



Methodology

Summary of approach

- This is the methodology for an analysis of palm ISH driven deforestation and peat conversion in Malaysia and Indonesia to identify administrative areas with minimal independent smallholder driven deforestation (MSD) since the industry cut-off date of 2015
- There is limited farm or plot level data available, especially in the public domain, for existing Palm oil Independent Smallholders data
- Therefore, POCG followed a “filtering approach” to determine whether deforestation was linked to other drivers (Palm oil companies/estates OR any other drivers – e.g. mining, cocoa, forest plantations, etc.)
- This filtering relied primarily on combining different publicly available datasets of other land cover types or uses to discount deforestation caused by other drivers. In addition, the GIS technicians conducted some visual checks using high resolution imagery from Planet to interpret and classify deforestation drivers.
- The remaining deforestation was then considered as potentially linked to ISH and for palm, and was then used to rank administrative units based on the amount of potentially ISH linked deforestation

Methodology to identify ISH palm deforestation

Steps followed to identify potentially driven deforestation by PO Independent Smallholders

Step 1
Identify forest
& peat
presence



Step 2
Prepare
deforestation
layer (2016 –
2022)



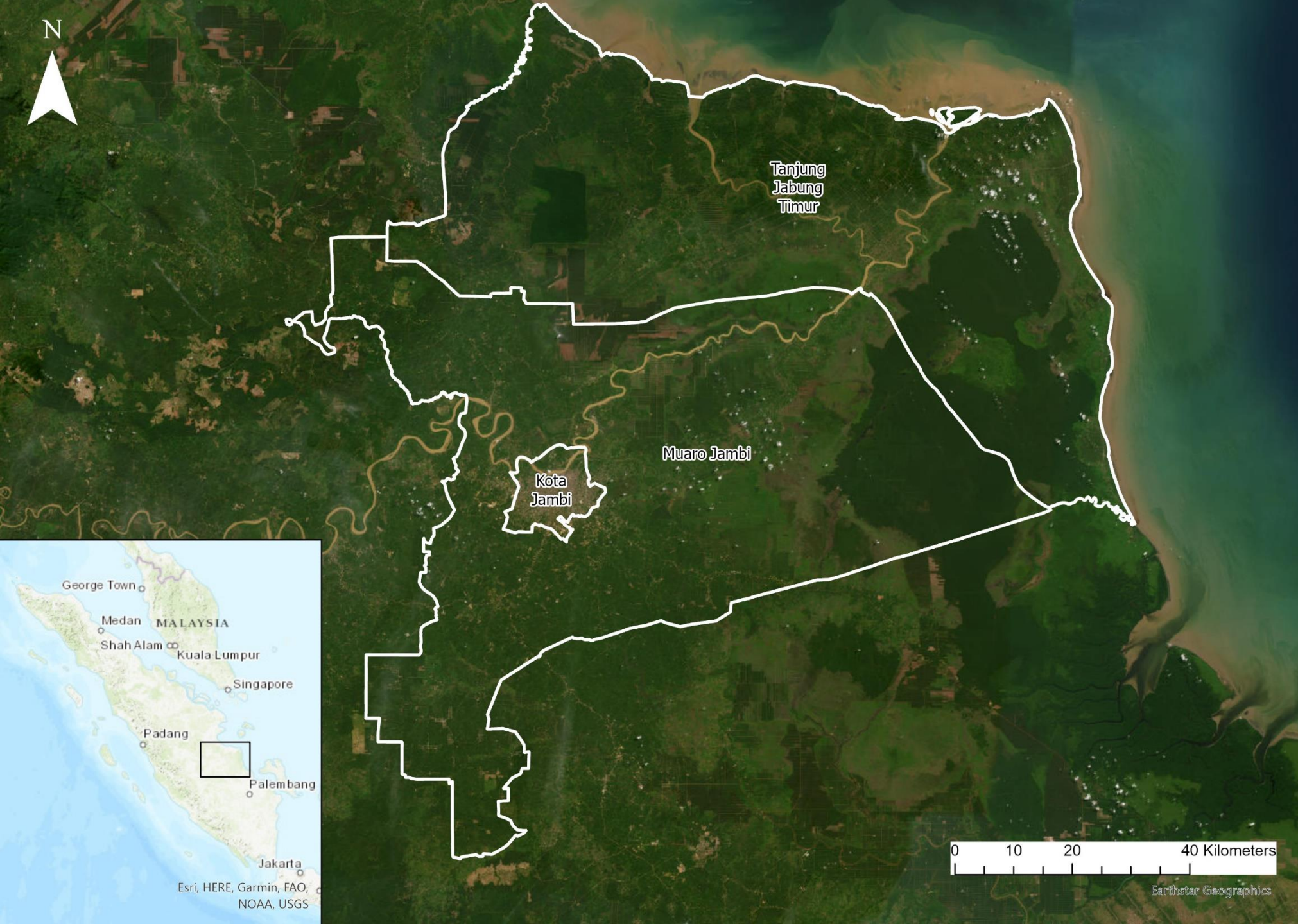
Step 3
Identify
deforestation
drivers:
1. Other non-palm
drivers
2. Palm oil
companies
3. Independent
smallholders
(ISH)



Step 4
Confirm
deforestation/
peat conversion
linked to
Independent
Smallholders
(ISH)
& remove false
positives



Step 5
Rank & classify
administrative
units based on
cumulative ISH
deforestation
(2016 – 2022)



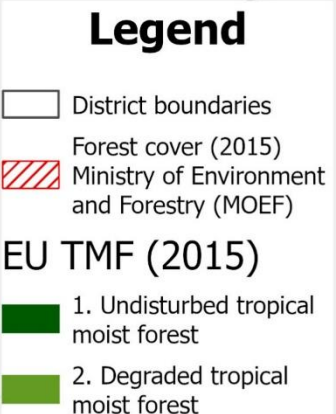
JAMBI AS AN EXAMPLE

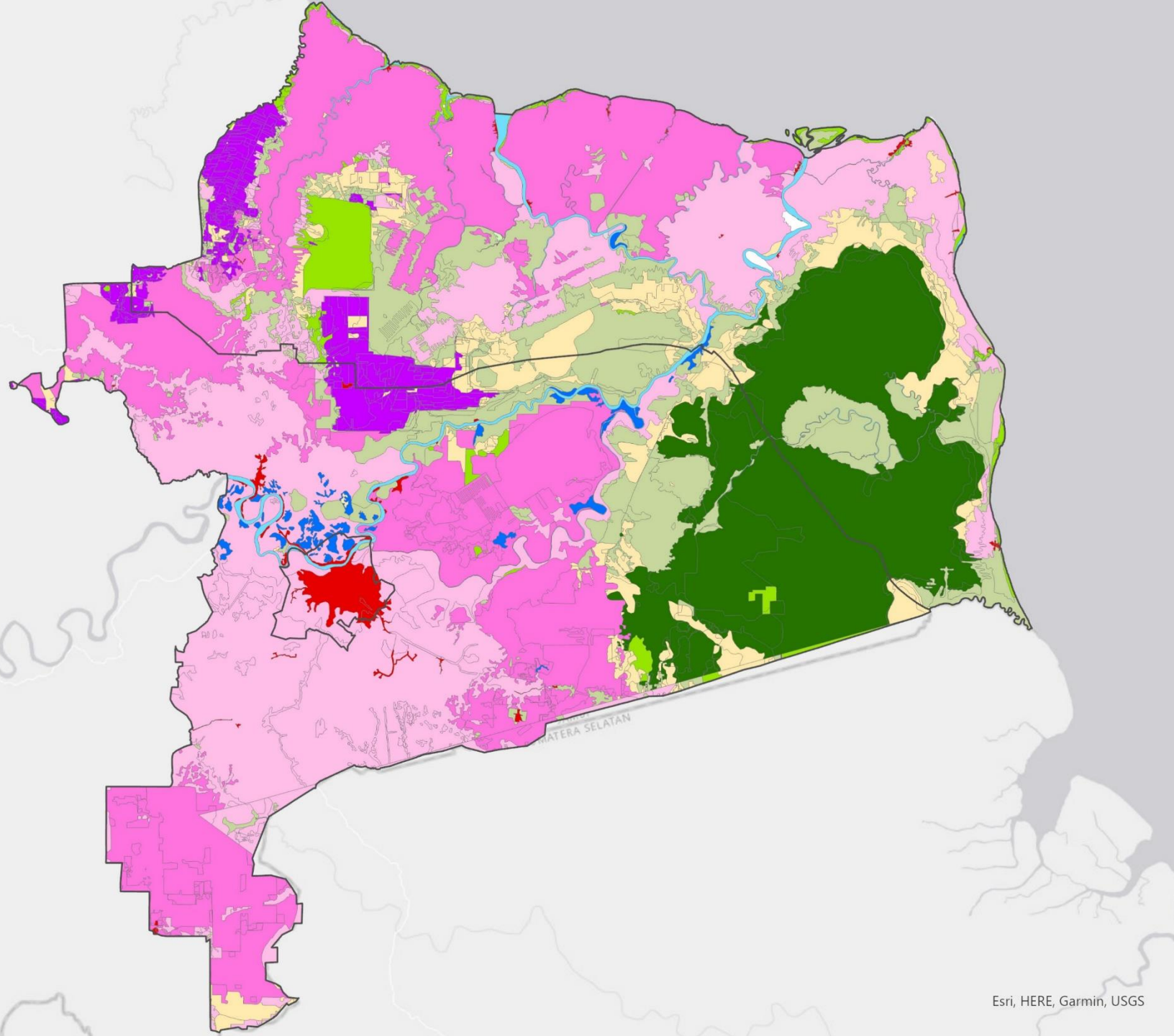
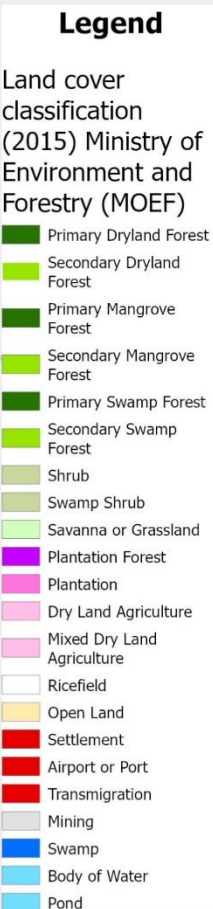
- Kota Jambi
- Muaro Jambi
- Tanjung Jambu Timur

Satellite imagery

JAMBI AS AN EXAMPLE

Identify Forest





JAMBI AS AN EXAMPLE

Identify already existing plantations/ agriculture land in 2015

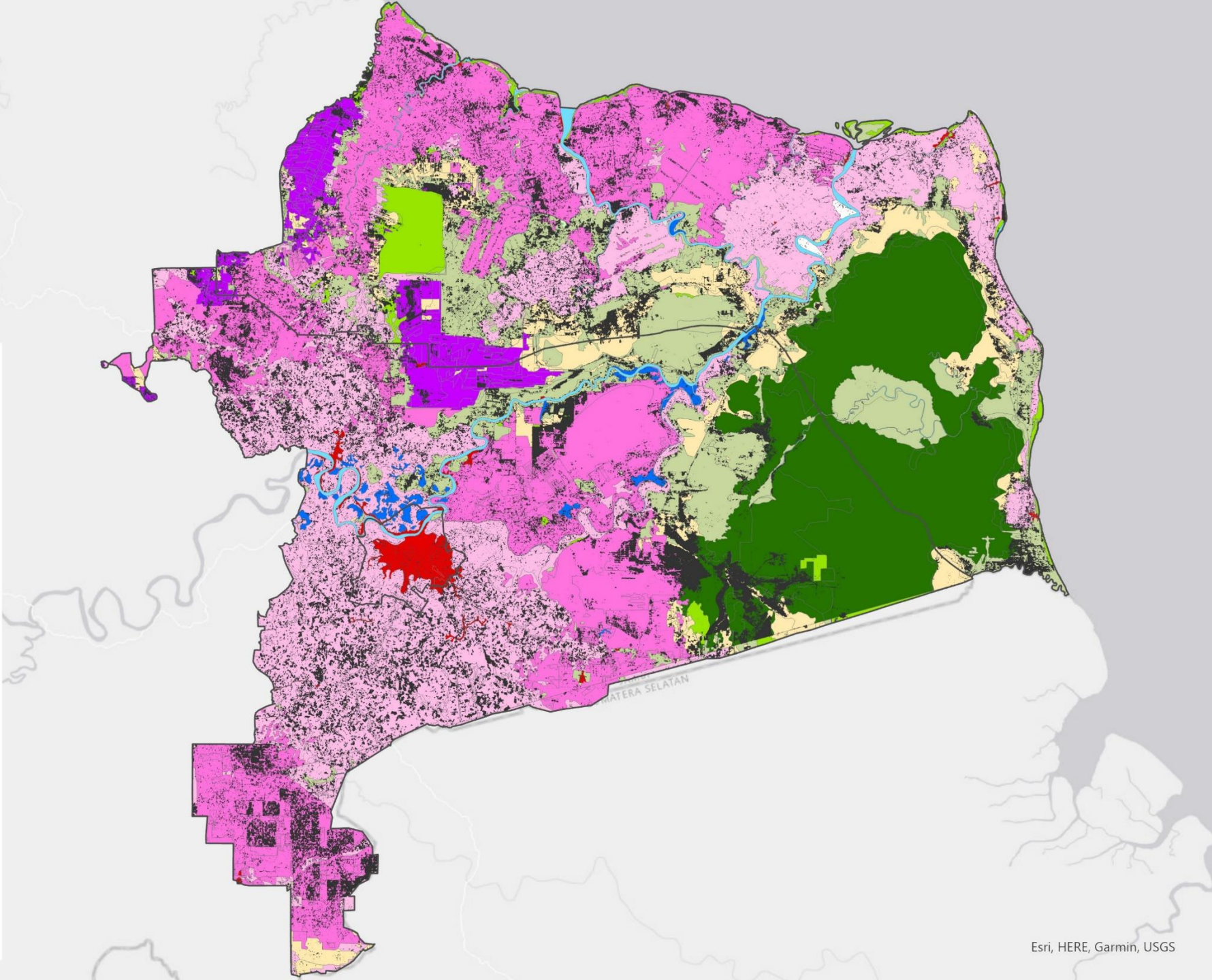
(This information allows to identify « false » positives)



JAMBI AS AN EXAMPLE

Compare raw deforestation/ peat alerts (EU TMF) against the land cover map from 2015 (Ministry of Environment & Forestry)

- Legend**
- Land cover classification (2015) Ministry of Environment and Forestry (MOEF)
- Primary Dryland Forest
 - Secondary Dryland Forest
 - Primary Mangrove Forest
 - Secondary Mangrove Forest
 - Primary Swamp Forest
 - Secondary Swamp Forest
 - Shrub
 - Swamp Shrub
 - Savanna or Grassland
 - Plantation Forest
 - Plantation
 - Dry Land Agriculture
 - Mixed Dry Land Agriculture
 - Ricefield
 - Open Land
 - Settlement
 - Airport or Port
 - Transmigration
 - Mining
 - Swamp
 - Body of Water
 - Pond



Raw deforestation alerts

Esri, HERE, Garmin, USGS



JAMBI AS AN EXAMPLE

Link deforestation/
peat conversion to
the 3 main drivers:

1. Other non-palm drivers
2. Palm oil companies
3. Palm oil Independent Smallholders (ISH)

Legend

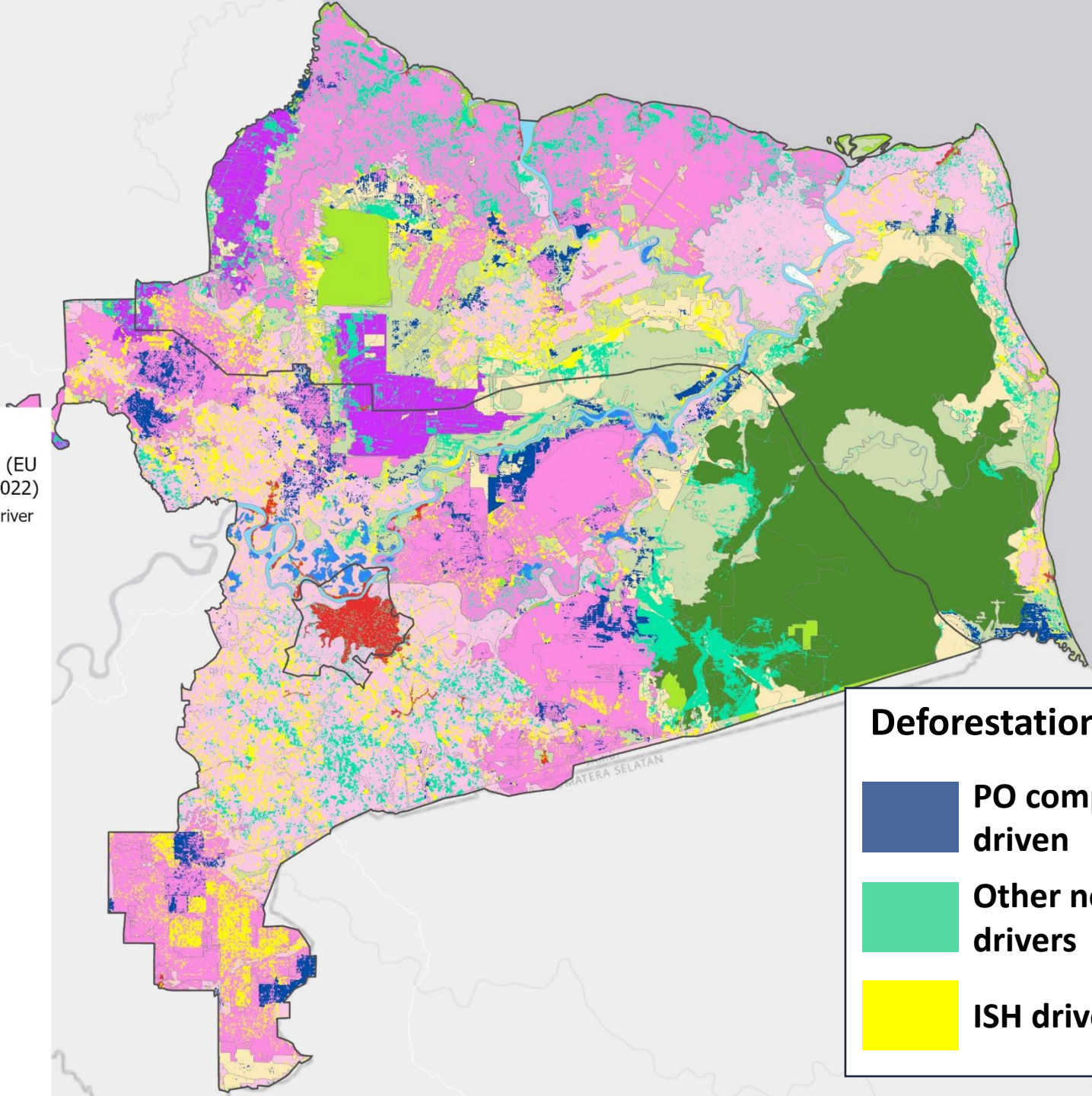
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Deforestation (EU TMF 2016 - 2022)

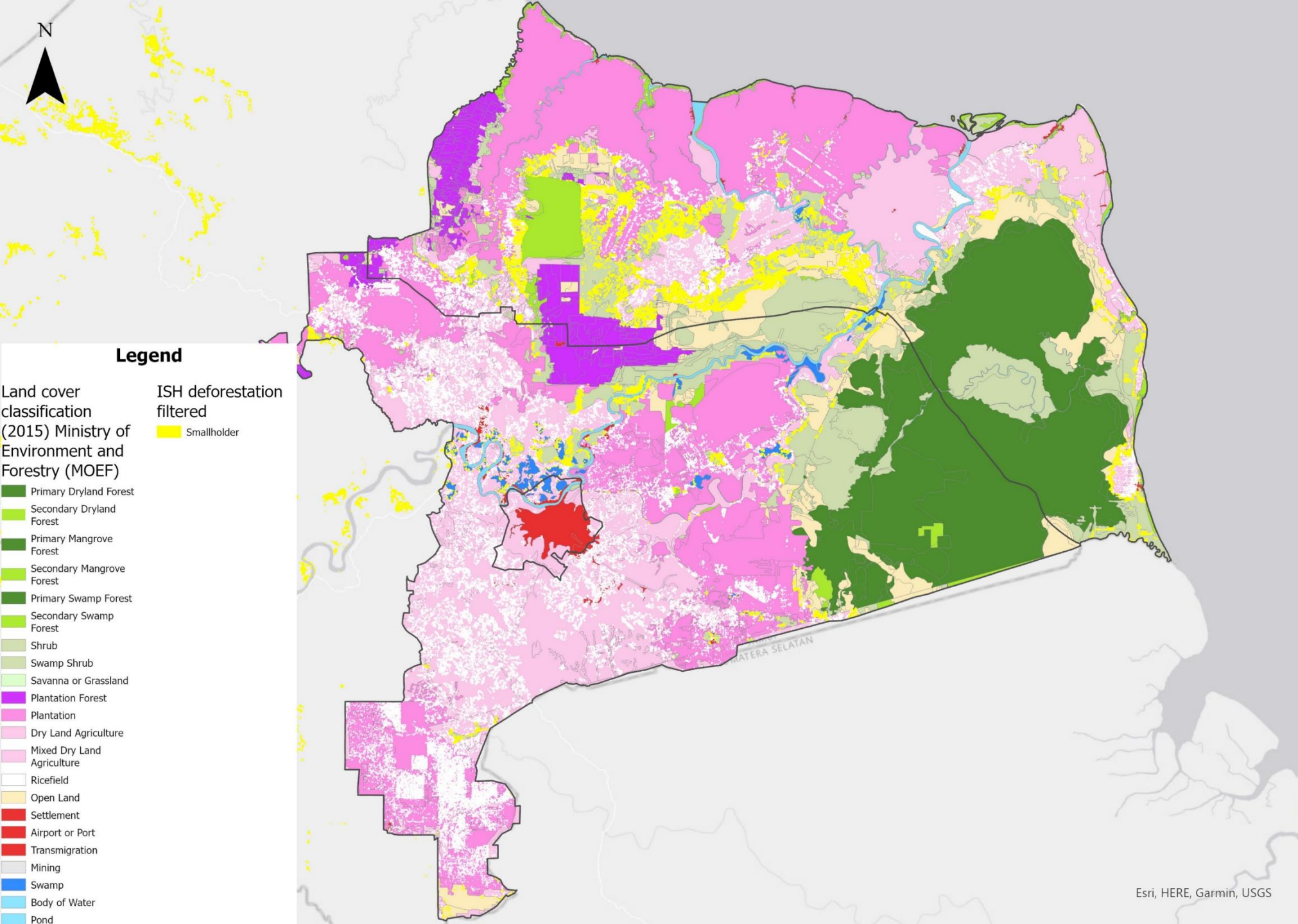
Deforestation driver

- Companies
- Other
- Smallholder



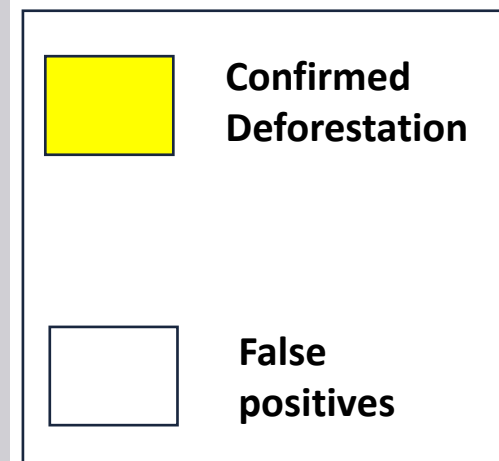
Deforestation driver

- PO company driven
- Other non-palm drivers
- ISH driven



JAMBI AS AN EXAMPLE

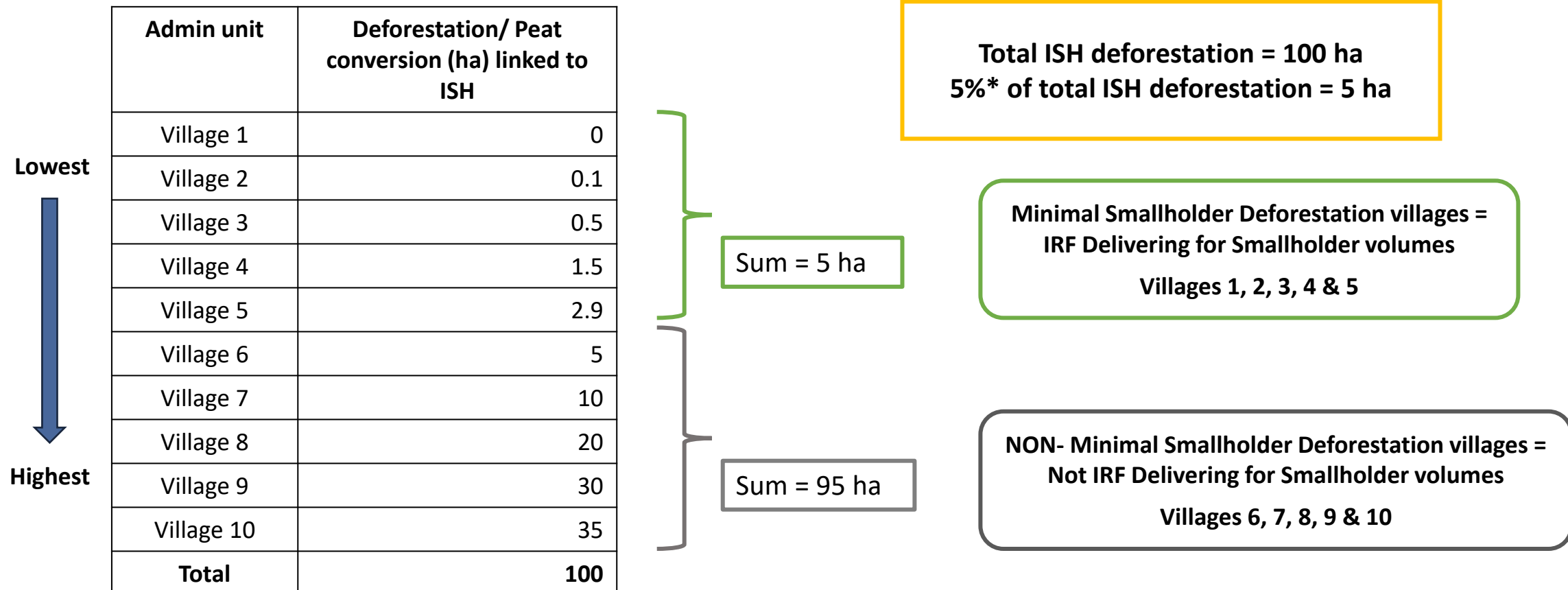
Final ISH
deforestation layer



How to determine « Minimal smallholder deforestation » administrative units?

Following the [subnational risk benchmarking](#) for soy conversion in Brazil led by the Soft Commodities Forum, the POCG technical group followed the methodology below to identify neg risk villages (in Indonesia), mukims (in Peninsular Malaysia) and districts (Sabah and Sarawak). Please note the POCG group used a 5% threshold to identify “Minimal smallholder deforestation” administrative units. **This slide is just showing an example with made up data and 5% threshold to explain the process to external stakeholders:**

Administrative unit Risk Ranking



How did POCG decide on a definition for Minimal Smallholder Deforestation?

- Sourcing areas (defined at the smallest administrative unit) where PO is grown but the cumulative deforestation/conversion linked to Palm Independent Smallholders (ISH) since 2015 is minimal
- The threshold for “minimal” smallholder deforestation was decided by POCG companies, taking into account inputs from an extensive consultative process with technical service providers and external NGOs.
 - The threshold agreed by the companies was that administrative areas accounting for 95% of all ISH deforestation in Malaysia and Indonesia should be classed as “significant”, and additional risk mitigation measures will be required.
 - Therefore, only administrative areas accounting for 5% of all ISH deforestation in Malaysia and Indonesia are classified as “minimal” smallholder deforestation areas.