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Improving Land Productivity through Fiscal Policy: Early Insights on Taxation in the palm oil supply chain

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A CPI Report

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Climate Policy Initiative is a team of analysts and advisors that works to improve the most important energy and land use policies around the world, with a particular focus on finance. An independent organization supported in part by a grant from the Open Society Foundations, CPI works in places that provide the most potential for policy impact including Brazil, China, Europe, India, Indonesia, and the United States.

Our work helps nations grow while addressing increasingly scarce resources and climate risk. This is a complex challenge in which policy plays a crucial role.

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Acronyms

APBN	<i>Anggaran Pendapatan Belanja Negara</i> (Indonesian state budget)
BLU	<i>Badan Layanan Umum</i> (special public services agency established by the Ministry of Finance to manage the funds outside of the state budget system)
CPO	Crude Palm Oil
CPKO	Crude Palm Kernel Oil
CSPO	Certified Sustainable Palm Oil
FFB	Fresh Fruit Bunches
HGU	Business use rights license
IPOP	Indonesia Palm Oil Pledge
ISPO	Indonesian Sustainable Palm Oil system
NJOP	<i>Nilai Jual Objek Pajak</i> (Tax Object Sale Value)
NJKP	<i>Nilai Jual Kena Pajak</i> (Taxable Sale Value)
NJOPTKP	<i>Nilai Jual Objek Pajak Tidak Kena Pajak</i> (Non-Taxable Sale Value)
NPOP	<i>Nilai Perolehan Objek Pajak</i> (Tax Object Purchase Value)
NPOPTKP	<i>Nilai Perolehan Objek Pajak Tidak Kena Pajak</i> (Non-Taxable Purchase Value)
PPh	Income Tax
PBB	Land and Buildings Tax
BPHTB	Land and building tax buyer's tax
PPh-BB	Land and Buildings Seller's / Income Tax
PPN	Value Added Tax
R&D	Research and Development
RSPO	Roundtable on Sustainable Palm Oil
WPOPDN	Individual income tax

Executive Summary

As the world's leading producer, palm oil makes a significant contribution to Indonesia's economy in the form of tax and export revenues as well as employment and infrastructure development. However, oil palm is also one of the leading drivers of deforestation and associated greenhouse gas (GHG) emissions in Indonesia, contributing to Indonesia's position as the third largest global GHG emitter, and threatening the nation's target to reduce emissions by 26% by 2020. The Indonesian government aims to increase palm oil production levels by 50% between 2013 and 2020 and land already licensed for production could fulfill these goals, avoiding use of additional, high ecosystem value land, but to be sufficient, sharp improvements in productivity are required as well as efforts to bring degraded lands back into production.

Fiscal instruments can help to restrict land expansion and support more sustainable business models. Tax revenue could be used to compensate for environmental externalities of the industry, for example the removal of public natural resources (forests) and resulting GHG emissions, and to fund schemes to reduce those impacts or fund forest protection schemes elsewhere. In addition, taxes can be used as a policy instrument: affecting the producer's bottom line, taxes can be used to encourage particular behaviors. On the other hand, if not well designed, there is a risk that fiscal policies can encourage undesired behaviors.

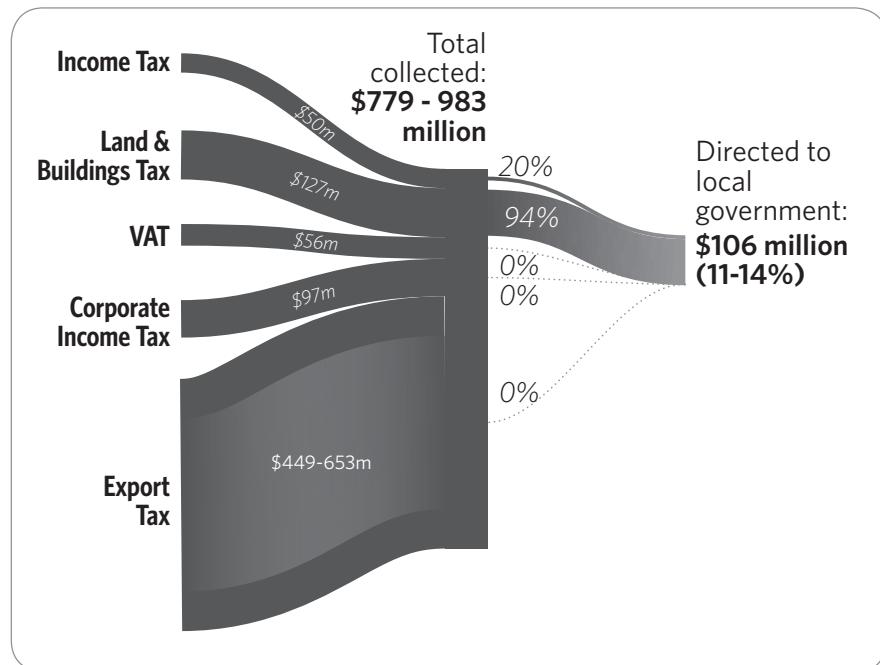
This study finds that the Indonesian national tax system as it stands is not incentivizing sustainable land use models in the palm oil industry. It highlights relatively low levels of tax collection from the industry and low levels of redistribution of revenues to local governments, with redistribution designed in a way that could incentivize increased licensing, reinforcing findings from a companion CPI study that looks at the broader land use sector (Mafira and Sutiyono, 2015). With these findings in mind, we identify several opportunities to modify the tax system in order to incentivize higher productivity models of palm oil land use and production.

We estimate that the palm oil industry contributed at least IDR 7,896 – 10,014 billion (USD 0.8 – 1 billion) to national tax revenues in 2012/2013 dominated by export tax (64%) and to a lesser extent by land and buildings tax (15%) and income tax (15% including individual, corporate and land and buildings sellers taxes).

Figure ES-1 illustrates the relative contribution from the palm oil industry to different national tax revenues and the level of sharing to local government stipulated in legislation for each tax. As shown in Figure ES-2, however, due to data availability, tax revenue estimates for Land and Buildings, Income, Corporate, and Value-Added taxes relate to contributions from oil palm plantation operations only, and do not include estimates of tax contributions related to any form of palm oil processing. Export tax revenue estimates instead are for all palm oil products exported and subject to tax, including raw and processed products.

While significant tax revenue stems from the oil palm industry, we would expect much more given its GDP contribution and high reported profit margins. While data availability limited our ability to look at the palm oil sector as a whole, we estimate based on in-depth

Figure ES1 Estimated total national tax revenues from Indonesian oil palm plantations and palm oil production (export tax only) in 2012/2013 and the distribution of revenues to central and local government



Source: authors' calculations based on publicly available data, see Chapter 3. Notes: 2013 data and estimates for all except income tax and VAT which are for 2013. Figures are in USD million. Land and Buildings tax includes Land and Buildings Seller's Tax.

research on the oil palm plantation sector a tax-to-GDP ratio of around 3.4% for (for plantations only, excluding all downstream processing), suggesting strong tax planning or even avoidance in the industry when compared to a total tax-to-GDP ratio in Indonesia of 12.3% in 2012 (Prastowo, 2014), and around 13% for other sectors such as manufacturing, electricity, and gas. This is particularly startling considering reportedly high profit to revenue ratios at some stages of the supply chain.

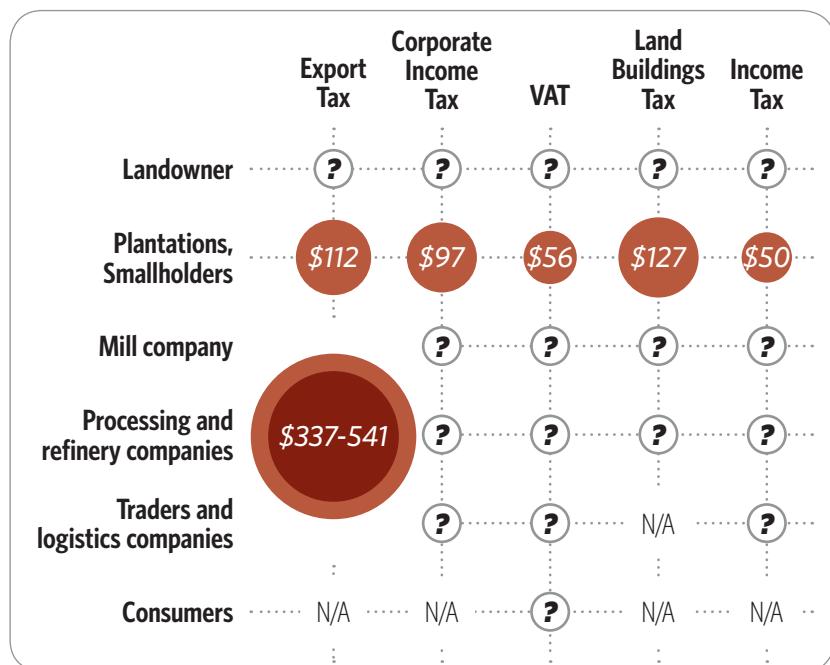
Just 11-14 % of palm oil tax revenues are redistributed to local governments in 2012/2013 according to our estimates. There is also no natural resource revenue sharing arrangement for plantations, as there is for forestry and mining activities e.g. This is counter-intuitive given local areas provide the natural capital to grow oil palm and face trade-offs from other uses of that land. However local governments receive budget from a range of different fiscal transfer mechanisms and more analysis is needed to review appropriate responsibility and revenue assignments considering all sectors and the complete fiscal system.

Official taxes and tax incentives for the palm oil industry do not encourage intensive, high productivity plantation business models. Artificially low property values applied historically for land and building tax collection¹ and various corporate income tax and Value Added Tax (VAT) incentives appear to have contributed to keeping land costs low and palm oil businesses more profitable, rather than incentivizing intensive high productivity plantation business models with reduced land take. Given that only land and buildings tax has significant local redistribution of revenue, there might be an indirect incentive for local government decision-makers to license more land in order to increase revenue collection, but more analysis is needed.

We identify six, non-mutually exclusive, opportunities to adjust the tax collection, revenue allocation and revenue distribution to incentivize sustainable behaviors in the palm oil supply chain, both on the side of producers and licensors. While each of these proposals needs further empirical testing, it is clear that

1 Legislation has recently changed requiring market land prices rather than artificially low standard prices to be used in the future to calculate land and buildings tax contributions in the future. But the details and impact are yet to be seen.

Figure ES-2 Taxation data availability across the palm oil value chain in 2012/2013 (USD million)



? not estimated. N/A: not applicable.

there are several opportunities to reform the tax system in a way that can economically benefit central and local government as well as palm oil industry players, at the same time as improving the productivity and sustainability of palm oil production in Indonesia.

- Increase tax rates on land for plantations** to encourage more intensive production and reduced licensing/expansion onto new lands. Current rates of productivity in Indonesian plantations are reported to be very low compared to neighboring producer countries. Increasing tax rates for Land and Building Tax for plantations could encourage more intensive production models by agribusinesses by increasing the cost of land to account for environmental externalities.
- Tax production area rather than production volumes or profits**, to incentivize high productivity per hectare of land and minimize the problem of tax evasion. In this way, taxes are shifted between instruments and not necessarily increased overall. Land area based taxes are also more difficult to evade and can be monitored inexpensively.
- Require palm oil supply chain players to meet specified sustainability criteria** in order to be eligible for existing tax breaks, or introduce penalties or increased tax rates for not adhering to specified sustainability criteria. The direct link between export tax and levels of production of

different oil palm products, and between Land and Buildings Tax and land values makes them ideal candidates for the introduction of supplementary criteria related to sustainability.

4. Increase revenue distribution to local governments.

Increased redistribution of national tax revenue to local governments, coupled with higher tax rates could encourage local governments to license less land for production. Alternatively a non-tax natural resource revenue sharing instrument could be introduced for plantations. Depending on the distribution mechanism, revenues could be earmarked in order to encourage local governments to carry out activities in support of improved the sustainability of the palm oil industry or improved protection for high ecosystem value areas. Technical assistance could be provided to help plan, monitor and report the effectiveness of spending.

5. Tie redistribution of fiscal revenues to sustainability performance indicators tracking local governments' progress on sustainable palm oil production and protection of high ecosystem value areas in their province.

Brazil's ICMS-E (Imposto Sobre Circulação de Mercadorias e Serviços - Ecológico) program and Portugal's Local Finances Law may serve as useful examples. In 2015, India has also taken a major step to incentivize forest protection by incorporating a forest cover indicator into the formula used to redistribute national tax revenues to states.

6. Gradually address unofficial payments in the informal sector by removing some powers associated with those payments (i.e. licensing concessions) and introducing increased official taxation and redistribution of resources to local government. Reforms that help to reduce unofficial payments over time could reduce overall costs faced by companies. Accounting for or even eliminating these payments has to be part of an effective fiscal solution to encourage sustainable palm oil supply chains, otherwise they will continue to undermine policy incentives and the current fiscal system.

Finally, while this study has provided first estimates of the contribution of the palm oil industry to national tax revenues, major data gaps prohibit a full understanding, particularly of contributions from downstream processing. Data gaps make detailed recommendations challenging. Additional follow-up work is needed to explore how other types of land use

are being taxed, as well as what non-tax public revenue and unofficial revenues are being raised from various forms of land use and how all of these fees interact to influence behavior. Furthermore, a deeper analysis of the potential tax reform options discussed in this paper and others, and their implications on government and business' behavior is required before more concrete recommendations can be offered.

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1. Introduction

This paper considers whether the current national tax system has an impact on land use practices of the palm oil industry and whether there may be opportunities to adjust it to incentivize more sustainable or high productivity models of land use and production.

The palm oil industry is a significant and growing contributor to Indonesia's economic growth, but is also a prime driver of deforestation, greenhouse gas emissions, and natural capital loss. More sustainable and productive land use could reduce the environmental impact of projected growth in palm oil production. This paper is part of a larger body of work by CPI that analyzes both tax and non-tax policies and revenue sharing provisions associated with several key land use sectors including forestry, mining and agriculture. In particular, this paper considers whether the current national tax system has an impact on land use practices in the palm oil industry and whether there may be opportunities to adjust it to both improve economic efficiency and incentivize more sustainable or high productivity models of land use and production.

In fact, how Indonesian fiscal policy is designed can encourage different behaviors by both public actors and private investors, through its two functions (Budgetaire -revenue raising, and Regulerend - regulating). Any adjustments to the current fiscal system have to balance the interests and motivations of the following key stakeholders: central government, local government, the Indonesian public, and the palm oil industry. This is no simple task but the timing is right - tax reform is a key priority of the current Indonesian administration, presenting an opportunity meet multiple development objectives.²

APPROACH

The paper provides an initial mapping and analysis of the national taxes incumbent on the palm oil industry - Export Tax, Land and Buildings Tax,³ Income Tax (including Corporate Tax), and Value Added Tax. The analysis provides estimates of the cost/revenue implications of the taxes where suitable primary or proxy data could be obtained, to better understand

their relative importance and the flow of benefits. For Land and Buildings Tax, Income Tax and Value Added Tax, simple estimates were derived using available sectoral tax and GDP data, while estimates for Export Tax revenues were derived using a simple spreadsheet model of export volumes, prices, and tax rates of 28 different palm oil products. Where possible we also present results for one province, Central Kalimantan, to explore in more detail local government perspectives. The analysis presented in the paper is based on analysis of publicly available legislation and statistics as well as 13 interviews with Indonesian tax and palm oil experts carried out between April and July 2014.⁴ The report was subsequently reviewed by the interviewees, plus a selection of international experts working on similar topics.

Using this approach, and to understand the relationship between national taxation and land use and business practices, we carried out an analysis of the landscape of national taxes paid by palm oil industry players to understand:

1. What activities are taxed, through which taxes, at what rates and what exemptions are applicable?
2. How much revenue is currently raised from the palm oil industry under each of the taxes?
3. How are revenues currently distributed across central and local government? Who collects the tax and what distribution mechanisms exist?

Based on this understanding of the current national tax system, we then discuss current and potential influence of the system on models of land use and palm oil production, to consider:

1. Does the current national tax system support sustainable palm oil production?
2. Is there scope to modify and use the tax system

2 The President aims to increase the country's tax-to-gross domestic product ratio from below 13 percent at present to 16 percent. <http://thejakartaglobe.beritasatu.com/news/jokowi-pitches-strategy-tax-reforms-fuel-subsidies-g-20/>; <http://thejakartaglobe.beritasatu.com/news/governors-ask-jokowi-rp-1-trillion-aid-funds-province/>

3 Including land and buildings purchase and sales taxes, BPHTB and PPh-BB, noting that the former now a local tax.

4 Interviews were carried out in Jakarta with experts from eight different Indonesian think tanks and NGOs working on tax and sustainable palm oil, a palm oil industry representative, and two academics familiar with Indonesia's public revenue distribution system as well as three regional government agency representatives in Central Kalimantan.

to incentivize sustainable behaviors through the actions of palm oil producers, local, and central governments?

STRUCTURE OF THE PAPER

The paper is structured as follows: **Chapter 2** provides key background information on the economics of Indonesia's growing palm oil industry and an introduction to the national taxes incumbent on the palm oil industry. **Chapter 3** presents an analysis of the current landscape of national taxes paid by the palm oil industry, providing a description of each tax, estimated revenue collected from the palm oil industry through the tax, and details of how the revenue is allocated across central and local government. At the beginning of the chapter we present combined estimates of total national tax revenues raised from the palm oil industry in 2013. **Annex III** includes supplementary detailed

information on each tax, including legal references, details on rates and exemptions, who collects the tax etc. while **Annex I** provides an overview of data gaps. In **Chapter 4** we discuss the current and potential influence of the tax system on models of land use and palm oil production, exploring potential options for using the tax system to incentivize sustainable behaviors through the actions of palm oil producers, local and central governments. Finally **Chapter 5** presents conclusions and recommendations for further work, to explore options for using the tax system to incentivize sustainable palm oil. In this vein, **Annex II** provides an overview of the broader landscape of public revenue collection instruments, beyond national taxation, that should be analyzed to understand their influence on land use and production models and/or potential to modify them to incentivize more sustainable production.

2. Background on palm oil production and taxation in Indonesia

- *Indonesia is the world's leading producer of palm oil, which makes a significant contribution to the nation's economy in the form of tax and export revenues as well as employment and infrastructure development.*
- *Palm oil is also one of the leading drivers of deforestation and associated GHG emissions in Indonesia, contributing to Indonesia's position as the third largest global GHG emitter.*
- *The Indonesian government aims to increase palm oil production levels by 50% between 2013 and 2020, leading to concerns over possible increases in GHG emissions.*
- *Land already licensed for production could be sufficient to fulfill Indonesia's goals, but sharp improvements in productivity are needed and use of degraded lands are currently out of production.*
- *Fiscal instruments can help to restrict land expansion.*

2.1 Palm oil's growing importance in Indonesia

Indonesia is the world's top producer of palm oil. In the last decade, the area of oil palm plantations in Indonesia doubled and Crude Palm Oil (CPO) production tripled. Currently oil palm plantations cover approximately 10.5 million hectares (ha), up from 8.5 million ha in 2010 (BPS 2014),⁵ and are projected to reach 13 million ha by 2020 (PwC 2012). This implies that by 2020, oil palm plantations in Indonesia will cover a total land area nearly the size of the island of Java.

Soaring demand and public subsidies, both domestically and internationally, have contributed to this remarkable growth

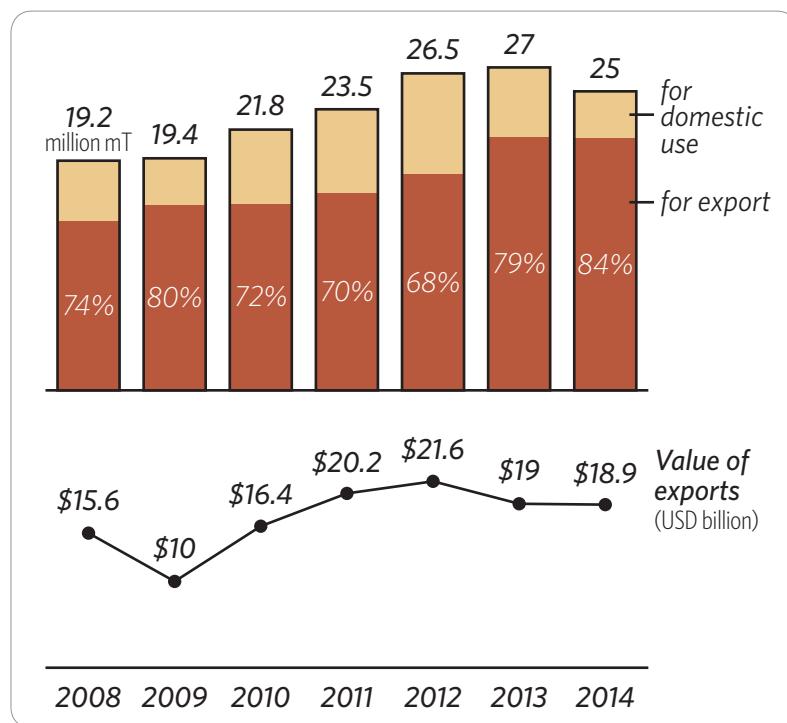
(McFarland et al. 2014). The majority of production is for export. As shown in the figure below, Indonesia has exported over 80% of its palm oil as unprocessed CPO in recent years. Domestic use is overwhelmingly for cooking oil but also for biofuels, margarine, soap and chemical industries.

Palm oil makes a significant contribution to Indonesia's economy, including via:

- Export revenues: Palm oil is Indonesia's third largest export earner, amounting to approximately USD 21 billion in 2012 (BPS 2014; Ministry of Trade 2014)
- Export tax revenue: Exported palm oil products are estimated to account for a large proportion of export tax revenues, as discussed later in this paper

- Other revenues accruing to different levels of government as a result to taxes, fees and other payments: according to Irawan et al. (2013) this could be as high as USD 1.6 billion per year, as shown in Table 1
- Employment: In 2011, oil palm plantations directly employed and estimated 3.2 - 3.5 million people (Obidzinski et al. 2014, Ministry of Industry 2015) or 1.46 million households in 2013 (BPS 2013a)
- Infrastructure development: Roads, electricity and telecommunications infrastructure in

Figure 1 Palm oil production and export



5 Data includes planted area of companies and smallholders. Alternative sources provide higher estimates of plantation area at 12.3 million ha (e.g. Saputra 2014)

Table 1: Average opportunity costs (NPV USD/ha) for private and public stakeholders (percentage allocation in brackets; 10% discount rate; palm oil price USD 800/t).

ALTERNATIVE LAND-USE ACTIVITIES	COMPANY	GOVERNMENT TOTAL	NATIONAL	PROVINCIAL	PRODUCING DISTRICT	OTHER DISTRICTS
Commercial logging	206 (47)	235 (53)	140 (32)	6 (1)	69 (16)	21 (5)
Timber plantation without prior logging	1037 (65)	568 (35)	536 (33)	7 (<1)	14 (<1)	10 (<1)
Timber plantation with prior logging in degraded forests	1507 (59)	1058 (41)	767 (30)	29 (1)	213 (8)	49 (2)
Oil palm plantation without prior logging	6355 (58)	4608 (42)	4587 (42)	3 (<1)	17 (<1)	0 (0)
Oil palm plantation with prior logging in degraded forests	6458 (57)	4782 (43)	4678 (42)	10 (<1)	82 (1)	13 (<1)
Oil palm plantation with prior logging in primary forests	7099 (56)	5502 (44)	5057 (40)	34 (<1)	350 (3)	61 (<1)

Source: Irawan et al. 2013

Notes: USD 1.6 billion estimate is based on the lowest estimated revenue for oil palm plantation for government and linear 30 year revenues, according to the author's calculations, and estimated current total area under oil palm plantation, 10.5 million ha. Note that the authors' calculations exclude personal income and export taxes, use relatively high CPO prices (USD 680 -1000/tonne) compared to today's price and are based on model estimates using limited company sample financial data, meaning the results may not accurately reflect real profit margins and tax/fee collection. Nonetheless the results provide a very useful starting point.

certain regions are associated with plantation development

- Contribution to rural livelihoods: Nearly half of the oil palm industry is made up of smallholder producers – 42.7% in 2013, with the remainder made up mostly of private enterprises (50.7%) and state-owned enterprises (7.6%) (BPS 2013b)

However, global CPO prices have declined sharply in the last one to one and a half years due to decline in crude oil prices. CPO price has declined by more than half, from a high of USD 992 per tonne in March 2014 to a low of USD 480 per tonne in August 2015.⁶ This will have an impact on the estimates above.

On the other hand, the palm oil industry also makes various demands on the Indonesian economy in the form of non-subsidized government credit and subsidies associated with production of palm oil, biofuels, and other products (see Annex II).

Furthermore, palm oil is one of the main drivers of deforestation and associated GHG emissions in Indonesia. A recent report by the Environmental Investigation Agency (EIA 2014) points to palm oil as being one of the leading drivers of deforestation in Indonesia since 1990 and the leading driver in recent years (2009-2011).⁷ The authors present results from

various studies and time periods that suggest the loss of 1.6m ha of forest to oil palm during 2000-10 and that the 50% of oil palm expansion during 1990-2005 led to the destruction of natural forestland.

Recent policy signals have implied an expansion of the Indonesian palm oil industry, as well as increasing pressure on palm oil operations to increase the sustainability of their operations. The Indonesian government aims to increase palm oil production to 40 million tonnes per year by 2020 (Boer et al. 2012), up from 2013 levels of around 27.8 million tonnes (Ministry of Agriculture 2014). It is estimated that if Indonesia were to adopt land-optimization measures, the land area already licensed for production could be sufficient to fulfill Indonesia's goals (even including bioethanol), without additional land clearing (Saputra 2014). With respect to Central Kalimantan, Boer et al. (2012) estimated that palm oil expanded production could be accommodated without large-scale deforestation, as around 1.6 million ha of degraded/non-forested lands is available and suitable for oil palm development.

However, demand for palm oil for biofuels is rising domestically as a result of mandates for increased amounts of biodiesel blending in power stations and rising biodiesel price subsidies for consumers. Furthermore, realizing increased production on existing agricultural land necessitates a steep improvement in productivity rates which are very low

6 <http://www.rea.co.uk/rea/en/markets/cpoprices>

7 Abood et al. 2014 rank palm oil as the third largest driver of deforestation in the earlier period of 2000-2010, after the pulp and paper and logging

in Indonesia compared to neighboring countries – 13.6 MT/ha⁸ for Fresh Fruit Bunches (FFB) compared to 19 MT/ha in Malaysia in 2013 and 2.6 MT/ha for CPO compared to 3.9 MT/ha in Malaysia (Saputra 2014). A new national palm oil platform, IPOP, supported by the United Nations Development Programme, has been set up by the Indonesian government and is partly aimed at boosting smallholder productivity (Mongabay 2015). In addition, Crop Estate Fund launched in 2015 is set to further support farmers and R&D toward increased productivity but will also subsidize biofuel production and demand. Furthermore, experts believe a large proportion of land already licensed for plantations is uncultivated and obtained for other reasons such as initial timber clearance and trading of valuable business use (“HGU”) licenses (Saputra, 2014) and so would need to be brought into production.

In addition to policy targets to increase oil palm production, there has also been increasing pressure on palm oil operations to increase the sustainability of their operations. Several major palm oil importing countries, including the U.S., EU, and Japan, have outlined minimum sustainability requirements for palm oil products. For instance the EU Renewables Directive sets requirements for sustainable production, prohibits the use of high ecosystem value land and has also considered adjusting CPO and biofuel import duty in line to promote high sustainability standards. Consumer and retailer pressure is also building for certified palm oil.⁹ As of 2014, the Roundtable on Sustainable Palm Oil (RSPO) has 101 members in Indonesia and 1.3 million ha of certified palm oil production area (RSPO 2014).

Despite these efforts, certification schemes are inadequate against the scale of the challenge. Standards are voluntary and while many producers have made significant commitments in recent years, implementing them has a cost to their value chain and as a consequence, there needs to be a more effective way to provide incentives for producers.

National fiscal mechanisms are both more direct, and have potential wins for governments that enforce them. This paper investigates the extent to which Indonesia's current tax regulations support increased productivity and sustainability of palm oil production or could be adjusted to do so.

⁸ Million tonnes per hectare.

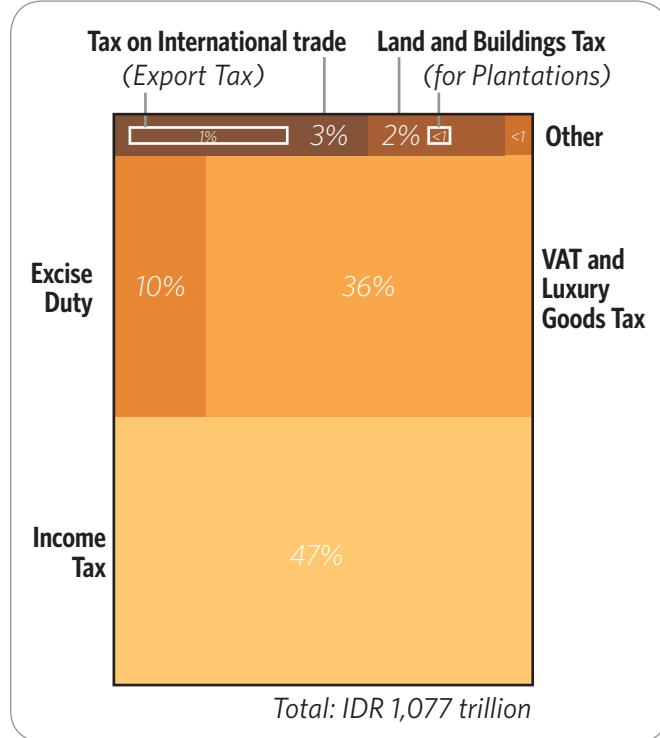
⁹ Current CSPO market uptake is around 52% and price premiums are around just 0.3% for CPO and 2.3% for PKO in 2013 or USD 11 per hectare (Butler 2014)

2.2 Introduction to the taxation of the palm oil industry in Indonesia

Total Indonesian tax revenue in 2013 was IDR 1,077 trillion or approx. USD 103 billion (Rol 2013, p.53), split as shown in Figure 2 below. Of the taxes that apply to oil palm plantations and palm oil producers and processors (all but excise duty), income tax and VAT dominate total revenues, at 47% and 36% respectively.

No data is publicly available on the contribution of the palm oil sector to overall tax revenues, let alone indications of the breakdown by different taxes therein. Only high-level sectoral data is available. However, we know that in 2012, the “agriculture, animal husbandry, forestry and fishery” sector contributed IDR 14.9 trillion (USD 1.6 billion) in tax revenues (including Income Tax and VAT only). This was just 2% of overall tax revenue, despite the fact that GDP for the sector was IDR 1,190 trillion (USD 101 billion), or 15% of Indonesia's total GDP. This implies a tax-to-GDP ratio of just 1.25%, compared to the average tax to GDP ratio in Indonesia of 12.3% in 2012¹⁰ (Prastowo 2014) and ratios of around 13% for other sectors such as manufacturing, electricity, and gas.

Figure 2 Overview of Indonesian tax revenues by tax in 2013



Notes: historic exchange rates from oanda.com. In addition to taxes collected by the Ministry of Finance, the tax on acquisition of land and buildings (Bea Hak atas Tanah dan Bangunan), now a local tax, generated IDR 9,100 billion in 2013 (Ministry of Finance, 2013). Sources: Rol 2013.

¹⁰ 9% if we exclude international trading taxes and duties

3. An overview of the landscape of national taxes incumbent on the palm oil industry

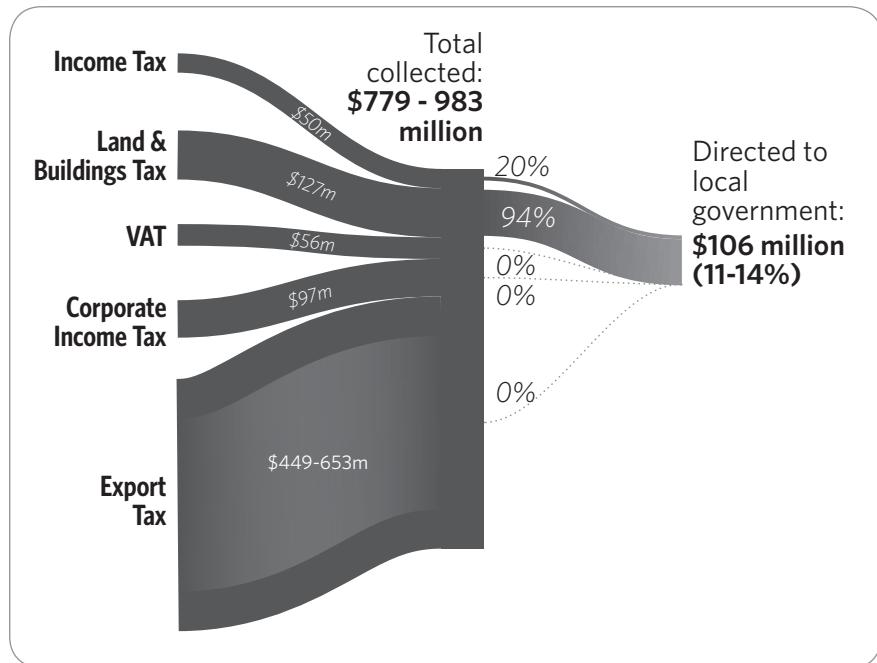
- In total, we estimate that the palm oil industry contributed tax revenues of at least IDR 7,896 – 10,014 billion (USD 0.8 – 1 billion) in 2012/2013, dominated by export tax (64%) and to a lesser extent by land and buildings tax (15%) and income tax (15%).*
- We estimate that just 11-14% (IDR 1,103 billion or USD 106 million) of revenue was directly redistributed to local governments, where oil palm is grown and natural capital consumed as a result.*
- We calculate a tax-to-GDP ratio of around 3.4% for the oil palm plantation sector alone (excluding processing), a relatively low ratio compared to other sectors.*

This chapter describes each of the four national taxes (Export Tax, Land and Buildings Tax,¹¹ Income Tax, including Corporate Tax, and Value Added Tax) in turn, highlighting in particular the tax object, rates, and revenue redistribution provisions. For each, we also present estimated tax revenues for the latest year for which (proxy) data was available. Additional details of the main provisions of each tax regulation can be found in Annex III. This analysis helps us to understand how each tax works and their relative importance monetarily, an essential starting point for exploring current and potential influence of the system on models of land use and palm oil production.

3.1 Estimated total national tax revenues from Indonesian palm oil production

In total, we estimate that the palm oil industry contributed tax revenues of IDR 7,896 – 10,014 billion (USD 0.8 – 1 billion) in 2012/2013,¹² dominated by export tax (64%) and to a lesser extent by land and buildings tax (15%) and income tax (15% including individual, corporate, and land and buildings sellers taxes).¹³ We estimate that just

Figure 3 Estimated total national tax revenues from Indonesian oil palm plantations and palm oil production (export tax only) in 2012/2013 and the distribution of revenues to central and local government



Source: authors' calculations based on publicly available data. Notes: 2013 data and estimates for all except income tax and VAT which are for 2013. Figures are in USD million. Land and Buildings tax includes Land and Buildings Seller's Tax.

11-14% (IDR 1,103 billion or USD 106 million) of revenue was directly redistributed to local governments. While direct redistribution is low it should be borne in mind that there are a range of other revenue instruments in place for local governments, as discussed further in Chapter 4. Figure 3 summarizes the combined results of this analysis, including estimates of revenues collected from the palm oil industry and the redistribution provisions for each tax.

tax, including raw and processed products.

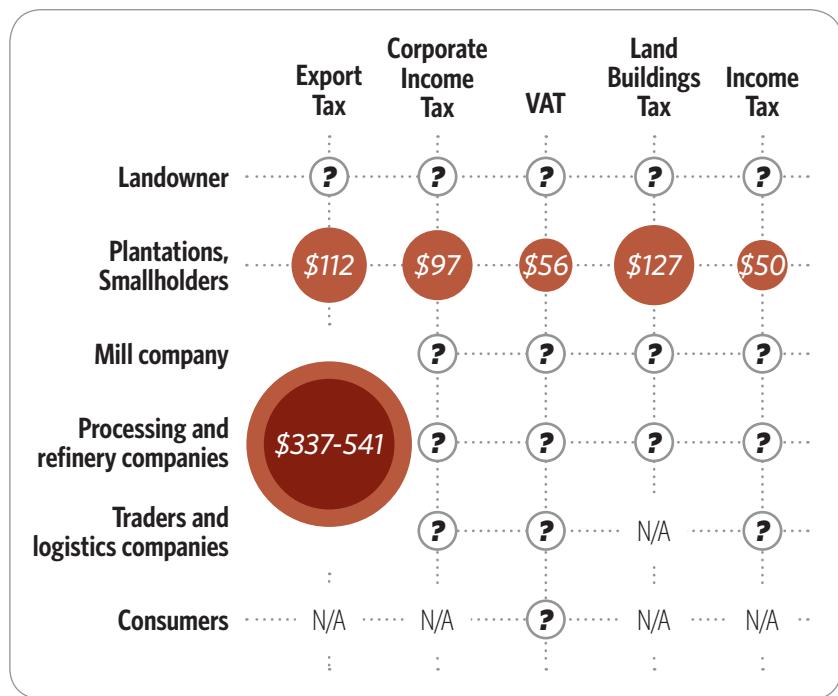
As illustrated in Figure 4, due to data availability, tax revenue estimates for Land and Buildings, Income, Corporate and Value-Added taxes, relate to contributions from oil palm *plantation* operations only, and do not include estimates of tax contributions related to any form of palm oil *processing*. This is because sub-sectoral tax data was available only for the “agriculture, animal husbandry, forestry, and fishery” sector, which includes plantations. Oil palm specific estimates were then produced using assumptions based on GDP data but this was not possible for the Manufacturing sub-sector. In addition, Land and Buildings sub-sector data was available for plantations¹⁴ but could not be split out for palm oil processing operations. On the other hand, Export tax revenues could be estimated for all palm oil products exported and subject to tax, including raw and processed products.

Using the above estimates of tax revenues, we calculate a tax-to-GDP ratio of around 3.4% for the oil palm plantation sector,¹⁵ assuming GDP for the sector to be approximately IDR 127 trillion in 2013 (73% of the plantation sector)¹⁶; this compares to ratios of around 13% for other sectors such as manufacturing, electricity and gas, and the economy as a whole. A tax to GDP ratio cannot be estimated for the broader palm oil industry (including post plantation processing and trading) since data is missing on post plantation tax revenues (except export taxes) and on GDP for the palm oil sector as a whole.

3.2 Estimated palm oil tax collection and redistribution in Central Kalimantan

As shown in Figure 5, limited quantitative information was available on palm oil tax revenues raised from production in the case study region, Central Kalimantan. The figure does however illustrate the low percentage of tax revenue that remains or gets redistributed to the local level where production occurs. Local governments

Figure 4 Industrial classification and data availability across the palm oil value chain outputs including the industrial classification.



Notes: 2013 data/estimates for all except income tax and VAT which are for 2012, figures in USD million. ?: not estimated. N/A: not applicable.

receive budget from a range of different fiscal transfer mechanisms and more analysis is needed to review appropriate responsibility and revenue assignments considering all sectors and the complete fiscal system.

Export revenues from palm oil products produced in Central Kalimantan only totaled USD 212 million in 2013 (BPS 2013c) and related **export tax revenue** is estimated to be between USD 4.5 - 7.8 million (IDR 47 - 81 billion) in 2013, around just 1% of national totals.

Land and Buildings Tax revenue totaling IDR 548 billion (2%) was allocated to Central Kalimantan province and its districts (including collection fees) in 2013, IDR 75 billion of which related to plantation land (representing 7% of the national total from plantation land), roughly in line with statistics reporting Central Kalimantan’s share of Indonesia’s oil palm plantation land to be around 10% (PILAR, 2015).¹⁷

Since 2011, **Land and Building Buyer's Tax** is a local tax collected by districts. In fiscal year 2013 in Central Kalimantan districts, Land and Building Buyer's Tax accounted for only 3% (IDR 27 billion) of local government tax revenues, with far larger sums derived (mostly at the province level) from taxes on surface water and cars, for instance (MoF 2013). We estimate

14 FAO statistics on the production value for the main plantation crops in Indonesia (sugar cane, cashew, coconut, oil palm fruit, palm kernels, oil palm, coffee, cocoa, tea, pepper, cloves, tobacco, rubber) in 2012 indicate that 73% of production value is associated with oil palm (FAO, 2015).

15 For the calculation of GDP ratio here, we include only exported plantation outputs (i.e. palm fruits and residues) in order to be consistent with the GDP data.

16 Ibid 14

17 As stipulated in 102/PMK.07/2013 which amends Peraturan Menteri Keuangan Nomor 205/PMK.07/2012 and 35/PMK.07/2013.

the proportion of the Buyer's Tax related to plantations to be 14% or IDR 4 billion for Central Kalimantan, according to the approach outlined in Section 3.4.

It is not possible to estimate the amount of **Income tax** paid by plantation employees operating in a particular jurisdiction. Regulation 202/PMK.07/2013 provides data on the total allocation of income tax revenues (PPh WPOPDN and Pasal 21, i.e. individual tax payers contributions only) to provinces and districts. For Central Kalimantan province and districts, the allocation in 2014 was IDR 166 billion (approx. USD 14 million).

A cursory review of the financial statements of one publically listed, oil palm focused plantation business, operating in Kalimantan, indicates that total tax expenses amounted to 29% of profits before tax in 2013 and 25% in 2012 (BW 2013) - by no means therefore an insignificant cost component for plantation businesses. More detailed analysis is however required to fully understand the data available in company financial statements.

3.3 Export tax: revenues and distribution

INTRODUCTION

Export taxes apply to fresh fruit bunches (FFB), CPO, and refined palm oil products. They were introduced to moderate the price of cooking oil domestically as well as to support the development of downstream industry including CPO processing and production of finished products.

As a result, export tax rates are progressive, increasing as standard export prices increase and more steeply for less processed products, which are taxed at higher rates, with the aim of incentivizing downstream palm oil industries. Figure 6 shows generally decreasing tax levels for more processed products but some anomalies occur, where prices were particularly high in 2013 so tax rates entered a higher bracket. In addition, until

Figure 5 Central Kalimantan estimated palm oil related tax revenues collected and redistributed

	Collected in Kalteng	Redistributed to (or remaining in) Kalteng
Export Tax	47-81	— 0
VAT	Unknown	— 0
Land & Buildings Tax	75+*	→ 75
Land & Buildings Buyer's Tax	4	→ 4
Land & Buildings Seller's Tax	Unknown	→ 20% (individual); 0 (corporate)
Income Tax	Unknown	→ 20% (individual); 0 (corporate)

*Data not available - assessment based on analysis of regulation and other information.

Notes: 2013 data/estimates, figures in IDR billion.

recently (see Box 1), for all but raw palm fruits, taxation did not apply until a standard price of at least USD 750 per tonne was reached or progressively higher for more processed products which tend to be more expensive.

Figure 6 shows how Indonesian palm oil product exports are concentrated on a handful of products, in particular solid residues of oil palm fruits, seeds, and kernels (2) and crude palm oil (3) and unsolid refined, bleached and deodorized fractions of oil palm and olein (16,17,28).

ESTIMATED TAX REVENUES

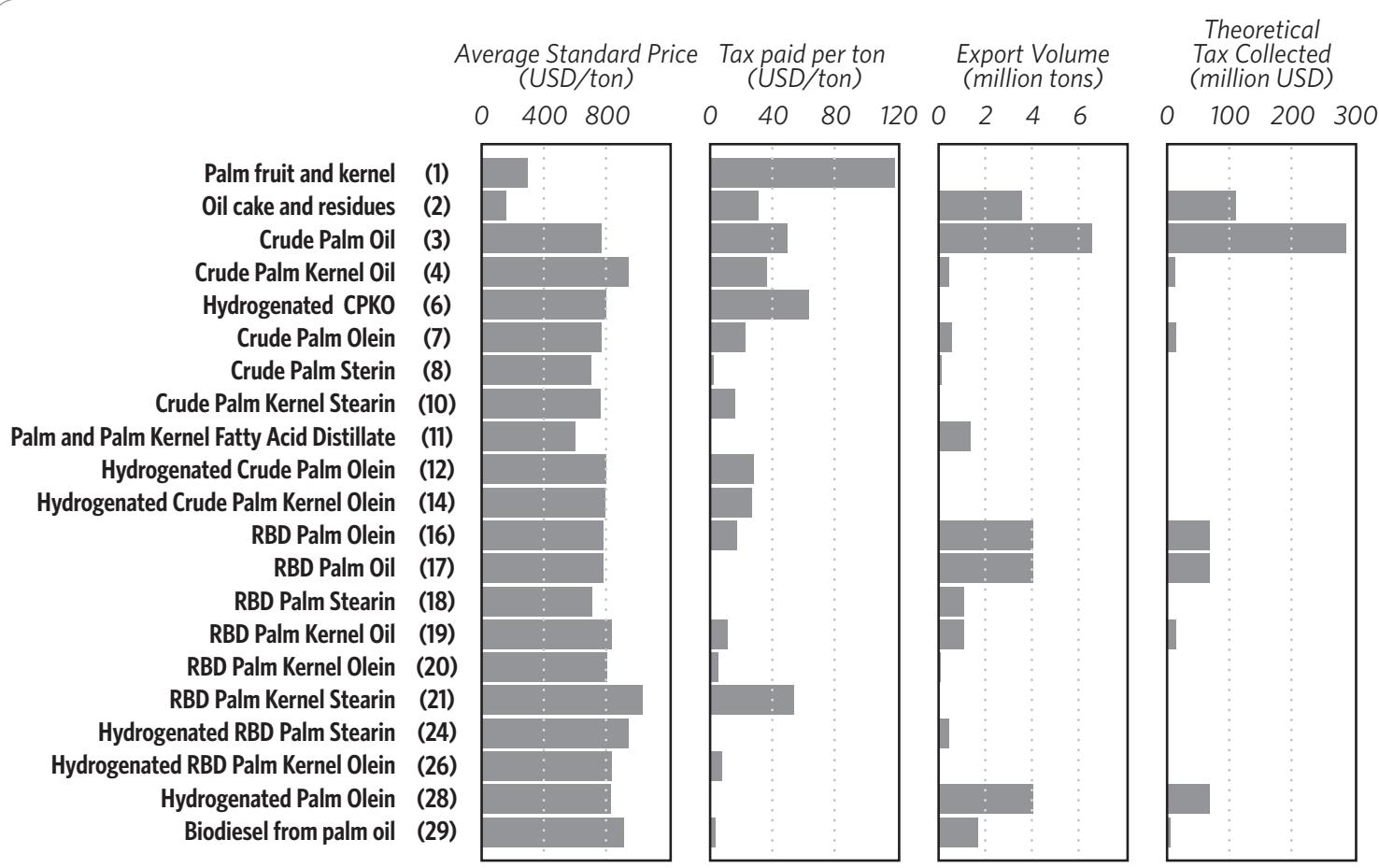
The Bank of Indonesia reports export revenues from palm oil products totaling USD 17.7 billion in 2012 (BI 2014), which is 9.4% of total national export revenues.¹⁸

Export tax revenues from all commodities totaled USD 2.3 billion in 2012 (Rol 2012) and USD 1.5 billion in 2013. No official data is available on the portion coming from palm oil product exports. We therefore estimate palm oil export tax revenues using a simple bottom up model with BPS statistics on exported weight of palm oil products in 2013, standard published prices and tax rates according to the regulation.¹⁹ We estimate that

18 Using BPS statistics to calculate value from exported palm oil products on a bottom basis results in higher estimates of USD 21.4 million in 2012 and USD 20.3 billion in 2013, possibly as a result of non-palm oil elements in export codes which combine palm oil and other products or narrower definition in BI statistics.

19 We use monthly BPS statistics on exported weight of different palm oil products, monthly standard prices for individual different palm oil products and tax rates for different palm oil products according to Export Tax regulation. BPS statistics do not allow a complete match with standard

Figure 6 Palm oil product export statistics in 2013



Note: products as specified in 128/PMK.011/2013. Note that export data does not allow differentiation between the following products: 14 and 15 (however they have the same tax rate); 22 and 23; 26 and 27 (however they have the same tax rate); 5, 12 and 13 (we conservatively assume the standard prices and tax rates of product number 12 in our calculations); 16, 17 and 28 (we conservatively assume the standard prices and tax rates of product number 28 in our calculations). Theoretical tax collected is the product of the sum of average tax per ton per month and monthly exports.

export tax collected from palm oil products should have totaled an estimated USD 449 – 653 million²⁰ (IDR 4,670 – 6,788 billion) in 2013, i.e. 30-44% of total export tax revenues. This is an estimate of how much tax should, in theory, be paid and does not necessarily represent how much was actually collected: there may be a gap. Furthermore, one interviewee suggested that export statistics might not always show the true volumes of exported goods since products exported from unregistered/illegal plantations are not recorded. As such it can only be assumed that tax revenue is not collected from these exports either.

Receipts from export tax reportedly decreased in 2012 (down by 26% compared to 2011) and again in 2013 (down by 33% compared to 2012) due to changes to

prices and tax rates in the case of some products. As such assumptions and ranges have to be calculated for those products.

20 Range results from different assumptions regarding export data, which does not specify between some products that have different tax tariffs.

export rates and tariffs for CPO which in turn shifted export patterns (Rol 2013, p.75; Rol 2014, p.68), showing that the industry is sensitive to changes in tariffs.

REDISTRIBUTION OF REVENUES

There is no redistribution of export tax revenues back to the local governments of jurisdictions where palm oil is produced. Revenues enter into the general state budget (APBN) and are not earmarked for particular purposes. Given the direct and visible link to palm oil production, there have been requests made by some Regents (Kabupaten) and Governors in recent years to redirect a portion of revenue from CPO export taxes redistributed to the local level.²¹ This would require legal review in the constitutional court of the 2004 revenue sharing law (where agriculture is conspicuously missing).²² Where

21 see for example Mongabay 2014.

22 See Article 11 of Law No. 33 of 2004 on Revenue Sharing Between Central and Regional Government

Box 1: The CPO Supporting Fund or Crop Estate Fund

In May 2015 the Government of Indonesia announced the enactment of a new export charge for Crude Palm Oil (CPO). Under the Presidential Regulation No. 61/2015 on the Crop Estate Fund, producers and exporters of CPO and its derivatives are required to pay a levy and transfer it into a special fund to subsidize biodiesel and fund palm oil research and development among other things. The tariff varies from USD 10 to USD 50 per tonne depending on the product, offset against export tax payments if prices are above USD 750 per tonne (the point at which export tax starts to be paid). The fund may also receive contributions from other sources.

The Ministry of Finance has established a special public services agency (*Badan Layanan Umum* or "BLU") to manage the funds outside of the state budget (APBN) system. The Fund is expected to generate around USD 750 million of revenues per year, to be used to subsidize biodiesel production, palm oil research and development, replanting, capacity building and equipment. Due to as many as six ministries involved in the Fund, governance arrangements are yet to be decided. At present there is no provision in the Fund for earmarking to regional governments. This subsidy, alongside other subsidies for biofuel production (e.g. minimum 15% bio content of diesel) will likely stimulate CPO demand and prices, and puts extra pressure on increased production, with unclear safety locks related to productivity improvements.

port authorities are run by state (as opposed to local government) enterprises, their general revenues are also not shared with local government.

3.4 Land and Building tax: revenues and distribution

INTRODUCTION

Land and Buildings Tax (Pajak Bumi dan Bangunan or PBB)²³ is payable annually, as a percentage of the officially designated value of the land or building owned or used (known as NJOP). The percentage applied is greater for plots over a value of IDR 1 billion and for plantation, forestry, and mining land (0.2% as opposed to 0.1%).

The Government of Indonesia is actively considering reform options for land and buildings tax including removing NJOP and replacing it with price zoning or even removing land and buildings annual tax altogether, leaving just the land and buildings sales and buyers taxes.²⁴ As of May 2015, it appears that the zoning option has been selected although there is so far no official regulation.²⁵

ESTIMATED TAX REVENUES

The following figure shows total land and buildings tax revenues collected in the past three years and the portion related to taxation of plantation land, which is low compared to other sources, in particular the oil industry. However this does not include non-plantation PBB tax paid by downstream palm oil manufacturing and processing companies, for which data is not available.

No data is available on oil palm plantation specific revenue collected or allocated but we can expect that the vast majority relates to oil palm.²⁶ Nor could data be found on collected tax for particular regions although this is expected to be relatively close to reallocated revenues.

Some interviewees mentioned the issue of outdated and artificially low officially designated land values (NJOP) being used to calculate and reduce payments of land and building tax. Some local governments might not therefore collect this tax to the full potential and it is likely that there is a "tax gap." It is difficult to substantiate this point with data since NJOP and actual sale value data for plantation land are difficult to obtain and compare but this is a well-known issue in

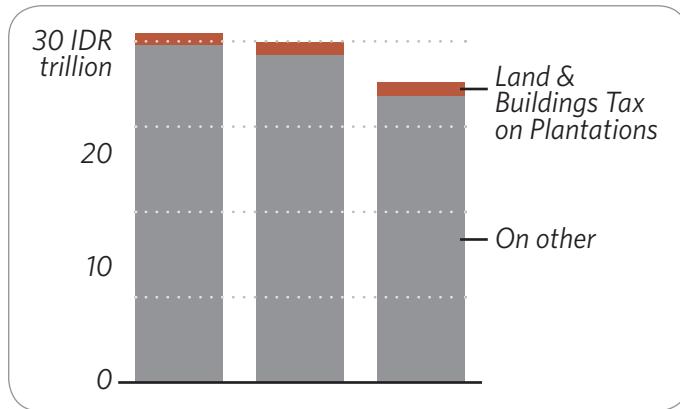
23 Sources of information: the regulations; PwC 2010; WB 2015.

24 Jakarta Post 2015

25 Metronews 2015

26 87% of large plantations in Indonesia in 2013 were for oil palm (BPS, 2014b) while 98% of plantations (operational and non-operational) in Central Kalimantan were for oil palm as of December 2013 (Central Kalimantan Dinas Perkebunan, 2014).

Figure 7 Land and Buildings Tax revenue collection



Source: LKPP, 2012 and 2013

the housing market in Indonesia.²⁷ Another interviewee pointed out that plantations operating illegally, without business use for plantation ("HGU") licenses are probably not paying land and buildings tax, hence creating another source of missed revenues.

Land and buildings tax is just one element of the cost of land in Indonesia. Annex II points to a broader landscape of public revenue collection instruments, beyond national taxation, that should be analyzed to understand their influence on land use and production models and/or potential to modify them to incentivize more sustainable production. As noted by Schlegelmilch et al. (2011, p.4), "spatial planning and a huge gap of land rent in agriculture areas pushed a sporadic land conversion so that the incentive for conservation is diminishing as the value of land for commercial purposes is increasing, accelerated by local decisions for increasing regional incomes."

REDISTRIBUTION OF REVENUES

Approximately 94% of revenues from land and buildings tax are redistributed back to the local government level based on levels of collection (the majority of the remaining goes to central government as collection fees). Allocation of tax revenue from the land and buildings tax in 2013 totaled IDR 23,414 billion, including IDR 1074 billion (5%) from plantation land.

3.5 Land and Buildings Buyer's Tax: revenues and distribution

INTRODUCTION

Land and Building Buyer's Tax (Bea Hak atas Tanah dan Bangunan or BPHTB) is a one off payment tax, paid by buyers upon acquisition of buildings or business use

rights, at a rate of 5% of the Nilai Perolehan Objek Pajak (NPOP), that is, the taxable acquisition value, which is set based on the officially designated value of the land or building (NJOP) or the actual purchase price (whichever is higher). As of 2011, the tax is a local, not a national one.

ESTIMATED TAX REVENUES

Land and Building Buyer's Tax revenue totaled IDR 9,120 billion in 2013,²⁸ with large cities contributing the vast majority. Data is not available on the portion of Buyer's Tax revenue that relates to plantations, oil palm plantations, or palm oil operations more broadly, but we can estimate for plantations at least, that it would be a similar proportion to the plantation component of the annual national Land and Buildings Tax, i.e. 5% or IDR 418 billion at the national level. However, one interviewee suggested that Buyer's Tax from plantations may be lower than expected due to the fact that plantations often change hands as part of a merger or acquisition of companies. In this case the land asset is not subject to the Buyer's or Seller's Tax.

Since, as per Land and Building's Tax, Buyer's Tax can be based on NJOP, there could also be a tax gap in this case.

REDISTRIBUTION OF REVENUES

In 2011, Land and Building Buyer's Tax became a local tax collected by districts so central government and provinces no longer receive revenues from the tax.

3.6 Land and Buildings Seller's Income Tax: revenues and distribution

INTRODUCTION

For transactions greater than IDR 60 million, Land and Buildings Seller's Income Tax (Pajak Penghasilan - Bumi dan Bangunan or PPh-BB) has to be paid, as a one-off payment, by the seller totaling 5% of purchase price or officially designated value of the land or building (NJOP), if higher.

ESTIMATED TAX REVENUES

We assume that revenues from Seller's Income Tax, related to plantation land, are equal to those derived from the Buyer's Tax, i.e. in 2013 IDR 418 billion at the national level. The figure may be lower due to the IDR 60 million threshold below which the seller does not

27 See, for instance, Suryana 2013.

28 Ministry of Finance 2013.

have to pay income tax. Since the Seller's Tax is part of income tax, caution has to be paid not to double count. As such Seller's Income Tax is not shown separately in Figure 3 above or counted in estimated total tax revenues.

REDISTRIBUTION OF REVENUES

Where Seller's Income Tax forms part of personal income tax, 20% of revenue from the Seller's Tax goes to Local Government and 80% to Central Government. As discussed in more detail below under Income Tax, tax is paid where the taxpayer is officially registered rather than where the land being sold is located. However it is assumed that most Seller's Income Tax related to plantations and palm oil production would be part of corporate income tax payments, in which case there would be no sharing of revenues to the local level as the corporate entities are mostly registered and pay taxes in Jakarta.

3.7 Income and Corporate tax: revenues and distribution

INTRODUCTION

Income tax (Pajak Penghasilan or PPh) provides the largest portion of tax revenue for the Indonesian government, at 47% of total tax take in both 2012 (IDR 465,070 billion) and 2013 (IDR 506,442 billion). Of the non-gas income tax revenue in 2012, 66% is related to corporations and 34% to individuals' income taxes.²⁹

The basic rate of corporate tax is 25%, but corporate taxes due are very dependent on the shareholder structure and the level of offshore activity of individual companies, as well as application of a large number of tax breaks specific and not specific to the palm oil industry players (see below).

ESTIMATED TAX REVENUES

The "Agriculture, Animal Husbandry, Forestry and Fishery" sector contributed IDR 10.1 trillion in income tax revenues in 2012, including corporate and individual income taxes (MoF, 2014). More detailed data on the contribution of plantations and the palm oil industry is not available. In the absence of better information, we estimate tax revenues from the plantation sector by applying the percentage of GDP for the plantation sector over GDP for the "Agriculture, Animal

Husbandry, Forestry and Fishery" sector to the tax revenue from the latter.³⁰ Thus we estimate income tax in 2012 for the plantation sector at IDR 1375 billion (USD 147 million), IDR 908 billion (USD 97 million) in corporate income tax and IDR 467 billion (USD 50 million) in individual income tax, using whole economy splits to estimate each. This approach unfortunately excludes tax revenues from down stream processing of oil palm.

As highlighted in the box below, the "Agriculture, Animal Husbandry, Forestry and Fishery" sectors, including plantations, appear to have one of the highest occurrences of tax minimization in Indonesia when it comes to tax avoidance and tax planning, in particular in relation to corporate income tax (see Box 2). This is likely in part due to the large amount of tax breaks available for oil palm plantation operators and palm oil producers. At all stages of the value chain, palm oil supply chain members are eligible for industry specific corporate income tax breaks, from plantation owners for import of goods and delayed depreciation of plantation expenses, import duty exemptions for CPO mill owners, through to tax reductions for Indonesian tax residents' treaty partners and complete tax holidays for biofuel producers. Public companies and small enterprises /smallholders are required to pay income tax but reduced rates are applicable. More information on these incentives is provided in Annex III, however, it is not known to what extent these income tax incentives are applied for. Some interviewees suggested that companies prefer not to apply for incentives in order to avoid additional scrutiny of accounts.

From May 2015, additional income tax breaks are available for forestry, mining, and plantation activities including several downstream palm oil products - hydrogenated palm olein, hydrogenated palm stearin, hydrogenated palm oil, hydrogenated palm kernel olein, hydrogenated palm kernel stearin, hydrogenated palm kernel oil.³¹ Tax breaks include (i) income tax reductions; (ii) accelerated depreciation on tangible assets or amortization of intangible assets; (iii) imposition of income tax on dividends for foreign taxpayers who do not operate under a permanent establishment; and (iv) compensation for losses.³²

30 GDP for the plantation sub-sector was IDR 162 trillion in 2012 or just 13.6% of the GDP for the "agriculture, animal husbandry, forestry and fishery" sector (BPS 2014).

31 Through Regulation No. 18 of 2015 on Income Tax Concessions for Investment in Certain Fields and/or Areas.

32 We maintain (iii) as a tax break given that the rate is lower than usual corporate tax rates: "A 10% income tax income may be applied to dividends paid to foreign taxpayers operating other than under a

29 Here, Pasal 21, 23, 26 and Pasal 25/26 Orang Pribadi are considered as "individual" income taxes and the others (Pasal 22, 22 Impor, 25/29 Bada, 26, Final and Fiskal LN and Non Migas Lainnya) as "corporate".

Box 2: Estimating and closing the tax gap in palm oil in Indonesia

Prastowo (2014) estimates a 'tax gap' of IDR 135 - 185 trillion (USD 13 - 18 billion) per year in the "Agriculture, Animal Husbandry, Forestry and Fishery" sector by comparing the tax ratio of the sector (1.25%) with other equivalent countries in the region (16-17%).¹ This does not, however, account for international trading taxes and duties contributed by the oil palm plantations and misses revenue from palm oil processing beyond the plantation. As discussed in Chapter 3.1, we estimate a tax ratio of 3.4% for the oil palm plantation sector alone, including all national taxes – low considering estimated profit ratios in the sector.² We were unable to make an estimate of the tax gap including post plantation palm oil production.

Prastowo explains that the tax gap in the plantation sector is driven by tax avoidance through international tax planning (legal) and, in some cases, tax evasion (illegal). He argues that both need to be addressed and that tax can instead be designed as a regulatory tool to control deforestation. Prastowo shows that tax evasion/planning tools likely to be used are mostly related to corporate income tax and principally include: (1) foreign shareholding /ownership structures (2) thin capitalization³ and (3) transfer pricing.^{4,5}

The challenges to overcome such issues are significant, requiring action to combat tax avoidance practices and iron out international loopholes. To overcome these issues Prastowo recommends: 1) research to understand the tax gap better, 2) improving tax administration, 3) deep investigation of tax payers in the sector, 4) encouraging increased international tax cooperation and transparency and 5) enhancing tax rules to prevent tax evasion. An e-procurement/one stop shop for license application and tax/non-tax payments could also help, by collecting information in one place to highlight inconsistent practices (Prastowo 2014).

While reforming the tax system to overcome such broader systematic issues, there may be potential to simultaneously establish systems that incentivize sustainable land use behaviors (see Chapter 4 for further discussion).

- 1 The Directorate General of Taxation strategic plan 2015-2019 sets an ambitious target to increase the tax ratio to 19% by 2019 (MoF 2014b).
- 2 Some interviewees and reviewers reported profit to revenue ratios for some public palm oil companies as high as 82% for CPO, and 60-68% for FFB and Kernel following similar methods but more detailed analysis is required to fully understand the data available in company financial statements.
- 3 Involves establishing a high debt to equity ratio and using high interest payments to reduce the profit, which will be taxed in Indonesia and avoid international dividend taxes.
- 4 Involves transferring goods to another business unit at low prices to reduce profit to be taxed in Indonesia. One recent court case highlighted that this practice was used by Asian Agri Group and inter alia, led to state losses of IDR 1.25 trillion (USD 134 million at 2012 conversion rates) over five years.
- 5 Laporte and Rota-Graziosi (2015) discuss "the curse of natural resources", specifically related to mining in developing countries where similar taxation challenges to those discussed here are often found.

REDISTRIBUTION OF REVENUES

While 20% of *individual* income tax is redistributed to local government on the basis of collection levels, no share of corporate income tax is redistributed. Of the local government share of individual income tax, 8% goes to the provinces, 12% to districts in the province, in accordance with their income tax contributions. Local government interviewees highlighted concerns that most top earning palm oil industry employees and their

companies are headquartered, and thus submit their tax returns, outside of the region where their plantations are located. This means no personal income tax revenue associated with those companies is shared back to the local government in the area of production. Another interviewee pointed out that logging concessions must have a local office and therefore pay income taxes locally. Similar provisions for oil palm plantations and palm oil production may be needed to increase redistribution of income tax revenues to the local level.

permanent establishment. This tax rate may be lower if a lower rate is provided for under a double taxation agreement between Indonesia and the foreign taxpayer's country of origin" (Hukumonline 2015).

3.8 Value Added Tax: revenues and distribution

INTRODUCTION

Indonesia's basic Value Added Tax (VAT) (Pajak Pertambahan Nilai or PPN) rate is 10%, payable by companies exceeding sales of IDR 4.8 billion per year. A number of VAT tax holidays specific and not specific to the palm oil industry players exist. Oil palm plantation owners and biofuel producers in particular benefit from VAT exemptions. VAT exemption is available for the import of capital goods for plantation companies and CPO mills. The biofuel component of fuel sales is also exempt from VAT.

A recent court decision has clarified that smallholders and traders delivering oil palm Fresh Fruit Bunches (FFB) are required to pay 10% tax,³³ while special

provisions apply for integrated plantation companies.

ESTIMATED TAX REVENUES

VAT varies greatly company-to-company and year-to-year based on company structure and stage of operations. Any estimates are therefore very uncertain. Tax evasion or planning may be an issue, as discussed in Box 2. As per the approach used to estimate Income Tax above, we estimate VAT in 2012 for the plantation sector to be 527 billion (USD 56 million). Since there is no selling during development stage, palm oil companies typically pay more VAT during planting/development.

REDISTRIBUTION OF REVENUES

There is no direct redistribution of VAT to the local level.

³³ Ministry of Finance 2014c.

4. Using the national tax system to influence models of land use and palm oil production

- *Low land costs and low tax combined likely factor in the expansion of plantations rather than incentivizing intensive high productivity plantation business models with reduced land take.*
- *Since national tax revenues shared with local government are generally low and relate almost wholly to land and buildings taxes, there might be an indirect incentive for local government to license more land in order to increase revenue redistribution. More analysis is required to understand possible linkages in detail.*
- *Designing and implementing an economically efficient and politically acceptable fiscal system is challenging.*
- *We identify six, non-mutually exclusive, opportunities to adjust tax collection, revenue allocation and revenue distribution to incentivize sustainable behaviors in the palm oil supply chain, both on the side of producers and licensors.*
- *We present a preliminary outline of the potential advantages and disadvantages of each option but more detailed modeling work is now needed to explore the feasibility of different options in more detail.*

This chapter discusses the current and potential influence of the national tax system on models of land use and palm oil production. First, we discuss whether the current national tax system supports sustainable palm oil production in any way. Second, we provide a preliminary discussion of potential options to modify and use the tax system to incentivize sustainable behaviors, such as:

- High production yields e.g. average production yields of above 20 metric tonnes of fresh fruit bunches per hectare or above 4 metric tonnes of CPO per hectare
- Planting outside high value ecosystems (e.g. on degraded lands)
- Production of certified sustainable palm oil

4.1 Does the current tax system support sustainable palm oil?

INDIVIDUAL TAX REGULATIONS

Land and Buildings taxes are directly related to land value, and a higher percentage of tax is payable for plantation land (along with forestry and mining land). However several interviewees suggested taxpayers commonly apply outdated official land prices instead of market prices, presumably resulting in limited impact on the cost and need to be efficient with the land.

Export taxes are directly linked to production levels of different palm oil products and rates are in theory designed to encourage expansion of downstream

industry. However, production remains predominantly upstream; implying that incentives may not be significant enough to shift production or at least that there may be a time lag in getting downstream infrastructure in place. It is also unlikely that an increase in downstream industries would shift upstream producers away from using more land, or using existing land more productively, particularly considering suspected profit margins.³⁴ It would likely trigger increased demand for production of raw materials for both export and domestic onward processing, probably leading to an increase in land area for production without the right safety locks in place.

As for **Income Tax and VAT**, there appear to be no direct linkages between taxation and sustainable production approaches. However, low land costs and low tax bills (supported by many corporate import/VAT tax incentives available to oil palm plantation operators and palm oil producers) combined, likely factor in expansionist rather than intensification plantation business models with reduced land take. However more analysis is required to understand possible linkages in more detail. While the actual level of uptake of tax incentives is not known, it is likely that palm oil supply chain actors are applying for those that relate to encouraging foreign direct investment or tax treaty partners, given the high level of foreign investment in Indonesian palm oil and the evidenced low tax to GDP ratio of the sector (see Box 2).

³⁴ Profit to revenue ratios for some public palm oil companies have been calculated to be as high as 82% for CPO, and 60-68% for FFB and Kernel but more detailed analysis is required to fully understand the data available in company financial statements.

TAX BREAKS

There are no prerequisites for sustainable production methods for access to any of the general or industry specific income tax breaks available. While some incentives, such as support for biofuel production, are aimed at incentivizing downstream industries, as already noted above, it is not likely that increasing downstream industries would shift growers towards more sustainable production models.

REVENUE DISTRIBUTION

An estimated 11-14% (IDR 1,103 billion or USD 106 million) of total national tax revenue from the palm oil industry was redistributed to local governments in 2013. Given this low share, it is possible that local governments are using the fiscal tools within their control to increase their revenues, including licensing more land to increase associated revenues from license and permit fees, land and building taxes (from which almost all revenues return to local government), and even, potentially, unofficial payments in the informal sector. One interviewee for this study suggested that the small amount of redistribution from central government to local government might be encouraging local governments to license more land to raise fees and unofficial payments. Irawan et al. (2013) estimate financial benefits accruing to companies and each level of government from different land uses including logging, timber and oil palm plantations. They conclude that local governments have a financial incentive to seek conversion of forests to plantation, given the higher absolute revenues they receive from plantations over their lifetime. This applies not only to local government but also to national government:

"The national government obtains a very large share of the benefits, so it has a strong interest in promoting all types of land-use change. Going below the surface, each of the national level ministries (sectors) has different interests in the pursuit of the alter-native land-use activities." (Irawan et al., 2013, p.81)

More analysis is however required to determine whether tax revenues do in fact influence licensing decisions in practice given the range of different local government fiscal transfer mechanisms in place according to established responsibility and revenue assignments.

4.2 Options to modify and use the tax system to incentivize sustainable behaviors

There are a number of opportunities to adjust the design of taxes and redistribution of revenues to positively influence sustainable behaviors in the palm oil supply chain in Indonesia. Theoretically, all taxes can be adjusted to incentivize sustainable behaviors; however some changes would be more challenging to implement than others. As discussed in detail by Mumbunan (2011) in relation to ecological fiscal transfer proposals for Indonesia, as well as more generally in the public finance literature (e.g. Mirrlees 2011), different tax collection and distribution arrangements can be justified according to economic efficiency arguments but technical feasibility and political palatability are also key considerations in tax design.

This study has not yet analyzed the feasibility of different proposed options in detail - more detailed modeling work is needed to do so. However, some preliminary considerations are outlined below before presenting potential options and their advantages and disadvantages.

4.2.1 TECHNICAL DESIGN CHALLENGES

Firstly, from a technical perspective, interactions with non-tax regulations, incentives, and subsidies will have to be considered, as well as Indonesia's readiness to implement environmental fiscal reforms. Decisions on adjustments to individual tax instruments must be taken in full consideration of the range of other fiscal collection, allocation and distribution instruments at play (as discussed briefly in Annex II). In terms of readiness, Schlegelmilch et al. (2011) highlighted a number of difficulties experienced in Indonesia in attempting to apply fiscal reforms in the energy sector, including:

- lack of understanding and support to implement instruments across different sectors and stakeholders
- lack of strong legal frameworks for fiscal instruments, apart from law 32/2009 which established principles and basis for economic and environmental fiscal measures but has not resulted in concrete instruments
- Conflicting regulatory and fiscal instruments for natural resource extraction

One interviewee stressed that any innovative changes to tax regulation in Indonesia would require complete

reform of the highest tax laws and policies. Naturally tax tariffs and rates are easier to change than changing whole tax instruments or introducing new ones. It may nonetheless be more feasible to enact change through local taxes or revenue sharing regulations.

In terms of adjusting individual taxes, Karsenty (2010, p.122) highlights the potential for tax instruments to have a “dynamic impact on companies’ strategy and behavior”, to “respond to change in fiscal pressure... through better management and technical or commercial innovation” but also stresses the challenge of setting tax rates at the right level, due to often asymmetric information between the taxpayers and tax collectors (Blackburn et al. 2012). Where taxes are low and excess profits high, perverse incentives may follow whereby sustainable resource management techniques are not employed because they require management changes and investment of time. But taxing too high results in limited capacity for businesses to invest in improvements. Another challenge which may arise is lack of information required to implement alternative tax arrangements.

4.2.2 BALANCING INTERESTS

Any proposed adjustments to the current tax system would also have to be mindful of potential impacts on current benefit flows of different stakeholders, both in assessing the feasibility to enacting changes to the current system and accounting for possible counter-behaviors that could result from changes to the tax system (see Table 1 in Section 2 and Irawan et al. 2013 for further discussion on relative financial incentives in the current system).

Central government benefits most from large flows of tax revenue from the current system, however there is a high amount of uncollected revenue (which the current administration is targeting hard) and potentially large sums of distortionary unofficial flows. The country’s natural capital is being expended inefficiently, not least through large amounts of value being lost from the sector while it exports large portions of unrefined goods generated in low productivity approaches, compared to industry best performers. Increasing tax revenues is a key priority of the government to fill the budget deficit and reach economic development goals.

Local government is a key decision maker in approving concessions and licenses; not only for plantations but also associated infrastructure that can influence how land banks are developed for plantations. Local governments therefore have an instrumental role

to play in shifting plantation and palm oil industry players to more sustainable production and land use models (i.e. increased productivity and use of degraded land), by both modifying what they license and what they invest in or support investments in. But local governments receive little tax revenue from palm oil at present, leaving little incentive or resources to support sustainable behaviors.

The palm oil industry would be supportive of increased redistribution of revenues to the local level earmarked for improving infrastructure and smallholder farmer productivity but would clearly be sensitive to any increases in overall tax payments. However, reforms that help to reduce unofficial payments over time could reduce overall costs faced by companies. Multi-national corporations face growing pressure to deliver sustainability commitments in the sector, and are concerned about who bears the cost of guaranteeing or enforcing sustainability across their supply chains. Adjustments that encourage system-wide incentives, standardized land management and best industry practices would support their efforts to transform supply chains.

Finally, systematic steps are needed to close data gaps that make it difficult to assess tax revenues and possible tax gaps. Hand in hand with any reforms of the tax system, tax monitoring/auditing capacity needs to improve considerably.

The challenges outlined above are significant. On the one hand, it may be that changing tax regulation is not the most effective way to change behaviors. On the other hand, the timing is right given that tax reform is a key priority of the current Indonesian administration, presenting an opportunity meet multiple development objectives.

4.2.3 EVALUATING SIX PRELIMINARY OPTIONS

We identify six, non-mutually exclusive, opportunities to adjust tax collection, revenue allocation and revenue distribution to incentivize sustainable behaviors in the palm oil supply chain, both on the side of producers and licensors. The options presented are not exhaustive, but rather, are intended to give a flavor for some of the elements that could be evaluated further to encourage more sustainable production of palm oil behaviors through the actions of palm oil producers (e.g. increasing productivity and using degraded lands), local government (e.g. actively helping private sector to move to degraded lands when issuing new concessions), and central governments.

Table 1 Preliminary assessment of advantages and disadvantages of increasing land tax rates

<input checked="" type="checkbox"/>	Increase productivity of producers
<input checked="" type="checkbox"/>	Compensate local governments if less land is licensed since revenue collected per hectare is increased
<input checked="" type="checkbox"/>	Opportunity to update outdated official land rates and capture lost revenues
<input checked="" type="checkbox"/>	Politically difficult to implement. Simultaneous adjustments to other taxes (see below) and/or transition measures could help.
<input checked="" type="checkbox"/>	Information asymmetry – difficult to understand the elasticity/optimum level of tax needed to encourage intensive production. A process of auctioning for newly purchased land could help to set the optimum level (see Box 4 for information on how this has worked in Cameroon's Forest Law).

1. Increase tax rates on land for plantations to encourage more intensive production and reduced licensing/expansion onto new lands. Current rates of productivity in Indonesian plantations are reported to be very low compared to neighboring producer countries. Increasing tax rates for Land and Building Tax for plantations could encourage more intensive production models by agribusinesses by increasing the cost of land to account for environmental externalities.³⁵

More specifically, land and building tax rates could be fixed per hectare of plantation nationally – avoiding the need for local governments to regularly calculate

35 Recent proposed changes to the way Land and Building Tax rates are calculated should increase the level of taxation but it remains to be seen to what level and effect. There are also proposals to introduce land price zoning, which could present an opportunity to optimize land allocation through a pricing mechanism.

NJOP and also rendering payments simpler and more transparent, reducing the incidences of under payment. A multiplier could also be added for high value ecosystems and land deforested after a certain date. Or NJOP for land under plantation and idle land could be fixed at the same level while the latter is currently lower.

In fact the Government of Indonesia is actively considering reform options for land and buildings tax including removing NJOP and replacing it with price zoning or even removing land and buildings annual tax altogether, leaving just the land and buildings sales and buyers taxes.³⁶ Further work is required to investigate what prices would trigger producers to change their current land use models.

36 Jakarta Post 2015

Box 4: Lessons from competitive auctioning of forest logging concessions in Cameroon

Karsenty (2010) draws out lessons from the Cameroonian application of auctions to allocate logging concessions and determine related annual area fees in Cameroon.

Here, the introduction of auctioned area fees encouraged new more efficient companies to enter the Cameroonian forest sector. The auction resulted in area fees higher than those initially proposed by the government and a system that captures most of the economic rent and redistributes half to the local level. But Karsenty warns that fiscal instruments will only be successful in encouraging Sustainable Forest Management if accompanied by a strong set of complementary public policies and actions. For example, mechanisms to control for volatile international commodity prices have to be integrated and care has to be taken to control for increased outsourcing, fiscal evasion and illegal logging.

Sources: Singer, 2015; Karsenty 2010

Table 2 Preliminary assessment of advantages and disadvantages of taxing more on the basis of production area

<input checked="" type="checkbox"/>	Incentive for productivity and reduced land take
<input checked="" type="checkbox"/>	Relatively easy to monitor, reducing tax evasion
<input checked="" type="checkbox"/>	Compensates local governments if less land is licensed since revenue collected per hectare will increase
<input checked="" type="checkbox"/>	Half the land area in Indonesia is not officially registered. While improving land registration has multiple benefits, production on such land is however illegal and is not currently be taxed.

2. Tax production area rather than production volumes

or profits, to incentivize high productivity per hectare of land and minimize the problem of tax evasion. Taxes can be shifted between instruments and do not necessarily need to increase overall. Alternatively, local environmental taxes or a new revenue sharing instrument could be introduced to make planting on deep peat and forest clearing prohibitively expensive.

Mafira and Sutiyono (2015) estimate that 93.5% of all land use revenue in Indonesia, comes from instruments based on profitability as opposed to land size (Rol 2013). Instead of taxing production volumes (as per export tax for example), it may be more effective to tax production area in order to incentivize high productivity per hectare of land.

Land area based taxes are also more difficult to evade and can be monitored inexpensively. One interviewee indicated that tax avoidance/evasion is mostly in relation to income and export taxes while land-based taxes are harder to evade. This makes a good case for a simple land area based tax that can also be monitored inexpensively with new technology.³⁷

3. Require palm oil supply chain players to meet specified sustainability criteria in order to be eligible for existing tax breaks, or introduce penalties or increased tax rates for not adhering to specified sustainability criteria.

The direct link³⁸ between export tax and levels of production of different oil palm products, and between Land and Buildings Tax and land values, makes them

ideal candidates for the introduction of supplementary criteria related to sustainability. For instance, plantations could pay lower taxes (or zero taxes) if they demonstrate:

- High production yields e.g. average production yields of above 20 metric tonnes of fresh fruit bunches per hectare or above 4 metric tonnes of CPO per hectare, meaning more production on the same land and therefore less land take.
- Planting outside high value ecosystems (i.e. on degraded lands)
- Production of certified sustainable palm oil

In addition, strong sustainability criteria prerequisites for eligibility for existing tax breaks or penalties would avoid tax benefits for an industry already reported to be paying relatively low rates of tax and enjoying high profit margins.

In fact, the previous Government indicated that it would reduce CPO export tax rates for ISPO certified companies once the system is up and running (Jakarta Post, 2011 in Obidzinski et al., 2013). This could also help to boost demand and the attractiveness of producing Certified Sustainable Palm Oil, while premium prices have been lagging.

4. Increase revenue distribution to local governments, with potential earmarking.

Increased redistribution of national tax revenue to local governments could help encourage local governments to license less land for production in order to raise revenues (Section 4.1), as well as provide resources to help local governments support sustainability improvements. While care must be taken to consider the broader public finance and fiscal transfer system already in place in Indonesia

³⁷ Drones are already being used in Indonesia to monitor tax evasion. See Bloomberg 2015.

³⁸ Income tax and VAT are more far removed as they tax profits and expenditures.

Table 3 Preliminary assessment of advantages and disadvantages of introducing sustainability criteria in tax breaks or rates

<input checked="" type="checkbox"/>	Producers can reduce their tax payments by following sustainability criteria
<input checked="" type="checkbox"/>	Such a system could be complicated to monitor and implement, e.g. to set suitable definitions and criteria for benefits
<input checked="" type="checkbox"/>	Such a system could be difficult for smallholders in particular to comply with

to assign governance responsibilities and share benefits (Annex II), there may be a case to revisit how agriculture sector tax and non-tax revenues are shared, given the sector's current low contribution to revenue sharing. Indeed, one interviewee for this study stressed the need to revise distribution rules according to the location of externalities and where investment in the industry is needed, i.e. where palm oil is being produced. Another interviewee said: "All palm oil development happens in regions, but the regions gain nothing from it. This fosters a condition whereby regions are dependent on the plantation companies for revenue for plantation-specific development (e.g. Location Permits), instead of gaining valuable revenue transfers, which they could use independently of the plantation to build the regional economy as a whole (e.g. for infrastructure development, downstream industry development, etc)." The current government has indicated its intention to direct more funding to the regions so this option seems palatable at least on the surface.

In practice, however, it may be very challenging to modify the revenue sharing allocations for individual taxes given that they have already been fixed relatively recently, and through a politically challenging process, on the basis of broad principles of assignment of responsibilities following Indonesia's process of decentralization.³⁹ It may therefore be more feasible to consider introducing a new non-tax natural resource revenue sharing instrument for cash crop plantations as opposed to sharing existing tax revenues. Furthermore, an area based revenue sharing instrument could incorporate the benefits discussed under option 2 above and could replace other taxes in order not to increase

the overall level of taxation incumbent on producers.

A non-tax natural resource revenue sharing instrument would also appear to be easier to earmark for spending on particular activities. Mafira and Sutiyono (2015) note that non-tax instruments have been earmarked and therefore show flexibility to be allocated towards land use activities, while tax instruments have not been earmarked (with the exception of a few regional taxes), making tax instruments less flexible in their allocation.

Earmarking may be considered economically inefficient from a distributive perspective – many would argue that jurisdictions can more efficiently and effectively plan their spending when transfers are untied - but desirable from an allocative perspective, in terms of securing environmental outcomes (Mumbunan 2011). Indeed, increased transfers to the local level are not guaranteed to improve sustainability. Earmarking funds can help encourage local governments to invest in improved sustainability of the palm oil industry or improved protection for high ecosystem value areas and technical assistance could be provided to help plan, monitor and report the effectiveness of spending.⁴⁰ Mumbunan (2011) discusses the limited precedence in Indonesia of earmarking local government finance for environmental purposes, including the Reforestation Fund⁴¹ and some specific purpose transfers for limited environmental activities.⁴²

40 The Brazilian Programme for the Sustainable Production of Palm Oil, under which the Brazilian governmental agricultural research agency, Embrapa, for instance, determines which areas deforested and degraded by cattle ranchers are apt for planting with oil palm, thus directly targeting state revenue towards enabling sustainable oil palm practices. According to Embrapa, some 10.4 million hectares of already deforested and degraded land are available. One agronomist has however raised concerns about lack of "necessary controls and oversight" to prevent undesirable environmental and social consequences (Frayssinet 2013).

41 Formerly part of specific purpose transfers to local government and now part of the natural resource revenue sharing agreements.

42 Including e.g. water quality and pollution control and water resource protection facilities.

39 For instance, taxes with less local relevance/extractability or lower spatial economic impact are often centralized, as well as those which serve distributive purposes or are sensitive to macroeconomic instability. Furthermore, local capacity and corruption are considerations (Mumbunan 2011).

Table 4 Preliminary assessment of advantages and disadvantages of increasing revenue distribution to local governments

<input checked="" type="checkbox"/>	Local governments are empowered to increase productivity of existing production land and increase protected areas
<input checked="" type="checkbox"/>	Local governments share benefits related to their natural capital
<input checked="" type="checkbox"/>	Industry would not be in favor of an additional fee. As discussed above, a new revenue-sharing mechanism could replace some elements of existing taxes or fees to compensate.
<input checked="" type="checkbox"/>	Sustainability outcomes are not guaranteed without earmarking and earmarking may not be very effective or efficient

Other options to increase the flow of revenues to the local level include introducing more palm oil related local taxes and/or a requirement for the headquarters of palm oil companies to be located locally in order to have permits to be approved (as per timber permits in some provinces), leading to more locally shared income tax. Local taxes adjustments would require Law 28/2009 to be revised (also see Schlegelmilch et al., 2011) and options for revision of the law are in fact currently under discussion in the Ministry of Finance in Indonesia.⁴³ Introducing a non-tax revenue sharing mechanism would require revision of Government Regulation 55/2005 on Revenue Sharing or GR 48/2012 on Non-Tax State Revenue Applicable to Plantations.

An interviewee representing the palm oil industry suggested that the palm oil industry would likely support the idea of sharing more (tax) revenue to local government, provided that overall taxes do not increase and particularly if the revenue is earmarked back to the plantation sector. Revenue shared could be targeted to support smallholders in increasing their productivity e.g. by providing high quality seeds and fertilizer or providing access to financing or financial support for replanting years, technical assistance for farmers and building necessary local infrastructure. The same representative noted however that any increase in local taxation would not be welcomed by palm oil companies, particularly as the industry currently invests a lot in basic infrastructure. At the moment there are no rewards for companies that provide basic local infrastructure and on the contrary, they are taxed considerably for road use, lighting etc., irrespective of

whether they funded the infrastructure or not.

5. Tie redistribution of fiscal revenues to sustainability performance indicators tracking local governments' progress on sustainable palm oil production and protection of high ecosystem value areas in their province.

In theory, the way in which tax revenues are redistributed could be modified in order to incentivize local governments to support sustainable palm oil production and protection of high ecosystem value areas, by basing redistribution on sustainability criteria. Land and buildings tax and export tax would be ideal candidates since their design already links directly to palm oil production volumes and land area, unlike income tax or VAT for instance.

In practice, however, it may be very challenging and complex to modify the revenue sharing allocations for individual taxes on the basis of sustainability criteria, particularly given that they have been fixed relatively recently, and through a politically challenging process, on the basis of broad principles of assignment of responsibilities following Indonesia's process of decentralization. As discussed further in Annex II, it is necessary to consider any possible changes holistically with the whole fiscal system in mind.

Alternatively, sustainability criteria could be incorporated into other revenue sharing instruments' formulae – for non-tax sharing or other general fiscal transfers. Mumbunan (Mumbunan 2011; Mumbunan et al. 2012) discusses current and potential future "ecological fiscal transfers" at length, noting they are currently limited in scope in Indonesia, including land area or forest area metrics in the allocation formulae of some fiscal transfer instruments. Mumbunan

43 See MoF 2014d. The article highlights issues that would need to be tackled in any revision: variable interpretation of the law in different regions, low capacity of local tax offices and low capacity from MoF's national office to provide training and oversight of local tax offices.

Table 5 Preliminary assessment of advantages and disadvantages of ecological fiscal transfers

<input checked="" type="checkbox"/>	Payment for performance, results are incentivized and guaranteed
<input checked="" type="checkbox"/>	Local governments are compensated for encouraging sustainable production and for maintaining protected areas
<input checked="" type="checkbox"/>	Monitoring might be tricky but not impossible if it builds on existing MRV systems

goes so far as to say that: "The Indonesian system of natural resource revenue-sharing has not aimed at financing the planned replacement of economies based on exhaustible resources with an alternative, more sustainable one. Indeed, the present system appears to neglect both inter-temporal and inter-generational dimensions of transfers." (Mumbunan 2011, p.161). As such, provinces with oil, gas and mining operations receive substantial shares of revenue from these sectors, for as long as they are active, while other provinces receive no share of those revenues. Meanwhile, provinces focused on agriculture and plantations receive almost no share of revenue from those activities and provinces that maintain large areas of intact forest or peatland are not compensated for the maintenance or opportunity costs associated with maintaining those cross-jurisdictional public goods and services.

Some countries have incorporated environmental indicators in their fiscal transfer systems to incentivize and compensate jurisdictions for their protected area coverage for instance – with protected areas being a relatively simple indicator to monitor and reflect broader sustainability efforts such as limiting production area. Mumbunan et al. (2012) argue that a protected area indicator would be best incorporated in Indonesia's fiscal transfer system in the General Purpose Transfer (DAU), to allow flexibility in the activities jurisdictions fund and to incorporate the increased fiscal needs that protected areas imply into the formula which addresses fiscal gaps.

Brazil's ICMS-E (Imposto Sobre Circulação de Mercadorias e Serviços – Ecológico) program serves as a useful example. Under the program, 16 out of 26 states have opted to include indicators for nature conservation for the redistribution of VAT revenues among municipalities (Gramkow, 2015). Forthcoming research shows a positive correlation with protected area shares in those states as a result of the program (Gramkow, 2015; Droste et al., 2015). In 2015 India has also taken a major step to incentivize forest protection by incorporating a forest cover indicator⁴⁴ into the formula used to redistribute national tax revenues to states.⁴⁵

In 2007, Portugal incorporated ecological considerations in its general purpose transfers in the revised Local Finances Law, recognizing that municipalities with protected areas face additional costs (including opportunity costs from not developing) and that the benefits of protected areas is a cross-jurisdictional public good. 5-10% of the municipal general fund is now shared on the basis of the extent of protected areas in different municipalities (Mumbunan 2011; Mumbunan et al. 2012; Santos et al 2010, 2012).

Most recently, in 2015, India also took a major step to incentivize forest protection by incorporating a forest cover indicator into the formula used to redistribute national tax revenues to states.

44 with a 7.5% weighting

45 Busch 2015

Table 6 Preliminary assessment of advantages and disadvantages of addressing unofficial payments

<input checked="" type="checkbox"/>	Reduce costs for producers, by reducing unofficial payments
<input checked="" type="checkbox"/>	Increase public revenues to be spent on public goods by reducing lost revenue
<input checked="" type="checkbox"/>	Difficult to change status quo and multiple regulations that may support unofficial payments

6. Gradually address unofficial payments in the informal sector. One interviewee for this study suggested that unofficial payments by oil palm plantations in some regions could be as high as 20% of their total costs and outweigh payments of official taxes and non-tax official fees. Accounting for or even eliminating these payments has to be part of an effective fiscal solution to encourage sustainable palm oil supply chains, otherwise they will continue to undermine policy incentives.

Unofficial payments might be addressed gradually by removing some powers associated with those payments (i.e. licensing concessions) and introducing increased official taxation and redistribution of resources to local government with earmarking related to supporting palm oil sector sustainability and increased productivity. Thus there would be no net impact for the palm oil businesses, but central and local governments would benefit from increased revenues. Such a proposal needs

more concrete analysis on the political economy of how to phase in such changes and really make it happen given strong interests from various sides.

Lowering or removing license fees so revenues are focused on taxation paid over the lifetime of a plantation business rather than in one lump sum payment would help to remove local government short (electoral) term incentives to maximize rents and license more, as well as helping to limit unofficial flows.

As a transition measure, Karsenty (2010) suggests that “performance bond” schemes could see companies rewarded with certification and tax cuts if they undergo additional independent auditing while international donors, in turn, compensate the Government, for tax revenue losses.

Each of these potential solutions should be further tested for feasibility and potential to incentivize sustainable behaviors.

5. Conclusions and recommendations for further research

This study presents first estimates of tax revenues from the palm oil industry. It highlights relatively low levels of tax collection from the industry as well as low levels of redistribution of revenues to local governments, reinforcing findings from a companion CPI study that looks at the broader land use sector (Mafira and Sutiyono, 2015).

We find that existing national tax regulation appears to be at best neutral in terms of its *direct* impact on the land use practices of the palm oil industry but, at worst, there may be some indirect negative relationships.

With these findings in mind, this paper proposes for further analysis some possible modifications of the national tax system to encourage more sustainable production of palm oil (see Section 4.2), including in brief:

- Increase Land and Buildings Tax rates for plantations
- Tax production area rather than production volumes or profits
- Require palm oil supply chain players to meet specified sustainability criteria
- Increase the redistribution of fiscal revenues to local governments
- Tie redistribution of fiscal revenues to sustainability performance indicators
- Gradually address unofficial payments

These options are not mutually exclusive or exhaustive but give a flavor for some of the potential options that could be integrated into the national tax system or broader fiscal system to encourage more sustainable production of palm oil. Such options would need to be tested for cost effectiveness and feasibility with key stakeholders.

RECOMMENDATIONS FOR FURTHER RESEARCH

This study's estimates of the contribution of the palm oil industry to national tax revenues are necessarily preliminary and partial, as major data gaps prohibit a full understanding, particularly related to contributions from downstream processing. Data gaps make detailed recommendations challenging. Additional follow-up work is needed to explore how other types of land use are being taxed, as well as what non-tax public revenue and unofficial revenues are being raised from various forms of land use and how all of these fees interact. A detailed understanding of the mix of existing and eventual incentives embedded in a fiscal reform is the key to design a tax system that would incentivize a more efficient use of the country's natural capital and promote higher sustainability. One possible analytical way forward could be joint work with individual entrepreneurs in the palm oil industry who wish to positively change the fiscal incentive and revenue distribution framework, as well as a case study carried out jointly with the local government to develop further insights.

This current analysis is a first foray in the topic, mostly based on publicly available data, often proxied with necessary assumptions, combined with selected expert interviews. The analysis would greatly benefit from improved data access and expert insights from central government, local government and palm oil companies themselves. A deeper analysis of potential tax reform options and their potential implications on government and business' behavior is required before concrete recommendations can be offered. It would also be useful to better understand how the progress of current sustainability movements (e.g. ISPO, RSPO, Zero Deforestation commitments, IPOP) related to palm oil production could potentially be supported or reinforced by the tax system.

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Annex I: Summary of methods used to estimate tax revenues, associated weaknesses and missing data

ITEM	APPROACH	APPROACH WEAKNESSES	MISSING DATA
Tax totals and tax to GDP calculations	Data taken directly from public reports and adjusted using sectoral GDP ratios.	Sectoral GDP data was reported to be unreliable by some interviewees.	Tax revenue data for the palm oil industry/value chain, including plantations, manufacturers and processors.
Export tax	Bottom up calculation using production and price statistics.	Export data may be misreported in some cases.	Data on export tax actually collected.
Land and Buildings Tax	Land and Buildings Plantation data	Includes all plantations, not just oil palm.	Land and Buildings tax paid by downstream industry, manufacturers and processors.
Land and Buildings Buyer's Tax	Apply % of Land and Buildings Plantation to Land and Buildings total to Buyer's Tax reported revenue data.	Excludes downstream manufacturing and processing industry contributions. Contributions may be less due to property changing hands as part of company acquisitions.	Data on plantation and palm oil industry contribution.
Land and Buildings Seller's Tax	Assumed equal to Buyer's Tax.	May be less than Buyer's due to IDR 60 million threshold for payment. Excludes downstream manufacturing and processing industry contributions. Contributions may be less due to property changing hands as part of company acquisitions.	Data on plantation and palm oil industry contribution.
Income Tax and VAT	Apply % of GDP for plantation/total GDP for "Agriculture, Animal Husbandry, Forestry and Fishery" to tax revenue data reported for the "Agriculture, Animal Husbandry, Forestry and Fishery" sector.	One interviewee claimed that GDP sectoral data is unreliable. The estimate includes plantations only so excludes downstream manufacturing and processing industry contributions.	Data on plantation and downstream palm oil industry contribution.

Annex II: The broader fiscal system

Beyond tax, the broader landscape of public revenue collection instruments, public subsidies and regulations, as well as revenue allocation and distribution potentially have or could have an influence on palm oil production and land use models in Indonesia (Schlegelmilch et al., 2011). Further study is required to understand these elements and their influence in more detail. The sample of regulatory requirements listed below gives a preliminary sense of the many bureaucratic procedures to be complied with by palm oil producers and associated payments. One interviewee for this study suggested that unofficial payments by oil palm plantations in some regions could be as high as 20% of their total costs and outweigh payments of official taxes and non-tax official fees. Another interviewee described the palm oil business as “politically lucrative...a source of official non-tax or unofficial fees. Every permit, every letter, has a price”. The same interviewee also stressed political benefits associated with opening up plantations and hiring staff that could help build political support.

A holistic approach is therefore needed to look at the whole suite of incentives, regulations, rent collection and distribution mechanisms associated with palm oil production in Indonesia, to understand what adjustments can be made to achieve the desired effect.

REGIONAL AND LOCAL TAXES

Regional taxes, which may be of particular relevance for palm oil businesses, include:

- motor vehicle taxes (PKB)
- vehicle transfer duty (BBNKB)
- Surface Water Tax (PAP) although smallholder plantations are exempt

Local (district) taxes which may be of particularly relevant for palm oil businesses include:

- advertisement
- groundwater
- urban and rural land and buildings tax
- land and buildings transfer duty (BPHTB), which is however discussed in this report.

PERMITS AND LICENSES

Other regulatory requirements for plantation companies, which generate revenues for local and central government (in particular via Ministry of Forestry) and clearly have very close links to land use

patterns include:

- Location licenses
- Land titles
- Land use rights
- Reforestation fee
- Business use rights (HGU) – revenues from this permit are collected by central government
- Environmental Impact Assessments (AMDAL)
- Environmental Permits
- Plantation Business Permit (IUP)
- Decree of Forest Estate Release
- Timber Use License /Izin Pemanfaatan Kayu (IPK)⁴⁶

REGULATION

Furthermore, a number of other important regulations influence plantation companies' ownership structures and operations, including e.g.:

- Investment Law 25/2007: prohibits share ownership and control through nominee agreements where certain shareholders have limited powers
- Presidential decrees 77/2007 and 111/2007: limit foreign investors to 95% in a palm plantation company
- Ministry of Agriculture/National Land Agency Regulation 2/1999 on location permits/licenses: limits plantation to 20,000 hectares in one province and 100000 throughout Indonesia (allowance doubled for Papua)

SUBSIDIES

McFarland et al. (2015) identify the following subsidies (of various forms, some but not all related to taxation) that apply to palm oil production in Indonesia:

- Interest rate subsidies for R&D to develop new seed strains and seedlings and funding for
- 46 Licenses provided to harvest existing timber on land with plantation concessions is often cited as a primary economic motive for deforestation, the plantation income (requiring more investment) secondary, if at all (Mumbunan 2014; Obidzinski 2013; EIA 2014; Kartodihardjo and Supriono in Irawan 2013). Districts issuing these licenses receive a portion of revenues back via e.g. the reforestation fund. This practice causes land degradation and encourages more expansive land use than is necessary for plantation purposes.

nurseries (although government spending on agricultural R&D is relatively small in Indonesia and has the potential *inter alia* to boost sustainability)

- Subsidy on provision of seeds and saplings at reduced costs via State Owned Enterprises
- Fiscal incentives including concessional loans⁴⁷
- Income tax breaks (discussed in this report)
- Differential export taxes on crude and refined palm oil (discussed in this report)
- Incentives for production of biofuels and biodiesel including income tax and VAT concessions (as well as corporate investment tax breaks also discussed in this paper), subsidies of the market price of biodiesel⁴⁸, government coverage of state owned Pertamina's losses resulting from biofuel blending and guidance on obtaining permissions for biofuel businesses (Regulation No. 051/2006).
- Incentives for smallholders in form of interest rate subsidy. Under Kredit Pengembangan Energi Nabati-Revitalisasi Perkebunan (KPEN-RP), the Indonesian Government cooperates with private banks, whereby the banks provide loans to smallholders and the government subsidizes the interest rate (as per Ministry of Finance Decree No 117/PMK06/2006).⁴⁹

In addition the authors identify several other broad agricultural subsidies that affect palm oil production including:

- Regulations and policies related to access to land
- Subsidies for key inputs such as fertilizers and transport fuels sold by State Owned Enterprises, resulting in price ceilings for farmers

⁴⁷ For farmers of biofuel crops and SMEs in the food and biofuel industry.

⁴⁸ McFarland et al. (2015) estimate that this amounts to up to USD 270 million of support per year.

⁴⁹ McFarland et al. (2015) reproduce an estimate of USDA that between 2000 and 2009, interest rate credits aided the establishment of 1.1 million ha of new oil palm plantations. Meanwhile, the credit interest subsidy for farmers of biofuel crops (Subsidi Bunga Kredit Biofuel (KPEN-RP)) amounted to IDR 76,986,565,900 in TA 2012 and IDR 74,504,074,566 in TA 2011 (Laporan Keuangan Pemerintah Pusat 2012).

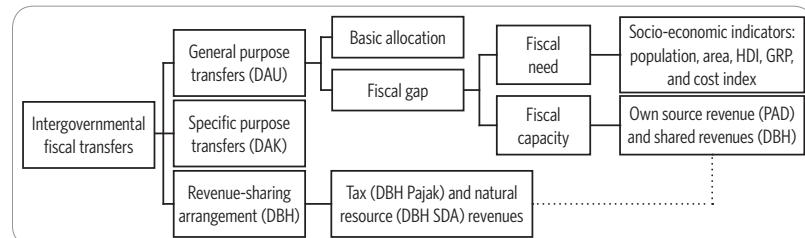
- Transport, energy and utility infrastructure investment as part of the national economic master plan (MP3EI).⁵⁰ Support through the MP3EI is also allocated for R&D on productivity that could boost sustainability.
- Domestic fuel blending mandate and cooking oil subsidies, which boost demand

Many of these subsidies are focused on incentivizing domestic down-stream processing, which adds value before export and enhances food and fuel security (cooking oil and biofuels). McFarland et al. describe a shift in public support for palm oil in Indonesia in the last decades, away from concessional loans, direct state investment (often tied to migration programs) and support for access to land (concession allocations, streamlining of investment and permitting procedures) to support for deregulation and privatization. However, some forms of direct state investment and public private partnership continue as well as a number of tax exemptions explored in this paper. McFarland et al. (2015) estimate the value of subsidies to the palm oil industry to total more than USD 17 billion annually.

REVENUE SHARING

Mumbunan (2011) and Mafira and Sutiyono (2015) describe in detail the sources of public finance available to local governments in Indonesia, including limited local own source revenues and taxes and dominating intergovernmental fiscal transfers. The key intergovernmental fiscal transfer mechanisms are illustrated in the diagram below. As discussed preliminarily in Section 4.2.3., these mechanisms may influence or could be used to influence local government land management behaviors.

Figure AII.1 Intergovernmental fiscal transfers in Indonesia



Source: Mumbunan et al. 2012

⁵⁰ McFarland et al. (2015) estimate that "Between 2011 - 2014, IDR 323 trillion (US\$ 34.5 billion (at 2011 USD prices, OECD data)) and IDR 124 trillion (US\$ 13.3 billion (at 2011 USD prices, OECD data)) was committed for expenditure on transport, energy and utilities, in those regions respectively."

Annex III: Individual tax summaries

Figure A-1, Export Tax: Overview

EXPORT TAX	
Regulation	UU 10/1995, 128/PMK.011/2013
Indonesian Abbreviation	Bea Keluar (Export Duty)
Basis of taxation	exported volume by weight
Rates	<p>Tax is calculated as follows:</p> <ol style="list-style-type: none"> 1. Export Duty Tariff x Export Reference Price Per Unit x Units of Good x Currency Exchange or 2. Export Duty Tariff in Certain Currency x Units of Good x Currency Exchange <p>Export Duty Tariffs are defined by Permenkeu 75/PMK.011/2012 as amended by 128/PMK.011/2013.</p> <p>Export Reference Prices are set monthly by DG Custom and Duty using CIF Rotterdam CPO prices as a reference.</p>
Category I: Fruit Bunches, Seedlings, and Kernels	Export Duty Tariff for is 40% and for Oil Cake and other solidified residues of FFB, Seedlings, and Kernels is 20% independent of export prices.
Category II: Crude Palm Oil, Crude Palm Kernel Oil and hydrogenated equivalents	The Export Duty Tariff ranges from 0-22.5% depending on export price ranges.
Category III: Crude Palm Olein and Stearin variants and Fatty Acid Distillates	The Export Duty Tariff ranges from 0-15% depending on export price ranges.
Category IV: Refined, Bleached and Deodorized Palm products	The Export Duty Tariff ranges from 0-13% depending on export price ranges.
Category V: RBM Palm Olein in branded packaging under or equal to 25kg and Biodiesel from Palm Oil	The Export Duty Tariff ranges from 0-7.5% depending on export price ranges.
Special provisions for palm oil?	0% tax rate applies for all products until a certain price limit. Limit is higher for more processed products. –
Who collects the tax?	Customs Office, which falls under DG Customs and Excise, not DG Tax.
Distribution	All export duty revenue goes to central government and does not get earmarked for revenue sharing back to the regions.
Are there differences in how it is applied to different sizes and types of actors?†	No
References (other than regulations themselves)	http://djpen.kemendag.go.id/app_frontend/contents/48-tax-procedure

† e.g. for smallholders vs private producers, mill owner vs plantation owner, etc.

Figure A2 Land and Buildings Tax: Overview

LAND AND BUILDINGS TAX	
Regulation	UU 12/1985, 12/1994, PP 48/1997, PP 25/2002
Indonesian Abbreviation	PBB
Basis of taxation	designated value of land or building owned/used (NJOP)
Rates	<p>land and building tax levied annually on holdings of land or buildings:</p> <ul style="list-style-type: none"> • For Objects with NJOP of up to IDR 1 billion: <ul style="list-style-type: none"> » 0.5% X NJKP (which is 20%) X [NJOP - NJOPTKP (which is IDR 12 million)] • For Objects with NJOP of above IDR 1 billion, and for plantation, forestry, and mining land: <ul style="list-style-type: none"> » 0.5% X NJKP (which is 40%) X [NJOP - NJOPTKP (which is IDR 12 million)] <p>Where Nilai Jual Objek Pajak (NJOP) is the standard average official price of land or buildings, set by local government based, inter alia, on actual market values. Nilai Jual Objek Pajak Tidak Kena Pajak (NJOPTKP) is the Non Taxable Sales Value, applicable for rural zones only, which is set at IDR 12,000,000 for each taxpayer. NJOP is published by MoF on January 1st each year or every 3 years depending on each region's rate of development. It is set according to regulation Permenkeu No. 150/PMK.03/2010 on Classifications and Determination of NJOP as a Basis for PBB Tax.</p> <p>For taxation purposes land plots are divided in accordance with spatial planning zones (meaning if a purchaser were to purchase two plots of adjacent land, different NJOP may apply for each plot). For NJOP valuation purposes, land is classified into urban, rural, forestry, plantation, and mining areas.</p> <p>For plantations, NJOP is calculated by taking into account not only the land value, but also the plant investment value. The formula for Plantation NJOP is:</p> $\text{Plantation NJOP} = (\text{Land size} \times \text{Land NJOP}^*) + (\text{Building size} \times \text{Building NJOP})$ <p style="text-align: center;">*{Land NJOP = Land Value + Standard Plant Investment^a}</p>
Special provisions for palm oil?	<p>According to DG Tax regulation PER-64/PJ/2010, NJOP for plantation land is calculated based on the price of similar land if the land was not purchased.</p> <p>With 25/2002 however, all plantation, forestry and mining land has a taxable sales value (NJKP) of 40%.^b</p>
Who collects the tax?	The tax is payable in the district where the land and or buildings are located. It is collected by the district Local PBB Tax Office.
Distribution	<p>GR No. 16/2000 and KepmenKeu No. 82/KMK.04/2000 on Revenue Sharing from PBB Tax between Central and Regional Government stipulates how revenues from PBB will be distributed between Central and Regional Government. 10% is distributed to central government and 90% to local government. 10% to central is then redistributed evenly back to districts (65%) and the remainder (35%) to districts which (over) achieved realization targets.</p> <p>The 90% portion going to local government is split into 16.2% for the respective provinces and 64.8% for the respective districts plus a 9% collection fee which is distributed in varying proportions for each sector (urban, rural, plantation, forestry and mining) between DG Tax (predominantly) and local government. The meaning of "respective" province/ district here means that it gets distributed back proportionally to the district where it came from.</p>
Are there differences in how it is applied to different sizes and types of actors?	No.

a Government estimate of the value of labor, raw materials, and equipment invested in opening land, planting, and maintaining the plantation.

b Also see <http://www.pajak.go.id/content/seri-pbb-ketentuan-umum-pajak-bumi-dan-bangunan-pbb?lang=id> and <http://www.pajak.go.id/sites/default/files/BookletPBB.pdf>

Figure A3 Land and Buildings Buyers' Tax: Overview

LAND AND BUILDING TAX/DUTY ON ACQUISITION OF LAND OR BUILDINGS (PURCHASE TAX)	
Regulation	UU 21/1997, UU 20/2000
Basis of taxation	value of land or building owned/used
Indonesian abbreviation	BPHTB
Rates	land and building tax/duty on acquisition (BPHTB) levied upon acquisition of buildings or business use rights, paid by the buyer: 5% of standard average official price of land or buildings (NPOP) or actual purchase price (whichever is higher), minus the Non-Taxable Sale Value, Nilai Perolehan Obyek Pajak Tidak Kena Pajak (NPOPTKP). The NPOPTKP is a maximum IDR 60 million (except for inheritance transfers).
Special provisions for palm oil?	No
Who collects the tax?	Local revenue office (Dispensa)
Distribution	remains within the District where it is collected.
Are there differences in how it is applied to different sizes and types of actors?	No, the difference of PBB would be in the size of the plot and the type of zone classification it is in which affects the NJOP.

Figure A4 Land and Buildings Sellers' Tax: Overview

TAX ON TRANSFER OF LAND AND BUILDINGS	
Regulation	GR 48/1994, GR 27/1995, GR 79/1999, GR 71/2008. Payment is considered fulfillment of PPh Article 25 obligations.
Subject and Object of taxation	Income from land or building transferred
Indonesian abbreviation	PPh-BB
Rates	Income tax on transfer of land and buildings paid by the seller: 5% of purchase price or NJOP if higher. PPh-BB is not applicable if transfer price is less than IDR 60 million.
Special provisions for palm oil?	No
Who collects the tax?	Payable in the district, city, or province where the land and or buildings are located. Tax is paid to Bank Persepsi - bank appointed by the Ministry of Finance to receive tax payments.
Distribution	20% to Local Government and 80% to Central Government. Of the 20%, 8% to the relevant province and 12% to the relevant district. Of the 12%, 8.4% to the municipality where the taxpayer is registered, and 3.6% evenly to all municipalities in the province. (Article 8 PP No. 55 of 2005 on Balancing Funds).
Are there differences in how it is applied to different sizes and types of actors?	

Figure A5 Income Tax: Overview

INCOME TAX	
Regulation	Law No. 7 of 1983, Law No. 7 of 1991, Law No. 10 of 1994, Law No. 17 of 2000, Law No. 36 of 2008 on Income Tax
Subject and Object of taxation	Profits of companies and individuals
Indonesian abbreviation	PPh
Rates	<p>Income taxes on corporation's income</p> <p>According to Articles 6 and 17, domestic corporate taxpayers pay 25% on profits, calculated as:</p> <ul style="list-style-type: none"> • gross revenue] minus [costs to obtain, claim, and maintain revenue] • whereby "costs" include: <ul style="list-style-type: none"> » operational costs (pension fund fees, insurance premiums, waste management etc), » currency exchange losses, » non-claimable credit, » depreciation of expenditure to acquire assets*, » capitalization of expenditure to acquire assets with more than a year of utility**. » Input VAT for purchase of capital goods (e.g. FFB) <p>If the balance is a loss, the loss can be carried forward for the next 5 years.</p>
General tax breaks	<p>Public company corporate taxpayers may receive a 5% tax break on the normal corporate tariff. Eligible public companies are those with at least 40% of their paid-in shares publicly owned, and the "public" should consist of at least 300 individuals, each holding less than 5% of the paid-in shares. Small enterprises (with turnover under IDR 50 billion per year) are eligible for a 50% tax cut on earnings up to IDR 4.8 billion.</p> <p>Article 22 Tax (Creditable against Final Income Tax) is typically applicable to payments for import of certain goods (0.5 - 7.5%); the sale of goods to the government or SOEs (1.5%); the purchase of fuel; lubricants, cement, paper, steel, automotives, pharmaceutical products; the purchase of materials by manufacturers or exporters in forestry, plantation, agriculture, cattle breeding and fishery from wholesalers (0.25%). Manufacturers or exporters in plantation and agriculture can collect Article 22 Tax from wholesalers without being appointed by the DGT to undertake this.</p> <p>Under regulation number 1/2007, revised by regulation 62/2008, tax breaks are available from DG Tax at the discretion of the BKPM chairman for limited liability companies to encourage foreign direct investment and domestic investment in certain industries and regions.*** Such incentives include reduction of net income of up to 30% of amount invested (split over 6 years), accelerated depreciation deductions, extension of period for which tax losses can be carried forward for up to 10 years, reduction of withholding tax rate on dividends paid to non-residents to 10% (or lower if tax treaty available). Other tax breaks are available for companies located in bonded zones or Integrated Economic Development Zones (Kawasan Pengembangan Ekonomi Terpadu/KAPET^a).</p> <p>Indonesian tax residents' treaty partners (that do not have a Permanent Establishment in Indonesia) are eligible for tax benefits in the form of withholding tax exemptions for service fees, or reduced withholding taxes on dividends, interest, royalties and branch profits.</p>

a There is a KAPET in Central Kalimantan. KAPET DAS Kakab includes Pangkaraya, Pulang Psau, Kapuas, and Barito Selatan districts.

INCOME TAX	
Income taxes on individual's income	<p>Article 21: Employers are required to withhold income tax from salaries payable to their employees and pay the tax to the state treasury on their behalf. The same withholding tax is applicable to other payments to non-employees e.g. individual consultants or service providers.</p> <p>Article 23: Tax on income paid to resident taxpayers at a rate of either 15% of gross amounts on: dividends, interest, royalties, prizes and awards or 2% on rental of assets other than land and buildings, forest felling services, etc.</p> <p>Article 26 Withholding tax of 20% payable on payments from resident tax-payers, organizations and representatives of foreign companies to non-residents, e.g. dividends, interest, royalties, fees, prizes, pensions, gains from debt write-offs, etc.</p>
Special provisions for palm oil?	<ul style="list-style-type: none"> * From 2009 onwards, the depreciation of development stage plantation expenses is automatically allowed to be deferred until the plantation trees have matured. This allows companies to deduct high expense of planting in initial years (VAT from planting stage) from tax due when the plantation is mature and sales are made. ** Most expenses incurred during development/ planting stage are capitalized as "immature plantation" for accounting purposes. Employee related expenses cannot be capitalized however. The cost of acquiring original land titles and licenses is also not allowed to be capitalized and amortized. ***Tax breaks are available for palm cooking oil producers in Sumatera and Kalimantan according to regulation 52/2011, with investments of greater than USD 60 million, employing over 100 people and integrated processing companies.^b <p>CPO mills are eligible for the following exemptions:</p> <ul style="list-style-type: none"> • Art. 22 Tax Prepayment Exemptions on the importation of capital goods • Import duty exemption under BKPM Master List. <p>Renewable energy companies, presumably including those producing biodiesel from palm oil, are eligible for corporation tax holidays for a period of five to ten years and thereafter a 50% reduction for two years. To be eligible taxpayers should be incorporated in Indonesia no earlier than 14 August 2010, have an capital investment plan of at least IDR 1 trillion, deposit a minimum of 10% in banks located in Indonesia, not withdraw their deposit prior to realization of investment plan and apply within 14 August 2014.</p>
Who collects the tax?	Income tax is paid to the State Treasury through a designated tax-payment bank (bank persepsi). Accompanying tax returns must be filed with the Indonesian Tax Office, in the province in which the company's HQ is registered.
Distribution	Personal income tax is redistributed 80% to central government and 20% to local government. Of the local government share, 8% goes to the provinces in accordance with their income tax contributions, 12% to districts in the province, the latter shared mostly according to the district in which the tax was originally paid.
Are there differences in how it is applied to different sizes and types of actors?	Small companies, with gross revenue of up to IDR 50 billion, receive a 50% tax cut on the normal corporate tax rate (resulting in a 12.5% tax rate), applied to up to IDR 4.8 billion of gross revenue (as per Pasal 31E).
References (other than regulations themselves)	<p>PwC, 2014, Indonesian Pocket Tax Book</p> <p>PwC, 2010</p> <p>PwC, 2012</p>

^b <https://staff.blog.ui.ac.id/martani/files/2013/02/PPh-Badan-PP-1-Tahun-2007-j.o.-62-Tahun-2008-j.o.-52-Tahun-2011-Fasilitas-PPh-Usaha-Tertentu.pdf>

Figure A6 VAT: Overview

VALUE ADDED TAX	
Regulation	Law No. 8 of 1983, Law No. 11 of 1994, Law No. 18 of 2000, Law No. 42 of 2009 on VAT and Luxury Goods.
Basis of taxation	value of goods sold
Indonesian abbreviation	PPN
Rates	<p>Input VAT is payable by a company when purchasing materials (capital goods, etc). Output VAT is chargeable by a company when selling goods (CPO, services, etc). Input VAT can be claimed as credit against the Output VAT (Output - Input = Final Input VAT).</p> <p>VAT is due on deliveries with the value exceeding IDR 4.8 billion per annum, at a standard rate of 10%. Government regulations can increase or decrease VAT to 15% or 5%.</p> <p>Services provided by plantation companies to plasma farmers (e.g. management, technical support, loans, fertilizer, pesticide lending) if any, are subject to VAT.</p>
Special provisions for palm oil?	<p>VAT Exemption is available for import of capital goods (applicable to plantations and CPO mills).</p> <p>A recent court decision has clarified that smallholders and traders delivering oil palm Fresh Fruit Bunches (FFB) are required to pay 10% tax^a, while special provisions apply for integrated plantation companies. Input VAT related to planting is not creditable by an integrated plantation company (FFB and CPO production) however, although there has been some confusion around treatment of integrated operations.</p> <p>According to Decree No. 156/PMK.011/2009, the biofuel component of fuel sales is exempt from VAT.</p>
Who collects the tax?	VAT is collected and recorded in District tax service offices (<i>Kantor Pelayanan Pajak/KPP</i>). Businesses with operations across different districts must register each unit with the relevant KPP.
Distribution	No direct redistribution to the local level.
Are there differences in how it is applied to different sizes and types of actors?	
By nature of the tax, is it likely to interact with sustainability of behaviors at present?	

^a See: <http://www.pajak.go.id/content/article/implikasi-putusan-mahkamah-agung-ri-nomor-70-tahun-2013-terhadap-petani-kelapa-sawit>