



## Landscape Protection Plan - Dharma Satya Nusantara Group

27 March 2020

**Disclaimer:**

The numbers represented in this plan are derived from 2019 and various historical sources. Numbers are indicative and local environment relative to 2019 year's context and may therefore change over time.

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### 1. Summary

In 1996, when the Oetomo family was asked by the local government of East Kalimantan on Borneo Island to start producing palm oil over 35,000 hectares of land that had previously been logged by production forest concessions, palm oil was still a nascent crop in Indonesia, and one full of promise. From humble beginnings as a wood products business in East Kalimantan, the Oetomo Family’s DSN Group emerged, today growing palm fruit across 15 estates across 4 provinces on Borneo island. In aggregate, the Company has planted 112,450 hectares and produces 610,000 tons of crude palm oil per annum from 10 palm oil mills, including a 30% contribution of Fresh Fruit Bunches (FFB) from associated independent producers (smallholders, cooperatives and smaller estates).

Today, due to its high yield relative to other vegetable oil crops (soy in particular), palm oil demand from the food and cosmetics industries continues to rise. Conversely, palm oil’s reputation has suffered due to the widespread deforestation its cultivation has caused, particularly in Malaysia and Indonesia. Nowadays, the food and cosmetics companies supplying the world’s consumers (though especially in western markets) increasingly want to be sure that the palm oil is sourced from sustainable plantations. Consumers have also become more informed on the subject of biodiversity loss and have demanded increased accountability from product manufacturers. Aided by NGO campaigns and climate advocacy groups, consumers have come to realize the critical importance of rainforests in preserving vital habits and the biodiversity they support, and which are essential in combatting the current climate crisis. While this approach may sound simple and effective from the top of the chain, it is, however, complex to implement on the ground: lack of traceability, asymmetry of information between different actors and across time and technical solutions to what in fact requires location-specific socio-economic approaches all hinder current efforts to address the problem. Therefore, having no deforestation associated with palm oil in consumers’ products is easier said than done.

Together with the &Green Fund, DSNG is setting out on a journey that can ultimately give buyers (and end users) of the group’s crude palm oil and its derivative products, the comfort that effectively no deforestation and no exploitation is involved in its production. This Landscape Protection Plan is the reflection of DSNG’s roadmap towards the realisation of this ambition. DSNG commits to delivering long-term environmental and social

returns, comprising protection of the forest (ER 1), sustainable intensification of productive land (ER 2), restoration of forest (ER 3) and social inclusion (SI). DSNG’s commitments are further linked to &Green’s financing, and relate to directly attributable actions: (a) the results of DSNG’s actions within initially, the seven plantations in East Kalimantan; and (b) DSNG’s actions outside its concessions, within the surrounding landscapes (e.g. by engagement with third parties such as suppliers, farmers and coordinating agencies that in turn generate ER).

DSNG will deliver the following returns through this Landscape Protection Plan:

Forest Conserved (ER 1)	Land sustainably intensified (ER 2)	Forest restored (ER 3)	Smallholders benefiting (SI)
>7,550 ha	>85,750 ha	110 ha	>8,025 SH farmers

This plan ultimately reflects DSNG’s vision as a business: through its ability to turn an initially small operation into a well-managed, forward thinking and profitable company, DSNG is able to further develop a virtuous and self-supporting relationship between prosperous socio-economic development and the protection of its ecosystem’s natural resources and forests.

## 2. Definitions

- **Landscape Protection Plan:** a sustainable land-use and management plan, which sets out how the impact will be generated during the financing period within the landscape or project area from which the Fund considers its Environmental Return and Social Inclusion to be derived.
- **Forest:** An area of land spanning more than 0.05 hectares with tree crown cover (or equivalent stocking level) of more than 10 percent with trees with the potential to reach a minimum height of 2-5 meters at maturity in situ. Actual definitions can vary from country to country as the Kyoto Protocol permits countries to specify the precise definition within these parameters to be used for national accounting of emissions.
- **Conservation:** The protection, care, management and maintenance of ecosystems, habitats, wildlife species and populations, within or outside of their natural environments, in order to safeguard the natural conditions for their long-term permanence (IUCN).
- **Land sustainably intensified:** As defined by FAO, agricultural intensification is an increase in agricultural production per unit of inputs (labour, land, time, fertiliser, seed, feed, or money). In practice, intensification occurs when there is an increase in the total volume of agricultural production that results from a higher productivity of inputs, or agricultural production is maintained while certain inputs are decreased (such as by more effective delivery of smaller amounts of fertilizer, better targeting of plant or animal protection, and mixed or relay cropping on smaller fields).
- **Forest restored:** Restoration is to work towards the re-establishment of the presumed structure, productivity and species diversity of the forest originally present at a site (adapted from UNEP World Conservation Monitoring Centre).
- **Smallholders:** A smallholder farmer is generally defined as farming less than 50 hectares although this may differ per crop, country and productivity. Other indicators that determine whether a farmer is a smallholder are market orientation, labour input, level of income, type of farming system, and crop yield
- **Plasma:** Community plantation developed by the company as required by the Indonesia Government regulation on palm oil and plasma systems
- **Palm oil concession:** refers to an area allocated by a government or other body for industrial-scale oil palm plantations.

## 3. The Landscape area and project boundaries

The purpose of this section is to (a) clarify the geographical boundaries of the Landscape Protection Plan; (b) depict the business as usual scenario within this landscape as it relates to deforestation (current land use, legal framework, and key deforestation drivers); and (c) indicate the relevant players for DSNG’s interventions. As a

preamble to Section 4 (describing DSNG's interventions and resulting ERs), this section ultimately helps contextualise the company's strategies for reducing deforestation and generating ERs and Social Inclusion. It will also provide evidence to support the additionality of DSNG's interventions.

### 3.1. Defining the geographical reach of DSNG's influence based on location and supply catchment areas

PT Dharma Satya Nusantara Tbk. (hereafter DSNG) started operations in 1980 as a wood products company and grew into a medium-sized, publicly listed company, now primarily engaged in oil palm plantations. Today, its plantations total approximately 112,450 hectares across 15 estates located in East, Central, North and West Kalimantan together with 10 palm oil mills and one kernel crushing plant. The company also has bulk CPO and PKO storage capacity of 84,000 tons.

DSNG's oldest palm oil estates are in East Kalimantan, under its SWA, DWT, DAN, DIN and KPAS subsidiaries. This cluster of 5 estates (often referred to as 'the Muara Wahau block'), consists of approximately 48,500 ha of mature planted palm. Within the same province, the group has also more recently acquired two smaller palm oil plantations (PT BAS and PT BPN), which together account for approximately 17,710 ha of planted area.

Altogether, these East Kalimantan plantations account for 75% of DSNG's total planted area, and the 7 estates are a key pillar for the group's overall revenue.

DSNG has 8 CPO mills in East Kalimantan, 6 located in Muara Wahau Block and 2 at PT BPN and PT BAS. The total production capacity of the mills is 470 tons/hour. DSNG also has a palm kernel plant that converts palm kernel into Palm Kernel Oil (PKO) with a capacity of 200 tons/day or 60,000 tons/year.

In order to fulfil the existing mill capacity, DSNG draws FFB from 5 different sources. First from its own nucleus plantations. Second, from the plasma plantations that the Company manages directly, but for which, part of the revenue is distributed to smallholder landowners. Third, from independent smallholder farmers, who sell their FFB exclusively to DSNG in exchange for financing provided for agricultural inputs. Fourth, from other independent palm oil plantations. And finally, from fully independent smallholders that sell FFB via cooperatives. Out of DSNG's seven subsidiaries, 4 currently rely on external suppliers (PT SWA, PT KPAS, PT BPN, PT BAS), while the rest obtain their supply exclusively from their own nucleus and plasma production areas.

Considering the spread and location of these external suppliers is relevant for clarifying the environmental and social impact that DSNG's integrated operations can have. In East-Kalimantan, the Muara Wahau supplier base is situated within a total radius of 32 km around the block, while PT BPN's suppliers are all located within a 22 km radius around the plantation. Finally, the suppliers of PT BAS are the most widespread, extending to an 82 km radius from the plantation.

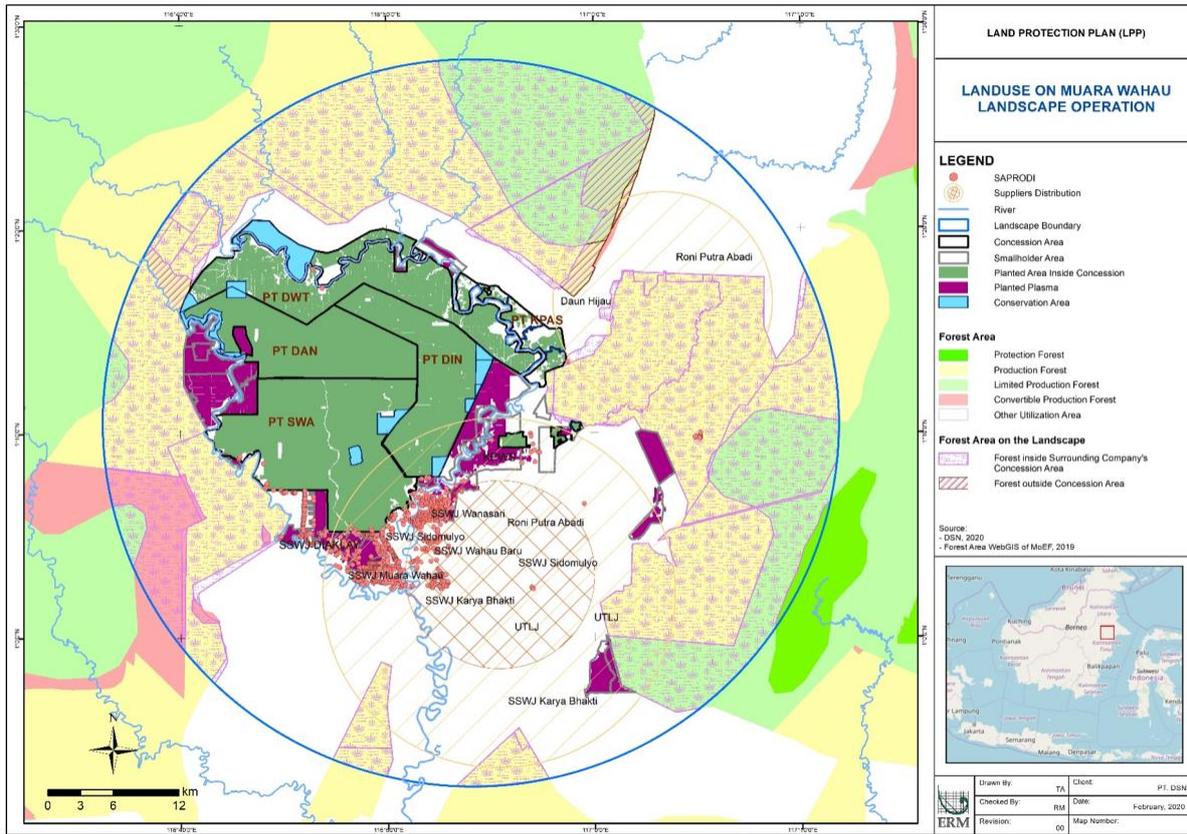


Figure 1: Landscape boundaries and land use in the M-W block.

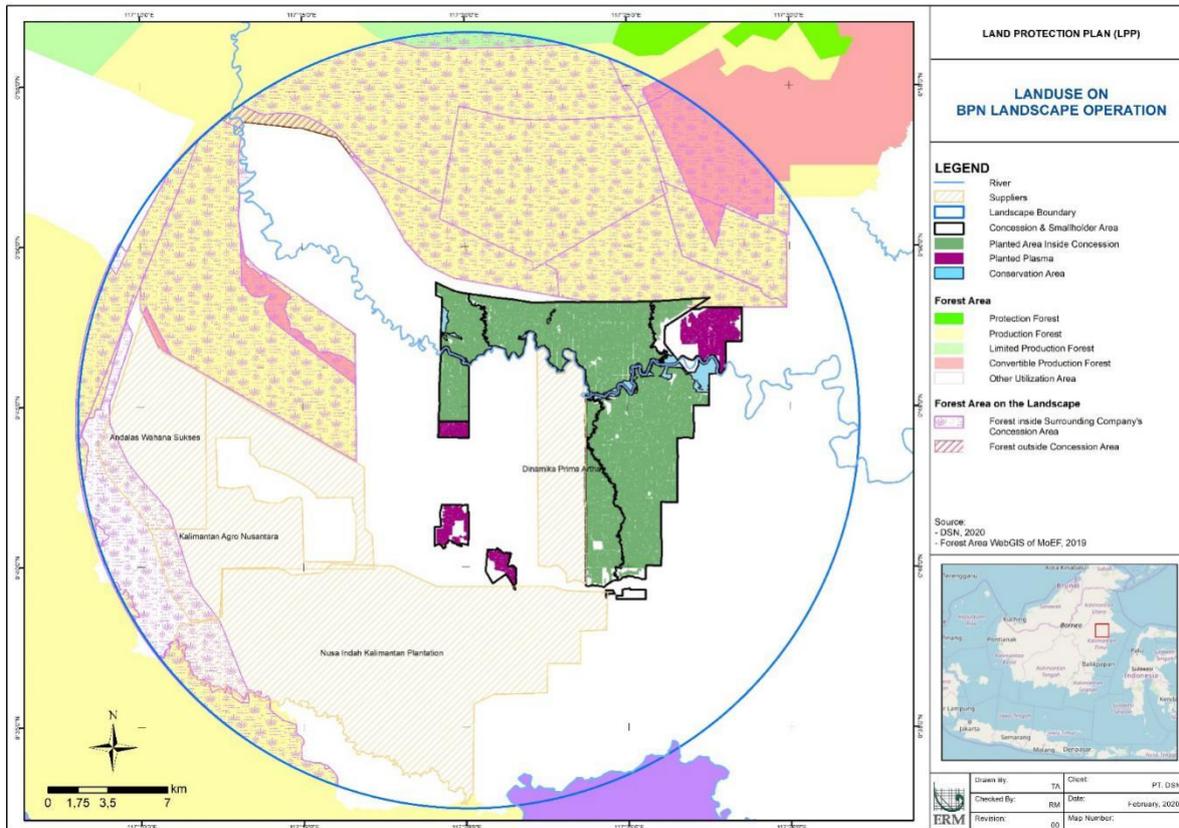


Figure 2: Landscape boundaries and land use for PT BPN

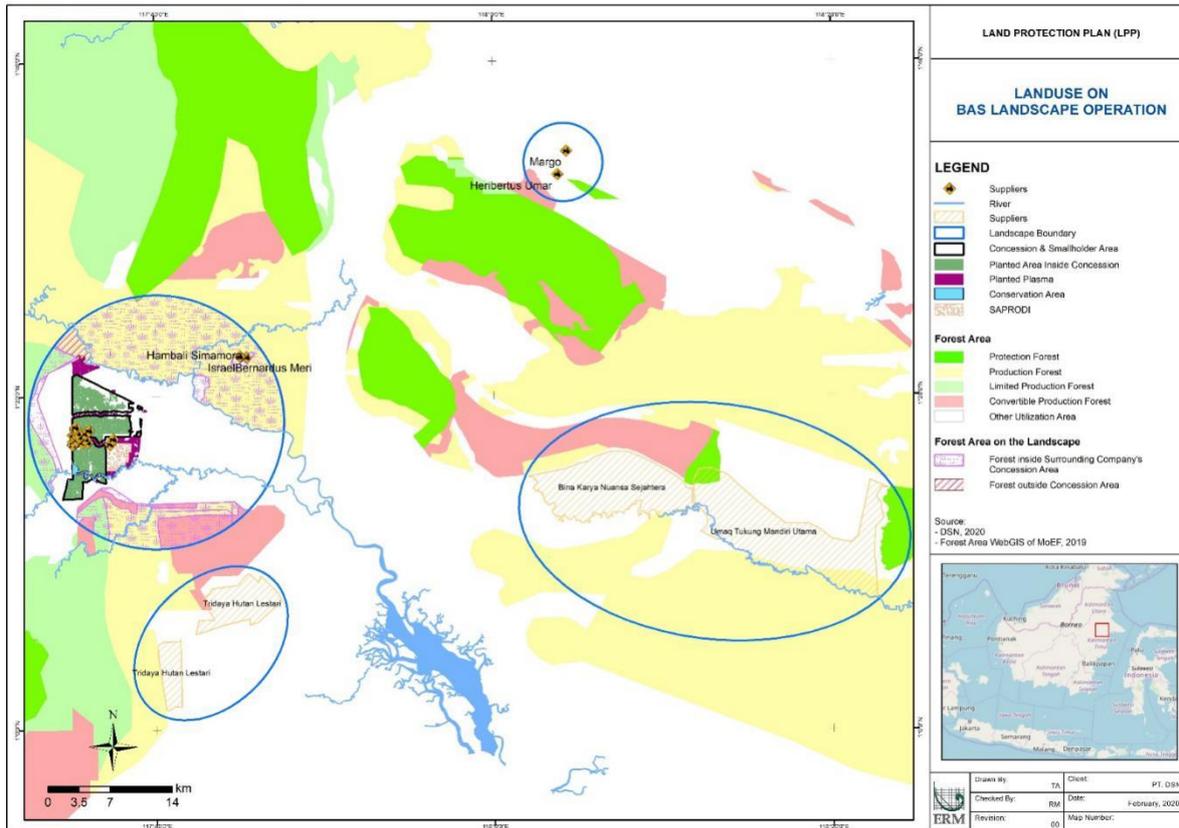


Figure 3: Landscape boundaries and land use for PT BAS

As the driving force for the group’s performance, the palm oil plantations in East Kalimantan province (officially called Kutai Timur Regency, Kalimantan Timur Province) have been chosen as the focus of the Landscape Protection Plan. It is important to note, however, that DSN is committed to implement the key interventions across its entire group of subsidiaries. Whilst the resulting ERs from group level calculations are not reflected here, we understand that they are substantially larger than what has been currently delineated.

### 3.2. Land use patterns within the project landscape (boundaries)

Most of the project landscape is defined by productive areas, or so-called ‘APL’. A smaller share of the total is allocated to either production forest permits or to protected and conservation areas.

Land classification in Indonesia is defined by its allowable uses. Land can either be classified as forest estate (KH) or non-forest estate (Areal Penggunaan Lain or APL). These classifications define the rights and permits related to it, the purpose of its use and the regulatory authority under which they fall (KH under KLHK and APL under the provincial government). The provincial governor, however, has the authority to request for a reclassification of KH into APL. It should be noted that APL refers to areas outside of forest estates and is therefore designated to be used for non-forestry purposes such as settlement, agriculture, etc. By contrast, forest estates are designated to be forested and may be used for a variety of commercial and non-commercial purposes, such as conservation areas, forestry concessions, etc.<sup>1</sup>

Originally, all of Muara Wahau block’s plantations, with the exception of PT KPAS, were defined by the government as production forest areas, allocated to natural forest logging concessionaires. In 1996, the government changed the status of the land (as part of a national revision of the country’s National Spatial Plan)

<sup>1</sup> <https://www.earthworm.org/uploads/files/Legal-options-for-protecting-forests-in-land-zoned-for-agriculture-in-Indonesia.pdf>

from production forest to APL, following a request from the governor. It was at this time that DSNG was asked to utilize the land for palm oil production (despite being a wood product business)<sup>2</sup>.

The summary of land uses in 2019 and for the seven concessions is presented as follows:

Plantation sites	Production area		Protected (HCV) area	Total concession
	Nucleus	Plasma		
<b>7 Muara Wahau and Vicinity Concessions</b>	<b>63.335</b>	<b>17.610</b>	<b>4.050</b>	<b>72,625 ha</b>

Table 2: overview of production and HCV area for the Landscape Protection Plan Subsidiaries.

Within DSNG' supply catchment area and based on the government spatial plan, the majority of the area has been allocated to APL (i.e. non-forestry purposes such as community settlements and agriculture) and production forestry concessions, purposed for productive and to some extent, commercial or industrial use. Naturally, the reclassification under the National Spatial Plan had direct impact on forest conservation. According to Forest Watch Indonesia, approximately 70% of land within DSNG's supply catchment areas in East Kalimantan (or 8.6 million ha) was already assigned and exploited by private companies by 2018 (i.e. concession plantations). 23% of the 8.6 million ha had been allocated to logging concessions (1.9 million ha), 15% to mining concessions (1.2 million ha), 13% to palm oil plantations (1.1 million ha) and 7% to production forest (567,000 ha).

Analysis of the forest cover across the area in 2020 shows that there is still a total of 674,651 ha of natural forest left in the 3 respective catchment areas (339,581 ha around the W-H block, 157,323 ha around PT BPN and 177,747 ha around PT BAS). Yet, the current analysis does not allow for a definitive determination of the state of the natural forest; it is possible that some areas might not actually be forest, but rather productive forest such as acacia or eucalyptus, for example. When overlaying the spatial planning maps mentioned above with the natural forest cover maps, it is evident that 34% of the forest cover identified is located within forestry concessions.

Forest cover	Hectares
<b>Forest cover in supply catchment area (ha)</b>	<b>674,651</b>
within in production forest (ha)	230,064
within APL (ha)	437,942
within protected forest (ha)	3,101
outside allocated land use (ha)	3,543

Table 3: Summary and classification of forest cover with DSNG's supply catchment area

More relevant for DSNG, and its ability to positively influence the forces that are currently putting pressure on the forest, is the natural forest identified within (a) 3,101 ha of protected areas; (b) 437,942 ha in APL; and (c) outside any classification. The current land use analysis shows that there is a total of 3,543 ha of forest outside DSNG's concessions in East Kalimantan that could be potentially safeguarded through DSNG's actions. This figure is key for understanding the potential impact of DSNG's interventions regarding forest conservation, which is covered in Section 4.

### 3.3. Historical deforestation trends and drivers

It is helpful to analyse the historical deforestation trends in the region, in order to understand the deforestation drivers that DSNG would be looking to incorporate into its strategies for mitigating risks of further deforestation within its landscape (both in and outside the concessions).

<sup>2</sup> Today, the land status of the Muara Wahau plantations can be classified as APL, Limited production forest areas and production forest area. However, limited production and production forest area represent less than 1% of the total area.

The figure below provides a historical perspective of deforestation trends by province. Over a 16-year period (2002-2018), there has been a significant transformation of forest cover in the country (see Figure 4). Indonesia experienced two key crises in terms of forest loss, from 2010 until 2012 and then a more pronounced one between 2013 to 2016. During the second crisis, Kalimantan experienced the highest deforestation rates in the country.

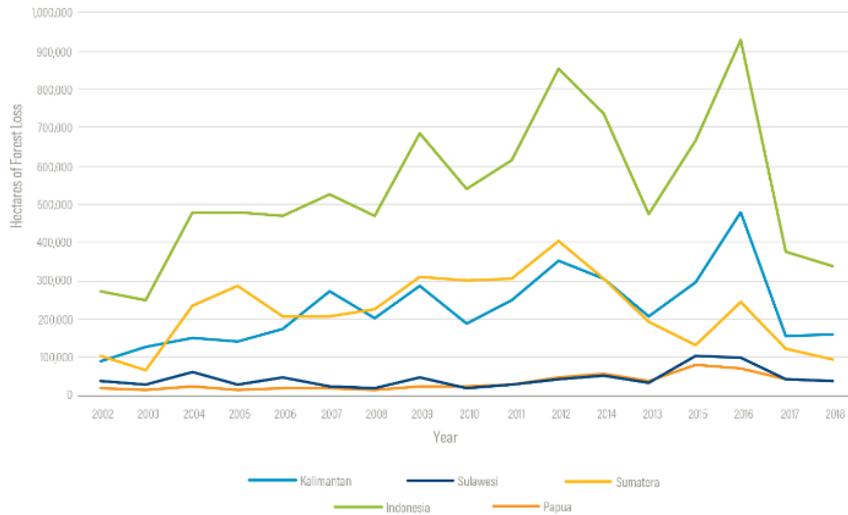


Figure 4: Deforestation trends in Indonesia from 2002-2016, by provinces. Source: Global Forest Watch, adapted

Analysing East Kalimantan alone, the timeseries below (figure 5) depicts the historical tree cover loss since the early 2000's, where the pink colour represents tree cover lost in the area. Global Forest Watch indicates that in 2016, 5.89 million hectares of land (47% of the total the province) was forest. 30% was classified as primary forest (30% of the total forest area), whilst the remaining 70% was classified as natural forest.<sup>3</sup> When deforestation in East Kalimantan was at its peak in 2016, the province lost 20% of its forest; 386,000 hectares of primary forest was lost together with 278,000 hectares of natural forest.

<sup>3</sup> FWI. 2018. Deforestasi Tanpa Henti. <https://www.globalforestwatch.org>

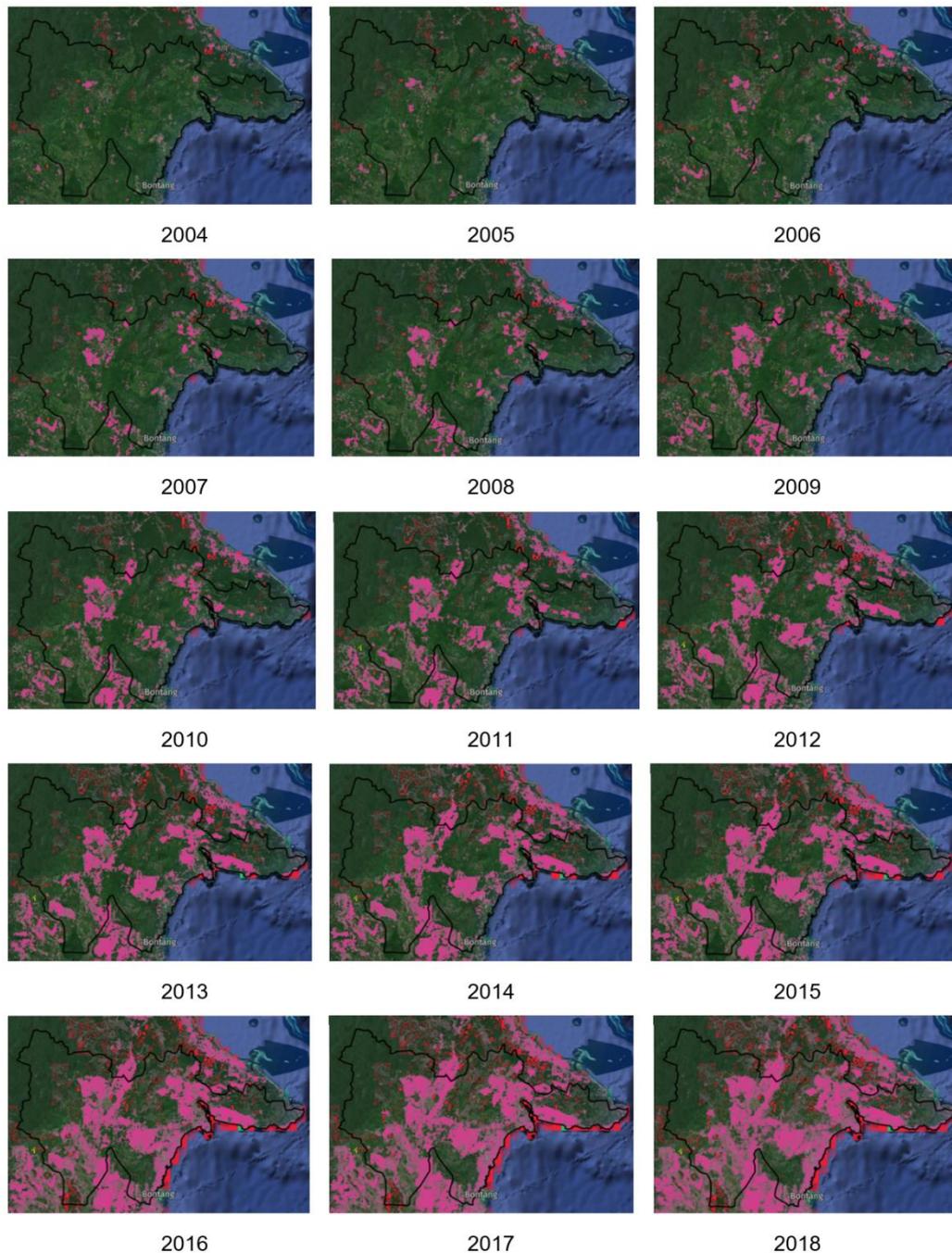


Figure 5: Time series showing the cumulative progress of tree cover loss in East Kalimantan between 2004-2018. Source: Global Forest Watch, adapted

Based on the Ministry of Environment and Forestry land cover data, the majority of the deforestation took place within APL areas (64% of total deforested area); an indication that plantation development has been the main driver of deforestation outside KH/forest areas. Based on an East Kalimantan 2017 plantation statistics report, the five agri-commodities that experienced the highest growth and covering altogether a total area of 1,352,063 hectares include oil palm, rubber, cocoa, pepper and coconut. Based on the historical evolution of the expansion of these five prominent agricultural commodities (Table 4), palm oil expansion experienced the sharpest increase. Between 2013 and 2017, palm oil expanded by 26%, and by 2017, it was 10 times larger than the second largest commodity (rubber).

Commodity	2013	2014	2015	2016	2017	Evolution
Oil palm	944,826	1,020,413	1,090,106	1,150,078	1,192,342	26% increase
Rubber	101,156	113,485	113,739	116,869	115,160	14% increase
Cocoa	10,999	9,514	8,296	7,931	7,778	29% decrease
Pepper	9,316	9,497	9,606	9,382	9,012	3% decrease
Coconut	27,272	26,674	22,887	22,897	22,289	18% decrease

Table 4: Historical evolution of the expansion of the five most cultivated agricultural commodities in East Kalimantan

Most of DSNG’s land clearing activities took place between 2000 – 2009 on the land previously exploited by the forest production company that previously operated the concession, and before the critical years of rapid palm oil expansion that resulted from a surge in palm plantings across the province as a result of crop substitution (e.g. from rubber and other lower yielding commodities) driven by peak CPO prices in 2007.

	HGU	Land clearance				
	Total	Prior to 2004	2004 - 2006	2007 - 2009	2010 - 2014	2015-2020
For the seven LPP concessions	72,625	11,941	11,561	19,738	19,686	409

Table 5: Land cleared area

### 3.3. Key players in the landscape

We recognize that, for a company attempting to reduce the pressures on the forest, it requires significant effort and innovation in the way it positions itself in the landscape and with respect to other stakeholders. For DSNG, industry initiatives, but more importantly its direct relationship with the key local actors, are essential for leveraging the goodwill its business has generated so far, to protect its natural resources and ecosystems. Below are some of the key relevant stakeholders for DSNG to implement its LPP and reach its ambitions.

#### Communities and smallholder farmers around the concession

There are approximately 30,000 people living around the seven concessions, distributed across 12 villages. Most of them are around the 5 oldest concessions of the Muara Wahau block. There is a diverse ethnicity within the villages including Dayak Wehea, Kayan, Jawa, Sunda, Bugis, Batak, East Nusa Tenggara, West Nusa Tenggara, and Bali. The population in the villages are dominated by Dayak Wahea, Javanese, and East Nusa Tenggara.

DSNG’s approach to community engagement (further explained the intervention sections of the LPP) is to strive to contribute to the sustainable economic, social development of the local communities living around its plantations. Firstly, through the development of a well-managed plasma scheme, smallholder support programs (SAPRODI) and the provision of service agreement (see section 4.2) Secondly, through CSR-based social- outreach programs to improve education, foster entrepreneurship, promote cultural development, housing, health and safety, and so on (see section 4.3).

#### Palm oil plantation concession supplying to DSNG

Plantation concessions supply FFB to DSNG in East Kalimantan. Most of these companies are medium to small scale concessions. Plantation concessions are important stakeholders for DSNG, from a commercial perspective but also for the implementation of its NDPE commitments. Since product labelling through certification is not currently possible, DSNG will work together with these plantations to define the verification mechanisms and required actions for demonstrating that they are not deforesting and not having negative impact on human life.

#### Fauna & Flora International (FFI)

Established in 1903, Fauna & Flora International (FFI) is considered to be one of the world’s oldest international wildlife conservation organisation. The NGO’s focus is on protecting biodiversity (the diversity of life on Earth), through science-based approaches to conservation. (<https://www.fauna-flora.org/>).

DSNG in collaboration with FFI to develop its remediation and compensation program (see section 4.3). The objectives of the program are: (1) to protect of high conservation value forest through sustainable community-based forest management in Laman Satong Village Forest, West Kalimantan and (2) to improve community livelihoods through the improvement of sustainable agriculture, NTFP (Non-Timber Forest Product), and development of ecosystem services in Laman Satong Village Forest, West Kalimantan.

#### **Other industry and government initiatives**

DSNG is also part of the national and international community for promoting sustainable palm oil: (i) DSNG is a member of the RSPO since 2012, with 8 certifications and an ambition to be fully certified by 2022, (ii) it holds ISPO certifications for 7 out of its 8 mills and (iii) has received PROPER Hijau certification from the Minister of Environment and Forestry for its environmental management performance in 2018.

DSNG has a formal grievance procedure that establishes a mechanism for reporting grievances under a set of Standard Operating Procedures (SOPs). These include SOPs for internal and external employees as well as suppliers and vendors, comprising External Communication & Complaints Handling SOP, Communication and Consultation SOP, and Employee Complaints Handling SOP. These SOPs also include grievances that relate to women’s rights, gender equality and any case of harassment (especially sexual harassment).

## 4. The program interventions

As demonstrated in Section 3, palm oil expansion in Indonesia has historically been strongly correlated with very visible trends of deforestation. The section provides the context for understanding the main dynamics and elements in the operating landscape, which is useful to frame the Environmental Returns and Social Inclusion generated by DSNG. This section describes the company’s business as usual (“BAU”) practices, as well as key driving forces behind the deforestation trends, DSNG’s interventions and &Green’s additionality.

### 4.1. ER 1: Ensuring forest conservation in DSNG’s concession and in the landscape, through on-concession protection and supplier engagement

#### **The Business as usual scenario with regards to forest protection in Indonesia:**

The current business as usual scenario in palm oil reflects the limits of public and private sector approaches as companies try to contend with (a) complex regulatory systems with limited resources and capacity to enforce legality; (b) disincentives and mechanisms to comply with certification schemes; and (c) on-ground complexities with regard to NDPE implementation, which require producers to do a lot more than pure commercial B2B engagement with suppliers.

From a legal standpoint, a lot of the attention brought by certifications, multi-stakeholder initiatives and NGOs has been on moving the sector towards higher standards of sustainable performance and “beyond legal compliance”. Legal compliance has, through this narrative, been assumed by many of the actors in the sector, whereas the reality is that non-compliance is in fact relatively widespread. This is partly to do with the complexity involved in navigating the legal systems and the insufficient resources and capacity of decentralised government to enforce the law.<sup>4</sup> The result typically translates into higher instances of illegal activities by plantations, and smaller scale producers and higher losses of forests.

From a global industry perspective, the roundtable on sustainable palm oil (RSPO) plays an important role in establishing internationally accepted guidance on voluntary forest protection, as part of its Principles and Criteria (P&Cs) and certification scheme. Through an HCV (High conservation Value) approach, RSPO helps palm oil companies and members identify and protect HCV area in places where there is rapid expansion of agriculture, forestry, and aquaculture. Many small to medium sized companies view the management and monitoring of HCVs to be financially costly however, as well as risky because if any HCV destruction or loss occurs

<sup>4</sup> 2014, Eric Wakker, Indonesia: Illegalities in Forest Clearance for Large-Scale Commercial Plantations. Aidenvironment Asia

within their license area (HGU), the company could lose their RSPO certification and be subject to fines, penalties or other punitive measures. They therefore may choose not to get RSPO certification, or more commonly, to excise these areas from their HGUs.<sup>5</sup> Prominent cases of this trend are illustrated by Astra Agro and Salim Ivomas opting to leave the RSPO.

The most noticeable trend may be the exponential increase of commitments made by downstream and mid-stream companies related to zero deforestation, no production on peatland, reduction of greenhouse gas emissions and the protection of human rights (i.e. the Consumer Goods Forum resolution on zero net deforestation and the New York Declaration on Forests)<sup>6</sup>. These commitments are often referred to as NDPE (No Deforestation, No Peat, No Exploitation). In 2017, 84% of palm oil imported into Europe was sourced under NDPE policies.<sup>7</sup> Through such policies, companies require their suppliers to refrain from clearing forests and peatlands for new oil palm plantations. Commitments have allowed for significant results to be made on many aspects, but progress to hit NDPE compliance targets is lagging. Moreover, even when compliance is achieved, its translation into actual forest protection is weak. Firstly, because often commitments are made by downstream companies, which do not have the ability to trace the source of the products for which no deforestation promises are made. The palm oil supply chain is relatively long, comprising 4-5 different actors at a minimum, which means that without traceability, commitments cannot be verified, and accountability is weak<sup>8</sup>. Full traceability is difficult, and it requires supply chain teamwork and stakeholder collaboration down the level of the land user, starting with mapping of supplier's farmlands or plantations. Given that 3.1 million hectares are said to be managed by independent smallholders supplying approximately 40% of the country's FFB, and who typically own 0,5-2 ha size farmers, this can be an immense task<sup>9</sup>.

Secondly, 'market leakage' arises when existing producers (suppliers) sell their production through multiple intermediaries or have access to other buyers, which do not require compliance to NDPEs. In this case, commercial leverage to ensure compliance is weaker, resulting in 'leakage' in the commercial regulatory framework. The current global demand for palm oil (projected to double by 2050), is mainly driven by the rapid expansion in Asian consumer markets. In 2019, ten Asian countries (principally India, China, Malaysia, Indonesia), consumed 60% of total global supply.<sup>10</sup> Today, these fast-growing markets do not require the same level of transparency than their European and North American peers, which increases the risk of market leakage.

Thirdly, deforestation in effect occurs before production begins, and typically, NDPE requirements are imposed on agents that are already producers/deforesters, not the ones that are not yet producers. It is possible for mills to work with existing suppliers before they look to expand their production, in order to reduce pressures on the forest. Yet, a lot of deforestation is caused by actors who are not yet producers. In this case, companies have no mechanism for direct engagement as there is no existing commercial relationship to build on, so many of those involved in deforestation are completely unaware or hopelessly disconnected from supply chain commitments.<sup>11</sup>

Downstream and mid-stream companies have developed and passed on methods for definition, identification and monitoring, which allowed rapid deployment of technical tools at scale and from a distance. Protection however more rigorous and requires more action and understanding the correlation between risk mitigation and the protection of identified forests. It is highly context-specific and has to be applied on the ground, requiring engagement with relevant local actors, development of appropriate strategies and commitment over the long term in order to address local socio-economic drivers of deforestation which vary by location<sup>12</sup>.

<sup>5</sup> Hannah Timmins, 2017, Protecting forest in Indonesia: legal options in land zoned for agriculture (Tft).

<sup>6</sup> BN10\_RSP\_14Nov

<sup>7</sup> [https://www.idhsustainabletrade.com/uploaded/2019/01/EPSo\\_Vormgeving2019\\_DEF\\_31012019.pdf](https://www.idhsustainabletrade.com/uploaded/2019/01/EPSo_Vormgeving2019_DEF_31012019.pdf)

<sup>8</sup> In its 2018 report, Supply Change mentions that out of the 469 companies that the organisation traced, and which made commitments to address deforestation, less than half of have made statements of traceability intent. Among those with a statement of traceability intent, 110 companies have made aspirational statements that lack detail, in that they have no targets or deadlines and are not accompanied by an action plan. Source : [https://www.forest-trends.org/wp-content/uploads/2018/04/doc\\_5748.pdf](https://www.forest-trends.org/wp-content/uploads/2018/04/doc_5748.pdf)

<sup>9</sup> October 2019, chain reaction research, future smallholder deforestation: Possible palm oil risk.

<sup>10</sup> Commodity market intelligence update n.6, WWF.

<sup>11</sup> BN10\_RSP\_14Nov

<sup>12</sup> BN10\_RSP\_14Nov

### **DSNG's interventions: forest conservation and additionality**

DSNG has already made significant improvements in developing its management systems for forest protection and ecosystem restoration. From a legal perspective, DSNG has all the necessary submissions to ensure full compliance with national laws.

In addition, DSNG has been registered as a RSPO member since December 2012 for all its then-owned concessions. Upon acquiring the new plantations (PT BPN and PT BAS) in December 2018, DSNG submitted two additional registration requests to RSPO in May 2019 to complete the registration of all its subsidiaries. Four of DSNG's eight mills hold RSPO certificates; two have been endorsed as Identity Preserved/IP mills (PKS2 - PT DAN, and PKS3 - PT DIN). The other two (PKS 6 – DWT, PKS1 and PKS4 – PT SWA) are endorsed as mass balance mills. DSNG will look to further build on these certifications by aiming to certify the group's outstanding plantations and mills with the RSPO by 2022.

Through this Landscape Protection Plan and &Green partnership, DSNG also commits to adopting and implementing an NDPE policy that aims for 100% compliance by 2025. DSNG will adopt this policy for all its own operations, all its subsidiaries, joint ventures, any productive assets it owns, manages, or invests in, including plasma plantations managed and operated by DSNG for the benefit of its smallholder farmers. DSNG will also apply this policy throughout its supply chain, including, most importantly, Fresh Fruit Bunch (FFB) suppliers as well as other suppliers and contractors associated with DSNG's palm oil activities.

The result of this commitment within its concession plantation translates into protecting and conserving the remaining HCV. Through the various HCV assessments carried out, DSNG has identified approximately 3,180 ha of HCV within its East Kalimantan concessions. As HCV re-assessments are on-going in PT BPN and PT BAS, the conservation targets for these two concessions might further increase, when the results have been verified and validated by the HCV Resource Network (HCVRN). In addition to the HCV areas, DSNG is also protecting riparian areas and setting aside non-HCV areas within the various concessions, aimed at increasing protection of critical ecosystems (riparian areas). DSNG's commitment to protecting its forest areas translates in practice into the following activities:

- Develop HCV-related communication campaigns, including board, media campaigns, in-person engagement, etc.
- Make the community aware of the boundary of the protected areas and raise awareness on the specific species that are to be protected (flora and fauna).
- Collaborate with the village administration and local community to develop community-based protection systems.
- Set up and roll out training program regarding HCV and biodiversity through all relevant workers.

In order to translate these policies and commitments outside its concessions, DSNG is setting out to develop with &Green, a programme supporting forest protection by collaborating with 3<sup>rd</sup> party suppliers (plantation and smallholder suppliers). As described in Section 3, the total forest around the DSNG landscape, which is currently threatened by encroachment and palm oil expansion is conservatively estimated at around 3,500 ha; effectively implementing the NDPE would reduce the pressure on these forested areas. The estimated area is a conservative estimation, as it excludes the areas with an existing legal designation of being conserved / protected areas, which based on BAU would also be threatened and it excludes the HCV still remaining within the palm oil plantation companies that supply to DSNG.

To effectively implement the NDPE policy DSNG commits to develop constructive and inclusive supplier engagement strategies. Using ICT based technologies, DSNG will trace and map its suppliers. For larger plantation concessions this will require the exchange of concession boundaries and shape files. For smallholder plantations this will include careful on-field engagement through GPS or drone technologies, in order to produce a precise map of all its suppliers and analyse the forest cover around and within their plantations or farms. In 2019, DSNG received FFB from 18 smallholder farmer cooperatives.

Assessing the supplier profiles based on these categorisations and specific locations will be critical in order to design tailored incentives and procedures for addressing the root causes of deforestation by these actors (e.g. legal status, agricultural practices, access to finance, inputs, etc.). DSNG will also have to consider the potential ‘not-yet-deforesters’ as well, to set preventive interventions. Support can typically take various forms, such as agronomic support to increase yields and reduce production costs, or advice and hands-on support to complement palm income by growing and marketing other crops; making seedlings available and helping farmers with replanting unproductive palm groves by for example helping the cooperatives’ credit unions to offer financing that matches this multi-year challenge.

Thirdly, DSNG will have to establish appropriate communication and socialisation campaigns to both, its internal staff, but more extensively towards its existing supplier networks and smallholder farming communities. This will be crucial to manage the expectations and understanding of its suppliers.

Finally, DSNG will develop internal MRV protocols and a reporting framework to track and monitor the number of smallholder and other suppliers bound to no deforestation commitments, as well as the successes that it creates for the productivity of these suppliers and therefore their improvements in livelihoods. Equally, DSNG will use satellite data to understand the impact this programme has on forest protection.

NDPE are usually arbitrated as a top-down approach, as explained above. The biggest additionality of &Green, through the development of this Landscape Protection Plan, is that of the holistic approach it brings to the NDPE. Specifically, by capturing the multiple economic and social root causes DSNG will need to address for incentivising compliance, through supporting sustainable intensification (ER 2) and alternative livelihoods (SI).

**Box 1: Implement effective solutions for avoiding leakage and economic exclusion**

To this day, DSNG’s success has been enabled by its willingness to work in a tight knit manner with communities, that thus far have praised the company for the positive impact it brought in terms of their socio-economic prosperity. DSNG’s effectiveness with regards to NDPE implementation will certainly depend on the capacity of the company to tackle the NDPE from a technical and organisational level. But its success will also be very dependent on its understanding of how to collaborate with local actors, and on its network for engaging communities. While many companies often struggle to marshal resources for all these initiatives, DSNG will be able to build on its existing experience and the various existing interventions it has developed since the mid-90’s. *See boxes 2 & 3 (under Section 4.2 and 4.4) for more information about how these incentives are already provided by DSNG to both farmers and communities.*

Furthermore, &Green’s additionality is established through adoption of a landscape approach, which embeds the monitoring and reporting of progress of implementation against actual forest cover (or forest cover loss). Through this Landscape Protection Plan, DSNG and &Green will be able to not only capture the effectiveness with which DSNG will be carrying out its engagement practices, but also transparently assess whether these interventions truly lead to forest conservation.<sup>13</sup>

Finally, the additionality of the Landscape Protection Plan lies in the opportunity it provides for DSNG to develop a proof of concept for the implementation of the policy in East Kalimantan, before replicating it to the rest of the groups’ subsidiaries. The NDPE will, by 2025, apply across the West, Central and North Kalimantan concessions, comprising approximately 30,000 ha of oil palm and 2 CPO mills. DSNG estimates being able to generate potentially an additional 12,00 ha on-concession forest conservation and a further 20,000 ha off-concession forest protection.

**ER 1 intervention targets:**

ER 1: Forest conserved	On-concession	Off-concession
Ha	Total of 4,050 ha to be conserved. ■	Potential conservation area around 3,500 Ha.

<sup>13</sup> DSNG however will not be held accountable for any forest loss outside its concessions, but only for carrying out the NDPE policies and procedures and monitoring the results at a landscape level.

Activities	<ul style="list-style-type: none"> <li>■ Maintaining the conservation and protection program on the existing conservation area</li> <li>■ Riverbank conservation through vegetation enrichment program</li> <li>■ Monitoring program to ensure HCV conservation areas are protected through annual HCV monitoring report and satellite imagery monitoring strategy</li> </ul>	<ul style="list-style-type: none"> <li>■ Implement the NDPE implementation, which will allow to get 100% compliance by 2025</li> <li>■ Engage with communities to identify and assess the need for a restoration and conservation program within community or smallholder plantation</li> </ul>
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#### 4.2. ER 2: Optimizing land use through sustainable intensification of production areas

##### **The Business as usual scenario with regards to palm oil production and intensification in Indonesia**

Over the last two decades Indonesia has moved up in the global ranks to become the number one palm oil producer in the world. The country’s production has grown significantly in volume, from 28 million ton in 2013 to 38 million ton in 2017. However, the productivity of palm oil production, defined as the total production per total area of mature plantations, has not increased significantly within the period. In 2017, national productivity numbers ranged from approximately 3.5 to 3.6 ton of CPO per ha, with smallholder estates having lower productivity at approximately 2.0 to 3.0 ton of CPO per ha. This level of productivity is considerably lower than the average of neighbouring plantations in Malaysia, which can produce up to 10 ton of CPO per ha per year<sup>14</sup>.

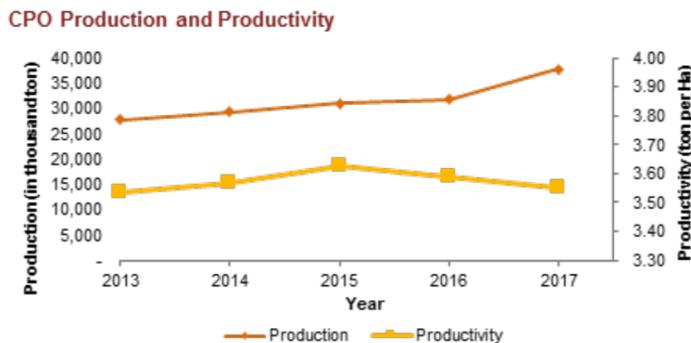


Figure 6: CPO Production and Productivity, 2013-2017 trends. Source: PwC

When assessing the risks of agricultural expansion vis-à-vis the country’s forest and natural habitat, the industry’s biggest concern is very much geared towards smallholders, due to the fact that they typically operate at much lower productivity levels, and within the margins of the legal and market systems. While tied/plasma smallholders receive financial support, farming advice and market access from large companies, independent smallholders often have limited resources at their disposal. Such constraints result in farmers lacking agricultural expertise and thus lower productivity. Smaller yields reduce smallholders’ incomes and are therefore a major driver of expansion into forests and peatlands to expand their total cultivation area or to supplement their incomes with other, sometimes illegal activities. To satisfy demand for palm oil without deforestation, smallholders instead need to replant and improve productivity on existing plots<sup>15</sup>. Today, thousands of smallholders are managing old palm oil plantations, where productivity is declining. Most farmers who do not have the capital to finance replanting will likely encroach into forested areas to supplement the lost income from declining yields.

<sup>14</sup> 2018, Plantation News Update, PwC. <https://www.pwc.com/id/en/industry%20sectors/cips/plantation-newsflash-dec-2018%20.pdf>

<sup>15</sup> October 2019, chain reaction research, future smallholder deforestation: Possible palm oil risk.

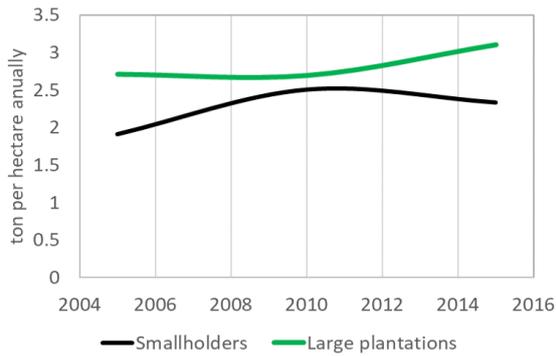


Figure 7: FFB production volume by ownership type in Indonesia. Source: Statistics Indonesia (BPS), 2016.<sup>16</sup>

**DSNG’s interventions: Sustainable intensification and additionality**

DSNG is a well-managed, forward thinking, producer of premium quality palm oil. Its cost of production advantage is achieved through scale economies, favourable terrain (all flat land) and a culture of cost control. This includes training, in-field mechanisation, energy savings from biogas installations and low-cost FFB and oil transportation from a partnership with very many small transport contractors from the local communities. Comparing its performance against BAU, DSNG’s average FFB yields are high relative to the average age of its plantings (10 years) at 25 ton/ha compared with a peer group of similar commercial producers at an average 20 ton/ha and an average age of 12 years (see figure 8). This advantage compounds with a CPO mill extraction rate of 23.6% compared with a peer group average of 21.9% to give a yield of CPO at 6.3 ton/ha compared to the peer group average of 4.4 ton/ha.

PPKS (*Pusat Penelitian Kelapa Sawit*) Indonesian Oil Palm Research Institute, an independent organization, developed the FFB yield standard-based on the soil type or soil classification<sup>17</sup>. According to Figure 9, DSNG’s yields have been mapped against PPKS classification. The yield production of DSNG is on average higher than PPKS standards with the exception of the El Nino years (2015 - 2016) and in 2018 when DSNG acquired PT BAS and PT BPN.

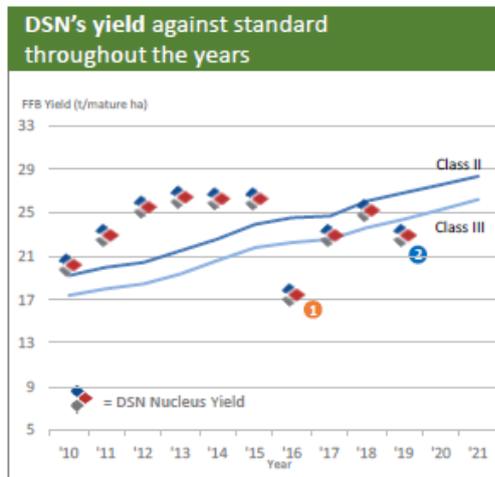


Figure 9: DSNG’s yield mapping against PPKS

DSNG has invested heavily in training its staff and technical personnel with a purpose-built and well-equipped training centre and library. All new recruits to the management team are required to take an induction course and a more specific field, processing, administration course as appropriate.

In addition, the company follows precise fertiliser regimes, tailored to annual leaf sampling and analysis carried out by agronomy specialists. Seeds sources are carefully selected from credible commercial seed suppliers. Finally, where mechanisation is not in place, harvesters cut and collect bunches and loose fruit at an output of 1.5 tons per man day (above average productivity).

Through this Landscape Protection Plan, DSNG firstly commits to continue driving production efficiencies and sustainable practices in order to maintain or increase the productivity of its nucleus and plasma plantations, over the 10-year loan tenor. More specifically, DSNG has identified and is committing to implement additional

<sup>16</sup> Note: This figure does not include the waiting period before production begins on new plantations and therefore does not provide accurate productivity levels. The figure is intended merely to show overall trends in productivity.

<sup>17</sup> Soil Class 1 (S1): Highly suitable; Soil Class 2 (S2): Moderately Suitable; Soil Class 3 (S3): Marginal Suitable

measures to its regular production practices, and in specific concessions where there still is opportunity to improve and align productivity with the mature plantations. To do so, some of the key activities will include:

- Carry out relay cropping programs to maximize the planted trees in plantation area
- Improve the road infrastructure to increase the efficiency of the FFB transportation routes
- Develop inter-row terraces in the hilly areas
- Develop drainage ditches in area that have higher flooding risks
- Apply Empty Fruit Bunch (EFB) to increase the yield and to reduce the palm oil waste
- Increase the use of Palm Oil Mill Effluent (POME)

Additionally, DSNG commits to invest in replanting for the oldest plantations, PT SWA and PT DIN in 2022 and 2024, respectively. As reflected in the table below, the productivity for these two concessions will experience a drop, as a result of the replanting activities, before rising again in 2029 - 2030.

In addition to the main plantation concessions, DSNG cultivates approximately 17,610 ha of plasma plantations (smallholder plantations) in East Kalimantan, who are permanent suppliers to DSNG and whose areas are developed around the concessions and closer to the plasma farmers villages. Under this so-called plasma structure, smallholders and the company have agreed to a partnership, which holds the company responsible for the development and management of plantation owned by the smallholders, and the smallholders (owners) in return agreeing to sell all their FFB to DSNG while gaining part of the profits made from these sales. The performance of the company and financial reports are reviewed by the management of the plasma cooperatives, who are democratically elected to represent the plasma smallholders. Costs of operations, and practices are reviewed at a minimum on an annual basis to assure the cooperative members of fair treatment and transparency with respect to the performance of their productive lands.

Based on the regulation of the Minister of Agriculture, plantation companies are obliged to facilitate the development of community plantations (at least 20% of the total area of the plantation that has been planted and operated by the company). Plasma plantation in the Muara Wahau Block and PT BAS represent 33% of the total planted area, above the minimum legal requirement (Table 7 below). PT BPN is still in the process of fulfilling the minimum requirement for its plasma plantation areas, following its acquisition in December 2018.

Subsidiary	Share of plasma against total concession area
PT SWA	34%
PT DAN	25%
PT DIN	27%
PT DWT	20%
PT KPAS	55%
PT BAS	33%
PT BPN	13%
<b>TOTAL</b>	<b>30%</b>

Table 7: Area, of plasma production area. Source: DSNG

In 2019, approximately 6,260 farmers are serviced through these plasma agreements. DSNG's approach to direct management of the plantations assures the same productivity results as its nucleus, which in turn means that DSNG's plasma farmers on average benefit from a far greater revenue from the crop, relative to other plasma smallholders in the country.

Through this Landscape Protection Plan, DSNG commits to continue supporting the 6,260 farmers via the good management of the land for maintaining productivity levels over the 17,610 ha of land owned by these communities. It also commits to further increase its plasma areas for PT BPN and PT BAS, by 2024. This in turn will allow for an additional 530 farmers to benefit from the scheme.

In addition to its plasma scheme, DSNG engages with independent smallholders surrounding its plantations. Unlike under plasma agreements, these smallholders cultivate their land independently and are often organised as cooperatives. Through these cooperatives, DSNG provides the smallholders with knowledge and agricultural inputs on a credit basis. The so-called ‘Limited Agricultural Production Facility Loan’ (Sarana Produksi Pertanian / SAPRODI) can take various forms: palm oil seedlings, fertilizer, road construction services, etc. SAPRODI credits will be charged to the cooperatives responsible for facilitating the transactions between DSNG and the smallholders. In exchange, DSNG has buying exclusivity for, at a minimum, one planting cycle (up to the age of 25 years). This is crucial for helping smallholders get access to basic agricultural inputs, but more importantly for their replanting plans. Ultimately such programs help the independent smallholders get better quality of FFB and higher volume of harvest that leads to better profitability and quality supply for DSNG.

Today, DSNG estimates it serves approximately 1,230 farmers, via 18 cooperatives with its SAPRODI program. These investments and with the company’s assistance potential 3,740 ha of palm oil planted land can benefit from improved inputs and practices, and thus shift incentives away from agricultural expansion, to sustainable intensification.

Through this Landscape Protection Plan, DSNG commits to continue serving all the farmers that are currently benefiting from the program and will look to further expand its production support to potential third-party smallholder suppliers that need to adhere to the company’s NDPE. The specific strategies to increase productivity and good agricultural practices will be designed once DSNG has been able to fully trace its suppliers and understand their specific needs and design the best benefits/incentives schemes it can provide to them. By 2021, DSNG will craft these strategies, as well as the baseline vis-à-vis the number of smallholders, their land size and productivity levels, to monitor its impact thereafter.

**Box 2: Smallholder production improvement programs, for increased yields and sustainable intensification: addressing the risk of leakage.**

DSNG understands that its business is dependent on being able to source palm fruit from independent suppliers as otherwise its mills will not run at optimum capacity. Over the past several years, it has developed a strong supply base via plasma plantations and cooperatives, which it serves through various incentives programs and income sharing schemes. DSNG can easily build on these initiatives to socialise its NDPE and incentivise compliance rather than leakage.

**ER 2 intervention targets:**

ER 2:	On-concession	Off-concession
Ha	<ul style="list-style-type: none"> <li>■ Total of 82,010 ha of sustainably intensified land (from both nucleus and plasma plantations)</li> </ul>	Support the intensification of 3,740 ha owned by independent smallholder farmers (benefiting from the SAPRODI program in 2019).
Activities	<ul style="list-style-type: none"> <li>■ Continue driving production efficiencies and sustainable practices in order to maintain or increase the productivity of its nucleus and plasma plantations, over the 10-year loan tenor.</li> <li>■ Implement additional measures to its regular production practices, where there still is opportunity to improve and align productivity with the mature plantations</li> <li>■ Implement a replanting program for PT SWA and PT DIN</li> </ul>	<ul style="list-style-type: none"> <li>■ Continue serving the 1,230 farmers that are currently benefiting from the SAPRODI program</li> <li>■ Expand its production support to potential 3<sup>rd</sup> party smallholder suppliers that need to adhere to the company’s NDPE</li> </ul>

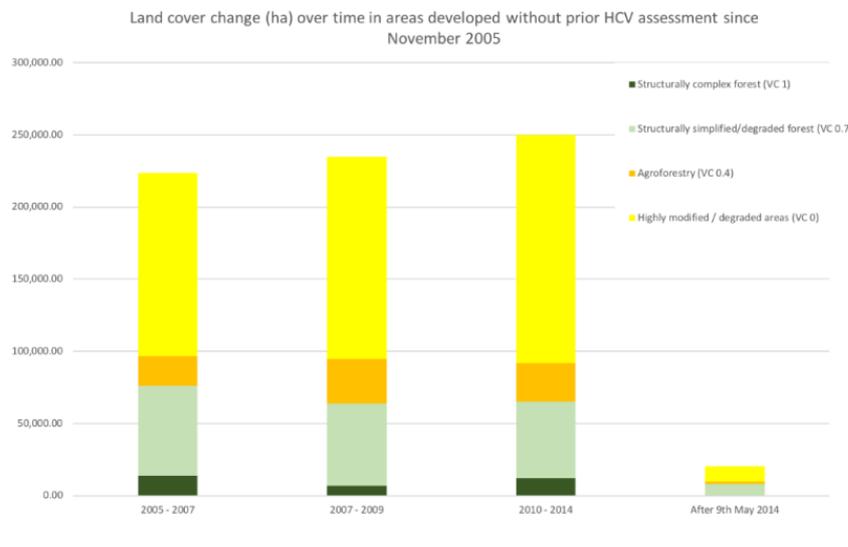
	<ul style="list-style-type: none"> <li>■ Continue supporting the plasma farmers via the good management of the land for maintaining productivity levels over the land owned by these communities.</li> <li>■ Increase plasma areas for PT BPN and PT BAS, by 2024</li> </ul>	
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### 4.3. ER 3: Forest Compensated through RSPO

#### **The Business as usual scenario with regards to forest restoration and compensation in Indonesia**

In 2005, RSPO established a Remediation and Compensation Procedure (RaCP) to address land clearance and plantation development undertaken since November 2005 without prior High Conservation Value (HCV) and therefore support non-compliant members to compensate for their past deforestation. The procedure requires growers to first disclose any new land development that took place without conducting a HCV assessment, calculate environmental liabilities through a Land Use Change Analysis (LUCA), and to carry out onsite or offsite remediation for the affected sites or remediation with affected parties. Compensation liabilities are determined based on vegetation coefficients as proxies for HCVs, the land clearance period, membership status and areas requiring environmental remediation. The final compensation liability is expressed in hectares.

Based on 2019 membership reviews carried out by the RSPO, approximately 730,0000 ha have been cleared by RSPO members since 2005, without prior HCV assessment (Figure 10)<sup>18</sup>.



VC	2005 - 2007	2007 - 2009	2010 - 2014	After 9th May 2014	TOTAL
1	13,998.27	6,896.50	12,333.15	356.32	33,584.24
0.7	62,083.51	56,840.40	52,701.39	7,590.58	179,215.88
0.4	20,491	31,146.95	26,934.66	1,613.96	80,186.57
0	126,992.06	139,874.08	157,741.62	10,799.25	435,407.01
<b>TOTAL</b>	<b>223,564.84</b>	<b>234,757.93</b>	<b>249,710.82</b>	<b>21,607.65</b>	<b>728,393.70</b>

Figure 10: Land cover change from 2005 in areas developed without prior HCV assessment. Source: RSPO

<sup>18</sup> (Figure 1) <https://rspo.org/certification/remediation-and-compensation>

**DSNG’s interventions: forest restoration and additionality**

As per Section 4.1, DSNG became a member of the RSPO in 2012, with a commitment to be fully certified by 2022. In line with these ambitions, DSNG followed the RSPO approach and carried out the necessary HCV assessments for all its concessions. To be prudent, DSNG has commissioned new HCV re-assessments for PT BAS and PT BPN are still ongoing and expected to be finalised by the end of 2020.

Given the age of its concessions, PT DAN, PT DIN, and PT SWA were almost fully planted before the HCV assessments became necessary and were conducted under RSPO’s New Planting Procedures (NPP). However, some planting and land clearing was still ongoing in PT DWT during one such the assessment, which led to the conversion of secondary forest. For this incident, DWT will be required to compensate land. The same applies to PT DAN and for PT DIN<sup>19</sup>. Altogether this accounts for approximately 110 hectares.

Through this Landscape Protection Plan and for its RSPO certification, DSNG commits to restore the land from the converted areas which have remained degraded, via RSPO approved remediation and compensation process or through natural revegetation post harvesting.. Upon finalisation of the HCV re-assessments for PT BPN and PT BAS, if additional remediation is required, DSNG will address it and consequently, the target for ER 3 will be updated in the Landscape Protection Plan.

Additionally, and following RSPO remediation and compensation process, DSNG is currently collaborating with FFI (Fauna & Flora International) to implement the RSPO-approved remediation and compensation program. Through the financing provided by DSNG, the envisioned outcomes of the program are (1) the protection of high conservation value forest through sustainable community-based forest management in Laman Satong Village Forest, West Kalimantan; and (2) the improvement of community livelihoods through the improvement of sustainable agriculture, NTFP (Non-Timber Forest Product), and payments for ecosystem services in Laman Satong Village Forest, West Kalimantan.

Outside its concessions, DSNG commits to work with its third-party suppliers and smallholder communities to further restore land, should they identify existing degraded areas that might be at higher risk of being deforested, and to support supplier’s compliance to NDPE requirements. Such restoration support will also consider the legal status of the degraded land (i.e. protected forest areas, including customary forests that have been recognized by the government or conservation areas) and the willingness of the suppliers and/or community to carry out additional restoration activities.

**ER 3 intervention targets:**

ER 3: Restored Forest	Direct Intervention	Indirect Intervention
Ha	Restore 110 ha of forest area	To be defined
Activities	<ul style="list-style-type: none"> <li>■ Restore the areas through natural regeneration.</li> <li>■ Develop and finance the remediation and compensation plan together with FFI, which will be implemented in West Kalimantan.</li> <li>■ Update on-concession targets based on final HCV assessments.</li> </ul>	<ul style="list-style-type: none"> <li>■ Work with its third-party suppliers and smallholder communities to further restore land, should they need identify existing degraded areas that might be at higher risk of being deforested, to support supplier’s compliance to NDPE requirements</li> </ul>

<sup>19</sup> The FFB accidentally planted in the areas in PT DWT and PT DAN are currently being harvested by DSNG. The intention is to consider these areas when the replanting plans are developed in order to set them aside.

#### 4.4. Social Inclusion: smallholders and households benefiting from DSNG’s interventions

##### **The Business as usual scenario with regards to smallholder and social inclusion in Indonesia**

Smallholders and their communities play a vital role in the Indonesian palm oil industry. In 2019, they were estimated to be responsible for 40% of the total planted area, with 3,1 million hectares managed by independent smallholders (i.e. excluding plasma).<sup>20</sup> Despite the commercial benefits for larger plantations and buyers to be more closely linked to these suppliers (i.e. improved quality, quantity, stability of supply, etc.), the majority of smallholder production is driven by subsistence farming and farmers whom operate at the margins of the legal systems and with limited leverage vis-à-vis market access in terms of bargaining power, access to finance, good inputs, education, etc. Smallholder exclusion is seen as one of the highest concerns for the long-term sustainability of the industry and with regard to the risks it poses to deforestation.<sup>21</sup>

The fast-paced growth of the industry as well as of some of the largest plantation in the country hints to the inequality and imbalance vis-à-vis local communities that are living in and around concessions. Often, palm oil expansion has been criticised to provide inadequate socio-economic development, and even loss of social and cultural capital. Unfortunately, under the current business as usual, palm oil is said to be a largest contributor to agrarian conflicts in Indonesia, with an estimated 23% of the total palm oil area (plantations) being in dispute as per reports from chain reaction research in 2018<sup>22</sup>.

##### **DSNG’s interventions: social inclusion and additionality**

Over the years DSNG has developed consistent and positive relationships with the community around its plantations. DSNG’s fundamental management philosophy strives to achieve a mutually beneficial relationship with its employees, the local communities and suppliers. Through a concerted effort to provide real long-term opportunities and not purely on social outreach programs to these groups, DSNG has enjoyed and built successful operations.

Firstly, strong performance at the level of the plasma plantations which is detailed in Section 4.2, guarantees shared revenues for both plasma smallholders and the company. Through this Landscape Protection Plan, DSNG’s plasma interventions will benefit a total of approximately 6,790 farmers by 2025.

Secondly, providing local employment and business opportunities, outside land cultivation for the communities to develop and thrive. Some examples are a truck purchasing scheme that we developed to allow for approximately 420 households to provide all of DSNG’s transportation needs (nearly 1,100 vehicles for FFB, CPO, and worker’s commute), and capital support to establish credit unions. Through the Landscape Protection Plan, DSNG commits to continuing providing 11,840 job opportunities and service level agreements.

Finally, outside its mainstream business operations, DSNG is catering for the large socio-cultural needs of the communities to improve education, foster entrepreneurship, promote cultural development, housing, health and safety, etc. With regards to fostering education for instance, DSNG is looking after the development and management of elementary and junior high schools in collaboration with the Sanata Dharma University. It provides teacher’s salaries and school’s transportation services and has developed informal

**Box 3: Job creation, alternative income-generating opportunities: providing the ‘not-yet-deforester’ with other incentives.**  
 A very important ethical issue which needs to be considered and addressed is how to ensure that small producers and communities, especially those without other resources, that opt to protect the forest don’t lose out in the long term compared to those that convert forest and generate an income from production. DSNG is already providing a number of alternative income-generating opportunities for local communities in construction, transports, education, health, services, as well as through its own business.

<sup>20</sup> October 2019, chain reaction research, future smallholder deforestation: Possible palm oil risk.

<sup>21</sup> October 2019, chain reaction research, future smallholder deforestation: Possible palm oil risk.

<sup>22</sup> <https://chainreactionresearch.com/report/oil-palm-growers-exposed-to-usd-0-4-5-9b-in-social-compensation-risk/>

educational programs at people’s houses. Overall, DSNG supports the families located across the five concessions. Important to note that for the purpose of this Landscape Protection Plan, the social inclusion results are specifically centred on DSNG’s social inclusion impact towards palm oil smallholders (Plasma, Saprodi program beneficiaries and independent smallholder suppliers) as well as towards job creation (from its business operations and service level agreements).

**SI intervention Target:**

Social inclusion	Number of smallholders benefiting from plasma and from the saprodi program	Number of jobs and services level agreements provided.
Target	8,025 farmers benefiting	11,840 job opportunities and service level agreements provided through DSNG’s operations
Activities	<ul style="list-style-type: none"> <li>■ Manage plasma plantations and drive efficiencies and productivity, which ultimately support plasma farmers</li> <li>■ Continue serving the independent farmers that are currently benefiting from the SAPRODI program</li> </ul>	<ul style="list-style-type: none"> <li>■ providing local employment and business opportunities</li> </ul>

## 5. Budget

The company has established core budget support for many of the activities needed to ensure achievement of the objectives described in this plan.

The costs may vary significantly over the 10-year period, given the dynamics of the landscape. As such, the allocation of funds from the operating budget will be reviewed periodically to suit the evolving needs of the programs and interventions DSNG has committed to deploy.

## 6. Milestones

Detailed milestones based on 2019 baselines and targets have been developed over the loan period, for each environmental return (outcome indicator) and following supporting output indicators. Performance against milestones will be monitored and audited on an annual basis as detailed in section 7.

## 7. Monitoring and Reporting framework

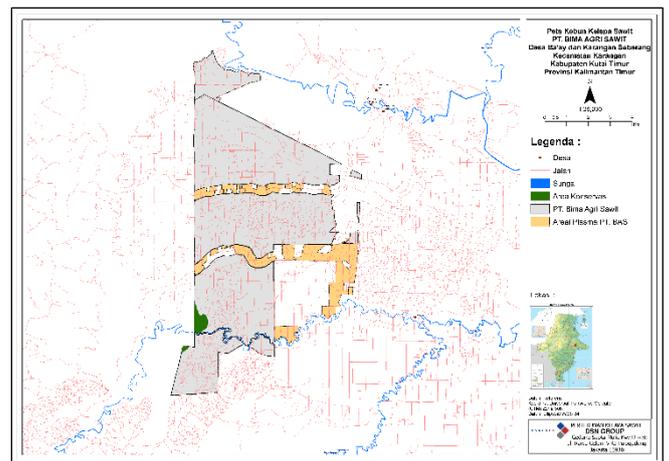
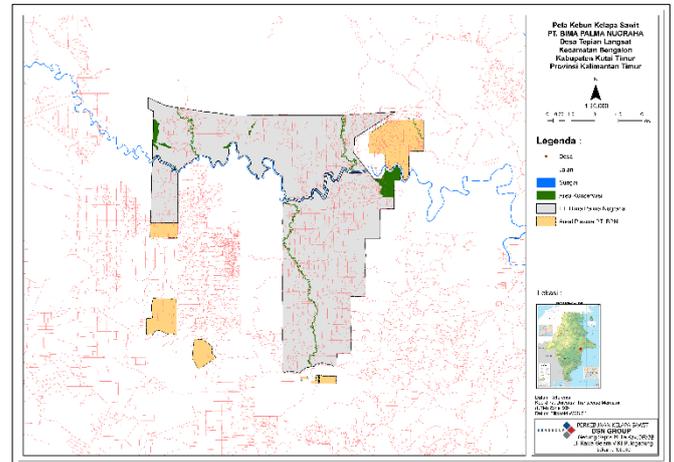
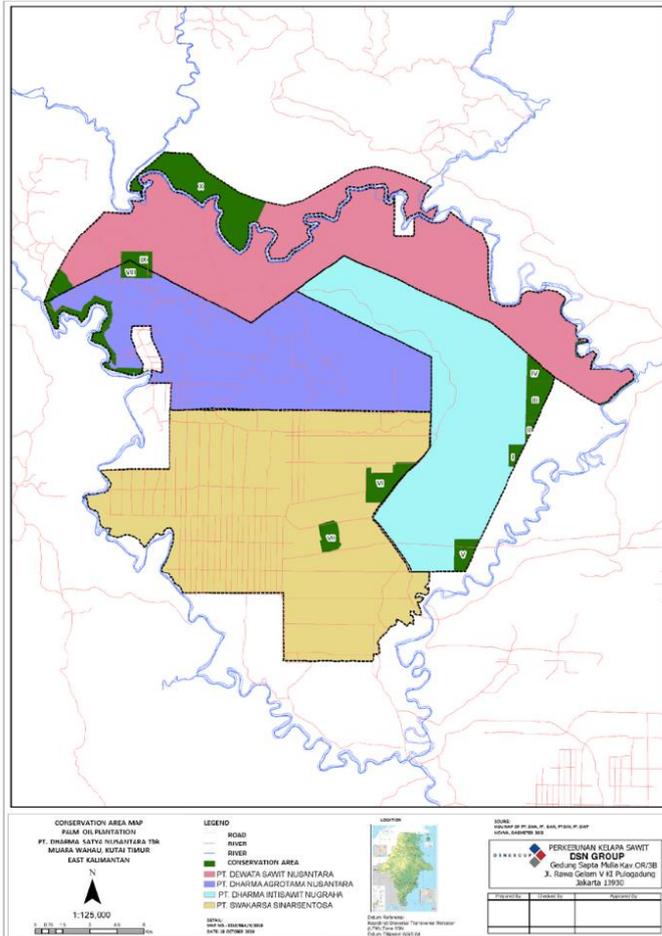
Monitoring and reporting against agreed ERs (direct targets and activities) will be carried out by DSNG as part of its commitment to the Landscape Protection Plan, and more broadly to &Green.

DSNG will report on the three dimensions of environmental return and agreed upon milestones on a 6-monthly basis in the first two years, and annually for the remaining tenor of the loan. The reporting approach will be designed based on DSNG’s existing reports as well as based on the satellite image monitoring and traceability systems that the company plans to develop in the first year of the loan tenor.

Third party audits will verify DSNG’s reporting and ER progress on a regular basis.

## Annex 1: Maps of the LPP plantations

The maps of the plantations in East Kalimantan, which are included in the Landscape Protection Plan, are presented below, for the 5 concessions in the Muara Wahau block (PT SWA, PT DIN, PT DAN, PT DWT, PT KPAS), as well as for PT BPN and PT BAS.



Clockwise:

Map 1 (left side): PT SWA, PT DIN, PT DAN, PT DWT, PT KPAS

Map 2 (top right side): PT BPN

Map 3 (bottom right side): PT BAS