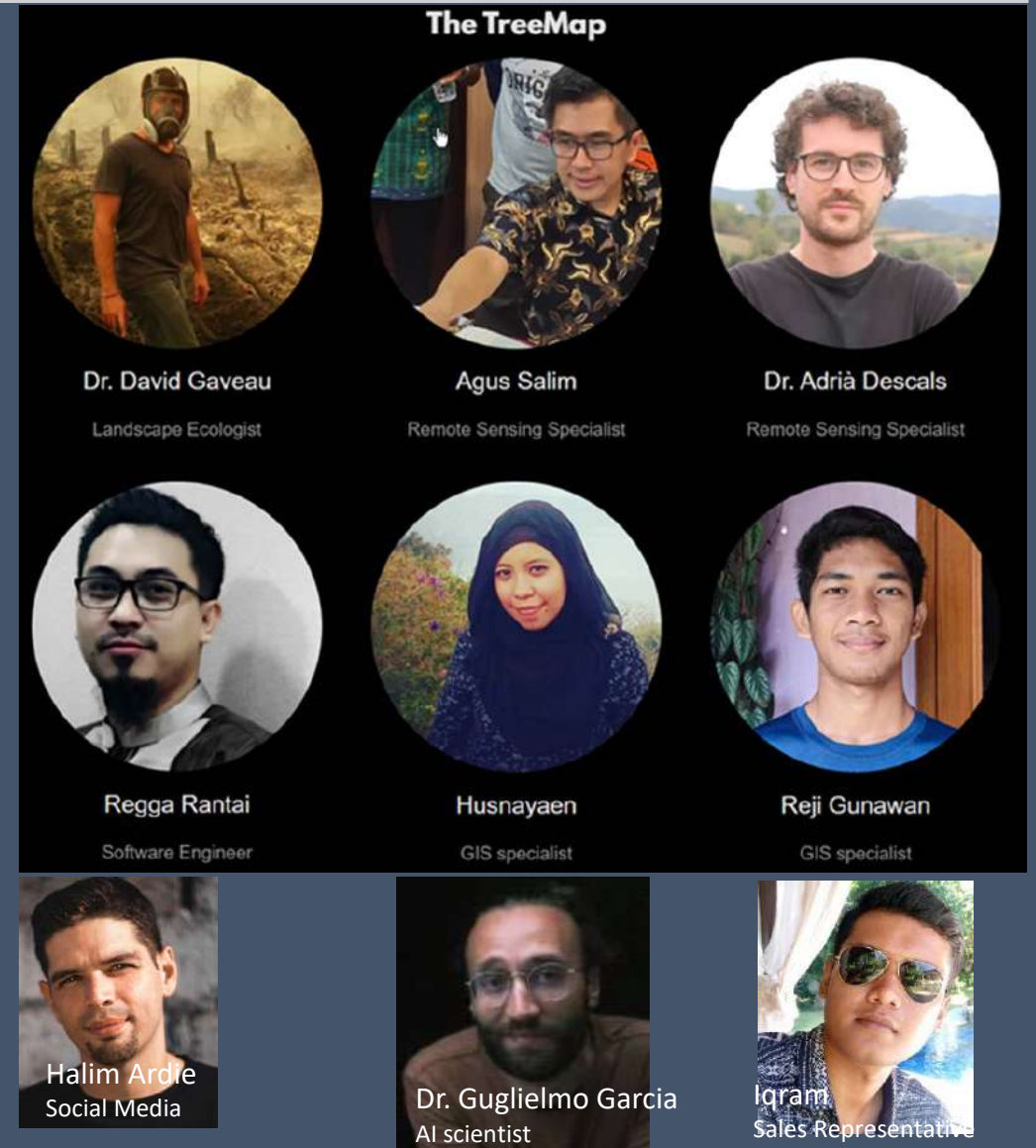


The TreeMap

A geospatial company working to protect forest by combining scientific research and advanced monitoring solutions using satellite technology.

We provide actionable information on deforestation and forest fires, their causes, and impacts.

Small team (9 people), but dedicated, reactive, and passionate!



The TreeMap



Machine learning and AI for advanced mapping of commodities (oil palm, coconut, pulpwood and rubber), and associated deforestation

Cloud computing programming for sophisticated back-end and front-end solutions:
Nusantara Atlas: <https://nusantara-atlas.org/>

22-year experience in conservation efforts, specializing in deforestation and fire monitoring in SEA

Track record of publications in peer-reviewed journals:
<https://thetremap.com/publications>

As the EUDR gears up for implementation, the conversation intensifies around the ethical sourcing of palm oil. The dilemma?

Sustainable palm oil supply chains exclude independent smallholders, even though they produce 30% of the world's palm oil production and many comply with EUDR standards.

For these independent smallholders, the principal obstacle is their inability to demonstrate compliance, due to technical constraints.



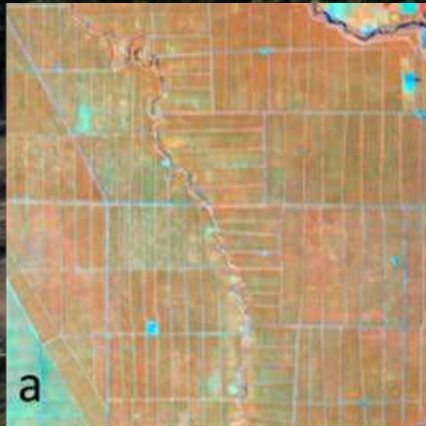
Over 7 Mha independent smallholder farms



OIL PALM PLANTATIONS

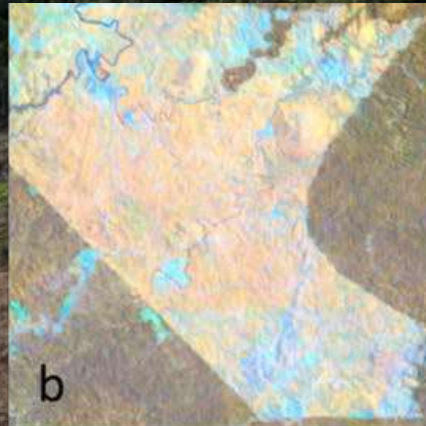
INDUSTRIAL OIL PALM

SMALLHOLDER OIL PALM



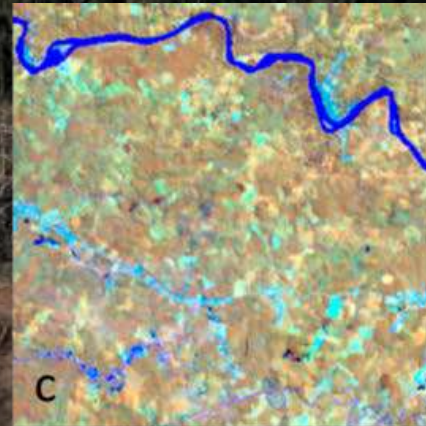
INDUSTRIAL OIL PALM

Large (>1000 ha)
Monoculture
Linear boundaries
Harvesting trails in
grids on flat areas



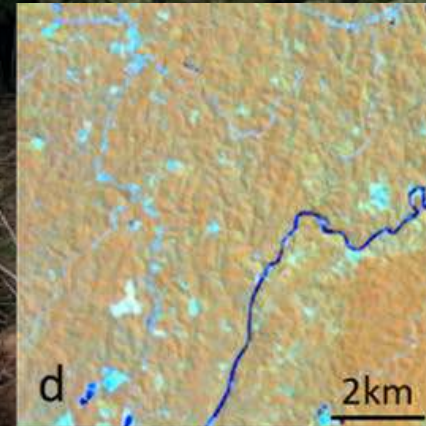
INDUSTRIAL OIL PALM

Large (>1000 ha)
Monoculture
Linear boundaries
Harvesting trails in
contours on hilly terrain



SMALLHOLDER OIL PALM

Small (< 25 ha)
Monoculture
mixed mosaic with
Other crops



SMALLHOLDER OIL PALM

Small (< 25 ha)
Monoculture
large homogeneous
landscape



SMALL/MEDIUM HOLDER OIL PALM

Intermediate (> 25 ha; <1000)
Monoculture
resembles industrial plantings
though generally smaller and
with less consistent structure

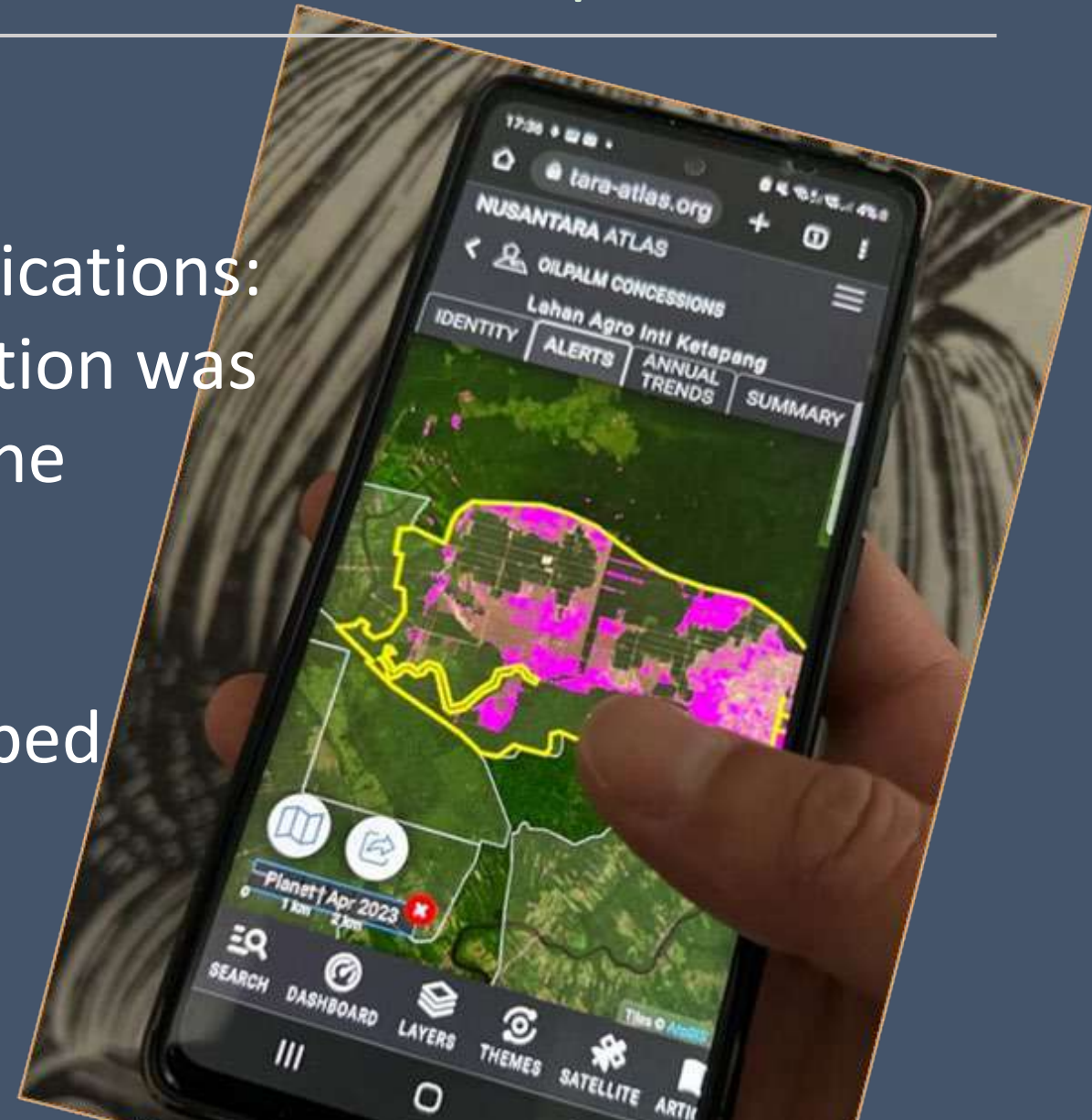
> 3 Mha independent smallholder farms did not clear forest after 31 Dec 2020



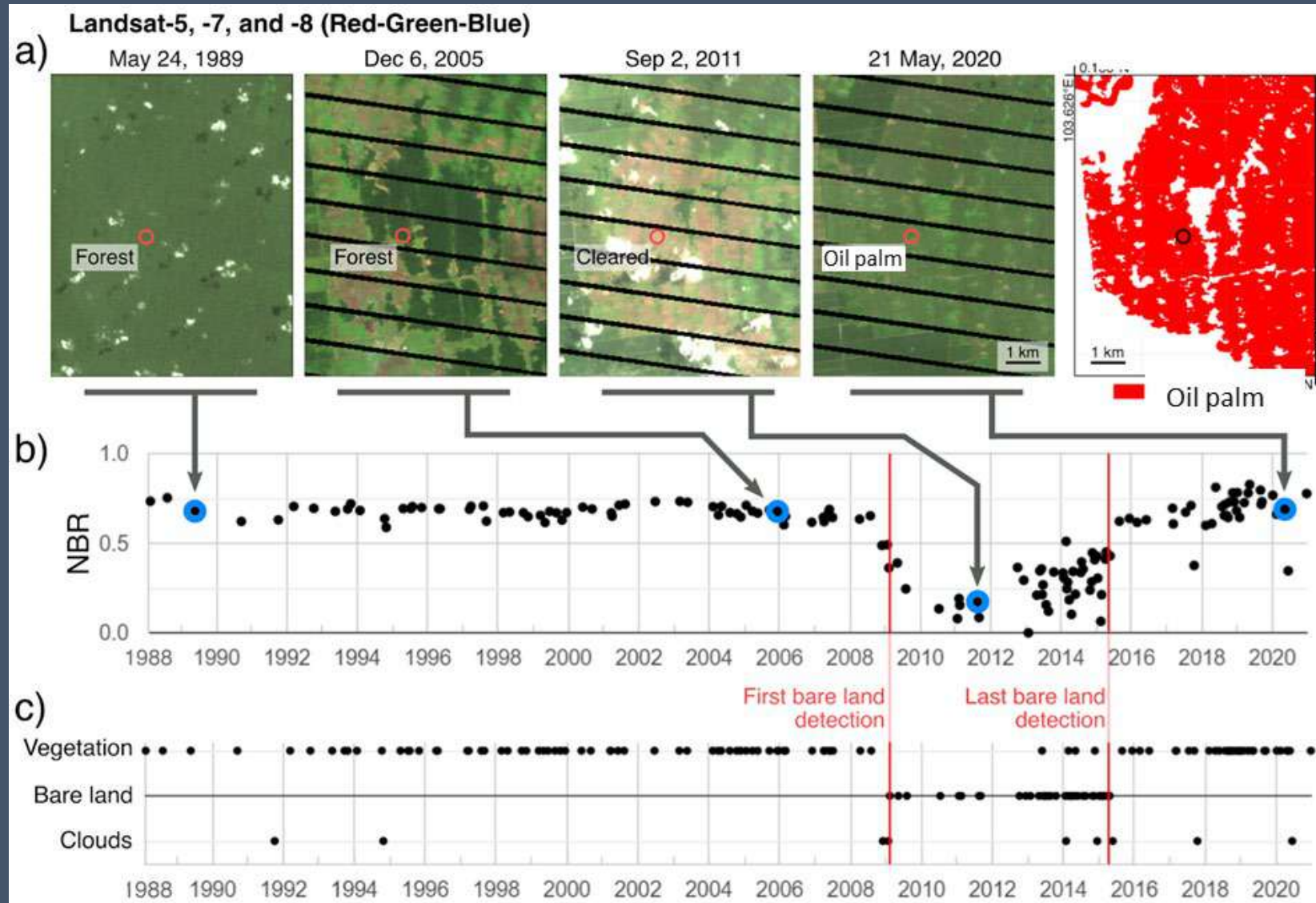
Helping Small farmers demonstrate compliance

Develop digital Tools and Mobile Applications: designed to verify the year the plantation was established and whether this was at the expense of forest using satellites.

Used by farmers to provide timestamped evidence of compliance



Create a visual audit trail



Helping Small farmers demonstrate compliance

Work with Indonesian and Malaysian NGOs who provide technical assistance to farmers, gather land plots, and help farmers gain market access and certification



NGOs share the land plots of smallholders under NDA. We upload them in our secure database and verify the year the plantation was established and whether this was at the expense of forest using time series satellite .



Digital tool to demonstrate compliance of thousands of farmer's land plots

Application for detecting vegetation changes, in homogeneous smallholder oil palm farm plots (average size 2.38 ha) using LANDSAT time series imagery.

Plot ID: 3204

Land Cover 2000: Forest

Num. disturbances: 1

FYOP: 2010

RYOP: 2010

First bare land | Min NBR date | Median bare land date | Last bare land | (bare land detections)

1: 2008-07-29 | 2011-06-04 | 2011-06-28 | 2014-02-28 | (17)

2:

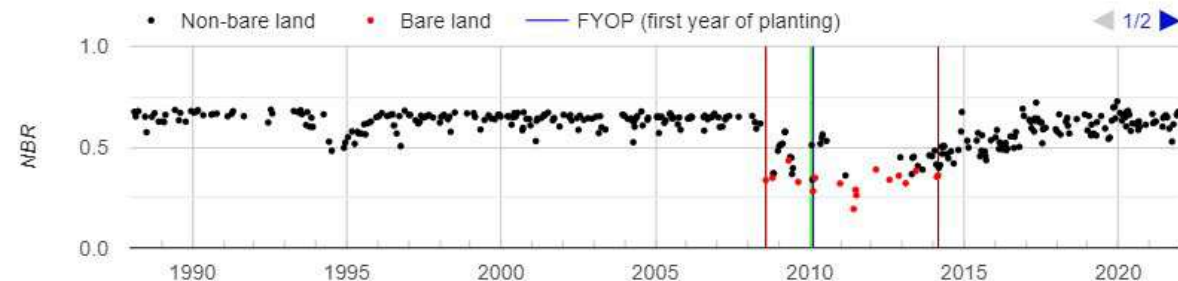
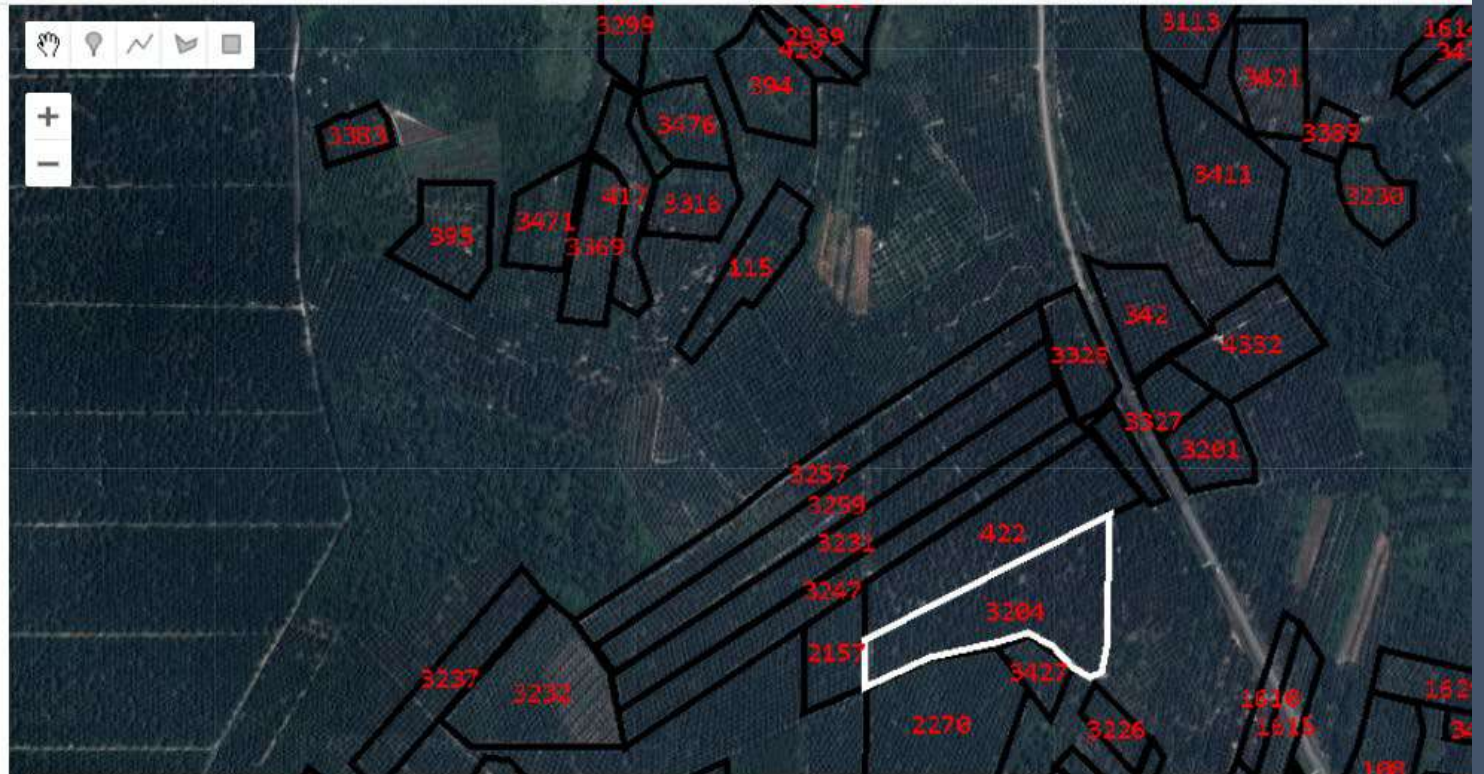
3:

4:

5:



TheTreeMap.com



Nusantara Atlas



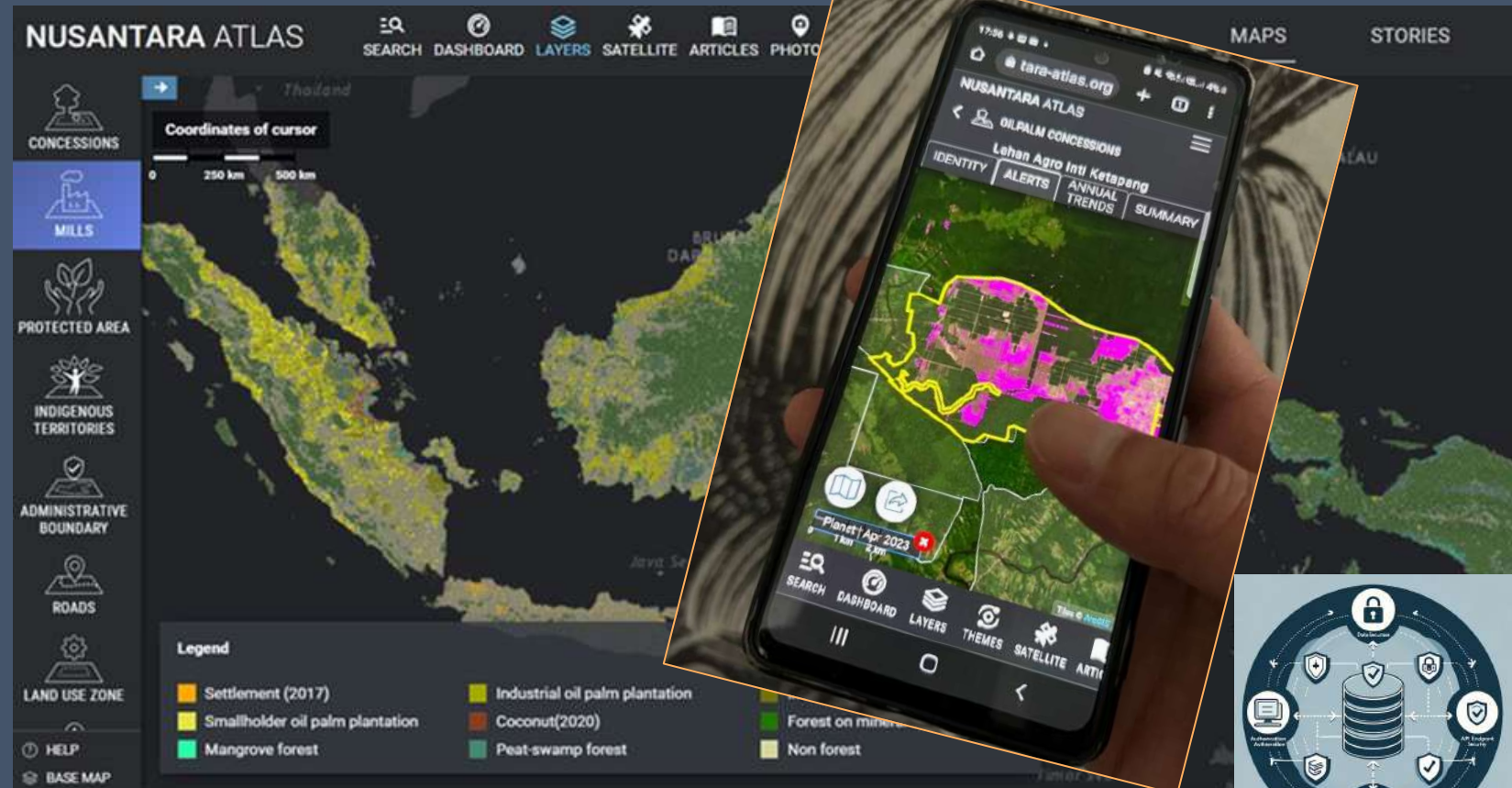
Web application designed to track palm oil- and wood pulp-induced deforestation

<https://nusantara-atlas.org/>

Enables anyone to see where forests are converted into plantations historically and in real time.

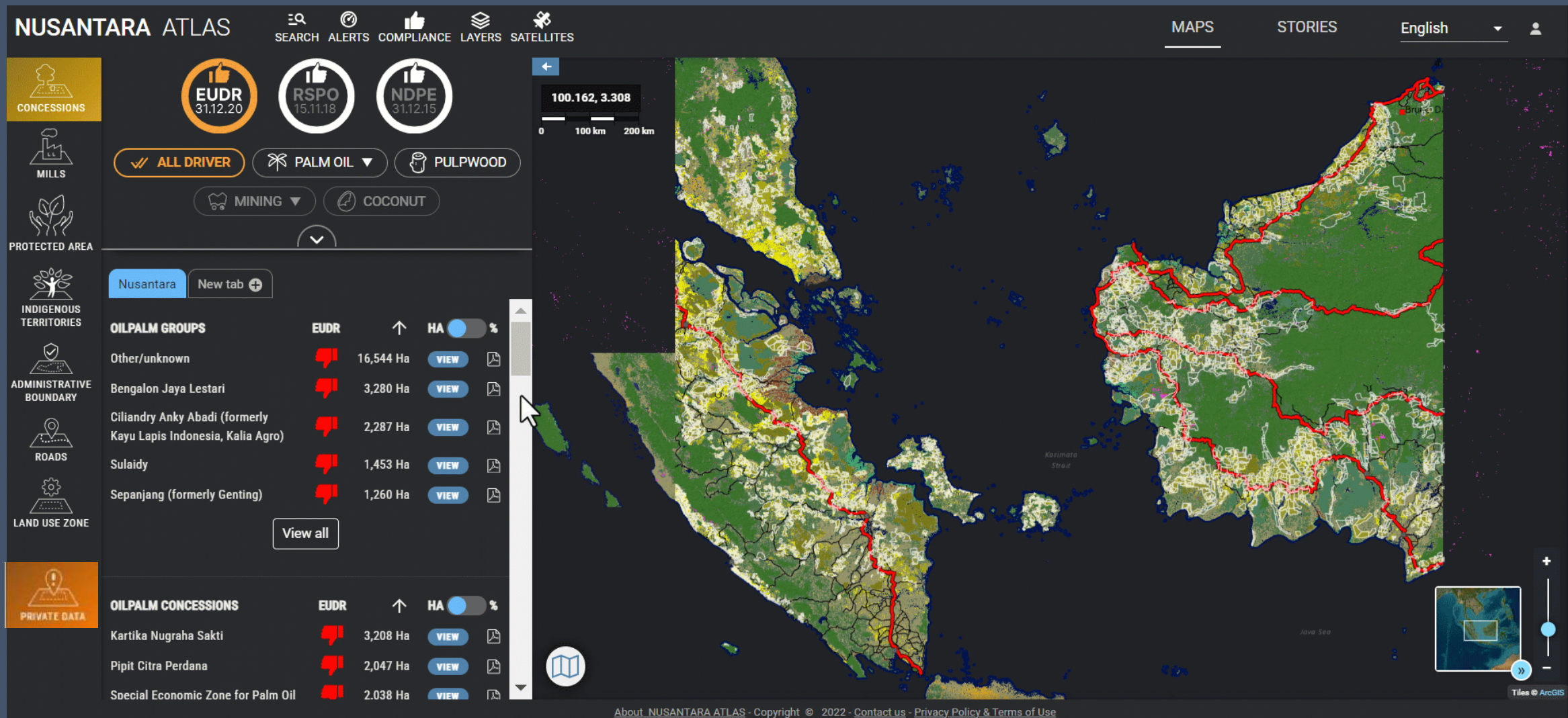
Designed to function on both computers and mobile phones. Free access.

Currently available for Indonesia and Malaysia. will be extended to more countries by the end of 2024.



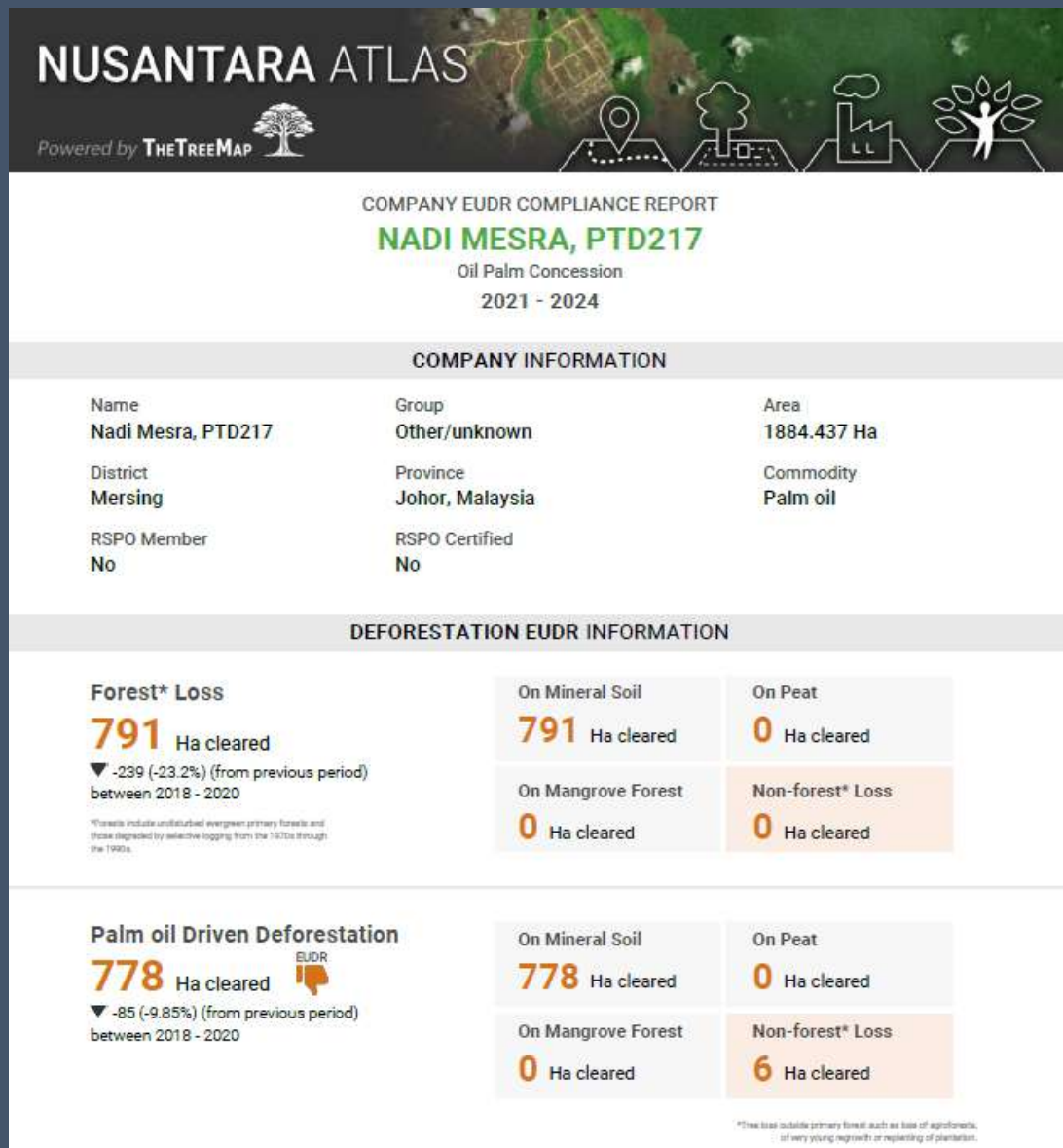
Nusantara Atlas

New compliance dashboard

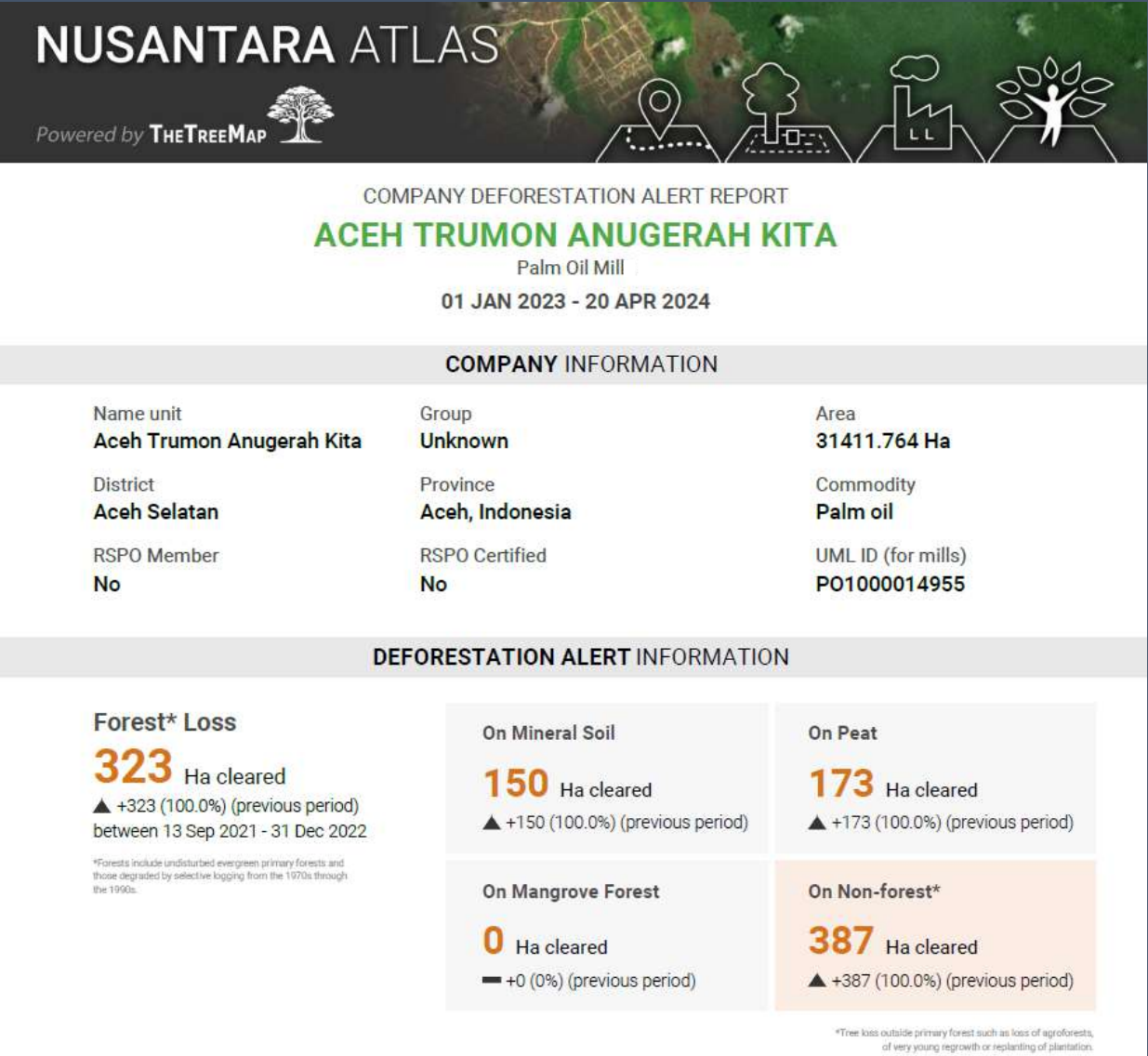


Nusantara Atlas

Automatic EUDR Reports Generation



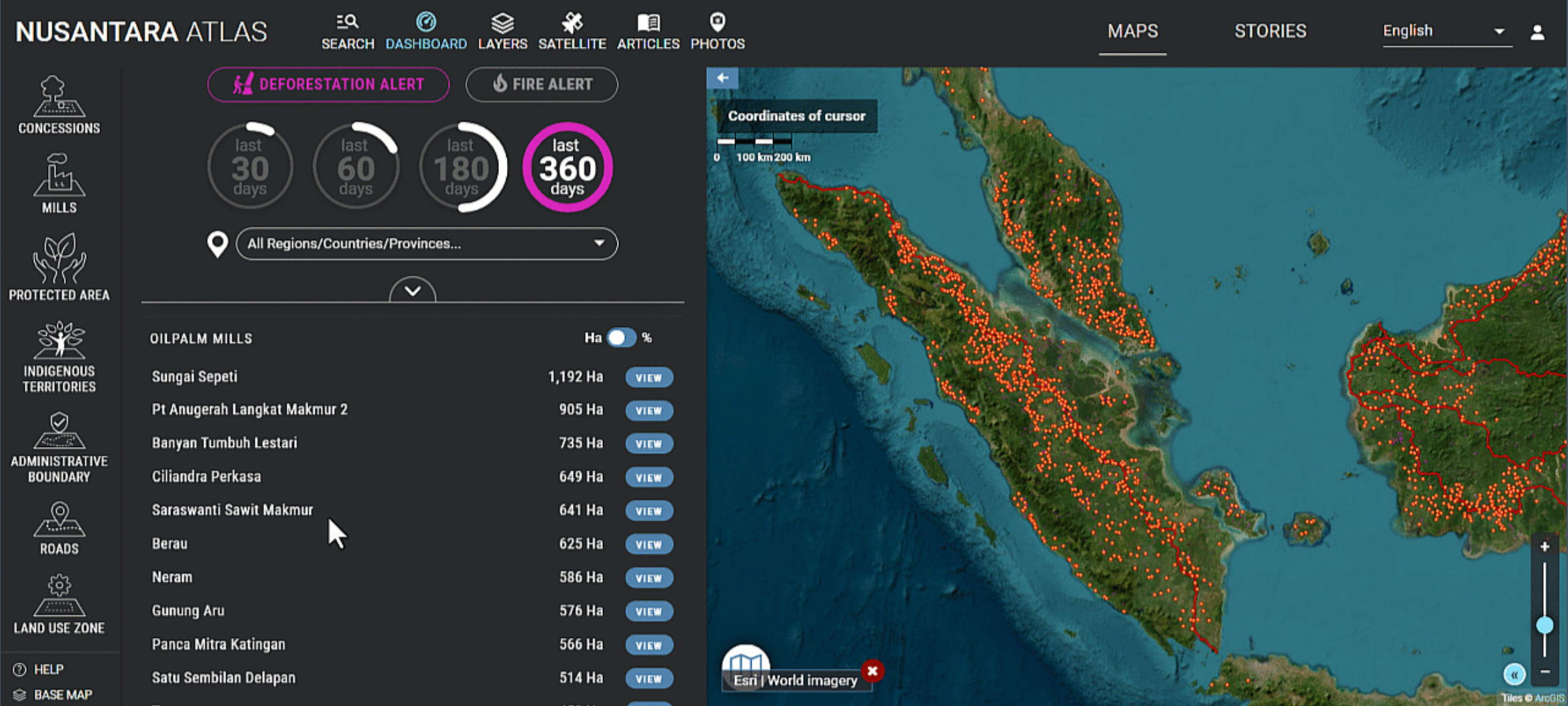
Nusantara Atlas Automatic Deforestation Alert Reports Generation



Nusantara Atlas



Deforestation Alert Dashboard Instantly Reveals the Most regions



Decoding Deforestation Alerts in Nusantara Atlas

By [TheTreeMap](#) on 17 May 2023

ATLAS RESOURCE

DEFORESTATION



This article aims to clarify deforestation alerts in Nusantara Atlas, helping users comprehend and maximize the use of this data.

Nusantara Atlas is on the front lines of the fight against deforestation in palm oil, pulp-and-paper, and mining supply chains in Equatorial Asia. By combining near real-time deforestation alerts, and comprehensive cadastral and supply chain information, it holds producers and buyers accountable to no deforestation, no fire, and no peat exploitation regulations like the [Indonesian Moratorium](#), RSPO and FSC certifications, and the new [EU Deforestation Regulation](#).



Deforestation alerts over Indonesia's worst-performing pulpwood concession in 2022