Aqua satellites, free of charge, with the ability to detect fires as small as 50m² under pristine conditions.

leaders, with pupils at schools and with the wider community. Communities became aware of the dire consequences of Tripa's destruction on their livelihoods. They built road blocks to protect Tripa and turned against the plantations. In April 2009, local people burned down the field office of the oil palm grower PT Surya Panen Subur II, following a private policeman shooting a local in the leg for trying to enter the estate.

Conversely, internationally prominent social and environmental NGOs based in the United Kingdom and the Netherlands formed a coalition including Greenpeace, Fauna & Flora International, Oxfam and Wetlands International. They questioned the environmental and social responsibility of supply chains actors based in the United Kingdom and the Netherlands. As a result of this, in June 2009, PT Surya Panen Subur II (one of the five plantations in Tripa) made the headlines in a British newspaper, *The Independent*, under the title 'Oil boom threatens the last orang-utans' (Marks, 2009), as the company belongs to the UK-based conglomerate Jardine Matheson. This became a serious media issue in the UK as the Queen had just knighted Jardine Matheson's chairman 'for services to British business interests overseas' (The Guardian, 2009). In addition, the General Assembly of the Roundtable on Sustainable Palm Oil (RSPO), a private global standard association of more than 1400 members, approved PanEco's resolution to classify Tripa as a High Conservation Value Forest, forbidding RSPO members to expand on Tripa.

Overall, the 'Forest conservation coalition' was successful in grasping emerging events monitoring key quantifiable causal factors and communicating them widely. However, the situation remained unchanged, with a state policy favouring forest exploitation over its protection, and governmental institutions (police, ministries) acting as 'brokers' (Sabatier, 1987) to keep the conflict under control, promising to act against the firms, but not stopping them in practice. Worse, palm companies accelerated their expansion on Tripa, burning most of the remaining forest and planting on deep peat (Wich et al., 2011). Jardine Matheson sold its concession to an unknown oil palm grower instead of collaborating with PanEco on a 'Green New Deal' that would combine long-term conservation objectives and short-term economic development.

In 2012, the change of governorship in Aceh provided a new chance for the NGOs to gain strategic advantage and impose their belief system. All this started in August 2011, when the then governor granted a new permit to PT Kallista Alam. The conservation coalition initiated a new strategy by mounting a legal bid against the firm to stop their operations. Leading KPRT, friends of the Earth Indonesia (*Wahana Lingkungan Hidup Indonesia - WALHI*) filed a lawsuit with the provincial Administrative Court in Banda Aceh (Case registration No 19/G/2011/PTUN-Banda Aceh) in November 2011 against the governor and the firm for an illegal permit, in particular because the destruction of the forest was against the Indonesian Moratorium and that the use of fire was forbidden by law. In this crisis context, the coalition evolved towards a policy core belief of 'conserving the forest for climate change'. This evolution allowed them to broaden support, including from the Indonesian central government's special REDD + Task Force. The Task Force undertook its own independent field investigations in Tripa in April 2012. The Task Force found that all of the allegations brought by the NGOs against the companies were true, in terms of illegal use of fire to clear land and on peat with a depth of more than three metres, and subsequently requested the Ministry of Environment and the head of the Indonesian National Police to conduct further investigations, halt these activities, penalise the offenders, and recover ecosystem loss (Chandra, 2012). At the same time, the members of the coalition also adapted strategies and actions with an emphasis on climate issue. As in the previous period, they monitored quantifiable causal factors regarding deforestation linked to climate change, and used them in their reports, such as *Tripa Truths*. They also disseminated the knowledge on forest status widely through a range of social media, including Facebook (www.facebook.com/endoftheicons) and Twitter

(#SaveLeuserEcosystem), press releases, e-newsletters and blogs (<https://endoftheicons.org>). This information was posted on the NGOs' websites, including www.sumatranorangutan.org and www.rainforest-rescue.org, and relayed by mainstream international media including The Washington Post (Associated Press, 2011) and The Guardian (Milman, 2012). The NGOs used the momentum from the gathered support to increase their pressure on the Indonesian state. For example, the patrons of GRASP wrote to the Indonesian Government to take action in Tripa, and a local activist undertook a 'Skydive for Tripa: falling for orangutans'. The timing of this exposure was crucial, as the state's investigations and NGO media campaigns gained momentum just as Yusuf Irwandi lost his position in 2012. This gave the new governor a political opportunity to clear the past by revoking the permit.

The case WALHI brought against PT Kallista Alam at the provincial level was initially unsuccessful. The judge dismissed it, stating the parties had not attempted first to reach an amicable solution. WALHI appealed the decision at the High Court in Medan, in the neighbouring province of North Sumatra. In August 2012, the court ruled in favour of WALHI and instructed the new governor of Aceh to cancel the plantation permit, which he did. The company was found guilty of using fire for deforestation. It was ordered to pay 366 billion IDR (28.2 million USD),² including 114 billion IDR (8.8 million USD) for environmental compensation and 252 billion IDR (19.4 million USD) to restore the environment to its former condition. PT Kallista Alam's appeal at the High Court in the provincial capital of Banda Aceh was rejected in October 2014. It then lodged a final appeal at the Supreme Court of Justice in Jakarta, which was also rejected in August 2015, bringing the long running civil case to an end.

In parallel to the civil case, Aceh police filed criminal cases against PT Kallista Alam, the company's director and the development manager, in November 2013 at the District Court in Meulaboh. In July 2014, the court announced a guilty verdict. The company was fined three billion IDR (230,000 USD), the company's director was sentenced to eight months in prison and fined 150 million IDR (11,500 USD), and the development manager was sentenced to three years in prison and fined three billion IDR (230,000 USD). The company made an appeal, which was rejected, at the High Court in the provincial capital at Banda Aceh.

From there, the Indonesian government mandated a network of Acehnese NGOs supported by YEL/PanEco to restore the area. They are closing the canals, establishing tree nurseries and replanting. At the same time, about 200 ha have been given to local communities for their own livelihoods. Yet, it remains unclear as to whether the fines were paid to the Government.

4. Conclusion

As the Tripa case study showed, social ecological coalition of NGOs can have a decisive impact on land use decision and management. This achievement however required them to engage over a decade in a complex policy-changing environment. Environmental NGOs' overall success was based on four factors: 1) Their capacity to take into account the overall context favouring forest conversion for economic development and grasp four new events: the post-tsunami reconstruction, the emerging connection between forests and climate change, the governors' change, and the use of new Internet-based technologies to gather and disseminate information; 2) Their capacity to recognize failure over their own past actions in this changing context and adapt their behaviour. This was marked by the evolution of their policy core beliefs, from conserving forest for biodiversity to conserving forest for local livelihoods, a belief further modified by framing forest conservation to prevent climate change. As a result, they could broaden their advocacy

² Indonesian Rupiah equals 0,000077 US Dollar in August 2015.

coalition, which grew to include diverse social and environmental actors, as well as partners from local to international levels, including the central state's REDD + Task Force; 3) Their ability to gain an advantage over economic power by acting strategically when changed occurred, which allowed them to gain support from the new governor to cancel the permit granted by the previous one; and 4) The monitoring and disseminating knowledge that supported a simple causal deforestation model (fire events, deforestation trends and peat depth), which allowed a high degree of policy-oriented learning. This, in turn, helped the coalition to modify strategies and act effectively.

The Tripa case indicates that the overall trend of rainforest destruction for large-scale agricultural extension in Southeast Asia, particularly in Sumatra, Indonesia, can be reversed, at least at the local level. Cautious not to overgeneralise, the case demonstrates that NGOs could improve forest governance by engaging in the long term, acting "smart", and building a broad environmental and rights-based coalition from local to international level.

This case also shows that academic research on NGOs' effectiveness over long period of time is needed, especially in the Southeast Asian context. Confronted to the rapid destruction of forest, we need to go beyond the depressing assessment that no much can be done (Dauvergne, 2017). We need to reflect on NGOs' efforts (Larsen, 2016; Ruysschaert and Salles, 2016) and concentrate on the enabling conditions of success for forest conservation policy.

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References

- Antlöv, H., 2003. Village government and rural development in Indonesia: the New Democratic framework. *Bull. Indonesian Econ. Stud.* 39 (2), 193–214. <http://dx.doi.org/10.1080/00074910302013>.
- Associated Press, 2011. Indonesia'S' Green Governor' OKs Plan to Clear Forests That Shelter Orangutans, Tigers, Bears. *Washington Post*, 09 December 2011. Retrieved from. <https://www.washingtonpost.com>.
- Bachelard, M., 2012. Former Aceh Chief Denies Orang-Utans Died in Burn, Banda Aceh. 6 Avril 2012. (Retrieved from. The Sunday Morning Herald). <http://www.smh.com.au/world/former-aceh-chief-denies-orangutans-died-in-burn-20120405-1wff4.html>.
- BAPPENAS, 2004. Tahun 2005-2025 Per 25 Februari 2004. Retrieved from. <http://www.bappenas.go.id/node/42/462/tahun-2005-2025-per-25->
- Chandra, K., 2012. Press Release September 6, REDD + Task Force Hails Medan Court Decision on Rawa Tripa Case, 06 September 2012. Jakarta: Indonesia REDD +. Retrieved from. <http://sumatranorangutan.org/wp-content/uploads/2013/07/sept-6th-2012-REDD+ -Task-Force-Hails-Medan-Court-Decision-on-Rawa-Tripa-Case.pdf>.
- Colchester, M., Jiwan, N., Andiko, Sirait, M., Firdaus, A., Surambo, A., Pane, H., 2006. Promised Land. Palm Oil and Land Acquisition in Indonesia: Implications for Local Communities and Indigenous Peoples. Forest Peoples Programmes, Sawit Watch, HuMa and World Agroforestry Centre, Moreton-in-Marsh, United Kingdom.
- Contreras-Hermosilla, A., Fay, C., 2005. Strengthening Forest Management in Indonesia Through Land Tenure Reform: Issues and Framework of Action. p. 47. (Retrieved from. Forest Trends, Washington D.C., USA. http://www.forest-trends.org/documents/files/doc_107.pdf).
- Dauvergne, P., 2017. Is the power of brand-focussed activism raising? The case of tropical deforestation. *J. Environ. Dev.* 26 (2), 135–155.
- Gautier, D., Benjaminse, T., 2012. Introduction à la political ecology. In: Gautier, D., Benjaminse, T. (Eds.), *Environnement, Discours Et Pouvoir. L'Approche Political Ecology*. Quae, Versailles, France p. 5-20.
- GCP, 2008. Forest Now in the Fight Against Climate Change. Retrieved from. Global Canopy Programme, Oxford, UK. http://thereddesk.org/sites/default/files/resources/pdf/2009/Forests_Now_version_4.pdf.
- Hidayat, F., 2012. Former Aceh Governor's Story About the Permit. *Globe journal* 18 July 2012. (Retrieved from. <http://www.smh.com.au/world/former-aceh-chief-denies-orangutans-died-in-burn-20120405-1wff4.html>).
- Indonesia, 2005. Master Plan for the Rehabilitation and Reconstruction for the Region and People of the Provinces of Nanggroe Aceh Darussalam and Nias Island, North Sumatra (Retrieved from. Presidential Decree of the Republic of Indonesia, Jakarta, Indonesia). http://www.recoveryplatform.org/assets/submissions/200909020450_master_plan_for_reconstruction_government_of_indonesia_tsunami.pdf.
- Kendal, E., 2012. Aceh, Indonesia: New governor advance islamisation. Religious Lib. Prayer Bulletin 159 (May), 16 2012. (Retrieved from <http://www.ea.org.au/ea-family/Religious-Liberty/NEW-GOVERNOR-IN-ACEH-INDONESIA-ADVANCES-ISLAMISATION>).
- Larsen, P., 2016. The good, the ugly and the dirty harry's of conservation, rethinking the anthropology of conservation NGOs. *Conserv. Soc.* 4, 21–33.
- Laumonier, Y., Uryu, Y., Stüwe, M., Budiman, U.A., Setiabudi, B., Hhadian, O., 2010. Eco-floristic sectors and deforestation threats in sumatra: identifying new conservation area network priorities for ecosystem-based land use planning. *Biodivers. & Conservation* 19, 1153–1174. <http://dx.doi.org/10.1007/s10531-010-9784-2>.
- Margono, B.A., Potapov, P.V., Turubanova, S., Stolle, F., Hansen, M.C., 2012. Primary forest cover loss in Indonesia over 2000–2012. *Nat. Clim. Change* 4, 730–735. <http://dx.doi.org/10.1038/nclimate2277>.
- Marks, K., 2009. Oil Boom Threatens the Last Orang-Utans. 23 June. The Independent. Retrieved from. <http://www.independent.co.uk/environment/nature/oil-boom-threatens-the-last-orang-utans-1714157.html>.
- McCarthy, J., 2000. The changing regime: Forest property and reformasi in Indonesia. In: Doornbos, M., Saith, A., White, B. (Eds.), *Forests: Nature, People, Power*. Blackwell Publishers, Massachusetts, USA, pp. 89–127.
- Miettinen, J., Hooijer, A., Chenghua, S., Tollenaar, D., Vernimmen, R., Chin Liew, S., Mallins, C., Page, S., 2012. Extent of industrial plantations on Southeast Asian peatlands in 2010 with analysis of historical expansion and future projections. *GCB Bioenergy* 4, 908–918. <http://dx.doi.org/10.1111/j.1757-1707.2012.01172.x>.
- Miettinen, J., Shi, C., Liew, S.C., 2011. Deforestation rates in insular Southeast Asia between 2000 and 2010. *Glob. Change Biol.* 17 (7), 2261–2270. <http://dx.doi.org/10.1111/j.1365-2486.2011.02398.x>.
- Miettinen, J., Shi, C., Liew, S.C., 2016. Land cover distribution in the peatlands of Peninsular Malaysia, Sumatra and Borneo in 2015 with changes since 1990. *Glob. Ecol. Conserv.* 6, 67–78. <http://dx.doi.org/10.1016/j.gecco.2016.02.004>.
- Milman, O., 2012. Fires Threaten to "Extinguish" Critical Indonesian Orangutan Population, The Guardian 29 June 2012. Retrieved from. <http://www.theguardian.com>.
- MacKinnon, j., 1982. National Conservation Plan for Indonesia Vol. 1: Introduction, Evaluation Methods and Overview of National Nature Richness. FAO, Bogor, Indonesia.
- Niles, J., 2007. It's Not Easy Being Green in Aceh, Indonesia. Forest Trends. Retrieved from. <http://www.forestcarbonportal.com/news/its-not-easy-being-green-aceh-indonesia>.
- Nowak, M., 2014. A Field Survey of the Tripa Peatswamps. PanEco Foundation/YEL, Medan, Indonesia.
- PanEco, YEL, 2008. How Palm-Oil Plantations Increase Disaster Risk, Contribute to Climate Change and Drive a Unique Sumatran-orangutan Population to Extinction: Value of Tripa. Retrieved from. PanEco/ YEL, Medan, Indonesia. <http://www.sumatranorangutan.org/wp-content/uploads/2013/07/Value-Tripa-15-Nov08.pdf>.
- Putri, N., 2008. Building a State, dispossessing the nation: sovereignty and Land dis-possession in Indonesia. In: 48th Annual Convention of the International Studies Association, Chicago, 28 February–3 March 2008. Retrieved from. http://citation.allacademic.com/meta/p_mla_apa_research_citation/1/7/9/0/5/pages179053/p179053-1.php.
- REDD, 2016. The REDD Desk. A Collaborative Resource for REDD Readiness. REDD + Task Force Indonesia. Retrieved from. <https://thereddesk.org/countries/actors/redd-task-force-indonesia>.
- Ruysschaert, D., 2013. Le rôle des organisations de conservation dans la construction et la mise en œuvre de l'agenda international de conservation d'espèces emblématiques. Doctorat de sociologie. Retrieved from. Université Jean Jaurès, Toulouse, France. <http://www.theses.fr/2013TOU20078>.
- Ruysschaert, D., Darsoyo, A., Zen, R., Gea, G., Singleton, I., 2011. Developing palm-oil production on degraded land. Retrieved from. PanEco, YEL and World Agroforestry Centre, Medan, Indonesia. <https://www.ifc.org/wps/wcm/connect/adf573004aa88852cdf998895a/BACP-PanEco.Developing-degradedland-report.pdf?MOD=AJPERES>.
- Ruysschaert, D., Singleton, I., Sudarman, S., 2009. Inappropriate land use in the coastal Tripa peat swamps on the West coast of Aceh. Icone Conference, 1-5.
- Ruysschaert, D., Salles, D., 2016. The role and effectiveness of conservation NGOs in the global voluntary standards: the case of the Roundtable on sustainable palm-oil. *Conserv. Soc.* 14 (2), 73–85.
- Sabatier, P., 1987. Knowledge, policy-oriented learning, and policy change. An advocacy coalition framework. *Knowl.: Creation Diffusion Utilisation* 8 (4), 649–692.
- Sabatier, P., 1988. An advocacy coalition framework of policy change and the role of policy-oriented learning therein. *Policy Sci.* 21 (2/3), 129–168.
- Tata, H., Van Noordwijk, M., Ruysschaert, D., Mulia, R., Rahayu, S., Mulyoutami, E., Widayati, A., Ekadina, A., Zen, R., Darsoyo, A., Oktaviani, R., Dewi, S., 2014. Will funding to reduce emissions from deforestation and (forest) degradation (REDD++) stop conversion of peat swamps to oil palm in orangutan habitat in Tripa in Aceh, Indonesia? Mitig. Adapt. Strateg. Glob. Chang. 19, 693–713. <http://dx.doi.org/10.1007/s11027-013-9524-5>.
- The Guardian, 2009. Queen's birthday honours list. The Guardian 13 June 2009. Retrieved from. <https://www.theguardian.com/uk/2009/jun/13/queens-birthday-honours-list-obe>.
- Wich, S., Meijaard, E., Marshall, A.J., Husson, S., Ancrenaz, M., Lacy, R.C., Van Schaik, C.P., Sugardjito, J., Simorangkir, T., Traylor-Holzer, K., Doughty, M., Supriatna, J., Dennis, R., Gumal, M., Knott, C.D., Singleton, I., 2008. Distribution and conservation status of the orangutan (*Pongo spp.*) on Borneo and Sumatra: how many remain?

- Oryx 42, 329–339.
- Wich, S., Riswan, Z., Jenson, J., Refisch, J., Nellemann, C. (Eds.), 2011. Orangutans and the Economics of Sustainable Forest Management in Sumatra. GRASP/ YEL/ ICRAF/ GRID-Arendal, Trykkeri, Norway.
- Wich, S., Singleton, I., Utami, S., Geurts, M., Rijksen, H., Van Schaik, C., 2003. The status of the Sumatran orang-utan pongo abelii: an update. Oryx 37, 49–54.
- Wrangham, R., 2002. Changing policy discourses and traditional communities, 1960–1990. A review. In: Colfer, C., Resosudarmo, I. (Eds.), Which Way Forward? People, Forests, and Policymaking in Indonesia. Resources for the Future. Center for International Forestry Research (CIFOR) and Institute of Southeast Asian Studies (ISEAS), Washington D.C, USA p.161-190.
- WWF, 2010. Sumatra's Forests, Their Wildlife And The Climate. WWF Indonesia, Jakarta, Indonesia (Retrieved from http://assets.worldwildlife.org/publications/752/files/original/Sumatra's_forests_report_2010.pdf?1418397465&ga=1.173194467.1393362542.1491295922).
- YEL, 2012. Current Status of Tripa Peat Swamp Destruction and Fires. An Emergence Report prepared for the Coalition to Save Tripa and Partners. By Yayasan Ekosistem Lestaria, Medan, Sumatera Utara. 27 March 2012.