



# **UNSTOPPABLE DEFORESTATION**

**“PORTRAITS OF DEFORESTATION IN  
NORTH SUMATERA,  
EAST KALIMANTAN  
AND NORTH MALUKU”**

**FOREST WATCH INDONESIA  
2018**



# UNSTOPPABLE DEFORESTATION

**“DEFORESTASI TANPA HENTI”**

ALL THE FACTS PRESENTED  
URGE US TO QUESTION THE  
GOVERNMENT OF  
INDONESIA'S COMMITMENT  
TO REDUCE GLOBAL  
CARBON EMISSION. THE  
FACTS SHOW THAT FOREST  
DEGRADATION AND  
DEFORESTATION  
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OR ILLEGAL. THESE FACTS  
ALSO FORCE US TO QUESTION  
GOVERNMENT SUPPORT  
FOR COMMUNITIES LIVING IN  
AND AROUND FOREST AREAS,  
AND THE GOVERNMENT'S  
COMMITMENT TO  
PROTECT THE  
ENVIRONMENT,  
PREVENT  
DISASTERS,  
AND CONSERVE  
NATURAL RESOURCES.

**NORTH SUMATERA**  
**EAST KALIMANTAN**  
**NORTH MALUKU**





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EAST KALIMANTAN AND NORTH MALUKU”

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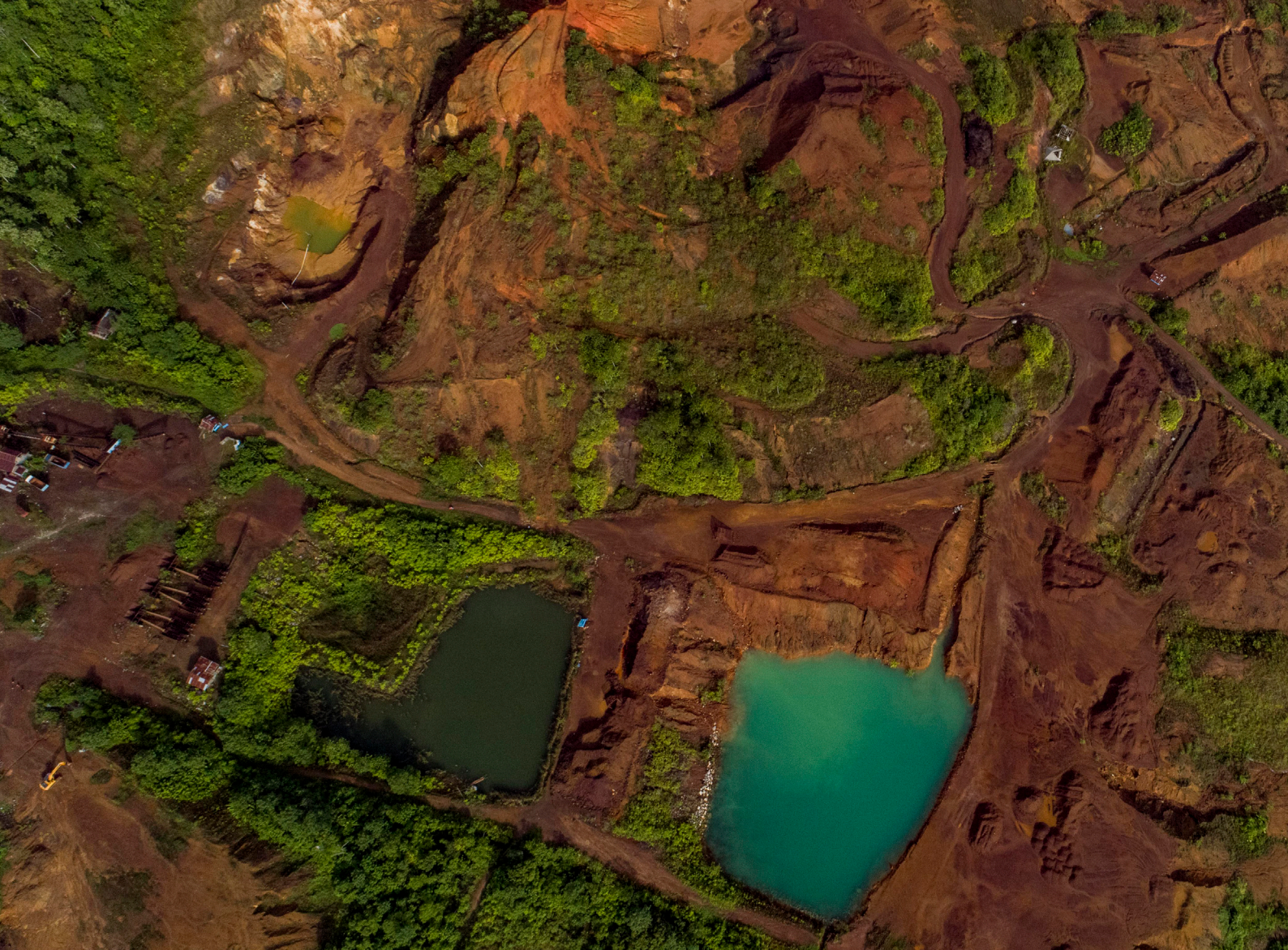
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## FOREWORD



Life support systems may only be a small part of forest functions. However, it is inseparable and is the source of life for many organisms, including humans. Forest degradation clearly breaks off this chain of systems, just waiting for disaster to come.

The high economic values of forests have attracted throngs of industries. Not only that natural forest timber is valuable, but forest soil is fertile for timber plantations and other types of plantations. Forests can only surrender to the clearing.

Then, a melodious voice arose calling for “sustainable” forest management. In reality however, forest areas continue to dwindle. Practices that cause forest degradation still carry on even with official certifications from heads of states.

This book provides only a glimpse into the condition of forest and its management practices. The contents of this book are expected to bring about new

awareness for all its readers, especially for formulating better policies and forest management practices. Finally, we would like to express our gratitude to the Environmental Investigation Agency (EIA) for their collaboration in the past three years that has helped the completion of this book.

Forest is the source of water,  
Forest is the source of life,  
Forest belongs to all

Executive Director of Forest Watch Indonesia,  
Soelthon Gussetya Nanggara





## TABLE OF CONTENTS

Excecutive Summary	06
Background	09
What is Deforestation?	11
Natural Forests in Indonesia	13
Current State of the Forest in North Sumatera, East Kalimantan and North Maluku	16
Direct Causes of Deforestation	21
Timber Plantation Development Sacrificing Natural Forests	22
Oil Palm Plantation Expansion	25
IUPHHK-HA (HPH) In North Maluku	28
Deforestation Trends In North Sumatera, East Kalimantan, And North Maluku	35
A Reflection And Threat Of Natural Forest Loss In The Future	41





# EXECUTIVE SUMMARY

The President of the Republic of Indonesia, Joko Widodo, admitted that Indonesia is the sixth largest global carbon emitter (Kompas, 2015). WRI's 2012 data shows that 1.98 billion tons CO<sub>2</sub> is emitted annually. The forestry sector is the greatest contributor of carbon emitted from deforestation and forest degradation (UNDP, 2007 ). In 2011, the Government of Indonesia issued Presidential Regulation No. 61/2011 on National Action Plan for Greenhouse Gas (GHG) Emission Reduction 2010-2020. Indonesia also ratified the Paris Agreement through Law No. 16 of 2016 on Ratification of Paris Agreement to the United Na-

tions Framework Convention on Climate Change. Indonesia is committed to reducing emissions by 29% on its own efforts and as much as 41% with foreign aid by 2030 under business-as-usual scenario, through sectors including forestry and agriculture.

But Indonesia would never reach its emission reduction target that it has set on its own without addressing deforestation and forest degradation. Facts show that Indonesia's forestry history is one of deforestation, from back in the day until this very day. In the 1970s deforestation rates reached 300 thousand hectares/year (FAO/WB, 1990), and in the 1990s these numbers rose to 1 million hectares/year (Sunderlin & Resosudarmo, 1997). FWI and GFW's 2001 analysis shows that deforestation rates continued to rise, reaching 2 million hectares/year in 1996-2000. In 2001-2010, deforestation rates reached 1.5 million hectares/year and 1.1 million hectares/year in 2009-2013 (FWI, 2011 & 2014).





FWI's most recent study shows that, though the study was done only in three provinces, deforestation rates are still high for 2013-2016 with reached 240 thousand hectares/year, which was an increase from the 2009-2013 figure of 146 thousand hectares/year (FWI, 2014). When combined, North Sumatera, East Kalimantan and North Maluku have lost 718 thousand hectares natural forest in the last three years. Other analysis has found that 72% of the deforestation occurring in these three provinces is located in areas under management permits. Activities in forest concessions (Hak Pengusahaan Hutan – HPH), industrial plantation forest (Hutan Tanaman Industri – HTI), oil palm plantations, and mining concessions are direct causes of deforestation.

Deforestation rates in North Maluku and East Kalimantan provinces have significantly increased com-

pared to rates in North Sumatera. In North Maluku, deforestation rates doubled that of the previous period from 25 thousand hectares/year to 52 thousand hectares/year. Similarly in East Kalimantan, deforestation rates nearly doubled from the previous period from 84 thousand hectares/year in 2013 to 157 thousand hectares/year in 2016.

Findings from North Maluku Province show the poor performance of HPH (now Natural Forest Timber Production License or Izin Usaha Pemanfaatan Hasil Hutan Kayu dalam Hutan Alam/IUPHHK-HA) concessions is one of the direct causes behind forest loss. Mining and oil palm plantation concessions are also major contributors to deforestation in this province. Meanwhile in North Sumatera, the primary factors driving deforestation are HTI and oil palm plantation expansion into HPH concessions. Rampant deforestation by HTI is caused by land clearing during land preparations for plantation forests. In East Kalimantan, the conversion of natural forest into oil palm plantations is indicated to be the primary driver of deforestation, along with mining concession expansion.

These deforestation facts demand for the Government of Indonesia side with communities living in and around forests. This includes realizing the Government's commitment in reducing emissions, protecting the environment, preventing disasters, and conserving natural resources. Facts show that 50% of all land in North Sumatera, East Kalimantan and North Maluku is controlled by concession holders. Only 4% of the land is controlled and managed by communities through social forestry or customary forests. In addition, facts show that forest degradation and deforestation in these provinces have led to natural disasters: flood, landslides, droughts, and loss of wildlife habitats.

As a final reflection, there is a current tendency in which natural forest loss is progressing toward eastern Indonesia. The reason being is none other than because natural forests in Sumatera and Kalimantan Islands have already disappeared. Natural forests in eastern Indonesia are mostly located along coastlines and small islands. Loss of these forests in small islands can create dire impacts as opposed to forest loss in larger islands. Islands sinking, sea water intrusion, and loss of livelihoods among coastal and small island communities' in eastern Indonesia are real and imminent threats.









# BACKGROUND

In period year 2009-2013, Indonesia has lost 1.13 million hectares of natural forest each year. the rate of deforestation is equivalent to 3 times the size of a soccer field per minute.

Indonesia's forests are disappearing. What was once lush has now vanished. In 2013 alone Indonesia lost  $\pm 1.1$  million hectares of natural forest. In other words, Indonesia loses three soccer fields every minute.

What is the cause of this widespread deforestation in Indonesia? Where are the forests being cleared? Who are the actors behind all this? And just how are they clearing Indonesia's forests?

The 1945 Constitution of the Republic of Indonesia stipulates, "The land, the waters and the natural resources within shall be under the powers of the State and shall be used to the greatest benefit of the people" (Article 33, paragraph 3), and "The organization of the national economy shall be conducted on the basis of economic democracy upholding the principles of togetherness, efficiency with justice, continuity, environmental perspective, self-sufficiency, and keeping a balance in the progress and unity of the national economy" (Article 33 paragraph 4). The follow-up questions are: Have Indonesia's forests been used to the utmost benefit of the people of Indonesia, or only for the wealth of an elite few? Is development – for which forests have been greatly sacrificed – carried out in line with principles of democracy, unity, equality, and sustainability, and is it environmentally sound?

Today, stories of Indonesia's once majestic forest perhaps only remain in parts of eastern Indonesia in Maluku islands and Papua. But not even these forests are safe. Like Sumatera and Kalimantan islands, forests in eastern Indonesia are seeing incoming extractive industries and land-based investments that devour large swathes of land. It is in areas like these that natural forests are disappearing.

To seek answers for questions regarding disappearing forests, this book is here to present facts and data, especially from North Sumatera, East Kalimantan and North Maluku. This book hopes to raise public awareness and concern to save what is left of the natural forests, especially in these three provinces, and for policy makers rethink and reform current forest governance systems. To ensure that the mandate of the Constitution is realized and remaining forests are protected in unity, justice, sustainability, sovereignty, and balance.









# WHAT IS DEFORESTATION?

Numerous stakeholders have different points of view about the definition of deforestation in Indonesia. These differing views are recognized by many organizations, such as World Bank 1990, FAO 1990, MOF 1992, TAG 1991, that reveal that the condition of Indonesia's forest is undermined by the use of the vague and inconstant term "deforestation". Lack of specificity of the term "deforestation" has led to varying data interpretation to estimate deforestation (William et al., 1997). In a broader context, deforestation is often regarded as a complex phenomenon with many interacting factors and interests, including the discourse on deforestation that often comes up as a result of Indonesia's corrupt economic and political systems (Asri S, 2013). This is the complexity and multi-interpretation of the meaning of deforestation in the context and policy of Indonesia's forestry.

In the perspective of forestry science, deforestation is defined as a situation in which the loss of forest cover and its attributes leads to loss of the structure and functions of the forest itself. This definition is supported by the definition stated in Ministry of Forestry (MoF) Regulation No. P.30/Menhut-II/2009 on Procedures for Reducing Emissions from Deforestation and Degradation (REDD) that clearly states that deforestation is the permanent alteration from forested area into a non-forested area as a result of human activities.

The word "forested" in this Ministerial Regulation contains meanings with contextual interdependence, and therefore is not linked to the status and functions of forest but instead focuses on the essence of the "forest" itself. Therefore deforestation contains meanings that are closely linked to a situation where a loss of forest and its attributes is caused by human activities, whether in forest areas as well as non-forest areas.

As we know, every forest type has a series of structural as well as functional attributes, which in turn form the characteristics of each forest type. Structural attributes comprises species composition, diversity, spatial distribution, canopy stratification and other attributes. Functional attributes include forest productivity, environmental services, nutrient cycle, erosion control, and others. In a balanced state, structure will determine function and vice versa.

The explanation above emphasizes the meaning in which every activity that leads to loss of forest and its attributes and functions, whether in forest or non-forest areas, is what is referred to as deforestation. Therefore this book aims to clarify this mistaken and narrow view that deforestation applies only in forest areas and not in non-forest areas.

Taconi et al. (2003) has sifted data stressing that the main cause for forest loss in Sumatera, Kalimantan and Sulawesi in 1985 to 1997 are: plantation activities with 2.4 million hectares (14%), forest fires 1.74 million hectares (10%), small-scale investments with 2 million hectares (10%), and farmers' land clearing practices with 1.22 million hectares (7%). This emphasis indicates that researchers for long illustrated that these aforementioned activities are the major causes of deforestation in Indonesia; and management of these activities must be controlled to protect the quality and quantity of Indonesia's forest resources.









# NATURAL FORESTS IN INDONESIA

Many studies name Indonesia as one of the major global carbon emitters. The President of the Republic of Indonesia, Joko Widodo, has admitted that Indonesia is in fact the sixth largest global carbon emitter (Kompas, 2015). According to data released by the World Resource Institute (WRI) in 2012, Indonesia is the sixth largest carbon emitter in the world with 1.98 tons CO<sub>2</sub> emission per year. The United Nations Development Programme (UNDP) stated in their 2007 report that forestry is the largest carbon emitting sector through deforestation and forest degradation.

In response to the global spotlight of the nation's GHG emission from forestry and its geographical location that makes Indonesia even more vulnerable to climate change impacts, the government issued Presidential Regulation No. 61/2011 on National Action Plan for Greenhouse Gas (GHG) Emission Reduction 2010-2020. In late 2015 during the Conference of Parties or CoP 21 in Paris, 195 out of 196 UNFCCC member countries – among them Indonesia – adopted the Paris Agreement to replace the Kyoto Protocol as a joint agreement to address climate change through various aspects and committed to realize low-carbon emission development.

Indonesia then ratified the Paris Agreement through Law No. 16 of 2016 concerning Ratification of the Paris Agreement to the United Nations Framework Convention on Climate Change (UNFCCC). Under this law, Indonesia's Nationally Determined Contribution (NDC) for the first period is to reduce emission by 29% under its own efforts and by 41% with international assistance under business-as-usual scenario by 2030. This will be achieved through forestry, energy (including transportation), waste, industrial processes and product use, and agriculture sectors. Indonesia's NDC commitment for the upcoming period will be determined based on performance assessments and the ability to show improvement from the previous period.

The GHG emission increase estimation makes sense in reference to Indonesia's high deforestation rates. These rates tend to vary annually. World Bank (1990) in Sunderlin W.D. and Resosudarmo I.A.P. (1997), referring to FAO's research, has recorded an increase in estimated annual deforestation, specifically in the 1970s with 300 thousand hectares/year, to 600 thousand hectares/year in 1981, and 1 million hectares/year in 1990. In 1996-2000, deforestation in Indonesia reached 2 million hectares/year (FWI & GFW, 2001). In the following ten year period deforestation rates reached 1.5 million hectares/year (FWI, 2011) and 1.1 million hectares/year in 2009-2013 (FWI, 2014).

High deforestation rates in the 1990s are closely linked to timber industry growth in Indonesia. In 1994, timber and timber products generated around USD 5.5 billion for Indonesia's export, or around 15% of the entire export profits (Economist Intelligence Unit (1995) in Cifor, 1997). Along the growth of this timber industry, Indonesia's forest cover loss increased in area and rate. FAO's 1990 study shows that forest cover in the country has declined from 74% to 56% in a 30-40 year period (FAO, 1990:3).

On the other hand, high deforestation rates is the result of corrupt political and economic systems that regard natural resources – especially forests – as a source of revenue to be exploited for economic and personal gains (FWI & GFW, 2001). Meanwhile, in its 2010 analysis, the National Development Planning Agency (Bappenas) stated that poor governance, discord between central and local government's spatial plans, lack of clarity in tenurial rights, and poor forest management capacity (including law enforcement) are the underlying issues in forest management in Indonesia.

FWI's analysis has found that as of 2013, Indonesia's natural forests cover 82 million hectares or around 46% of the country's total land area. As of 2013, the percentage of natural forest in each island compared to its land area is as follows: 85% of Papua's land is natural forest, Maluku 57%, Kalimantan 50%, Sulawesi 49%, Sumatera 24%, Bali and Nusa Tenggara 17%, and Java 5% (FWI, 2014).

The figure above shows that some islands still have large areas of natural forest cover. However, this land cover data must be viewed in the context of Indo-

nesia as an archipelago, each large island group has different natural characteristics while small islands also have a typical environmental vulnerability and require a specific forest carrying capacity.

Therefore in the context of forest management, geographical conditions and local vulnerabilities caused by forest conversion in a certain island, especially small islands, must become critical considerations in deciding forest management policies. Because no matter how small the conversion, it will directly impact the sustainability of the environment and lives of the communities in that island.

The explanation and data presented above illustrate the general condition of forests in Indonesia from 2009 to 2013. These illustrations have been discussed specifically, in detail and comprehensively in FWI's 2014 publication titled "The State of the Forest Indonesia Period 2009-2013". From that publication, as part of its information update, FWI is now presenting the current conditions on deforestation and forest degradation in North Sumatera, East Kalimantan and North Maluku Provinces.

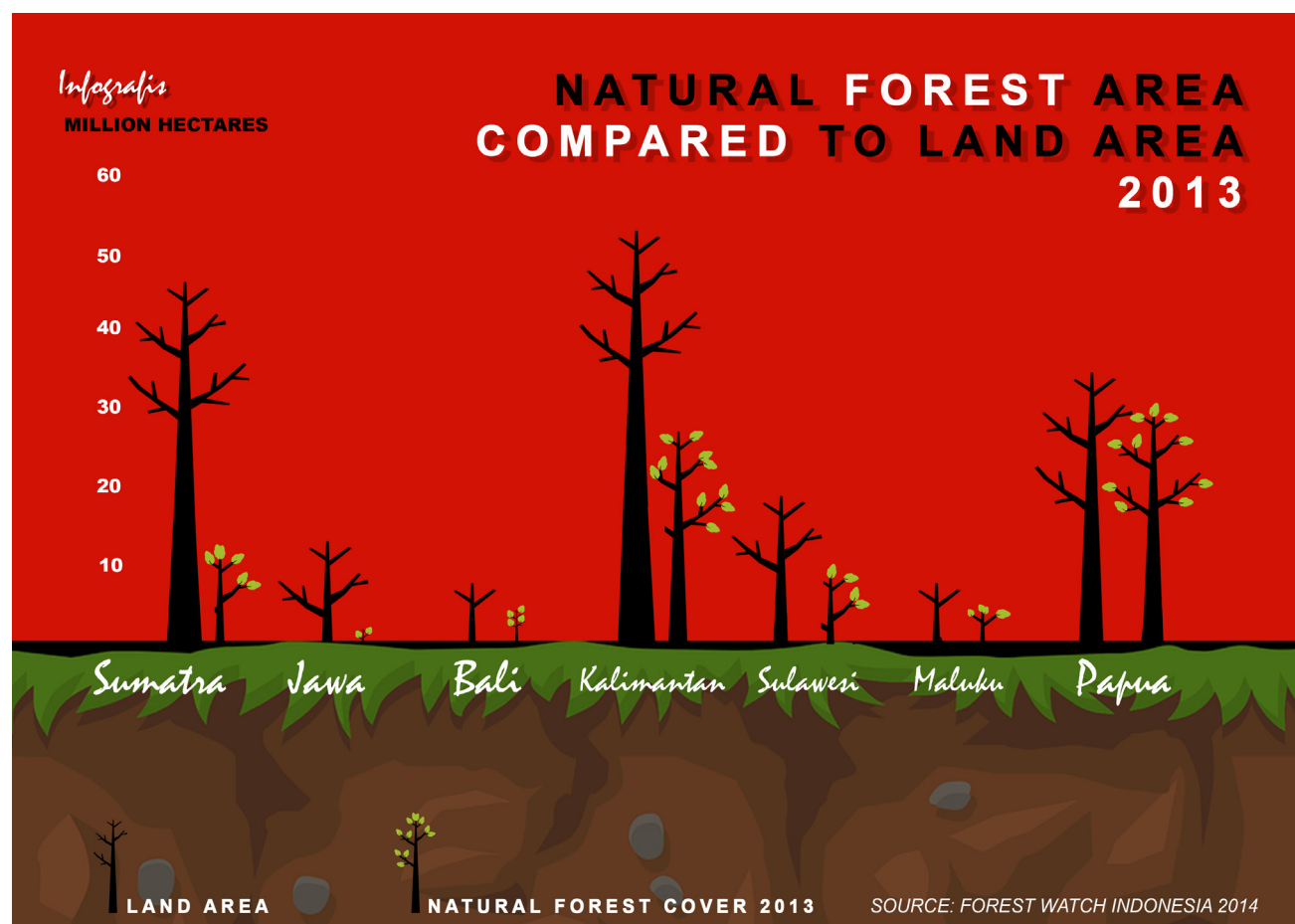


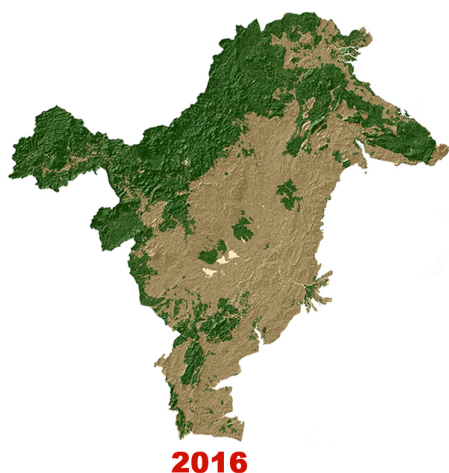
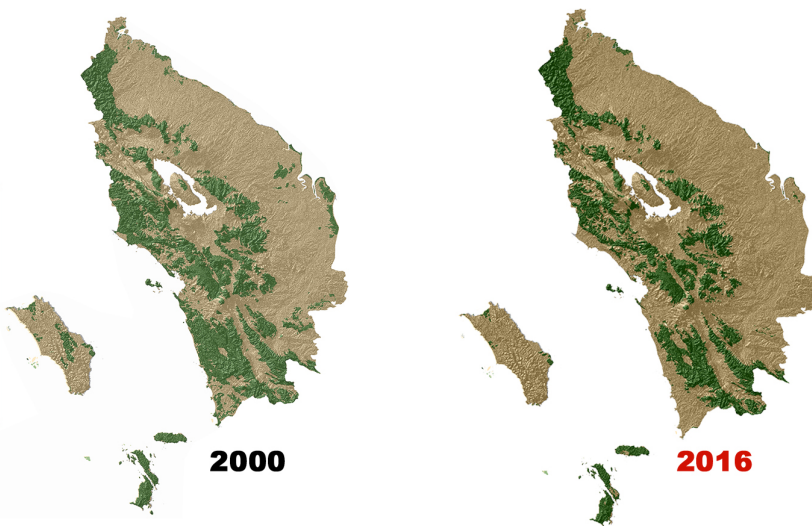
Figure 1. Natural Forest Area Compared to Land Area, 2013



# FOREST COVER AND DEFORESTATION IN 3 PROVINCE

## NORTH SUMATERA

**NORTH SUMATERA 2016 FOREST COVER 1.64 MILLION HECTARES (23%), DEFORESTATION IN 2013-2016 AROUND 90,000 HECTARES, LAND AREA 7 MILLION HECTARES**

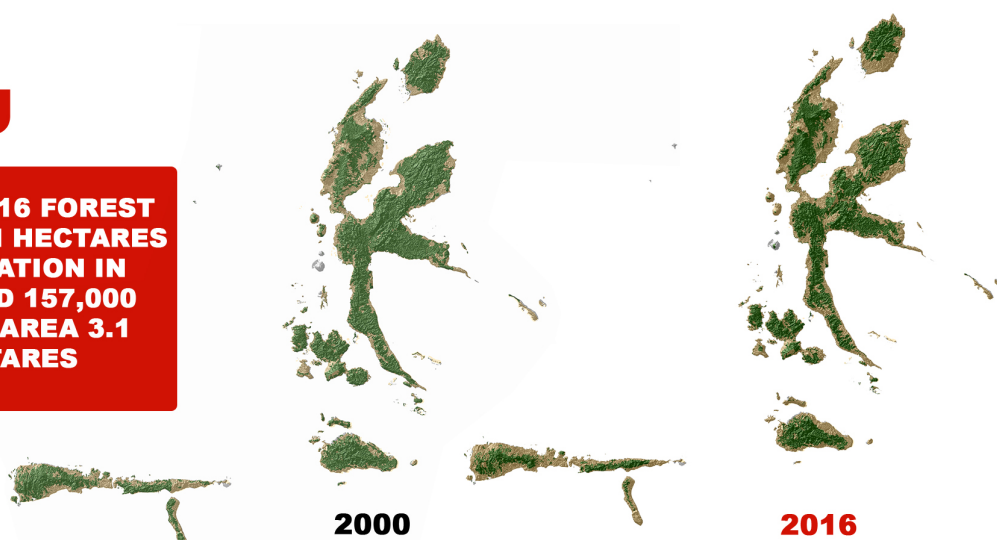


## EAST KALIMANTAN

**EAST KALIMANTAN 2016 FOREST COVER 5.89 MILLION HECTARES (47%), DEFORESTATION IN 2013-2016 AROUND 472,000 HECTARES, LAND AREA 12.5 MILLION HECTARES**

## NORTH MALUKU

**NORTH MALUKU 2016 FOREST COVER 1.51 MILLION HECTARES (48%), DEFORESTATION IN 2013-2016 AROUND 157,000 HECTARES, LAND AREA 3.1 MILLION HECTARES**



SOURCE: FOREST WATCH INDONESIA 2018



# CURRENT STATE OF THE FOREST IN NORTH SUMATERA, EAST KALIMANTAN AND NORTH MALUKU

Natural forests in these three provinces have different characteristics, namely in their current forest cover, geographical landscapes, land ownership in forest use, island location, population, and threats that can potentially wipe out natural forests.

In 2016, North Sumatera, East Kalimantan and North Maluku Provinces still have 9 million hectares of natural forest or around 40% of the total land area in the three provinces. This area of natural forests has been reduced by 718 thousand hectares in 2013-2016. In other words, these three provinces in total lost 240 thousand hectares natural forest annually or an area the size of Depok City every month, or more than 4 times the area of the Beautiful Indonesia Miniature Park complex every day, or 42 times the size of a soccer (football) field every hour.

North Maluku and Maluku are island provinces in eastern Indonesia. These two provinces have 1,780 islands between them, according to the Ministry of Marine Affairs and Fisheries, and only 9 are catego-

rized as large islands. In 2013, North Maluku's natural forest covered 1.67 million hectares (FWI, 2014). In 2016, the province's natural forest was reduced by 156 thousands hectares to 1.51 million hectares. Most of these natural forests are distributed in small islands.

In 2013, natural forests covered 6.3 million hectares of East Kalimantan. In 2016, only 5.89 million hectares remained, which is only 47% of the province's total land area. The province's vast natural forests face very real threats from forest use permits. East Kalimantan's high rate of deforestation is a signal of these threats.

In 2013, North Sumatera's natural forest covered 1.73 million hectares. In 2016, the province's remaining natural forest only covered 1.64 million hectares or 23% of the total land area in the province. In general, North Sumatera's remaining natural forests are located in conservation areas.





Out of the three provinces assessed, North Maluku has the highest percentage of natural forest compared to its land area. However, the province's rate of forest loss is also high. North Maluku's geographical characteristic as an archipelagic province makes access to forests and timber extraction from the islands easier. In addition, vast natural forest areas and great timber potential makes the province a target of extractive industries.

## CONTROL OF LAND IN THE 3 PROVINCES

Extractive industries have led to not only deforestation and forest degradation but also social problems. Communities in and around forests become marginalized and inequality in land control widens. According to data on forest and land use permit in North Sumatera, East Kalimantan and North Maluku, around 50% or 11.2 million hectares land in these three provinces are controlled by holders of Natural Forest Timber Production License (IUPHHK-HA) or Forest Concession (HPH) license, Industrial Plantation Forest (HTI) license, oil palm plantation or mining concession holders.

From 11.2 million hectares land under management licenses, around 4 million hectares or 36% have overlapping licenses. These numbers are followed by HPH with 2.6 million hectares (23%), mining concessions with 2.2 million hectares (20%), oil palm plantations with 1.4 million hectares (13%), and HTI with 873 thousand hectares (8%).

East Kalimantan has the largest concession areas which in total cover 8.6 million hectares or 70% of the province's land area. North Maluku comes in second where 1.4 million hectares or 46% of its land area has been handed over to various concession licenses. Meanwhile in North Sumatera 1.1 million hectares or 16% of the province's land area is concession-managed land.

Table 1. Area and percentage of forest and land under forest and land utilization licenses, 2016 (numbers in hectare)

EAST KALIMANTAN						
Overlapping Concession	Longging Concession (HPH)	Timber Plantation (HTI)	Oil Palm Plantation	Minging	Total	Total Of Land Area
42%	23%	7%	13%	15%	70%	100%
3.663.887	1.999.104	567.671	1.152.392	1.289.802	8.672.856	12.466.114
NORTH SUMATERA						
Overlapping Concession	Longging Concession (HPH)	Timber Plantation (HTI)	Oil Palm Plantation	Minging	Total	Total Of Land Area
4%	29%	25%	24%	19%	16%	100%
46.363	320.608	280.516	266.237	208.913	1.122.637	7.092.041
NORTH MALUKU						
Overlapping Concession	Longging Concession (HPH)	Timber Plantation (HTI)	Oil Palm Plantation	Minging	Total	Total Of Land Area
25%	19%	2%	1%	52%	46%	100%
363.328	282.322	24.837	21.064	757.261	1.448.812	3.126.774
GRAND TOTAL						
Overlapping Concession	Longging Concession (HPH)	Timber Plantation (HTI)	Oil Palm Plantation	Minging	Total	Total Of Land Area
4.073.579	2.602.034	873.023	1.439.694	2.255.975	11.244.306	100%
36%	23%	8%	13%	20%	50%	22.684.930

Source: FWI, 2018

From North Sumatera Province's 7 million hectares land area, 16% of which (or 1.1 million hectares) are managed by concession licenses. HPH licenses cover the largest percentage of land with 320,608 hectares (29%), followed by HTI with 280,516 hectares (25%), oil palm plantation concessions with 266,237 hectares (24%), mining 208,913 hectares (19%), and the remaining 46 thousand hectares (4%) are overlapping licenses.

In East Kalimantan, 8.6 million hectares or 70% of the total land area is under the management of HPH, HTI, oil palm plantation and mining concessions. As much as 3.6 million hectares (42%) are overlapping concession areas (between HPH, HTI, oil palm plantations and mining concessions). The largest portion of land is under control of HPH (1.9 million hectares or 23%), followed by mining (1.2 million hectares or 15%), oil palm plantation (1.1 million hectares or 13%), and HTI (567 thousand hectares or 7%).

North Maluku's land area covers 3.1 million hectares, in which 1.4 million hectares or 46% are under management licenses, whether in forested or non-forested areas. Meanwhile, only 54% or 1.7 million hectares are free from concessions. Mining concessions cover the largest portion of land with 757 thousand hectares or 52% of total concession area. On second place is HPH concessions with 282 thousand hectares (19%), HTI concessions with 24 thousand hectares (2%), oil palm plantations with 21 thousand hectares

(1%), and the remaining are overlapping areas that cover 363 thousand hectares (25%).

The analysis and figures above illustrate opposite conditions from the land allocated for communities in or around forests. To this day, only 4% or around 812 thousand hectares forest designated for social forestry in these three provinces.

## DEFORESTATION IN AND AROUND FOREST AREAS

In the context of forest resources management, the State gazettes forest areas. A large portion of land in North Sumatera, East Kalimantan and North Maluku has been designated or gazette as forest areas and further classified based on forest functions. Forest area map shows that 60% or around 13.7 million hectares land in these provinces are classified as forest areas and another 9 million are outside of forest areas.

According to their functions, forest areas in the three provinces are classified as Production Forest (Production Forest and Limited Production Forest) covering 8.3 million hectares or 37%, Protected Forest covering 3.5 million hectares or 16%, conservation areas covering 1 million hectares or 5%, and Convertible Production Forest covering 759 thousand hectares or 3%.

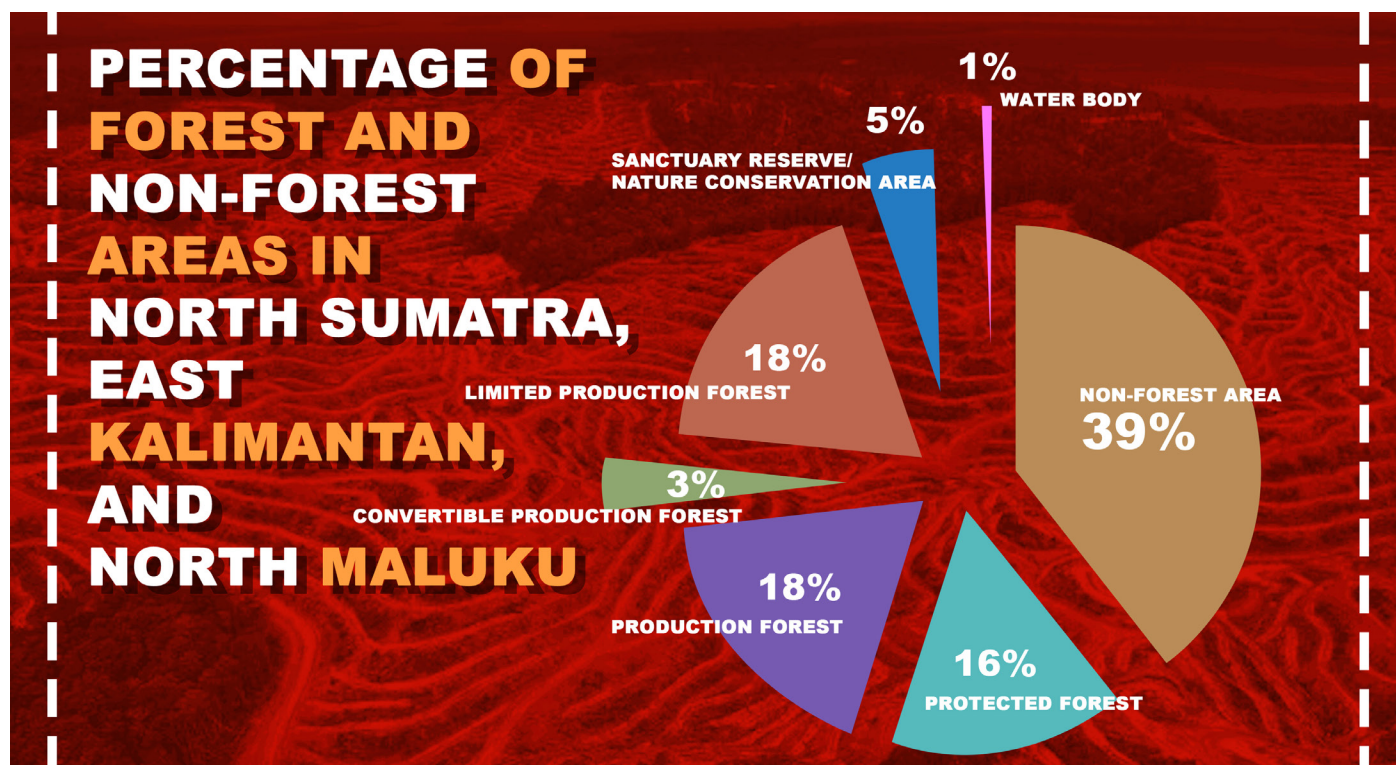
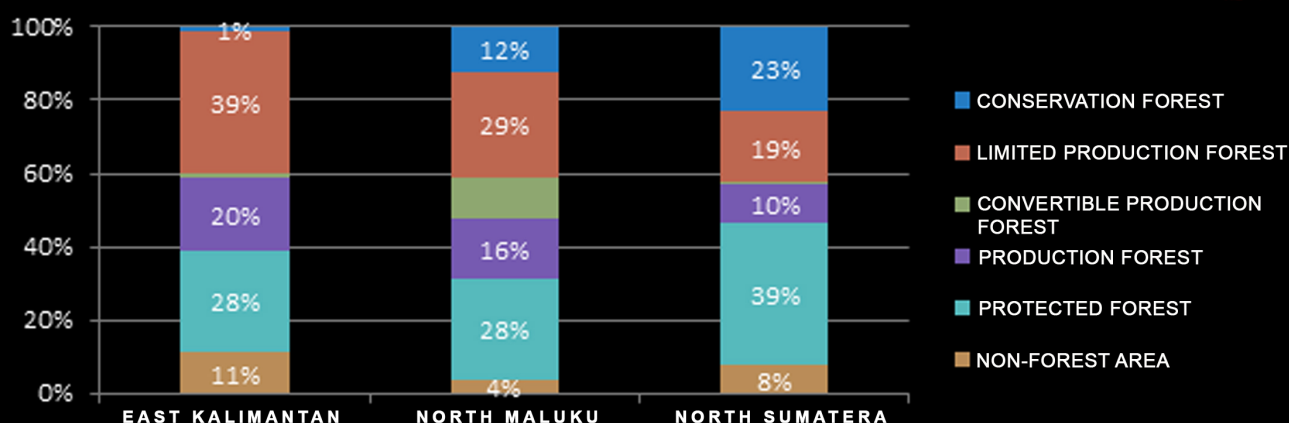


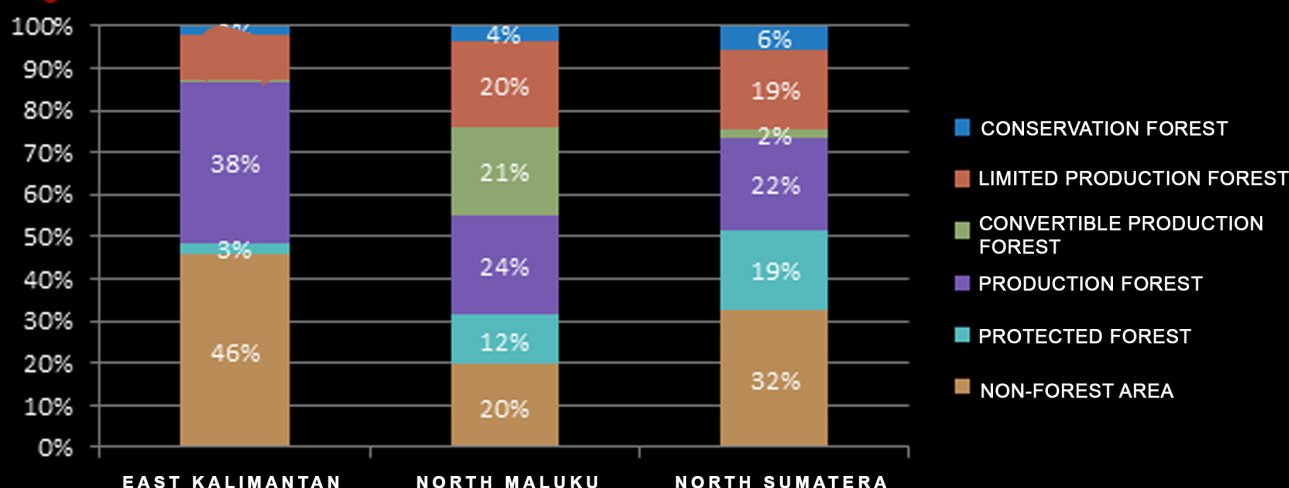
Figure 2. Percentage of forest and non-forest areas in North Sumatera, East Kalimantan, and North Maluku (FWI, 2018).



## NATURAL FORESTS IN AND OUTSIDE FOREST AREAS IN NORTH SUMATRA, EAST KALIMANTAN AND NORTH MALUKU



## DEFORESTATION IN AND OUTSIDE FOREST AREAS IN NORTH SUMATRA, EAST KALIMANTAN AND NORTH MALUKU



**“DURING THE 2013-2016 PERIOD 718,000 HECTARES FOREST AREA IN NORTH SUMATRA, EAST KALIMANTAN AND NORTH MALUKU WAS DEFORESTED, AND 61% OF THE DEFORESTED AREA IS LOCATED WITHIN FOREST AREAS.”**

SOURCE: FOREST WATCH INDONESIA 2018

Compared to actual natural forest cover condition, the status of forest area is not directly linked with forest cover sustainability. In 2016 FWI found that 40% or around 9 million hectares of the land area in these three provinces are natural forest. Out of that natural forest area, 8.2 million hectares are located inside forest areas and another 853 thousand hectares are located in non-forest area (APL). From this 8.2 million hectares, 4.8 million hectares are allocated for production functions (3 million hectares Limited Production Forest, 1.5 million hectares Production Forest, and 221 thousand hectares Convertible Production Forest), and the remaining 3.3 million hectares are located in protected and conservation areas.

During the 2013-2016 period 718 thousand hectares forest area in North Sumatera, East Kalimantan and North Maluku was deforested, and 61% of the deforested area is located within forest areas. The greatest proportion of deforestation occurred in Production Forests (Limited Production Forest, Production Forest and Convertible Production Forest). But forest areas designated for protection and conservation functions could not escape deforestation either. During this period, 68 thousand hectares natural forests in protected and conservation areas were cleared.

In the three provinces, relatively vast natural forests are found in production and protected areas. A comparison of natural forest according to their functions (Table 2) compared to the total natural forest area in the three provinces are as follow: 4.87 million hectares (54%) in production forests (Limited Production Forest, Production Forest and Convertible Production Forest), 2.69 million hectares (30%) in protected forest, 0.63 million hectares or 7% in conservation forest. Natural forests outside forest areas cover 0.85 million hectares or 9%.

With regards to their management, each forest area has its own unique functions, although in general for-

ests have conservation, protection and production functions. Conservation functions aims to protect life support systems, preserving plant and animal biodiversity and their ecosystems, and to provide sustainable utilization of living resources and their ecosystems. Forest with protection functions aims to protect life support systems to regulate hydrological functions, prevent floods, control erosion, prevent sea water intrusion, and maintain soil fertility. Functions of production forest are timber forest product utilization, plantation forest, or other production forests.

Deforestation predominantly takes place in forest areas with production functions because these areas can be legally placed under license for HPH or HTI concessions, or may be converted to other uses (Convertible Production Forest). Deforestation in production forests may be caused by unsustainable HPH management or HTI concession that was acquired in a productive forest area, or natural forest conversion because of other uses such as plantations. In addition, production forest area may be managed under borrow-to-use permits in forest areas for exploitative industries such as mining that can result in deforestation.

Under such management conditions, deforestation threats in production functions are greater than the threats in areas of conservation and protection functions. Therefore under the worst forest management scenario and the assumption that there is no natural forest conversion in areas of protection and conservation functions, then there would only be 3.3 million hectares natural forest remaining in the three provinces: 1.6 million hectares in East Kalimantan or 14% from the province area, 607 thousand hectares in North Maluku (19%), and 1 million hectares in North Sumatera (14%).

Table 2. 2013-2016 deforestation rates and 2016 land cover in forest and non-forest areas (number in hectare)

Area Status	EAST KALIMANTAN		NORTH MALUKU		NORTH SUMATERA		TOTAL Deforestation in 2013-2016	Total Forest Cover in 2016
	Deforestation in 2013-2016	Forest Cover in 2016	Deforestation in 2013-2016	Forest Cover in 2016	Deforestation in 2013-2016	Forest Cover in 2016		
<b>Non-forest areas (APL)</b>	217.468	672.490	30.805	54.544	28.927	126.053	277.201	853.087
<b>Protected forest</b>	12.010	1.632.621	18.753	419.333	17.144	642.681	47.908	2.694.635
<b>Production forest</b>	179.349	1.179.964	36.983	245.775	19.203	167.410	235.534	1.593.149
<b>Convertible production forest</b>	2.354	41.753	32.953	170.084	1.879	9.569	37.185	221.407
<b>Limited production forest</b>	51.088	2.305.978	31.763	433.113	16.930	318.649	99.781	3.057.741
<b>Conservation forest</b>	10.332	66.655	5.653	187.935	4.991	379.467	20.977	634.058
<b>TOTAL</b>	472.602	5.899.461	156.909	1.510.784	89.074	1.643.830	718.585	9.054.076

Source: FWI, 2018





# DIRECT CAUSES OF DEFORESTATION

This book classifies drivers of deforestation into two groups, namely direct causes and underlying or indirect causes. Direct causes are defined as activities that directly affect changes in forest cover, such as forest clearing and timber harvesting in natural forests. Indirect or underlying causes include national/local influences that may drive forest loss, especially government policies and abuse of authority.

More than 50% of the remaining natural forests are located inside under management permits (Appendix 15). This condition stresses the views of this book that the main factor driving deforestation in these three provinces is land-greedy extractive industries. This argument is supported by a number of case studies presented here that explain the loss of natural forests within management permit concessions.

In East Kalimantan, PT Fajar Surya Swadaya was proven to have cleared natural forests in Muara Lambakan Village in Paser District. In 2009-2016, as much as 17 thousand hectares natural forest was converted into HTI concessions.

In North Sumatera in PT Toba Pulp Lestari's HTI concession, satellite images indicate that during 2013 to 2016, around 2,108 hectares natural forest was cleared in this concession. These satellite images

were supported by ground findings of mixed forest clearing occurring on July 2016. These findings show that PT Toba Pulp Lestari has broken their commitment to stop natural forest clearing, even though these natural forest areas are located within their concessions.

In North Maluku, there were other violations against sustainable forest management regulations in addition to the conversion of natural forests into HTI. One example is PT Poleko Yubarsons, an HPH concession in Obi Island. Logging along riparian buffer is believed to cause deforestation and forest degradation, which in turn reduced the quality of water catchment in the area. In result, downstream localities in southern Obi Island are flooded every year (based on interview with communities).

In addition to the examples above from the forestry sector, another direct cause of deforestation is rampant oil palm plantation expansion. One example is PT Teluk Nauli, an HPH concession in North Sumatera. Oil palm plantation in forest areas clearly indicate neglect and even violation by the government and concession permit holders of applicable laws and regulations.



## TIMBER PLANTATION (HTI) DEVELOPMENT SACRIFICING NATURAL FORESTS

HTI development policies as Timber Plantation License (IUPHHK-HT/HTI) concessions began in early 1990s. In addition to rehabilitate degraded forests, HTI is expected to be able to provide raw materials for forestry industry, and eliminate forestry industry's dependency on natural forests. Unfortunately, policies that should be able to rehabilitate forest in fact only degrade forests from the presence of HTI licenses in natural forests. Eventually many HTI concessions in natural forests end up converting forests to prepare land for their operations.

HTI concession development contributes 10% to deforestation in Indonesia during 2009-2013 (FWI, 2014). In 2009, 2 million hectares natural forest was found in HTI concessions, but this figure has shrink to 1.5 million hectare in 2013. One supporting data for this is that in 2009-2015, 20% or 53.2 million m<sup>3</sup> logs were produced from land clearing to prepare for HTI.

### UPHHK-HT (HTI) PT TOBA PULP LESTARI

In North Sumatera, there is an HTI concession with 280,516 hectares. During the 2000-2016 period, HTI concessions have cleared 53 thousand hectares natural forest. High deforestation rates by HTI are caused by land clearing during land preparations. These activities have converted natural forests into monoculture HTI concessions.

FWI's monitoring in PT Toba Pulp Lestari (PT TPL) from July to November 2016 found documented natural forests clearings in Aek Nauli Block in Simalungun District, North Sumatera. Mixed forest clearing in the concession is believed to be caused by raw material shortage for the company's pulp mill. According to FWI and KSPPM's visit in 2016, raw material shortage is thought to be caused by disease that attacked the company's eucalyptus plants in the last three years. This led to PT TPL clearing more forests for their planting areas. Satellite images show that in 2013-2016 2,108 hectares have been deforested in PT TPL.

From the concession company's 115 thousand hectares, only 15% natural forest (17 thousand hectares) is located within the company concession, while 27% has been cleared for plantation forest. This fact is the cause why PT TPL is still converting natural forests in their concession. These alleged natural forest clearing activities by PT TPL is supported by data on deforestation from 2013-2016. During this period, plantation forests contributed to 52% of the land conversion from forested into non-forested areas in the concessions.

These series of facts show that in addition to directly causing deforestation, these activities have also violated the company's own sustainability commitments as announced on December 2015. At the time PT TPL stated their commitment to stop deforestation in all of their supply chain. Through these land clearing activities the company also violated their forest protection and conservation commitments that was launched on 30 June 2014.

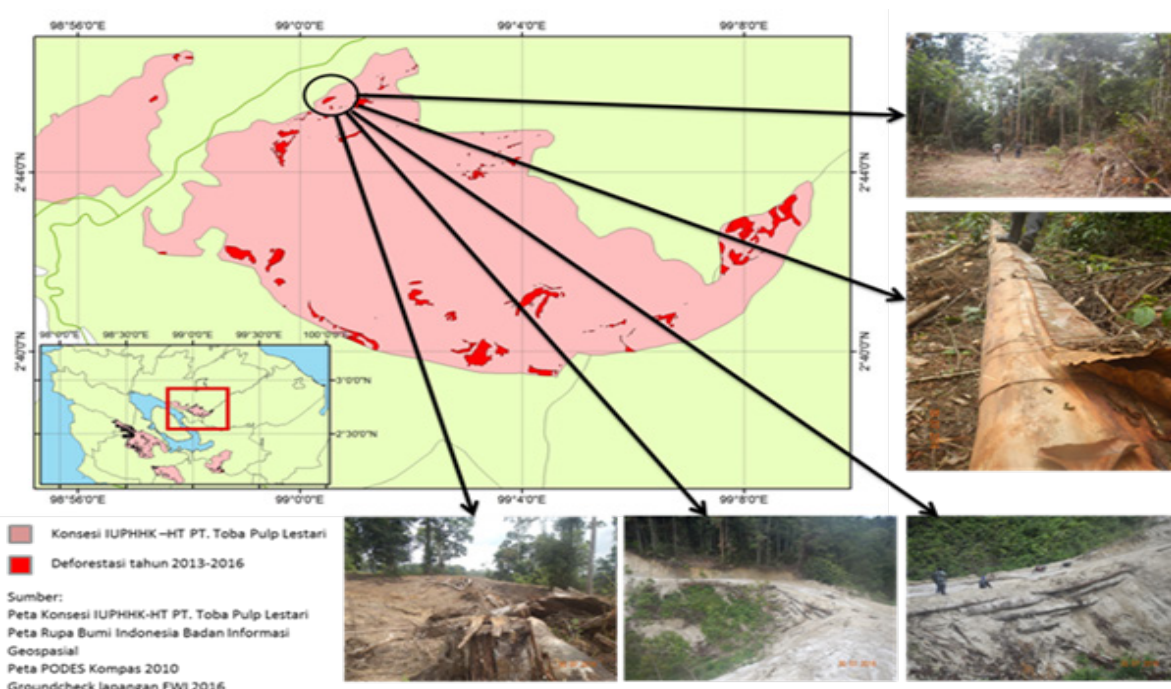


Figure 3. Natural forest clearing in Aek Nauli Sector, Simalungun District, North Sumatera (Photo: FWI, 2014)



## IUPHHK-HT (HTI) PT FAJAR SURYA SWADAYA

Nature degradation as result of HTI activities is clearly evident ever since PT Fajar Surya Swadaya (PT FSS) first operated its timber plantation in East Kalimantan. This accelerated degradation is clearly caused by the company's operation system of clearing and converting forest areas into monoculture plantations.



Figure 4. PT Fajar Surya Swadaya concession, East Kalimantan (Photo: JPIK East Kalimantan)

PT FSS is a company that works in pulp, paper and rayon sector of the timber industry. The company was built by Fajar Surya paper and pulp industry group (PT Surabaya pulp and paper industry, and PT Fajar Surya Wisesa) with Djarum Group through PT Agra Bareksa Indonesia and Yayasan Keuangan Panglima Besar Sudirman (YKPBS) Jakarta. One of the objectives of HTI development by PT FSS is to meet raw material demands for the pulp and paper industry in East Kalimantan with a capacity of 300,000 ton/

year (based on PT FSS 2008-2017 work plan).

PT FSS' concession is located in 7 villages in 2 sub-district and 2 districts: Longkali Sub-district in Paser District and Watu Sub-district in Penajam Paser Utara District. The 7 villages are ialah Mendik Karya, Munggu, Muara Pias, Muara Toyu, Perkuwin, Pinang Jatus, and Muara Lambakan. The company obtained an IUPHHK-HT license through Forestry Minister Regulations No. 383/Kpts-II/1997 in conjunction with No. SK.428/Menhut-II/2012 for 61,470 hectares. This license is valid for 43 years (35 years plus 1 8-year planting cycle).

On early 2015, PT Agra Bareksa (a subsidiary of Djarum Group) prepared funds of IDR 2 trillion to build a pulp mill in Buluminung Industrial Zone in Penajam Sub-district, Penajam Paser Utara District. In addition, a train system will be built to transport raw materials from the HTI concession to the mill. PT FSS was recruited for this pulp mill designed for 1 million ton/year capacity (Tribunnews.com, 2015).

Spatial plans for the company's work area are designed in the 2008-2017 Plantation Forest Timber Production Work Plan (RKUPHHK-HT). PT FSS has allocated 45,844 hectares (68.8%) for main crops, 3,257 hectares (4.9%) for priority plants, 7,524 hectares (11.3%) for livelihood plants, 6,701 hectares (10%) for protected area and 3,333 hectares (5%) is unsuitable for production. In 2008, PT FSS has delineated and demarcated its boundaries, constructed nurseries and built facilities and infrastructures, as well as roads.



Figure 5. Landscape changes in PT Fajar Surya Swadaya as viewed from Landsat 7 satellite image from February-July 2016



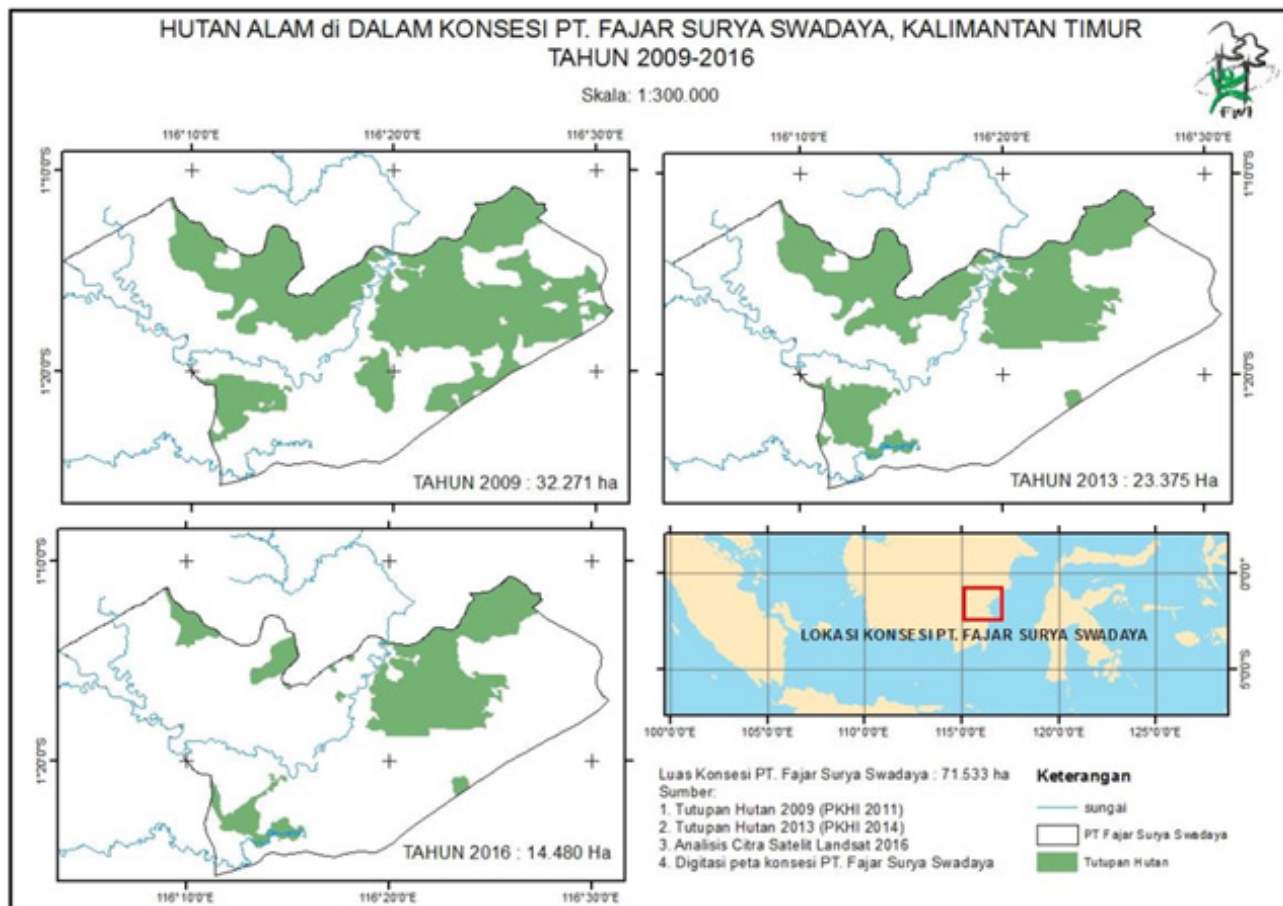


Figure 6. Map of natural forest cover change in PT Fajar Surya Swadaya in 2009, 2013 and 2016 016

From 2009 to 2016, natural forest area in PT FSS concession has decreased by more than 17 thousand hectares. Deforestation in the concession is caused by forest conversion into timber plantation. Natural forest is cleared to prepare land, and logs are sold to third parties. PT FSS' RKUPHHK-HT data show that the company plans to harvest 1.2 million m<sup>3</sup> logs. The company's 2014 annual work plan also includes plans to sell 55,903 m<sup>3</sup> natural forest timbers to the market or a third party.

Figure 6 shows forest cover change in PT FSS' HTI

concession. Natural forest area in the company concession continues to decrease every year. This began in 2009 when companies did not have management permits and candidate sites for these concessions still had 32 thousand hectares natural forest. By 2013, natural forest area has decreased to 23 thousand hectares. This decrease in natural forest area is in line with PT FSS' IUPHHK-HT license in 2012. Natural forest area inside the company concession continued to decrease until 2016, when only 14 thousand hectares natural forest remained in the concession.



Figure 7. Piles of logs from natural forests logged by PT Fajar Surya Swadaya (Photo by JPIK East Kalimantan)



# OIL PALM PLANTATION EXPANSION



The Ministry of Agriculture's Directorate General of Estates stated that oil palm plantations contributed IDR 239.4 trillion to the national income (CNN Indonesia, 2017). This is the primary reason that the government and various other stakeholders are battling anti-palm oil campaigns and findings of forest degradation caused by oil palm plantations. In this argument, they accuse that the campaigns disclosing forest degradation is part of a business "market war" agenda from companies refusing the progress of palm oil in Indonesia.

Thus the development of palm oil industry in Indonesia is always countered with the argument on whether oil palm plantation is causing deforestation.

The term deforestation is the source of a constant

debate because "forest" has always been differentiated from "forest area". When forest cover is lost, though the area is not administratively classified as forest area, many refuse to consider this as deforestation. This book views that deforestation occurs even when the natural forest cover is not located within a forest area.

Vijay et al. (2016) in Thamrin School (2017) stated that oil palm plantation expansion is behind 54% of deforestation that occurred in Indonesia between 1989 and 2013. Meanwhile, previous studies have cited higher numbers of at least 56% (Koh & Wilcove, 2008 in Thamrin School, 2017). In 2014 FWI stated that oil palm plantations have cleared around 500 thousand hectares natural forest in 2009-2013.



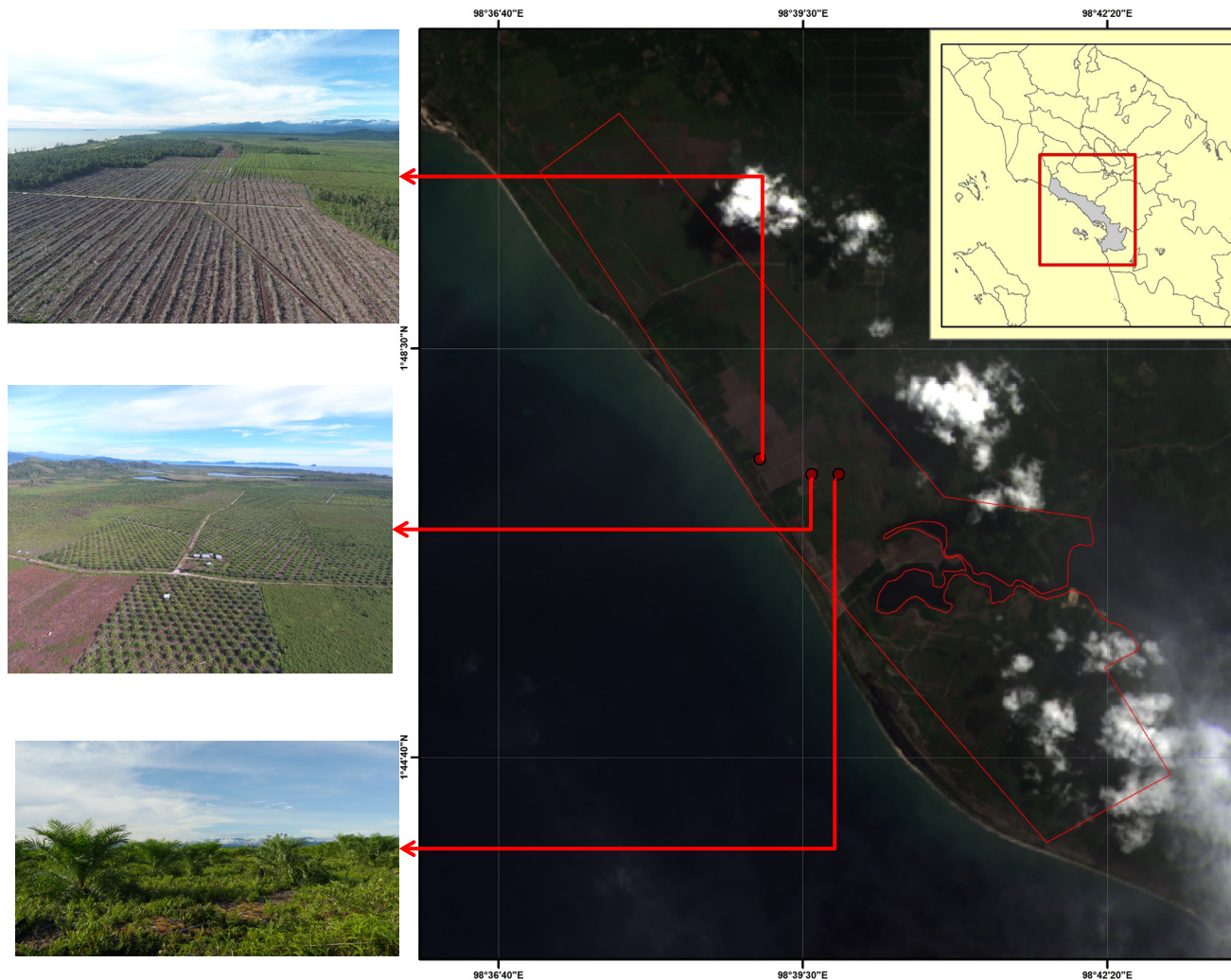


Figure 8. Map from groundchecking in PT Teluk Nauli UKL I Aek Kolang where most of the area have been converted into oil palm plantation (PT Gaharu Mas)

## OIL PALM PLANTATIONS INSIDE FOREST AREAS

Based on a 2013-2016 forest cover change analysis, an HPH concession in Tapanuli Tengah District provides an interesting example for natural forest loss due to oil palm plantation expansion. This particular area is part of PT Teluk Nauli Unit II IUPHHK-HA or HPH concession located in Markati Nauli Village, Kolang Sub-district, Tapanuli Tengah District in North Sumatera. PT Teluk Nauli obtained IUPHHK-HA license based on Forestry Ministry Decree No. SK.414/Menhut-II/2004 valid from 19 October 2004 up to 30 June 2044 with a total concession area of  $\pm 83,143$  hectares in North Sumatera.

According to a 2014-2015 Global Forest Watch (GFW) interactive map analysis, deforestation occurred in over 873 hectares in one of the company blocks. FWI's analysis also shows that 2,706 hectares in PT Teluk Nauli concession was deforested in 2013-2016. Meanwhile, Google Earth satellite image monitoring results up to 2017 show land clearing activities in a

number of sites. In principle, the HPH license applies only for selective logging and should leave out trees under the allowable harvest size.

These findings prove initial speculations that this HPH concession has been converted into a concession for another commodity. This speculation is supported by information from field visit and interviews with plantation workers assuring that PT Teluk Nauli's supposed UKL I Block B (Aek Kolang) has been converted into PT Gaharu Mas' oil palm plantation since 2015.

Ever since the company first came to the area, PT Gaharu Mas plantation's presence has caused conflicts with surrounding communities. These broad-ranging conflicts include land grabbing (actual.com, 2015), damages to village infrastructure (RRI, 2016), to license noncompliance. The Tapanuli Tengah District Environmental Impact Management Agency (BAPEDALDA) conducted an investigation and found that as of 2017 PT Gaharu Mas has only applied for environmental permits.





Figure 9. Forest cover change in 2005, 2013, 2015 and 2017 as seen from Google Earth satellite images

According to clarification from Head of Makarti Nauli Village, the company has begun land clearing since 2014 and began planting its first oil palm plants in 2015. In fact, on August 2016 the Tapanuli Tengah District BAPEDALDA had just announced to the community that PT Gaharu Mas was in the process of applying for environmental permit for its oil palm plantation (Appendix 13).

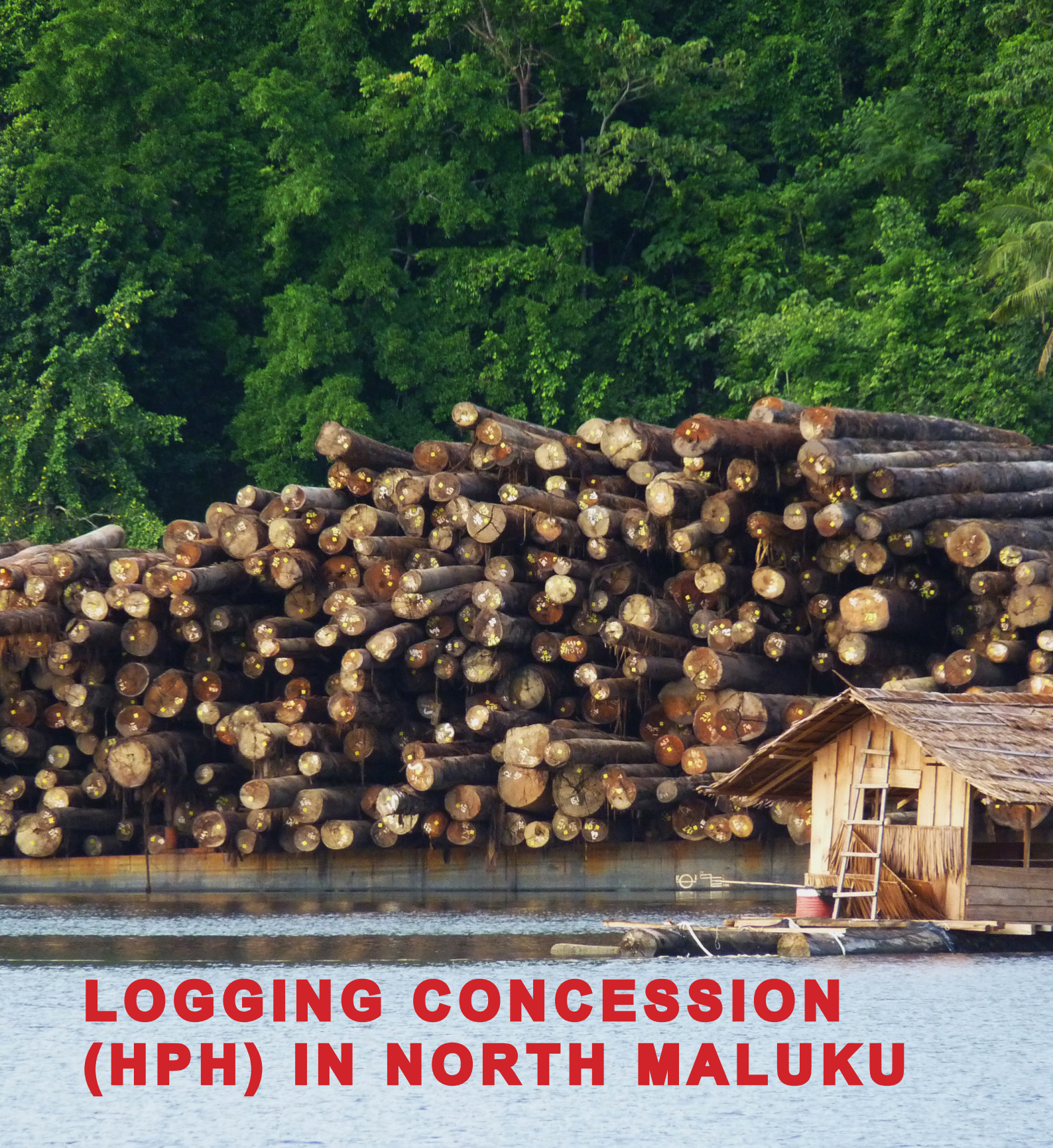
The establishment of oil palm plantation in PT Teluk Nauli HPH concession leads to a number of ques-

tions. PT Teluk Nauli seems to be negligent of land clearing and oil palm planting activities in their location permit. In fact, PT Teluk Nauli's company office is located only 15 km away from the oil palm planting area. Pandan Zone XI Forest Management Unit (KPHP), through one of their staff, stated that they do not have any knowledge of oil palm planting taking place in that forest area, when actually this issue has been ongoing since 2014 and is frequently covered in the media until 2016.

**“In Period Years of 2009-2013,  
Oil Palm Expansion Has Do-  
nated Deforestation of more  
than 500 thousand hectares”**

**Forest Watch Indonesia, 2014**





# LOGGING CONCESSION (HPH) IN NORTH MALUKU

Poor performance from IUPHHK-HA or HPH license holders is one of the many direct causes of forest loss in North Maluku. Operations of HPH concessions in production forests directly cause forest degradation or even deforestation in North Maluku. In 2013-2016 only, forest cover in production forests decreased to 101 thousand hectares, and with HPH contributing 13,5 thousand hectares to this total figure.

Law No. 41 or 1999 on Forestry stipulates that production forest can be used for its timber and non-timber forest products. Therefore it can be inferred that deforestation in North Maluku's production forests is caused, among others, by IUPHHK-HA concession activities in utilizing timber.



Table 3. List of IUPHHK-HA concessions in North Maluku

No	Company Name	Province	District	Decision Letter	Date Of Decision Letter
1	Bela Berkat Anugrah, PT	North Maluku	South Halmahera	389/Menhut-II/06	12-Jul-06
2	Mahakarya Agra Pesona, PT	North Maluku	East Halmahera	9/1/IUPHHK-HA/PMDN/2017	10-Mar-17
3	Mohtra Agung Persada, PT	North Maluku	Central Halmahera	400/Menhut-II/06	19-Jul-06
4	Nusa Niwe Indah, PT	North Maluku	Halmahera Utara	410/Menhut-II/04	18-Oct-04
5	Nusa Pala Nirwana, PT	North Maluku	South Halmahera	24/1/IUPHHK-HA/PMDN/2016	15-Nov-16
6	Paleko Yubarsons, PT	North Maluku	South Halmahera	962/Kpts-II/99	14-Oct-99
7	Surya Kirana Dutamas, PT	North Maluku	South Halmahera	630/Menhut-II/2009	15-Oct-09
8	TAIWI Unit I, PT	North Maluku	East Halmahera	368/Menhut-II/09	23-Jun-09
9	TAIWI Unit II, PT	North Maluku	South Halmahera	394/Kpts-II92	22-Apr-92
10	Telaga Bhakti Persada, PT	North Maluku	South Halmahera	372/Menhut5-II/09	23-Jun-09
11	Tunas Pusaka Mandiri, PT	North Maluku	North Halmahera	351/Menhut-II/06	12-May-06
12	Wana Kencana Sejati Unit II, PT	North Maluku	Central Halmahera	295/Menhut-II/07	28-Aug-07
13	Wana Kencana Sejati, PT	North Maluku	East Halmahera	95/Menhut-II/05	12-Apr-05
14	Wijaya Kencana Indonesia, PT	North Maluku	South Halmahera	21/1/IUPHHK-HA/PMDN/2016	18-Oct-16

Source: FWI compilation, 2018

HPH license holders should be logging selectively and replanting the logged-over areas. However, HPH concessions' forest management practices often prove differently. In a number of cases, HPH logged-over areas are in fact used by communities for farming and developing their settlements. These are the cases occurring in Obi Island.

The cases in Obi Island confirm the writers' belief that in Southeast Asia and other tropical areas, there is a unique sequence of events where forests are first cleared by HPH or logging concessions and then managed for agriculture purposes (Grainger 1993; Kummer & Turner 1994, in Sunderlin WD, & Reso-sudarmo IAP, 1997). Therefore it may be argued that in areas where this sequence occurs, logging by HPH concessions is driving deforestation, and shifting cultivation farmers are only taking over the spaces made available by HPH concessions (Sunderlin WD & Reso-sudarmo IAP, 1997).

Obi Island is currently controlled by two large HPH concessions, namely PT Telaga Bhakti Persada and

Poleko Yubarsons. Both companies own 63 thousand and 82 thousand hectares, respectively. Both companies control more than half area of Obi Island. The analysis done for this book has found that PT Telaga Bhakti Persada still has 37 thousand hectares natural forest, while PT Poleko Yubarsons still has 46 thousand hectares natural forest. Between 2013 and 2016, as much as 8.9 thousand hectares natural forest cover was lost, specifically 4.8 thousand hectares in PT Telaga Bhakti Persada and 4.1 thousand hectares in PT Poleko Yubarsons.

According to PT Telaga Bhakti Persada's annual and business work plans, the company is a subsidiary of PT Kayu Lapis Indonesia (PT KLI) and has sourced its timber to its parent company in Central Java from 2014 to 2016. The timber supplied to PT KLI in 2016 reached 40 thousand m<sup>3</sup>. On the other hand, PT Poleko Yubarsons ship their timber to various timber processing companies in Maluku, Sulawesi, East Java, Central Java, and even to North Sumatera.



Table 4. Flow of timber from IUPHHK-HA concessions in Obi Island, 2014-2016

Company	Year	Timber Industry	Province	Timber Volume (m <sup>3</sup> )
<b>PT Telaga Bakti Persada</b>	2014	PT Kayu Lapis Indonesia	Central Java	39.658, 52
	2015	PT Kayu Lapis Indonesia	Central Java	45.779, 87
	2016	PT Karunia Rimba Makmur Semesta	North Sumatera	2.169,43
		PT Kayu Lapis Indonesia	Central Java	40.080,82
<b>PT Poleko Yurbarsons</b>	2014	PT Kutai Timber Indonesia	East Java	9.076, 93
		PT Waenibe Wood Industries	Maluku	1.539, 41
	2015	PT Karunia Rimba Makmur Semesta	North Sumatera	2.169, 43
		PT Karya Wisesa	North Sumatera	1.863, 72
		PT Kutai Timber Indonesia	East Java	17.145, 69
		PT Panca Usaha Palopo	South Sulawesi	3.566, 64
		PT Waenibe Wood Industries	Maluku	3.032, 93
	2016	PT Karunia Rimba Makmur Semesta	North Sumatera	1.588
		PT Karya Wisesa	North Sumatera	1.863,72
		PT Kutai Timber Indonesia	East Java	8.392,21

Source: FWI, 2018. Compilation from Industrial Raw Material Supply Plan (RPBBI) documents from IPHHK concessions

### Box 1. Control of Land in Obi Island, North Maluku

Obi Island is located in southern North Maluku Province, specifically in West Halmahera District. Obi Island comprises 3 sub-districts and 18 villages. It is home to more than 36 thousand people, according to 2015 South Halmahera District Statistics. Obi Island covers an area of 2,500 km<sup>2</sup> and thus not classified as a small island according to Law No. 1 of 2014. However, ground study findings on environmental impacts and degradation clearly justify that the island's natural resources must be managed by taking sustainability and carrying capacity into consideration to ensure the small island's life support system.

Although many people live in Obi Island, the status of 92% of its land area is forest area. In consequence, most of its residents – even government facilities and public facilities – are located within forest areas.

With this forest status, it is suspected that the majority of Obi Island land area has been allocated for exploitation, especially for timber from the island's natural forest. FWI's investigation found that 70% of the land area is under production forest status and 13% is convertible production forest. In addition, 49% of the island's land area is mining concessions.

This high level of corporate land management in Obi Island is a ticking social time bomb, especially for conflict between communities and extractive industries (mining and HPH concessions). Total area of mining concession in Obi Island is 126 thousand hectares of 49% of the island area. HPH concessions cover 145 thousand hectares or 56% of the island land area.

FWI's 2017 land cover analysis found that from the company-managed 186 thousand hectares, around 19 thousand hectares or 10% are plantations that provide communities with sources of livelihoods and economy. Another 48 thousand hectares or 26% shrubs where, most likely, communities' farms are located and 421 hectares are settlements, including public facilities and government buildings.

With regard to environmental disasters, as of 2016 natural resources in every river headwater in Obi Island have been and are still exploited by logging (HPH concessions) and mining. This small island's forests have been denuded and now disasters come every year, destroying these sources of livelihood. The resulting impacts are annual floods that the Obi islanders have grown accustomed to. On December 2016, floods in Obi Island destroyed more than 1,400 buildings and homes with losses reaching hundreds of billions of Rupiah (Tempo, 2016).



# INDICATIONS OF SVLK VIOLATIONS BY PT POLEKO YUBARSONS IN NORTH MALUKU



PT Poleko Yubarsons is the current holder of IUPHHK-HA forest management license issued through Decree SK No. 962/Kpts-II/1999 dated 14 October 1999 for 86,599 hectares. The company's concession is located in the north and southern parts of Obi Island. Through this license, PT Poleko Yubarsons control 32% of the island's land area.

PT Poleko Yubarsons also holds a timber legality assurance system certificate (Sistem Verifikasi Legalitas Kayu – SVLK). Three timber legality certificate inspections were held in 2015, 2016 and 2017. Certificate inspection and issuance was done by the certification body PT Lambodja Sertifikasi. The last certificate that the company obtained was dated 12 May 2017.

PT Poleko Yubarsons' Timber Verification Legality (Verifikasi Legalitas Kayu – VLK) certificate inspection and issuance raises suspicion. The inspection held on 20-25 March 2017 resulted in a decision to suspend certification due to failure to fulfill 6 verifier categories. The suspension was announced on 18 April 2017. However, less than a month later on 12 May 2017, a certificate issuance was announced by the same certification, PT Lambodja Sertifikasi.

FWI conducted monitoring on May 2017 in PT Poleko Yubarsons and found 3 indications of company violations against Director General of Sustainable Production Forest Management (PHPL) Regulation No. P.14/VI-BPPHH/2014 in conjunction with Director General of PHPL Regulation P.15/PHPL/PPHH/HPL.3/8/2016 on Standards and Guide for Evaluating Sustainable

Production Forest Management Performance and Timber Legality Verification. List of violations against VLK system in accordance with the aforementioned regulation is provided in Appendix 12).

## DISCREPANCIES BETWEEN CONCESSION AREA AND PRODUCTION FOREST AREA

Criteria 1.1 in Director General of PHPL Regulation No. P.14/PHPL/SET/4/2016 in conjunction with Director General of PHPL Regulation P.15/PHPL/PPHH/HPL.3/8/2016 on Standards and Guidelines for Assessment of Performance of Sustainable Production Forest Management and Verification of Timber Legality states that forest management unit is located in production forest area. During their inspection, the certification body found that PT Poleko Yubarsons' area is in accordance with its designation. This is different from FWI's finding on May 2017 based on spatial data analysis and ground truthing, where around 9,992 hectares of the concession area is located outside of production forest area. Most or around 9,300 hectares are located in non-forest area (APL), 585 hectares in protected forest and the remaining 74 hectares are located within sanctuary reserve. FWI has found that community settlements, public facilities and government offices (including hospitals, sub-district head's office, village office, police station, bank and school) are located in non-forest area in PT Poleko Yubarsons' concession.



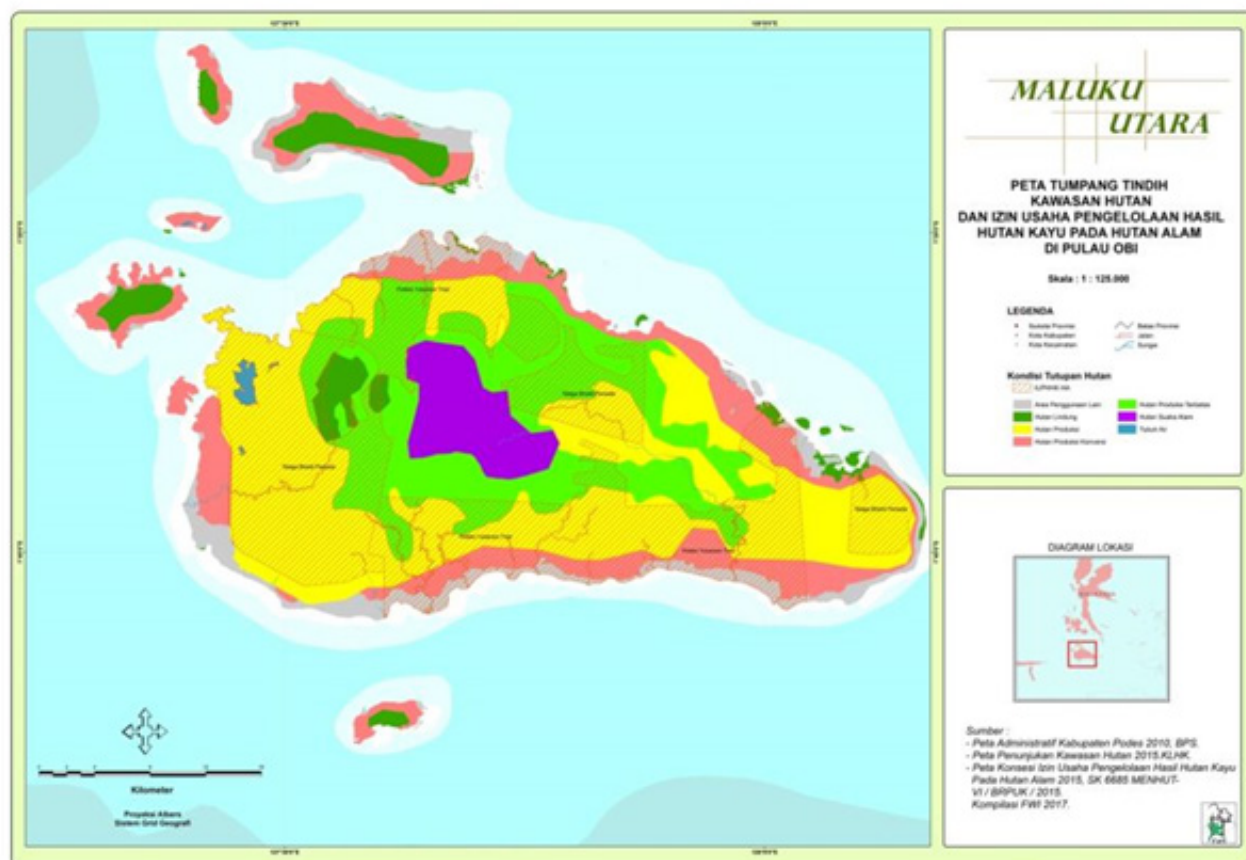


Figure 10. Map of forest area and distribution of IUPHHK-HA/HPH management licenses in Obi Island, North Maluku

## DISCREPANCIES IN PHYSICAL IDENTITY OF TIMBER

Criteria 3.1 of Director General of PHPL Regulation No. P.14/PHPL/SET/4/2016 in conjunction with Director General of PHPL Regulation P.15/PHPL/PPHH/HPL.3/8/2016 on Standards and Guidelines for Assessment of Performance of Sustainable Production Forest Management and Verification of Timber Legality states that license holders must ensure that all timber transported from forest log yard to the transit

log yard, and from transit log yard to forest product primary industries/markets have legal physical and documented identities. The certification body conducting an inspection audit in PT Poleko Yubarsons found that this criteria has been fulfilled. Specifically, Log Number in the Production Report was found on site and logs were marked with the V-Legal logo. In reality however, FWI found in their visit that the stumps were not marked with the logo.



Figure 11. Tree stumps, log transport and log pile in log yard ( Photos by FWI, 2017)



## NEGLIGENCE OF ENVIRONMENTAL AND SOCIAL ASPECTS

Criteria 4.1 of Director General of PHPL Regulation No. P.14/PHPL/SET/4/2016 in conjunction with Director General of PHPL Regulation P.15/PHPL/PPHH/HPL.3/8/2016 on Standards and Guidelines for Assessment of Performance of Sustainable Production Forest Management and Verification of Timber Legality describes that license holders must have Environmental Impact Analysis Document (AMDAL)/Environmental Management and Monitoring Documents (DPPL)/Environmental Management Efforts (UKL) and Environmental Monitoring Efforts (UPL) and implement the requirements as stipulated in these documents. In their inspection of PT Poleko Yubarsons, the certification body deemed that the

company has fulfilled all requirements for this criteria. Inspection report explains how PT Poleko Yubarsons has implemented some environmental management measures such as constructing hardened roads using gravel and soil, constructed culverts, sheet piles, and arranged the riparian buffers. Reports are available for physical, chemical, biological and social environmental assessments, and monitoring facilities and infrastructure are in place. But FWI's findings prove differently. There are rivers used as roadways, logging along riparian buffers of rivers and tributaries, springs blocked, and the company has triggered social conflicts. The company's activities are strongly suspected to have caused conflict in Obi Island which damaged communities' farms.



Figure 12. A river used to transport logs, clearing along riparian buffers of rivers and tributaries, a spring blocked, and community farms destroyed by floods (Photos by FWI, 2017)







# DEFORESTATION TRENDS IN NORTH SUMATERA, EAST KALIMANTAN, AND NORTH MALUKU

High global demands for natural resources-based commodities such as timber, palm oil, pulp, mined products, and paper, have all driven government's reactive and opportunistic attitude in issuing various sectoral policies that are profit-oriented, exploitative and unsustainable. All these lead to even greater pressure on Indonesia's forests from forest degradation and deforestation.

The same applies with deforestation in North Sumatera, East Kalimantan and North Maluku Provinces, where the condition in the three provinces are caused by issues at the policy level. There are differences in the direct causes of deforestation; the most obvious difference is the actors directly causing deforestation in the three provinces. This difference is in line with the difference in forest resources among the three provinces. Conditions of resources determine the commodity behind high deforestation rates in each of these provinces.

Table 5 shows that 72% of deforestation in North Sumatera, East Kalimantan and North Maluku takes place within areas under management licenses. Activities from within these concessions are direct causes to deforestation.

There are indications that most deforestation is planned in areas under management licenses. In other words, the deforestation is happening legally. That is, there is minimum intention and real action to reduce deforestation for ensuring natural forest sustainability and conservation.

Table 5. Deforestation inside forest and land management license concessions (number in hectare)

PROVINCE	DEFORESTATION 2013-2016							TOTAL
	Overlapping Concession	Longgong Concession (HPH)	Timber Plantation (HTI)	Oil Palm Plantation	Mining	Total Deforestation inside concession	Outside Of Concession	
<b>East Kalimantan</b>	203.902	54.495	29.501	61.571	35.907	385.376	87.226	472.602
<b>North Maluku</b>	31.715	14.597	2.843	9.098	46.717	104.971	51.938	156.909
<b>North Sumatera</b>	170	14.758	4.945	6.049	676	26.598	62.476	89.074
<b>Grand Total</b>	235.788	83.850	37.290	76.718	83.300	516.945	201.640	718.585

Source: FWI, 2018



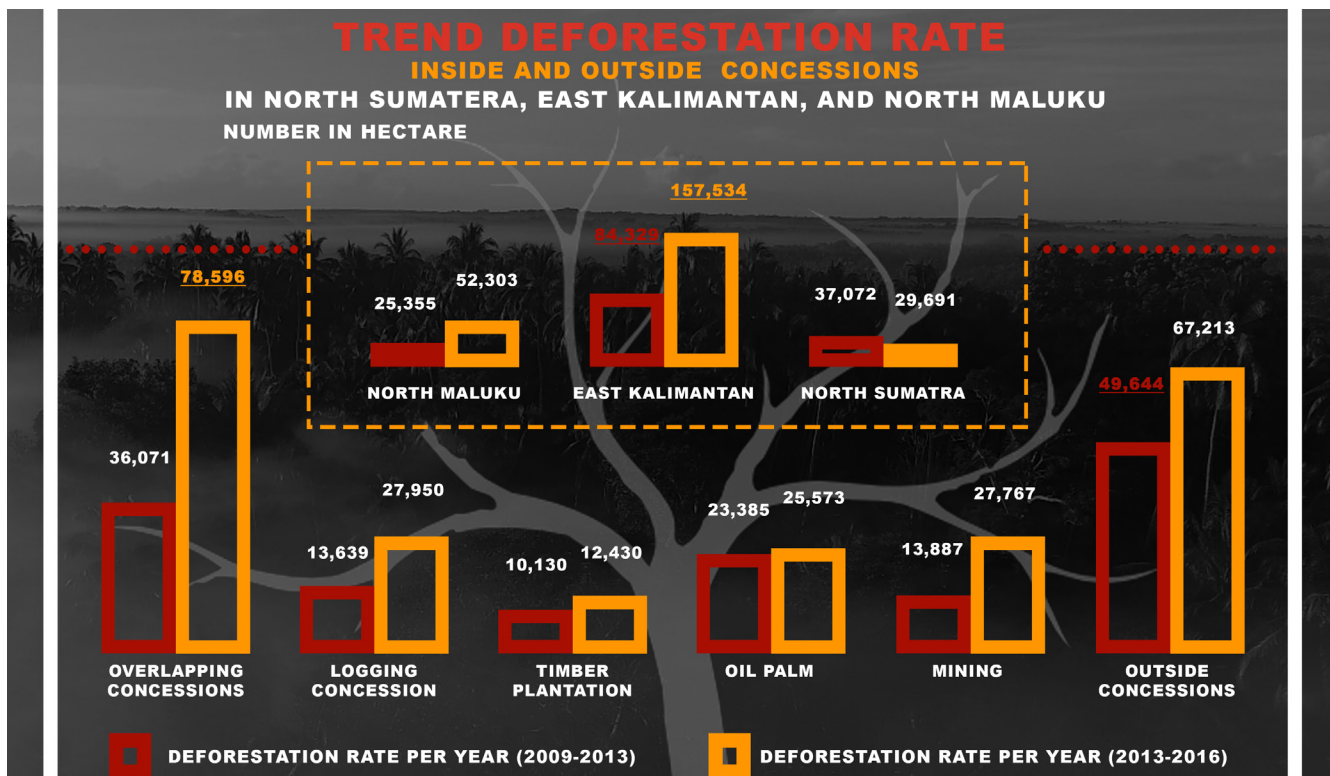


Figure 13. Trends in deforestation rate in 3 provinces in 2013 and 2016

On average, deforestation rates in 2013-2016 in the three provinces tend to increase from 146 thousand hectares/year (FWI, 2014) to 239 thousand hectares/year. Deforestation rates increased significantly in North Maluku and East Kalimantan, while rate in North Sumatera tend to decrease compared to the previous period. In North Maluku, deforestation rates even doubled from that of the previous period from 25 thousand hectares/year to 52 thousand hectares/year. Similarly in East Kalimantan, deforestation rates also doubled from 84 thousand hectares/year in 2013 to 157 thousand hectares/year in 2016.

Looking at where deforestation is taking place, high deforestation rates occur in HPH and mining concessions and areas of overlapping concessions. In these areas deforestation rates doubled from that of the previous period (Figure 13).

Differences in characteristics of forest resources and mined commodities in the three provinces lead differences in trends in direct causes to deforestation in these provinces.

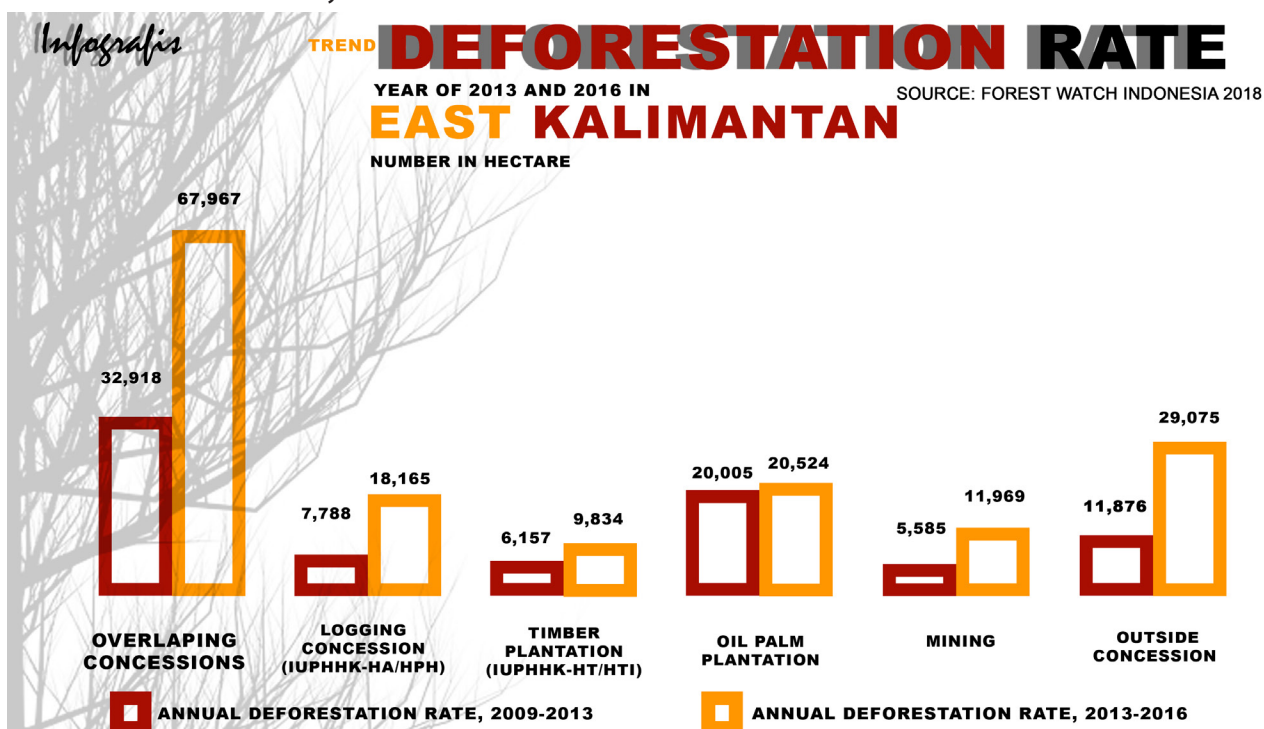


Figure 14. Annual deforestation rates in and outside concession areas in 2009-2013 and 2013-2016 in East Kalimantan



## DEFORESTATION TRENDS IN EAST KALIMANTAN

From the context of licenses, East Kalimantan's significant increase in deforestation takes place in HPH and mining concessions, where deforestation rates is higher than the previous period. This is an opposite of oil palm plantation where there is only a slight increase in deforestation rates. However, when the deforested concession areas are compared, deforested area inside oil palm concessions is the largest next to all other concessions and has been going on since 2009-2013.

Increased deforestation rates in HPH concessions led to questions about the performance of HPH license holders. Selective logging in HPH concessions should not impact forest cover inside HPH concessions significantly, especially if the logged-over areas are replanted and the license holders implement adequate maintenance and monitoring. Deforestation that occurs in HPH concessions show that HPH concessions' forest utilization have not implement sustainable principles. It must be admitted that increasing deforestation rates in HPH occur in parallel to increased HPH license issuance in East Kalimantan until 2016. In 2009, HPH concessions in East Kalimantan covered 328 thousand hectares and increased to 343 thousand hectares in 2016 (MoEF, 2016).

Increased deforestation rates in the province also took place in HTI concessions. The 6 thousand hectares/year deforestation rate in 2013 rose to 9 thousand hectares/year in 2016. Increased deforestation rates in East Kalimantan HTI concessions happened in line with rampant HTI concession developments, and

deforestation rates in HTI concessions are expected to continue to increase annually. This is parallel to increasing HTI concession areas from 2009 to 2016. In 2009, HTI concessions in East Kalimantan covered 298 thousand hectares and in 2013 increased to 373 thousand hectares, and to 377 thousand hectares in 2016 (MoEF, 2016).

The pulp mill constructed in Penajam Paser Utara District has been operating since 2017. This means growing demand for raw materials, whether its timber from natural forest or plantation forest. Timber demand for this pulp mill will drive conversion from natural forests into monoculture plantation, whether inside or outside of the HTI concession itself.

## DEFORESTATION TRENDS IN NORTH SUMATERA

North Sumatera's deforestation rate tends to be on the decline from 37 thousand hectares/year to 29 thousand hectares/year. This decline is due to none other than the fact that there is now less natural forest remaining. In 2016, only 1.6 million hectares natural forest remains in North Sumatera, or 23% of the province's land area.

In 2013 the rate of deforestation outside of concessions reached 26 thousand hectares/year, and decline to 20 thousand hectares/year in 2016. Compared to other areas under management licenses, nearly the entire latter category experienced declines in deforestation rates, except for HPH concessions. Inside HPH concessions deforestation rates increased from 2.4 thousand hectares/year to 4.9 thousand hectares/year.

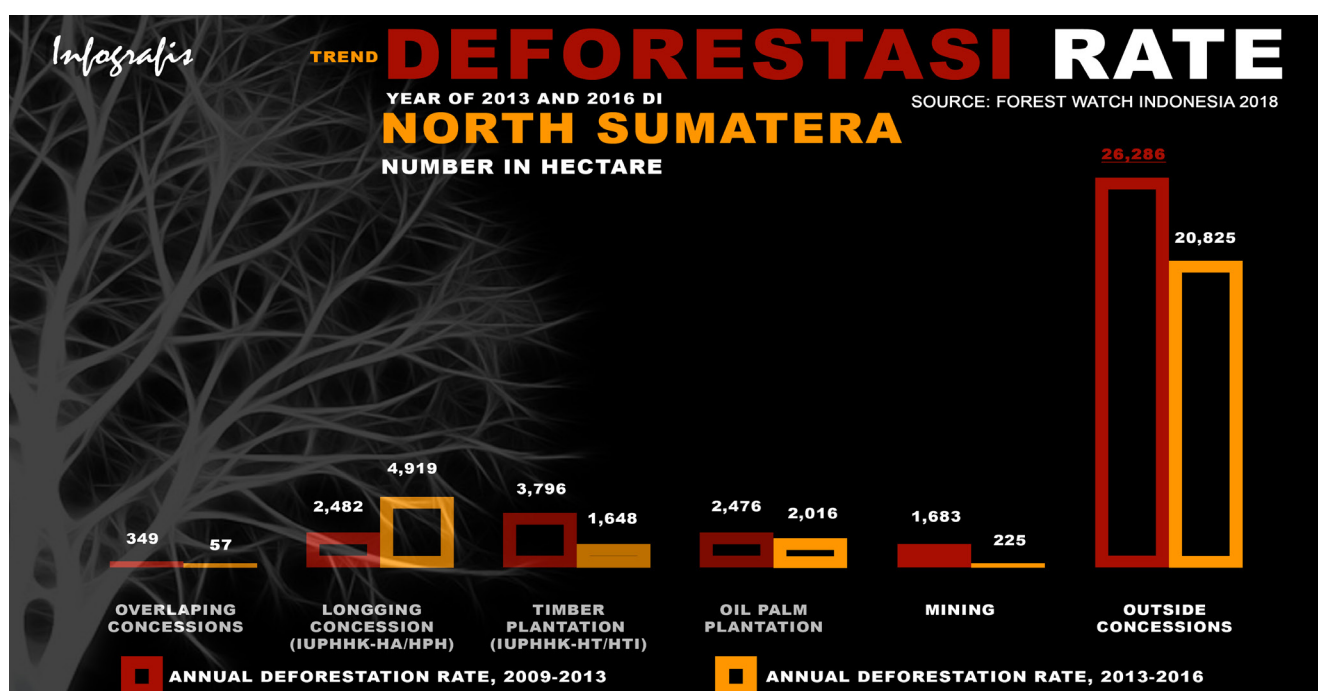


Figure 15. Annual deforestation rates in and outside concession areas in 2009-2013 and 2013-2016 in North Sumatera



Since HPH license holders have yet to implement sustainability principles, another cause of high deforestation rates in HPH concessions in North Sumatera is oil palm plantation expansion inside HPH concessions. An example is explained above in PT Teluk Nauli HPH concession where oil palm plantation developments began in 2014. This case shows weak control over forest areas in North Sumatera by the government as well as license holder.

The condition in HTI concessions showed the opposite where deforestation rates tend to decline, although up to 2016 there are 377 thousand hectares HTI concessions in North Sumatera (MoEF, 2016). This deforestation occurs because natural forests have been converted into plantation forests.

## DEFORESTATION TRENDS IN NORTH MALUKU

Increased deforestation rates in North Maluku occur in all areas under management licenses, whether HPH, HTI, oil palm plantations, or mining concessions, or areas of overlapping concessions. Out of all the areas under management licenses, deforestation in mining concessions is the greatest contributor to deforestation in concession areas in North Maluku in 2009-2013. Deforestation in mining concession increased significantly from 6 thousand hectares/year to 15 thousand hectares/year.

Next to mining, oil palm plantation expansion into natural forests is becoming a threat in increasing deforestation in North Maluku. As of 2017, only one oil

palm concession – PT Gelora Mandiri Membangun – is operating in the province over an area of 10,500 hectares. The total area under oil palm plantation management license in North Maluku covers 48 thousand hectares.

In 2013, deforestation rate in oil palm plantations is 905 hectares/year and increased to 3 thousand hectares/year in 2016. This condition is a result of oil palm plantation expansion in North Maluku and is predicted to increase, noting that oil palm plantation licenses tend to increase annually as well. Oil palm plantation licenses covered an area of 7,500 hectares in 2009, which increased to 15,500 hectares in 2013 and 48 thousand hectares in 2016.

Another point worth noting is the rate of deforestation within HPH concessions in North Maluku, which increased from 3.3 thousand hectares/year to 4.8 thousand hectares/year in 2013 to 2016, respectively. From a licensing point of view, HPH concession areas in North Maluku tend to decline annually. In 2009, HPH concessions covered 804 thousand hectares, decreased to 565 thousand hectares in 2013 and again to 545 thousand hectares in 2016 (MoEF, 2016).

Logged-over HPH concessions are often used by communities for farming, or even as settlements. Communities clearing farmlands in logged-over areas are only taking over the spaces made available by HPH concessions (Sunderlin WD & Resosudarmo IAP, 1997). Weak enforcement and absence of replanting in logged-over areas are thought to be the causes behind encroachment and affect changing land use in concession areas.

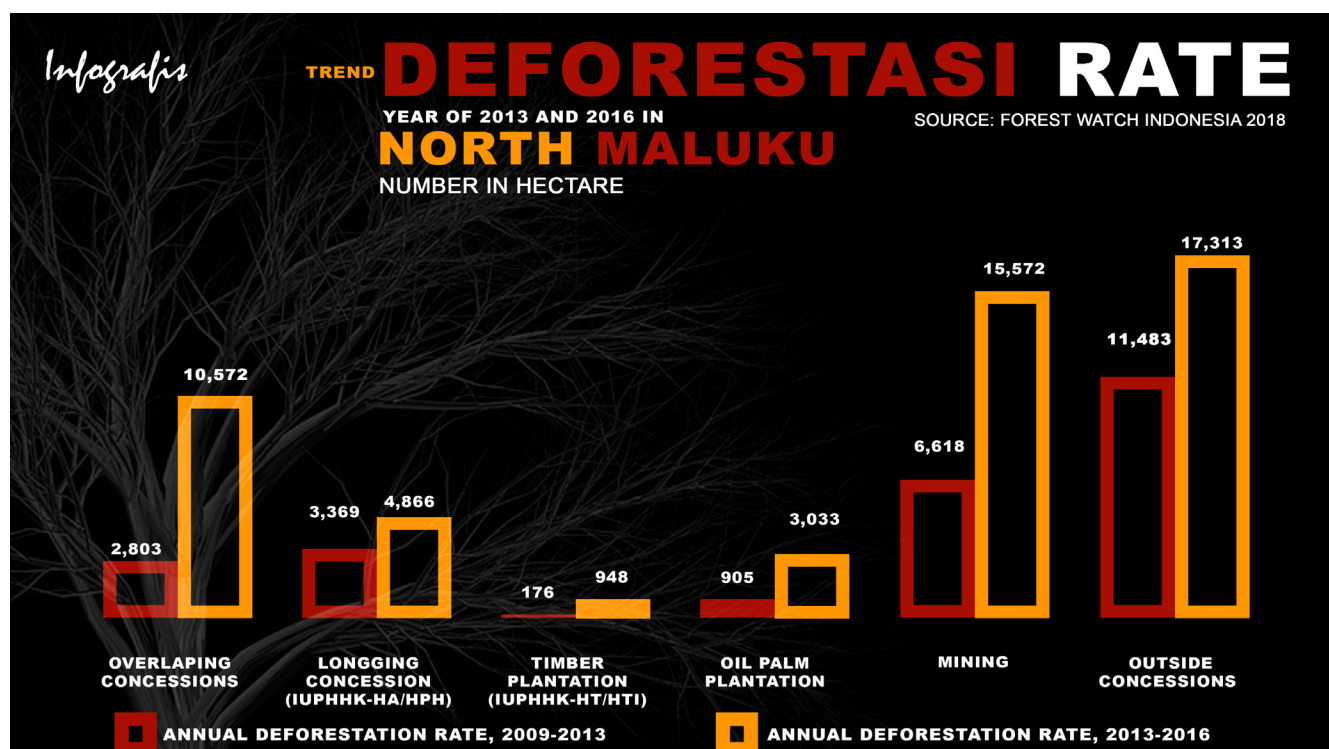


Figure 16. Annual deforestation rates in and outside concession areas in 2009-2013 and 2013-2016 in North Maluku



## DEFORESTATION TRENDS IN AREAS OF OVERLAPPING CONCESSIONS

Deforestation rates rose drastically in overlapping concessions, from 36 thousand hectares/year in 2013 to 78 thousand hectares/year in 2016. In East Kalimantan and North Maluku, increased deforestation in overlapping concession areas was a major contributor to deforestation within concession areas. Deforestation in overlapping concession increased from 32 thousand hectares/year to 67 thousand hectares/year in East Kalimantan and from 2 thousand hectares/year to 10 thousand hectares/year in North Maluku.

Further analysis show that mining concessions that overlap with other licenses are major contributors to overall deforestation rates. In 2013, overlapping mining and oil palm plantation concessions causes the most deforestation in overlapping concession areas. Deforestation in overlapping areas in 2016 increased 3.5 times from 9 thousand hectares/year in 2013 to 35 thousand hectares/year.

In addition to overlaps between mining and HPH concessions, deforestation also occurred in overlapping mining and HTI concessions from 5 thousand hectares/year to 19 thousand hectares/year. During that same period, deforestation in overlapping mining and oil palm concessions increased from 12 thousand hectares/year to 15 thousand hectares/year.

The vast overlapping areas between mining and other concessions are more likely due to the high number of mining licenses issued. These include Mining Business License (IUP), Contract of Work (KK), Coal Mining Contract of Work (PKP2B), and Community Mining License (IPR). Many of these licenses are further classified into exploration and exploitation licenses.

Difficulties in accommodating mining activities in spatial planning are another factor for the difficulty in preventing overlaps between mining activities and other concessions (ESDM, 2008). New mining activities can only begin if potential mineral content is found in a particular area. Even this must go through an assessment stage to determine whether exploitation is suitable for the area. This is why mining concession establishment usually require more time compared the spatial planning process itself.

Available data indicates that other more dominant factors behind deforestation within overlapping concessions with other sectors are activities other than mining. Deforestation within HPH concessions are indicated to be a major cause behind loss of natural forest cover in overlapping concessions followed by HTI and oil palm plantations. However, this is not the case for North Maluku where deforestation in overlapping concession tends to be caused by mining itself. This data is supported by the high deforestation rates within mining concessions in this province.

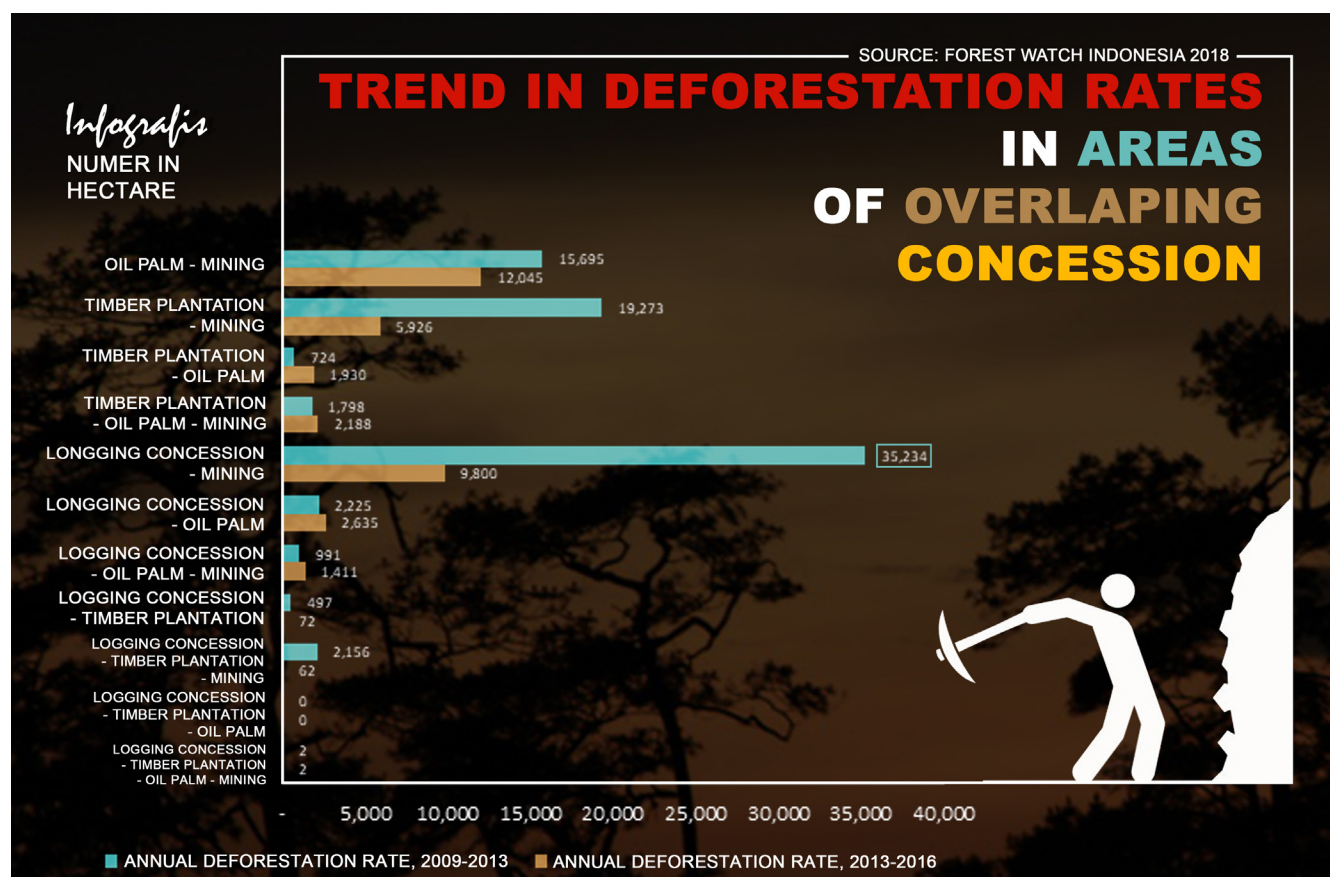


Figure 17. Trends in deforestation rates in areas of overlapping concessions









# A REFLECTION AND THREAT OF NATURAL FOREST LOSS IN THE FUTURE

All the facts presented urge us to question the Government of Indonesia's commitment to reduce global carbon emission. The facts show that forest degradation and deforestation continue to take place, whether legal or illegal. These facts also force us to question Government support for communities living in and around forest areas, and the Government's commitment to protect the environment, prevent disasters, and conserve natural resources. Facts show that communities in and around forest areas are becoming increasingly marginalized with growing gaps in land ownership in which 50% of the entire land areas in North Sumatera, East Kalimantan and North Sumatera are controlled by concession holders. Only 4% of the land is allocated by government for social forestry and customary forests. Facts also show that forest degradation and deforestation in these three provinces have caused environmental disasters: flooding, erosion, draughts, and loss of wildlife habitats.

Indonesia's natural forests are never free from threats. From 2013 to 2016, as much as 718 thousand hectares natural forest cover in North Sumatera, East Kalimantan and North Maluku has disappeared. Natural forests are disappearing at a rate of 240 thousand hectares/year, or 20 thousand hectares/month. As of 2016, the total natural forest area remaining in these three provinces is 9 million hectares.

Most, specifically 72%, of all deforestation in North Sumatera, East Kalimantan and North Maluku occur in areas under management licenses issued by governments to corporates. Like it or not, the conclusion is that most natural forest loss is planned and takes place within areas under management licenses by corporates or other actors. The three routes for government permitting deforestation are:

## Conversion of Natural Forests into Oil Palm Plantations and Timber Plantation (IUPHHK-HT/HTI)

From 2013 to 2016, as much as 25 thousand hectares natural forest in oil palm plantation concessions disappears every year (20 thousand hectares in East Kalimantan, 3 thousand hectares in North Maluku, and 2 thousand hectares in North Sumatera). In East Kalimantan, natural forest conversion into oil palm plantations is estimated to be the main driver of deforestation, as did in the previous period in 2009-2013.

A similar finding was observed in North Maluku. Though not the greatest contributor to deforestation in the province, deforestation from oil palm plantation expansion tend to increase in the province from 905 hectares/year to 3 thousand hectares/year. Deforestation from oil palm plantation expansion tends to increase annually since plantation issuance has also increased every year. In 2009, oil palm plantation concessions cover 7,500 hectares, and increased to 15,500 hectares in 2013 and 48,623 hectares in 2016.



Increasing deforestation rates also occur in natural forests within HTI concessions. From 10 thousand hectares/year in 2013, deforestation rates increased to 12 thousand hectares/year in 2016. In East Kalimantan, deforestation in HTI concessions increased from 6 thousand hectares/year to 9 thousand hectares/year. This increased deforestation rate correlates with the growing HTI concession areas in East Kalimantan from 298 thousand hectares in 2009, to 373 thousand hectares in 2013, and finally 377 thousand hectares in 2016. Driving this increase is the pulp mill construction in Penajam Paser Utara District. Increased fiber demand for this pulp mill will drive the conversion of natural forests into monoculture plantation, whether inside or outside HTI concessions.

### Legal Practices and Oil Palm Plantation Expansion in IUPHHK-HA/HPH Concessions

From 2013 to 2016, an average of 27 thousand hectares natural forest disappears every year from inside HPH concessions in North Sumatera, East Kalimantan and North Maluku. This deforestation is a two-fold increase compared to the 2009-2013 rates of 13 thousand hectares/year. In North Maluku, deforestation rates increased from 3.3 thousand hectares/year to 4.8 thousand hectares/year and from 2.4 thousand hectares/year to 4.9 thousand hectares/year in North Sumatera, and 7 thousand hectares/year to 18 thousand hectares/year in East Kalimantan.

One of the reasons behind such high deforestation rates in HPH concessions is oil palm plantation expansion into areas under HPH licenses. One example is oil palm plantation in PT Teluk Nauli in North Sumatera.

Poor forest management by HPH license holders also contribute to deforestation. Selective logging in HPH concessions should not impact natural forest cover significantly in these concessions, especially of the logged-over areas are replanted through adequate maintenance and monitoring by license holders. Therefore this huge increase in deforestation rates within HPH concessions has led to suspicions of a commodity conversion from natural forest timber to non-natural forest timber. In addition, poor control and oversight in logged-over areas breed ideal conditions for encroachment by local communities taking over this neglected space.



### Expansion Of Mining Companies

Mining is a sector that greatly contributes to the loss of natural forest, especially in North Maluku and East Kalimantan. Deforestation in mining concessions is even the greatest contributor to natural forest loss in North Maluku. In 2013-2016, as much as 15 thousand hectares natural forest deforested every year is located inside mining concessions. Deforestation rates increased two-fold from 6 thousand hectares/year in the previous period in 2009-2013. Similarly in East Kalimantan, deforestation in mining concessions increased from 5 thousand hectares/year (2009-2013) to 11 thousand hectares/year (2013-2016).

Natural forest loss from mining concessions is predicted to increase in these three provinces because as of 2016, more than 800 thousand hectares natural forest is located inside mining concessions.

Finally, as a closing reflection, deforestation is now making its way toward eastern Indonesia, none other than because natural forest areas in Sumatera and Kalimantan Islands are shrinking. Natural forests in eastern Indonesia are located along coastlines and in small islands. Loss of these forests will lead to greater impacts as opposed to forest loss in larger islands. Threats of sinking islands, sea water intrusion, and loss of livelihoods among coastal and small island communities in eastern Indonesia are standing right before our eyes.





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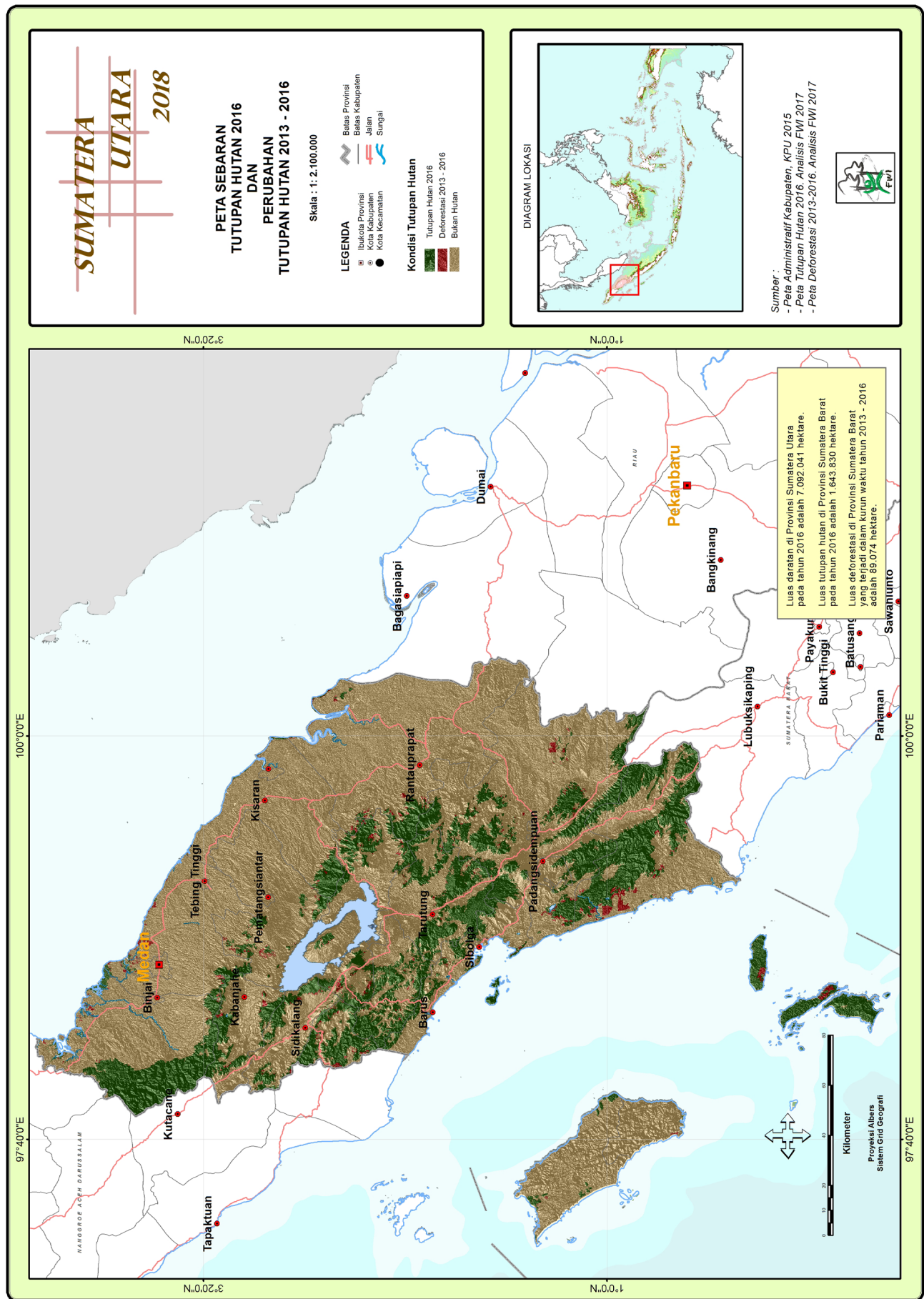
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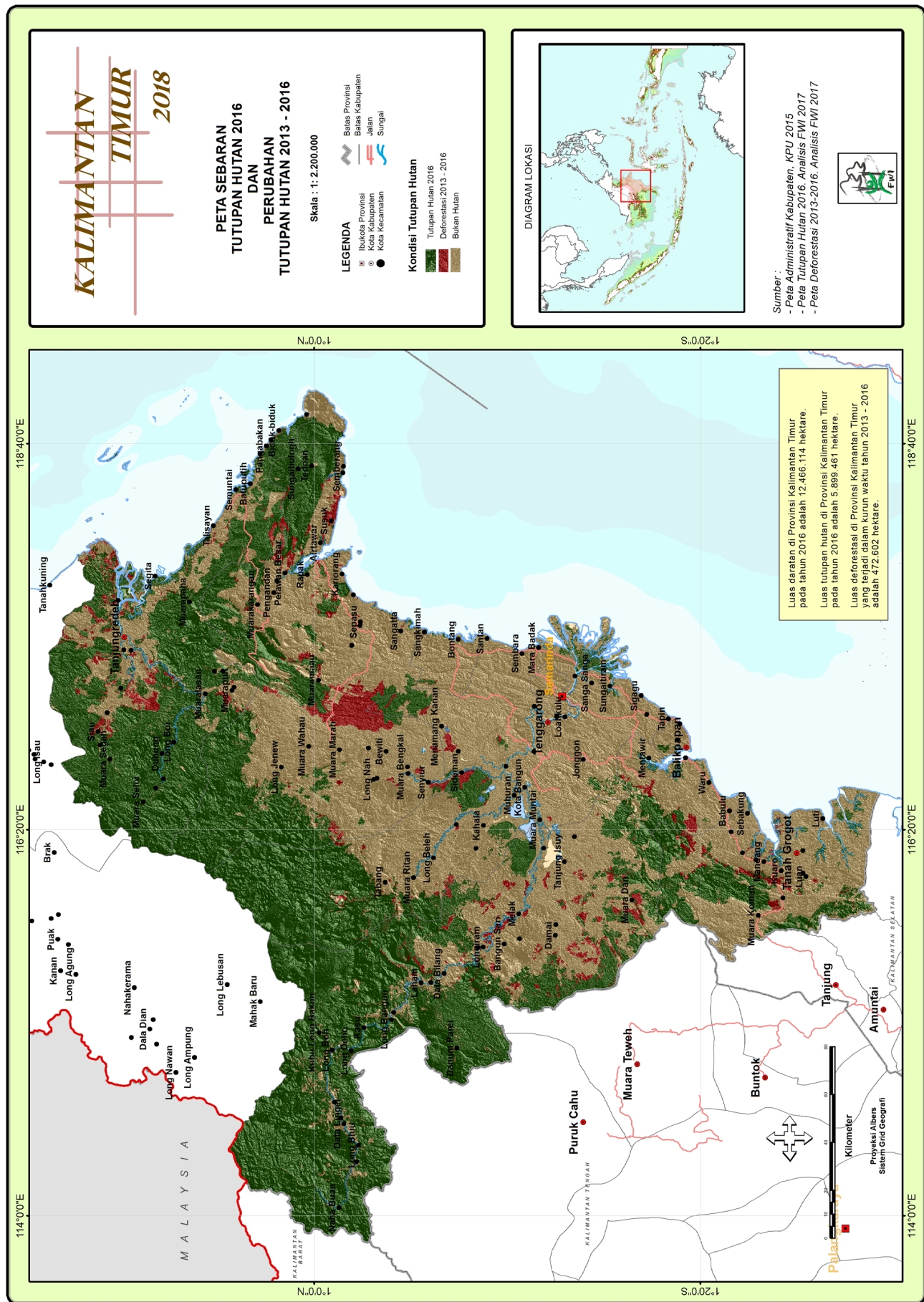


Appendix 1. 2016 Forest Cover and 2013–2016 Deforestation Rates in North Sumatera



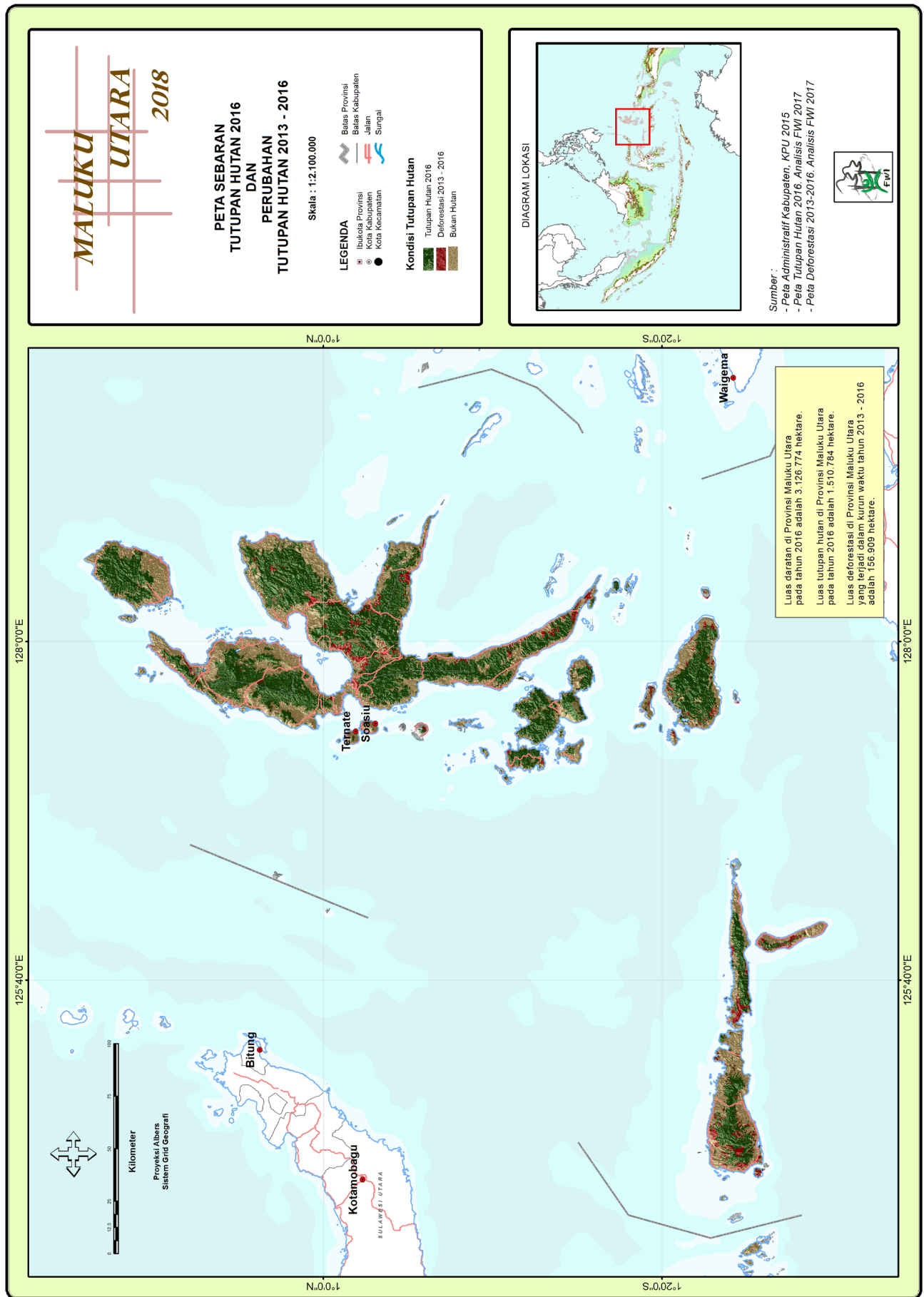


Appendix 2. 2016 Forest Cover and 2013-2016 Deforestation Rates in East Kalimantan



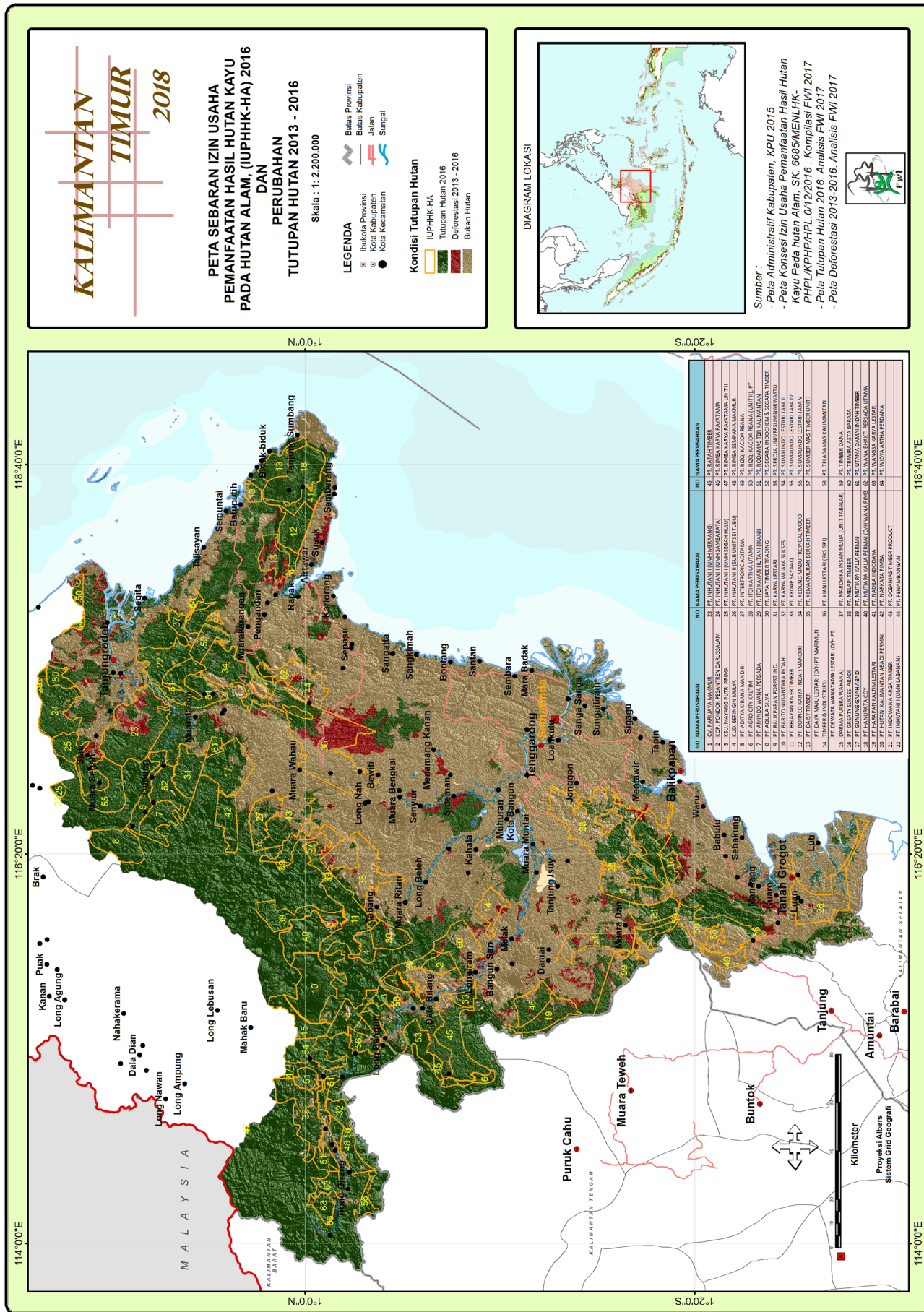


Appendix 3. 2016 Forest Cover and 2013-2016 Deforestation Rates in North Maluku



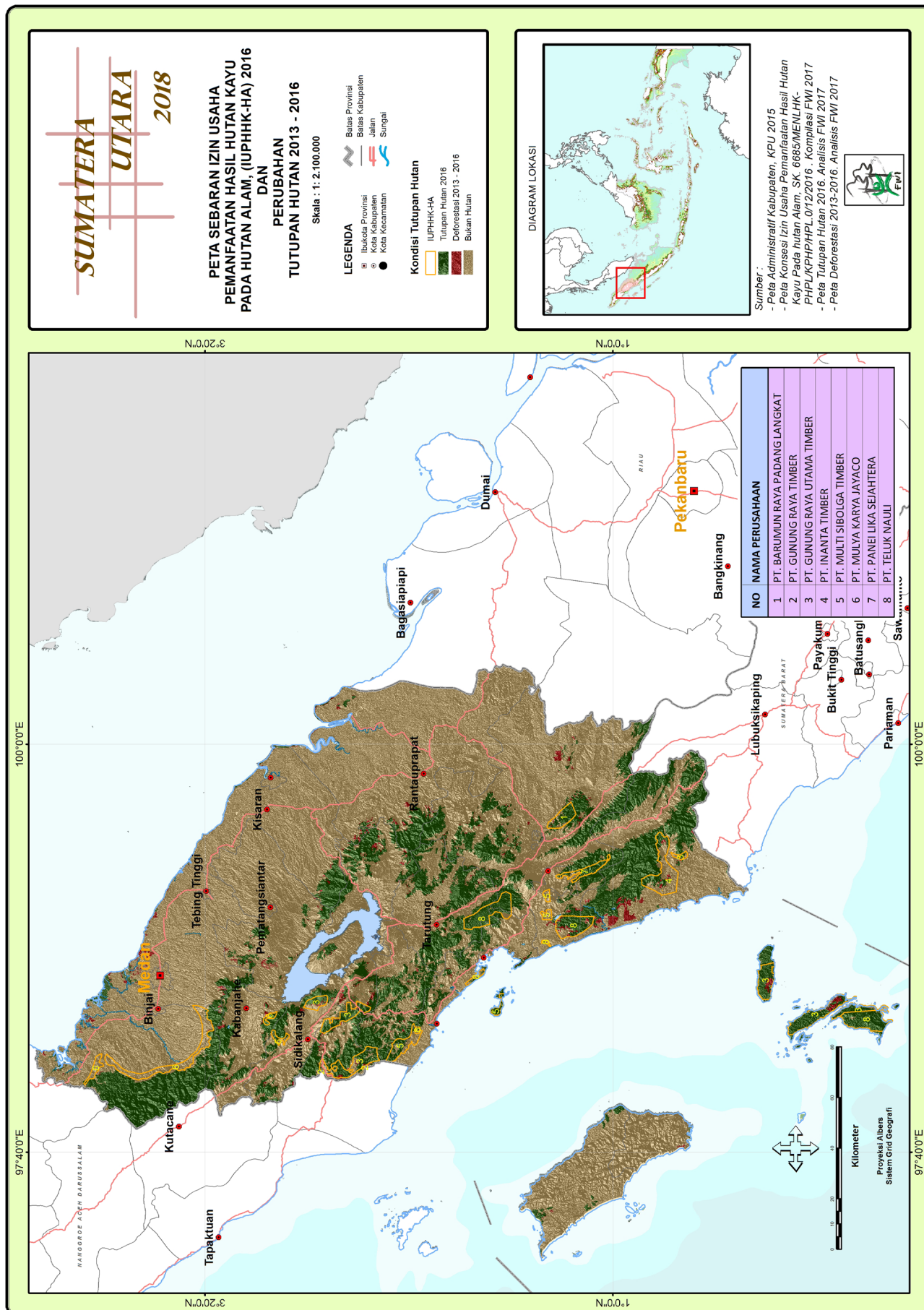


Appendix 4. 2016 Distribution of Natural Forest Timber Production License (IUPHHK-HA) and 2013-2016 Deforestation Rates in East Kalimantan



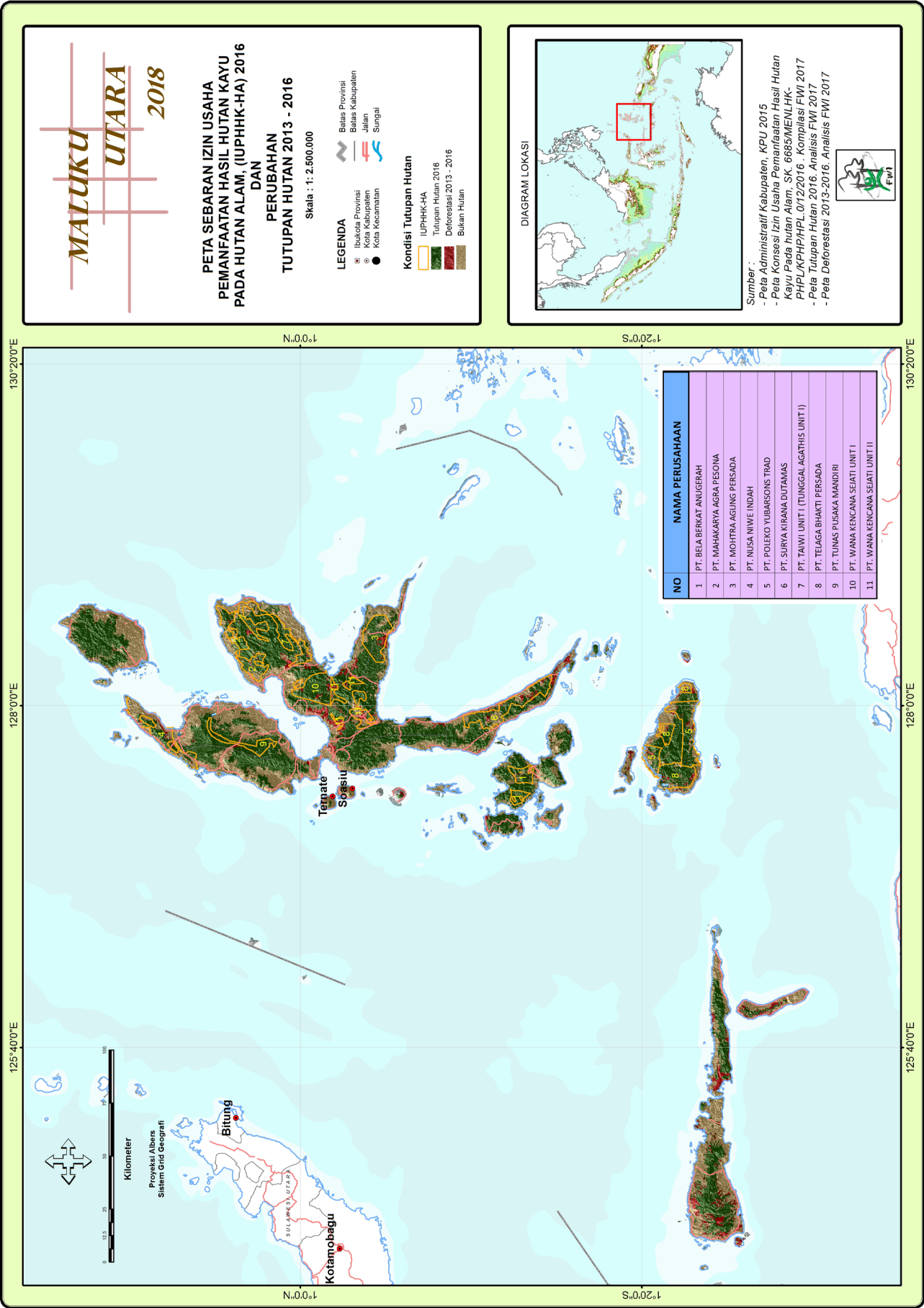


Appendix 5. 2016 Distribution of Natural Forest Timber Production License (IUPHHK-HA) and 2013-2016 Deforestation Rates in North Sumatera



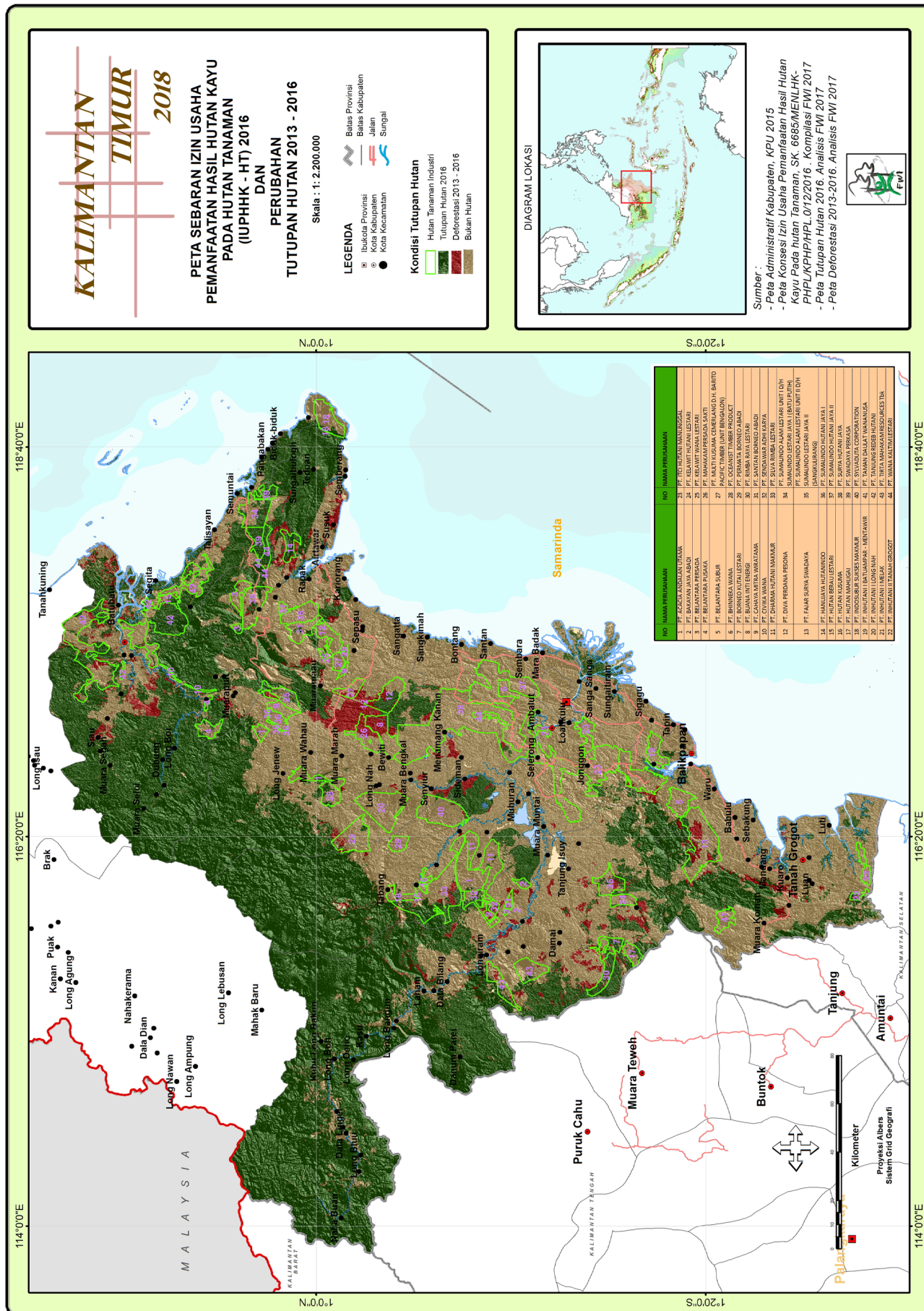


Appendix 6. 2016 Distribution of Natural Forest Timber Production License (IUPHHK-HA) and 2013-2016 Deforestation Rates in North Maluku

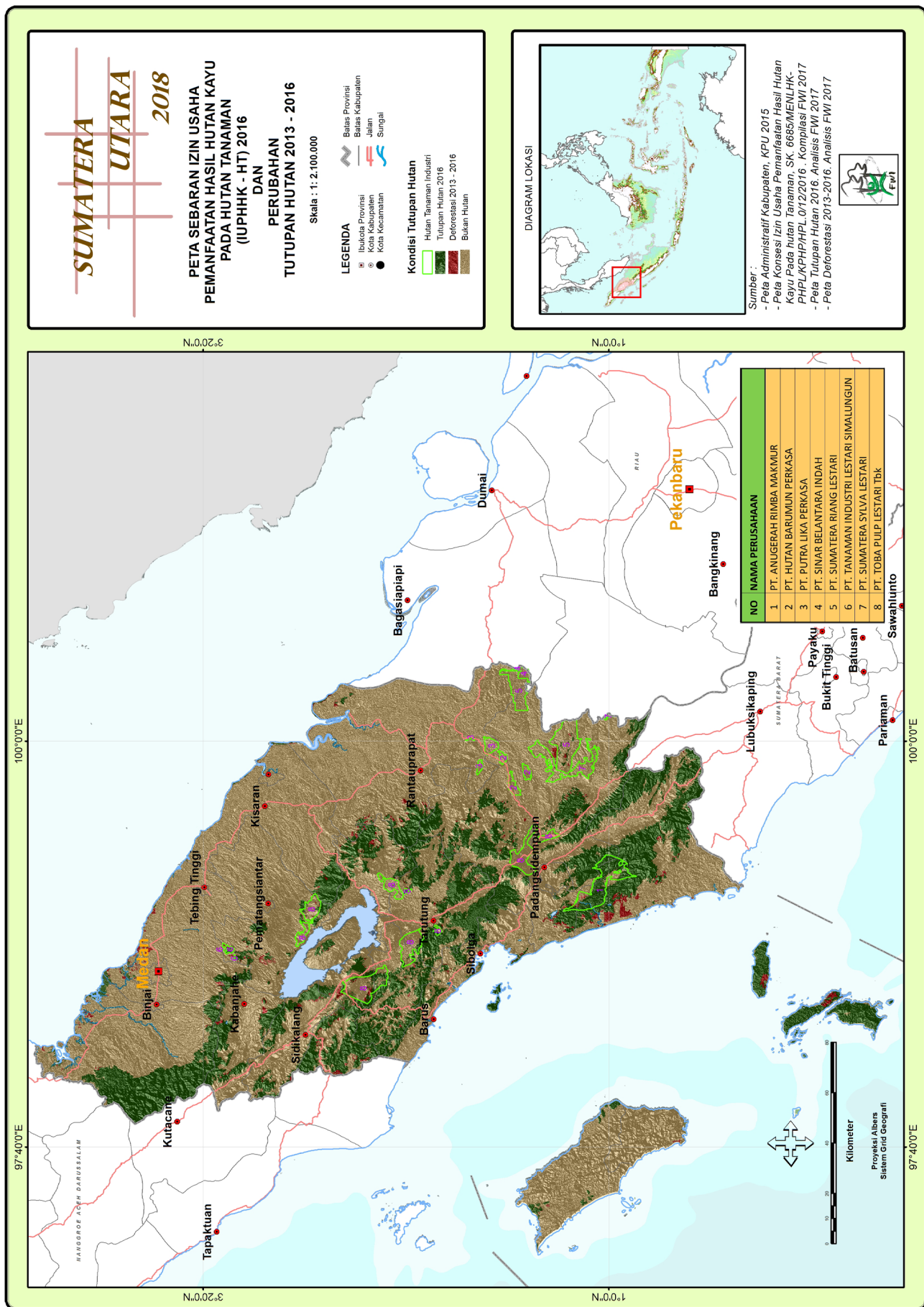




Appendix 7. 2016 Distribution of Forest Timber Production License (IUPHHK-HT) and 2013-2016 Deforestation Rates in East Kalimantan

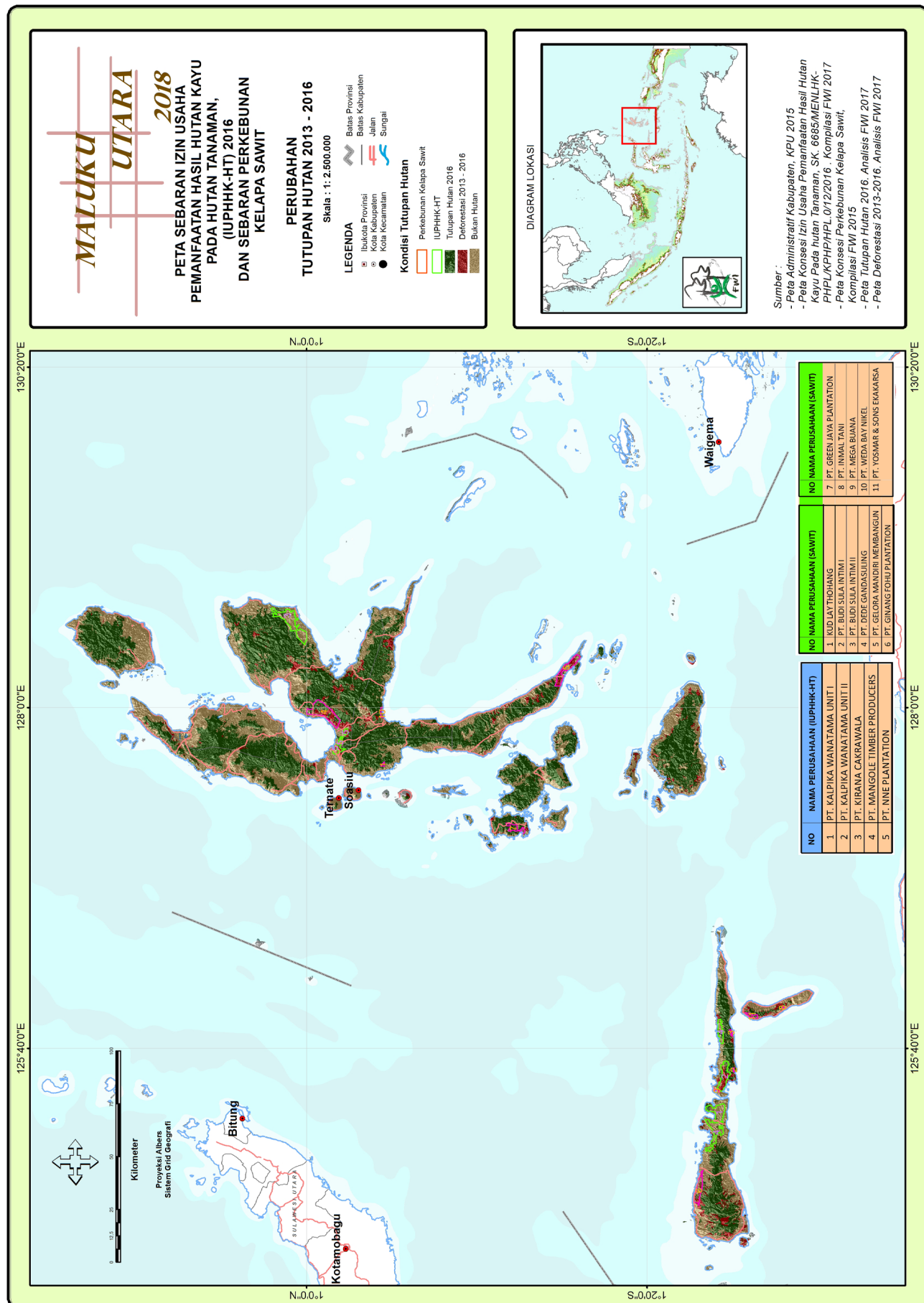






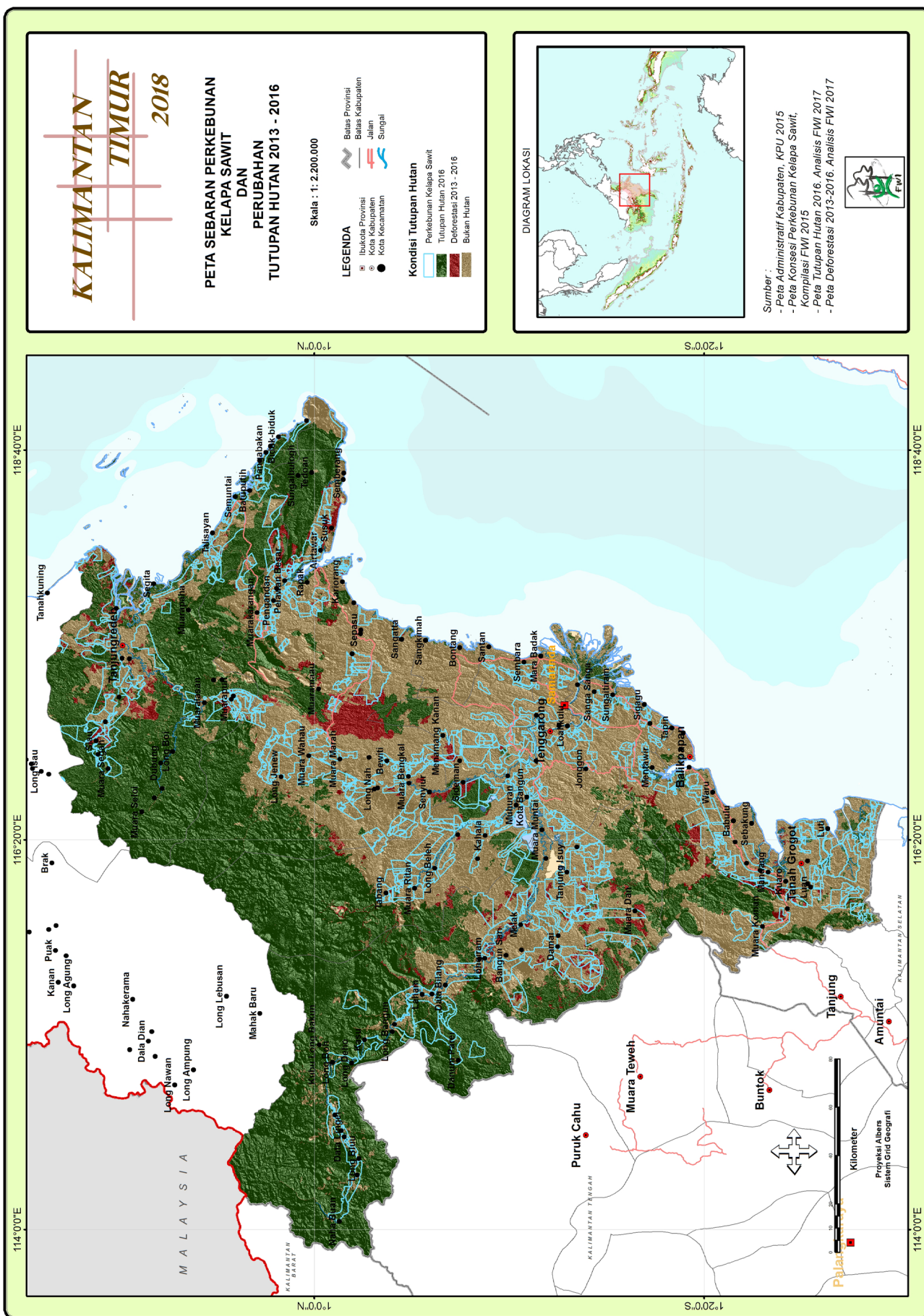


Appendix 9. 2016 Distribution of Forest Timber Production License (IUPHHK-HT), Oil Palm Plantations, and 2013-2016 Deforestation Rates in North Maluku





Appendix 10. Oil Palm Plantation Distribution and 2013-2016 Deforestation Rates in East Kalimantan









<b>P.1 Clarity of IUPHHK-HA, IUPHHK-HT, IUPHHK-RE, and Management Rights</b>		
<b>C.1.1 Forest management unit area is located inside production forest area</b>		
	LVLK Assessment	FWI/Independent Monitor's Observations
<b>1.1.1 Management License/Rights Holder can prove legality of Forest Timber Production License (IUPHHK)</b>	Compliant: PT Poleko Yubarsons' IUPHKKA-HA License and maps that have been authorized by authorized official is complete and based on overlay of Maluku Province Forest and Water Area Gazettement (Appendix of Forestry Ministry's Letter No. 490/menhut-II/2012 dated 5 Sept. 2012) with PT Poleko Yubarsons' PDAK (Appendix to Forestry and Estate Minister Decree No. S.962/KptsII/1999 dated 14 Oct. 1999) proving that PT Poleko Yubarsons' area location complies with its designation.	9,999 hectares concession area is located outside of production forest. 9,333 hectares in non-forest area (APL), 585 hectares in protected forest, 74 hectares in sanctuary reserve
<b>P.3 Legality of log trade or transfer of ownership</b>		
<b>C.3.1 License holders assure that all timber transported from forest yard to the transit log yard, and from transit log yard to forest product primary industries/markets have legal physical and documented identities</b>		
	LVLK Assessment	FWI/Independent Monitor's Observations
<b>3.1.1 All timber cut/harvested or used has appropriate Production Report (LHP) documents</b>	Compliant: LHP reports are available and authorized by authorized official. LHP document in accordance with physical conditions of timber. LHP log number is found on the ground.	Log number was not found on tree stumps
<b>P.4 Fulfillment of environmental and social aspects relevant to logging</b>		
<b>C.4.1 License holders must have Environmental Impact Analysis Document (AMDAL)/Environmental Management and Monitoring Documents (DPPL)/Environmental Management Efforts (UKL) and Environmental Monitoring Efforts (UPL) and implement the requirements as stipulated in these documents.</b>		
	LVLK Assessment	FWI/Independent Monitor's Observations
<b>4.1.2 License holders have reports of Environmental Management Plans (RKL) and Environmental Monitoring Plans (RPL) explaining actions to address environmental impacts and provide social benefits</b>	Compliant: PT Poleko Yubarsons has implemented some environmental management measures such as constructing hardened roads using gravel and soil, constructed culverts, sheet piles, and arranged the riparian buffers. Reports are available for physical, chemical, biological and social environmental assessments, and monitoring facilities and infrastructure are in place.	Rivers are used as roadways, logging along riparian buffers of rivers and tributaries, springs blocked, and the company has triggered social conflicts. The company's activities are strongly suspected to have caused conflict in Obi Island which damaged communities' farms.

Source: FWI monitoring results, 2017





**PEMERINTAH KABUPATEN TAPANULI TENGAH**  
**BADAN PENGENDALIAN DAMPAK LINGKUNGAN DAERAH**

Jln. Zainul Basri Hutagalung No. 5 Telp. 371553

Pandan – 22611

## **PENGUMUMAN**

NOMOR : 660/263/BPDL/2016

DIUMUMKAN KEPADA MASYARAKAT KECAMATAN TAPIAN NAULI  
DAN KECAMATAN KOLANG KABUPATEN TAPANULI TENGAH BAHWA ;

NAMA USAHA	:	PT. GAHARU MAS
NAMA PEMRAKARSA	:	RUDI INDRAWAN
ALAMAT	:	DESA MAKARTI NAULI KECAMATAN KOLANG KABUPATEN TAPANULI
JENIS KEGIATAN	:	PERKEBUNAN KELAPA SAWIT
SKALA BESARAN	:	LUAS LAHAN : ± 633 Ha
LOKASI KEGIATAN	:	DESA MAKARTI NAULI, DESA RAWA MAKMUR KECAMATAN KOLANG DAN DESA TAPIAN NAULI I KECAMATAN TAPIAN NAULI KABUPATEN TAPANULI

MELAKUKAN PERMOHONAN PENERBITAN IZIN LINGKUNGAN ATAS KEGIATAN TERSEBUT DI ATAS. BERKENAAN DENGAN ITU MASYARAKAT DAPAT MEMBERIKAN SARAN, PENDAPAT SERTA TANGGAPAN SECARA TERTULIS, YANG DITUJUKAN KEPADA BUPATI TAPANULI TENGAH d/p. KEPALA BADAN PENGENDALIAN DAMPAK LINGKUNGAN DAERAH KABUPATEN TAPANULI TENGAH JALAN ZAINUL BASRI HUTAGALUNG NO. 5 PANDAN.

SARAN PENDAPAT DAN TANGGAPAN DAPAT DISAMPAIKAN SEJAK TANGGAL PENGUMUMAN INI SAMPAI DENGAN TANGGAL 4 AGUSTUS 2016.

DEMIKIAN PENGUMUMAN INI UNTUK DIKETAHUI.

PANDAN, 1 AGUSTUS 2016  
KEPALA BAPEDALDA KABUPATEN  
TAPANULI TENGAH

DTO

TIOPRIDA SITOMPUL, SE  
Pembina Tk. I  
NIP. 19600828 198602 2 006



Appendix 14. 2013-2016 deforestation and forest cover in 2016 inside and outside forest area  
(number in hectare)

EAST KALIMANTAN				
Forest Status	Deforestation 2013-2016	Forest Cover 2016	Non Forest	Total Of Land Area
Non-forest areas (APL)	217.468	672.490	3.619.354	4.291.844
Protected forest	12.010	1.632.621	131.287	1.763.908
Production forest	179.349	1.179.964	1.834.284	3.014.248
Convertible production forest	2.354	41.753	78.874	120.628
Limited production forest	51.088	2.305.978	534.330	2.840.308
Conservation forest	10.332	66.655	368.523	435.178
TOTAL	472.602	5.899.461	6.566.653	12.466.114
NORTH MALUKU				
Status Kawasan	Deforestation 2013-2016	Forest Cover 2016	Non Forest	Total Of Land Area
Non-forest areas (APL)	30.805	54.544	562.293	616.837
Protected forest	18.753	419.333	161.317	580.650
Production forest	36.983	245.775	234.685	480.460
Convertible production forest	32.953	170.084	392.992	563.076
Limited production forest	31.763	433.113	233.828	666.941
Conservation forest	5.653	187.935	30.875	218.811
TOTAL	156.909	1.510.784	1.615.990	3.126.774
NORTH SUMATERA				
Forest Status	Deforestation 2013-2016	Forest Cover 2016	Non Forest	Total Of Land Area
Non-forest areas (APL)	28.927	126.053	3.931.074	4.057.128
Protected forest	17.144	642.681	555.272	1.197.954
Production forest	19.203	167.410	526.734	694.144
Convertible production forest	1.879	9.569	66.161	75.731
Limited production forest	16.930	318.649	323.193	641.842
Conservation forest	4.991	379.467	45.776	425.244
TOTAL	89.074	1.643.830	5.448.211	7.092.041
TOTAL	718.585	9.054.076	13.630.854	22.684.930



Apeendix 15. 2013-2016 deforestation and forest cover in 2016 inside and outside concessions  
(number in hectare)

PROVINCE	FOREST COVER IN 2016							
	OVERLAPING CONCESSION	LOGGING CONCESSION (HPH)	TIMBER PLANTATI ON (HTI)	OIL PALM PLANTATION	MINING	INSIDE CONCESSION	OUTSIDE CONCESSION	TOTAL
EAST KALIMANTAN	1.179.276	1.629.739	138.444	228.799	348.900	3.525.158	2.374.303	5.899.461
NORTH MALUKU	207.539	169.165	2.611	3.010	348.297	730.621	780.163	1.510.784
NORTH SUMATERA	34.597	193.300	53.647	3.552	106.897	391.993	1.251.837	1.643.830
Grand Total	1.421.412	1.992.204	194.702	235.361	804.094	4.647.773	4.406.303	9.054.076
Percentage with total of forest cover	16%	22%	2%	3%	9%	51%	49%	100%
PROVINCE	DEFORESTATION 2013-2016							
	OVERLAPING CONCESSION	LOGGING CONCESSION (HPH)	TIMBER PLANTATI ON (HTI)	OIL PALM PLANTATION	MINING	INSIDE CONCESSION	OUTSIDE CONCESSION	TOTAL
EAST KALIMANTAN	203.902	54.495	29.501	61.571	35.907	385.376	87.226	472.602
NORTH MALUKU	31.715	14.597	2.843	9.098	46.717	104.971	51.938	156.909
NORTH SUMATERA	170	14.758	4.945	6.049	676	26.598	62.476	89.074
Grand Total	235.788	83.850	37.290	76.718	83.300	516.945	201.640	718.585
Percentage with total of deforestation	33%	12%	5%	11%	12%	72%	28%	100%



**“ALL THE FACTS PRESENTED URGE US TO QUESTION THE GOVERNMENT OF INDONESIA’S COMMITMENT TO REDUCE GLOBAL CARBON EMISSION. THE FACTS SHOW THAT FOREST DEGRADATION AND DEFORESTATION CONTINUE TO TAKE PLACE, WHETHER LEGAL OR ILLEGAL. THESE FACTS ALSO FORCE US TO QUESTION GOVERNMENT SUPPORT FOR COMMUNITIES LIVING IN AND AROUND FOREST AREAS, AND THE GOVERNMENT’S COMMITMENT TO PROTECT THE ENVIRONMENT, PREVENT DISASTERS, AND CONSERVE NATURAL RESOURCES**

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