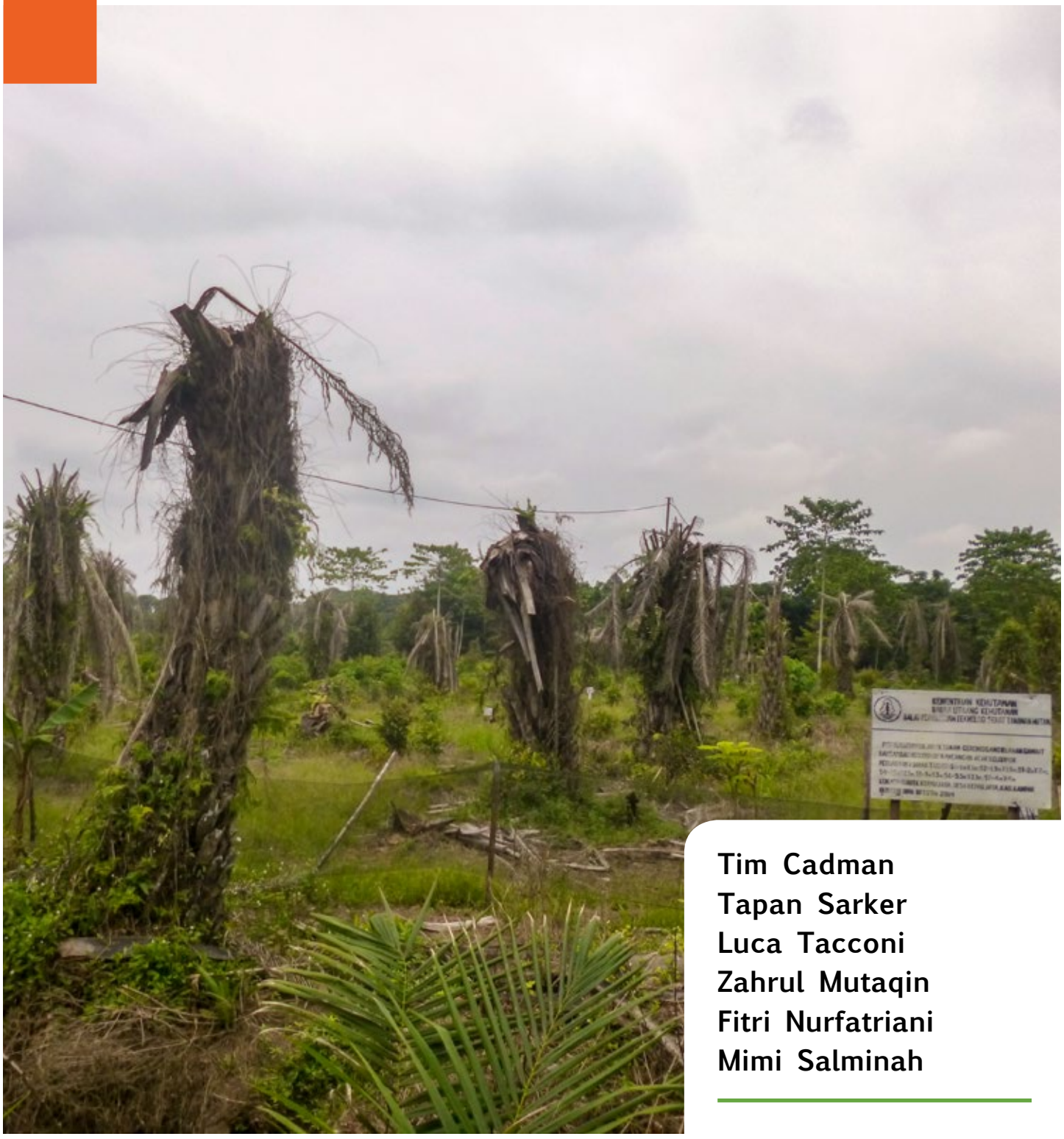
Making palm oil sustainable and inclusive: incentives and disincentives in Indonesia



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"Beyond certification, broader institutional approaches can be adopted to manage resources more sustainably."

Introduction

This article investigates the impacts of palm oil on the economic development of smallholder communities and deforestation in Indonesia, based on a review of academic research and interviews conducted by the authors in 2016. Increased forest conversion was a consequence of government efforts to alleviate rural poverty through increased commodity production, exacerbated by the designation of palm oil as a priority industry, and a new crude palm oil fund to increase domestic bio-diesel production. Certification was, however, largely unsuccessful in reducing forest loss, and may even have made matters worse (Carlson et al. 2018). Also, government, industry and NGO interviewees said that the rainforest logging ban of 2000 made it difficult for other sectors to compete. So, prospects for a sustainable palm oil industry will remain limited unless governance is improved and barriers to smallholder participation in sustainability certification are reduced.

Background to palm oil issues in Indonesia

Indonesia is the world's largest producer of palm oil, with rural production encouraged in the 1980s and 1990s as part of a 'transmigration' programme of relocating people to less densely-populated regions. Initially this involved direct subsidies to smallholders who were allocated farmland, later becoming supply-partnerships directly with companies (Euler et al. 2016). Palm oil experienced a further boom in the 2000s notably in Sumatra, with smallholder expansion almost double that of private companies (Bissonnette 2016). Subsequently, smallholders have continued to expand outside of concessions and without formal supply contracts, resulting in a sector that exists largely outside any form of governmental control (Euler et al. 2016).

Although palm oil production is still dominated by large-scale industrial enterprises, the smallholder contribution rose from 33% to 42% between 2010 and 2015, when the total area of cultivation expanded from 4.7 to 11.3 million hectares. Smallholder expansion has not come at the expense of existing farmland, however, but through encroachment into forests and peatlands. This is cheaper than replanting (Hutabarat et al. 2018), especially for local communities who have access to communal forests, but not for those granted land under transmigration programmes (Euler et al. 2016).

A major problem when establishing oil palm in Indonesia is the use of fire for land clearing. It was estimated that the 1997 fires generated up to 2.7 gigatonnes of CO2 and cost US$2.8 billion, whereas the 2015 fires cost more than US$16 billion (Watts 2018, in press). Intergovernmental environmental policy instruments like REDD+ for reducing emissions under the UN Framework Convention of Climate Change are important mechanisms for combatting deforestation and conserving biodiversity, but REDD+ has generally been unable to outcompete palm oil as a land-use option. Consequently, combatting deforestation requires more complex policy responses than simply paying farmers to not clear land, as this is unlikely to be effective (Cacho et al. 2014).

There have been two primary initiatives to increase sustainability in Indonesia. The voluntary Roundtable on Sustainable Palm Oil (RSPO) includes industry and NGOs in a multi-stakeholder development process and certification scheme. But uptake amongst smallholders is low due to high certification costs and market penetration

Degraded peatland area within Katimpun village forest, Central Kalimantan. Photo by: Faridh Hamdani

is low even though the EU and others are committed to purchase only from certified sources. The scheme's credibility has also been challenged by accusations that despite being voluntary, very few growers have been expelled for poor practices. In response, the Indonesian government developed Indonesian Sustainable Palm Oil (ISPO) in 2011, its own compulsory scheme tied to state environmental regulations, but it is less multi-stakeholder and has less stringent sustainability criteria such as not excluding forest conversion (Bissonnette 2016).

However, the extent to which national government can intervene in countries like Indonesia is uncertain, given a perceived lack of political vision, institutional capacity, and resource constraints. And for corporate producers there is no imperative to change, given their market dominance, vertical integration, and the lucrative nature of existing arrangements. In this regard, palm oil has similar features to the timber and rubber commodity sectors and incentives are needed to overcome these barriers (Jelsma et al. 2017).

Analysis of challenges facing smallholders

Oil palm has been hailed as a potential saviour for impoverished rural communities, but researchers question the economic benefits due to high input costs and lack of technical capacity. Environmental degradation has also resulted from using fire for land-clearing and pollution from mill processing and chemical use. Furthermore, land-grabbing by private companies has resulted in the alienation of community land (Bissonnette 2016). Although adoption of palm oil cultivation may not be more lucrative than existing activities, indirect gains still encourage adoption so expansion is likely.

Some smallholders have certainly benefitted, but results have been uneven. Palm oil as a main income source can be problematic and increase vulnerability to poverty. Those without contractual ties are less exposed to market shocks, having more diversified sources of income. The claim that palm oil has alleviated smallholder poverty is not clear cut, as some benefit from high prices when the market is good but experience poverty during downturns. This has led some to

Participatory planning process to manage ecosystem services at Katimpun village forest. Photo by: Faridh Hamdani

recommend that contractual arrangements between smallholders and companies must be reassessed to ensure they meet the poverty alleviation agenda purported to be the main objective of encouraging palm oil (Cahyadi and Waibel 2016).

Consumer demand for improved sustainability and social and environmental performance has placed smallholders in a difficult position where they must navigate their way through a range of public and private standards (Jelsma et al. 2017). Independent smallholders find RSPO certification onerous in terms of compliance regarding land tenure, chemical and fertilizer use, and the complexities of the process itself (Brandi et al. 2015), and certification does not reduce dependency on market conditions or guarantee improved prices.

There is also little evidence that government certification schemes lead to livelihood improvements for smallholders. Although ISPO certification is technically not compulsory for smallholders, it is, effectively, as many supply large companies require it. This has led to a patchy adoption, with 40-60% uptake depending on numbers of practices adopted. IPSO is also not reaching some smallholders, leading to suggestions for more effort to encourage uptake through awareness-raising (Ernah, Parvathi and Waibel 2016). And as one commentator pointed out, "smallholders do not eat certificates" (Glasbergen 2018).

Industry perspectives

Other macro-economic barriers mitigate against alternatives to palm oil. Interviews in 2016 of 35 government, private, and NGO actors revealed the existence of subsidies to maintain the price of palm oil, an option which does not exist for forest concessions. The agency for palm oil plantation fund management (Badan Pengelola Dana Perkebunan Sawit) collects payments from companies based on an export price of US$20-50 per tonne. This fund covers a range of activities, with grants provided to smallholders for planting and maintenance of up to 4 ha per household, which can also be aggregated into community groups of up to 300 ha. Producers sell biodiesel to the government oil and gas company (Pertamina), and in 2016, three million kilolitres of crude palm oil were used as biodiesel under the twin

justification of maintaining price stability and preventing carbon emissions. The diesel price in world markets is currently around IDP3,000 (US$0.20) per litre, while crude palm oil is around IDP 8,000 (US$0.56) with the difference subsidized through the fund.

One interviewee explained that some people view the fund as a trigger of forest conversion as it supports oil palm expansion, notwithstanding measures that companies had in place to prevent this. Another explained how existing arrangements were an incentive for oil palm over forestry, because once a company harvests timber, it must replant, and that requires payment of taxes, but with oil palm, companies take the fruit but don't have to pay tax. Also, forest companies are obliged to follow the annual and ten-year plans of the Ministry fo the Environment and Forests, whereas palm oil under the Ministry of Agriculture does not follow such planning cycles. Together, these act as incentives for oil palm conversion, and that it was declared a priority industry by the government led one NGO to conclude that "this makes oil palm oil number one, with other sectors like natural forests a far distant third."

Different sectors are in competition regarding forest management, further impacting their ability to compete with oil palm. Natural forest concession holders noted that they were at a disadvantage to timber plantation concessionaires. One said: "In plantation forests there are opportunities for collaborative forest management, less so in natural forests. Though we still pay, but plantation companies have more latitude" and a certification body representative concurred, noting that "there are a lot more burdens on natural forest operations." Local communities also saw natural forests as 'customary land' and expected to be able to garner 'windfall profits', but did not see plantations in the same way. But other interviewees disputed this. However, there was some consensus regarding the unhealthy competition between concessionaires producing plantation roundwood, and palm oil and paper pulp-producing companies.

Logging concessionaires universally saw the log export ban as having extremely negative impacts on their industry, introduced merely "to appease international consumers" according to one concession holder. The consequence however, was that plantation roundwood was also banned "to create equality in the market with natural forest logs" and became a "lose-lose situation" for plantation companies processing roundwood, who said that "only pulp companies benefit". This interviewee talked of ministerial discussions on a partial lifting of the ban in return for reduced impact logging and good performance but that major players had prevented this because "they wanted to control the market and the price". According to another natural forest concession holder, the logging ban generated a series of macro-economic problems, the consequence being "there is just no investment". The view that bans did not work, was expressed by one government interviewee who noted that "there are problems with imposing moratoria as a policy approach. In Aceh for example, logging was stopped, but logs are still coming out. There needs to be consideration for livelihoods of local people, or there will be no change."

Non-extractive concessionaires noted that they were at a disadvantage to logging concession holders. One explained that "current taxes and fees are working against us.", with the problem being "multiple applications for license fees." If a particular ecosystem services market collapsed, such as carbon or REDD+, and they opted for something new, they were obliged to re-apply for a new permit for the new activity. They did not understand why they had to pay multiple permit fees, but were also clear that "other people working with REDD+ are dealing with similar problems."

Conclusions and recommendations

Most agree that palm oil cultivation is a profitable activity and as such is likely to expand, and has greater carbon storage potential than annual cropping (Sayer et al. 2012). Despite this, negative impacts on biodiversity combined with a history of encroachment into natural forest

and peatland, especially in Indonesia, have resulted in considerable resistance from social and environmental activists. Researchers also note that ongoing expansion of palm oil production by smallholders as well as corporations raises questions concerning the degree to which current governance and regulatory frameworks address sustainability issues.

Efforts to increase social and environmental sustainability of palm oil production in Indonesia have resulted in the development of mandatory and voluntary systems by state and non-state actors. However, the scale of cultivation, the broad range of actors and limited state capacity has made enforcement of environmental regulations difficult. Investigations by the authors in 2016 indicated that in addition to barriers faced by smallholders, there are structural and fiscal barriers to developing viable alternatives at scale. In addition, the logging ban has also made forest management less attractive, with the perverse consequence of encouraging further oil palm expansion.

Encouraging the implementation of payments for ecosystem services schemes might encourage behavioural change, but research results are mixed. Creating incentives for farmers by providing financial rewards to maintain traditional agricultural practices had some success, but assisting farmers to comply with environmental legislation rather than forcing them had a greater likelihood of success. In addition, providing employment for local communities in forest, carbon, and ecosystem restoration concessions is important, and crucially, sharing the benefits that arise from payments for ecosystem services. Rethinking certification models is thus essential, emphasizing landscape-level initiatives and standards rather than single commodities, and focusing on genuine stakeholder partnerships, and recognizing the need to help smallholders address their livelihood challenges.

Beyond certification, broader institutional approaches can be adopted to manage resources more sustainably. Assessing how smallholder systems are organized and developing good governance arrangements will allow improved smallholder access to supply chains and encourage higher productivity on existing areas so reducing further encroachment (Jelsma et al. 2017). Institutional design principles are also important and related work on common pool resources has been helpful (Ostrom 1990). But arrangements need to go beyond purely functional and mechanistic ones, and recognize social issues such as increasing participation and empowering collective action. Good governance can also contribute to reducing conflicts between smallholders and companies that arise from uneven power relations, lack of transparency, absence of free, prior and informed consent, and unequal benefit sharing, all aggravated by unclear land tenure.

Beyond these arrangements, broader societal behaviour changes in consumer countries would help to ensure that palm oil production occurs on a more sustainable and equitable basis. Given that palm oil will continue to expand, maximising benefits while minimizing negative outcomes requires alternative production methods that focus on ecologically and socially sustainable development.

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This paper was submitted for inclusion in the forthcoming edition of **ETFRN News 59 - Exploring inclusive oil palm production**, due for release in early 2019. This will contain 20 papers plus interviews, presenting examples of innovative and inclusive palm oil production systems. It will assess what has not worked, but importantly, it will analyse what positive practices and policies have worked for more inclusive palm oil production and why, as we strive towards more collective and sustainable solutions to this apparently intractable problem.

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Cover photo: Drained peatland encroached by oil palm at Kepau Jaya research forest, Riau Province. Photo by: Zahrul Muttaqin

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