



Good food, Good life

Palm Oil Forest Footprint

Aceh Province Analysis

November 2020

Overview

We carried out a Forest Footprint pilot exercise in the Aceh Province with the following objectives in mind:

- How can we better understand risks within our supply chain related to forests and peatlands conservation?
- How can we better understand risks to the rights of Indigenous Peoples and communities?
- How can understanding all of these risks help us design effective, forward-looking forest-positive strategies?

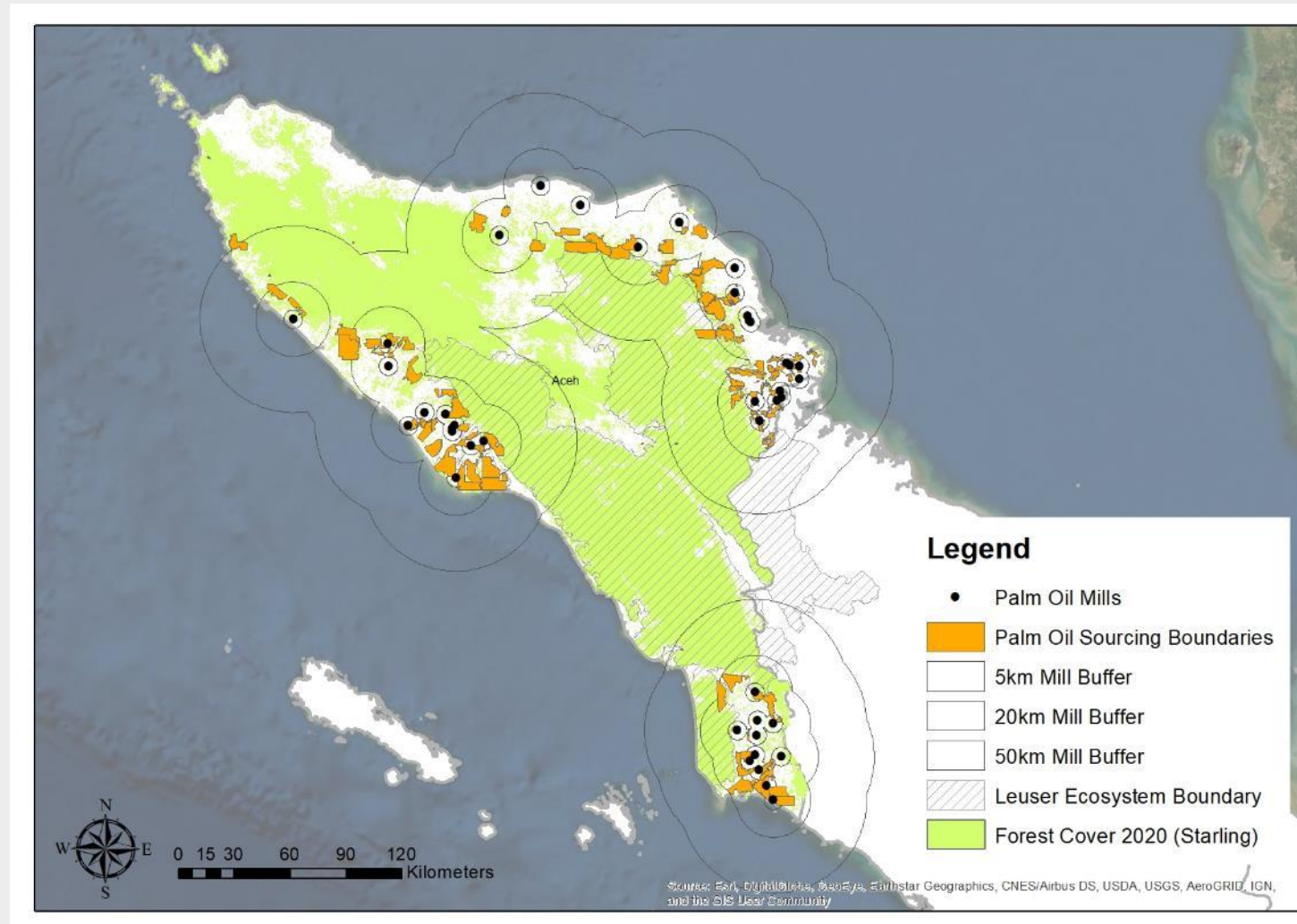
The Forest Footprint was carried out on the basis of Starling satellite mapping and monitoring in combination with relevant data sets (see Appendix).

Since January 2019 Nestlé has been using Starling to monitor deforestation risk its entire palm oil supply chain, take action in priority areas and engage suppliers to address deforestation risks within known concession boundaries or within predicted sourcing areas.



Background on Nestlé's supply chain in Aceh

Nestlé is sourcing from 41 mills in Aceh and these mills are linked to 21 refineries located south of Aceh.





Forest Footprint Methodology

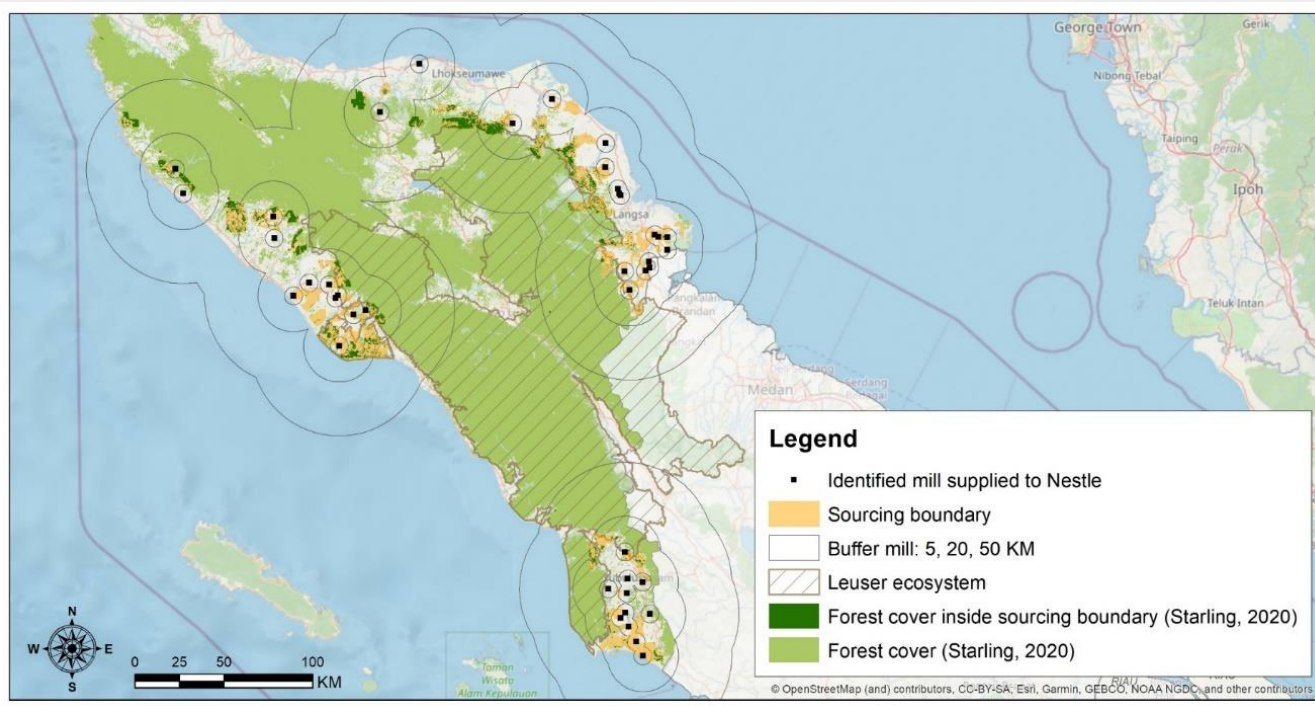
Together with our partner Earthworm Foundation, we identified forest areas, peatlands and community lands located within or in proximity to mills in our supply chain.

We overlaid this information on Starling platform with the following mill information:

- Available sourcing boundaries with confirmed links to mills in our supply chain.
- Available sourcing boundaries with unconfirmed links to mills in our supply chain.
- A 5, 20 and 50km radius around mills in our supply.

We analyzed the number of hectares of remaining forest and peat within or in proximity to mills we source from and how this overlays with available customary land boundaries.

Forest Area Analysis

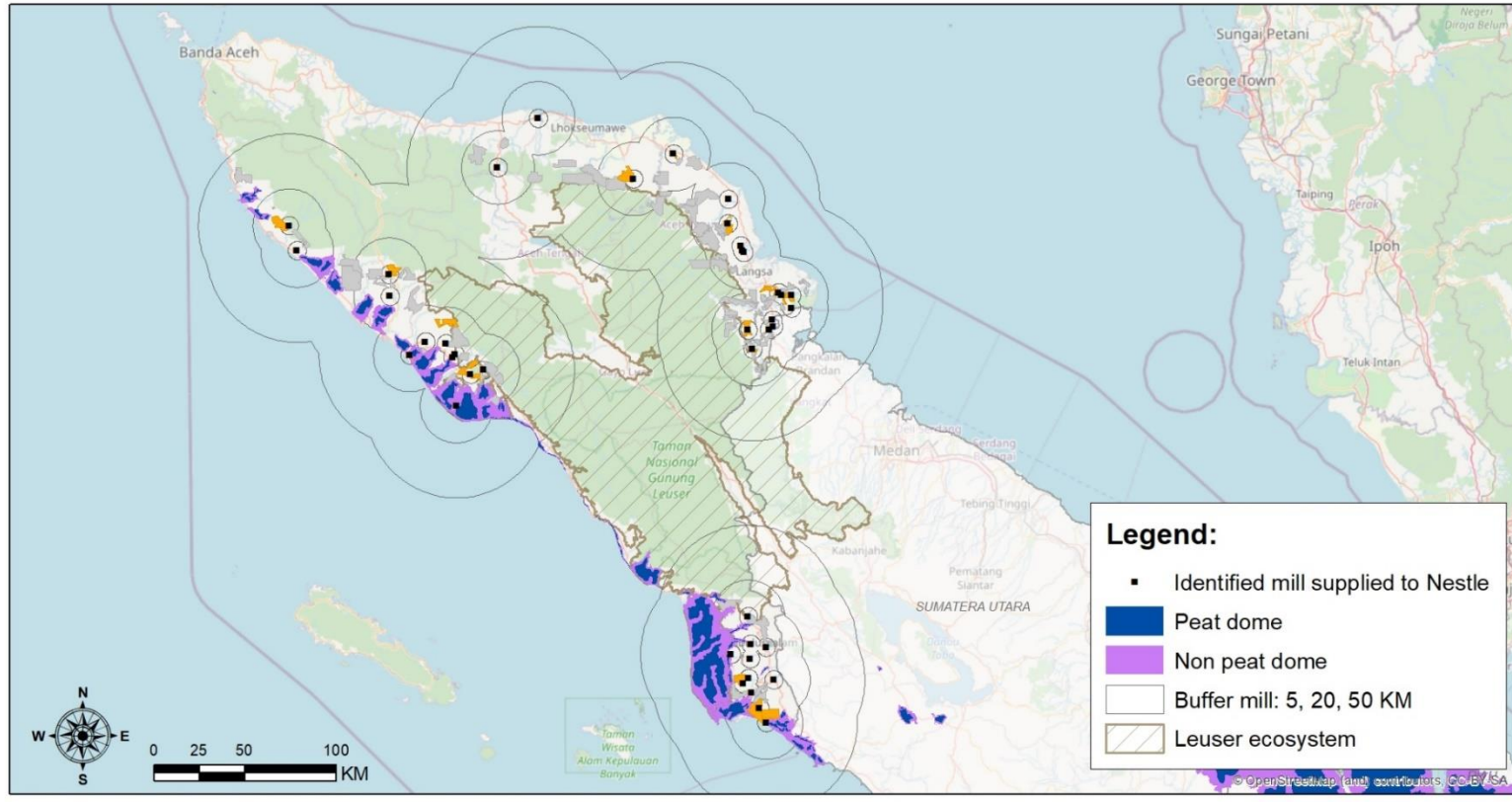


- **Findings:**
 - Sourcing boundaries identified in Aceh contain 89,667 ha of remaining forest. Further analysis is required to clarify which of these areas are linked directly or indirectly to Nestlé supply chain.
 - Within 50km of mills Nestlé are linked to in Aceh, there is 1.45 million ha of forested land suitable for palm oil cultivation, of which 350k ha is zoned as 'Another Utilization Area' (APL)
- **Limitations:**

Some information is missing in some cases to make the analysis more robust, including:

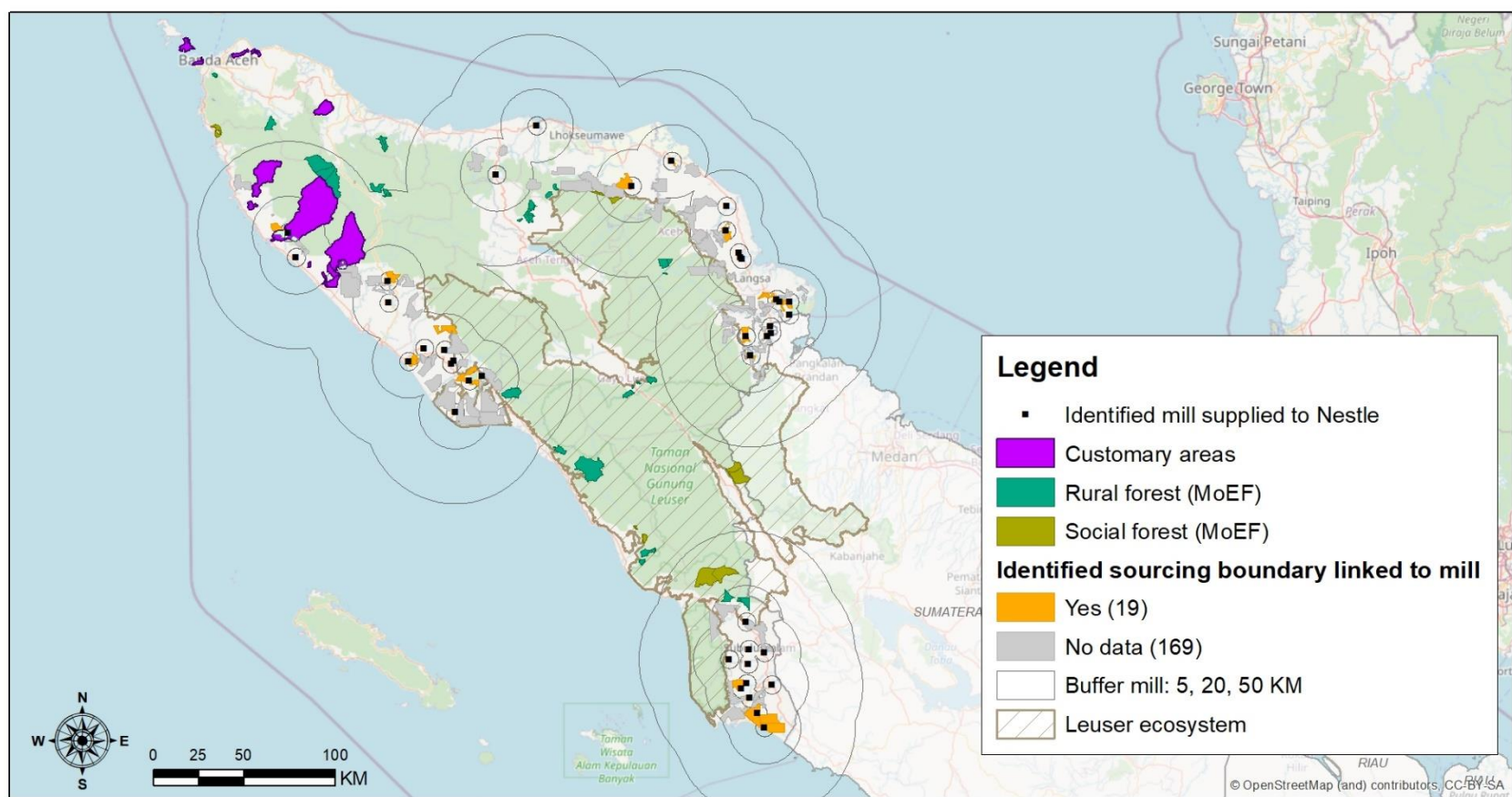
 - Linkages between plantation and mills.
 - Identification of parent companies for concessions and mills.
 - Mill capacity data.
 - Traceability to Plantation (TTP) information, including access to full plantation boundaries for smallholder-owned and company-owned estates and percentage of a mill volume coming from smallholders.

Peatland analysis



- **Findings:**
Less than 8,000 ha of peatland identified by the Indonesian Ministry of Environment and Forestry (MoEF) exists within unverified sourcing boundaries linked to mills in our supply chain
- **Limitations:**
We need for more accurate peatland information, including status of peatland mapping, moratorium areas inside and outside concessions, plans for restoration or rezoning of lands in 'Another Utilization Area' (APL)

Customary land analysis

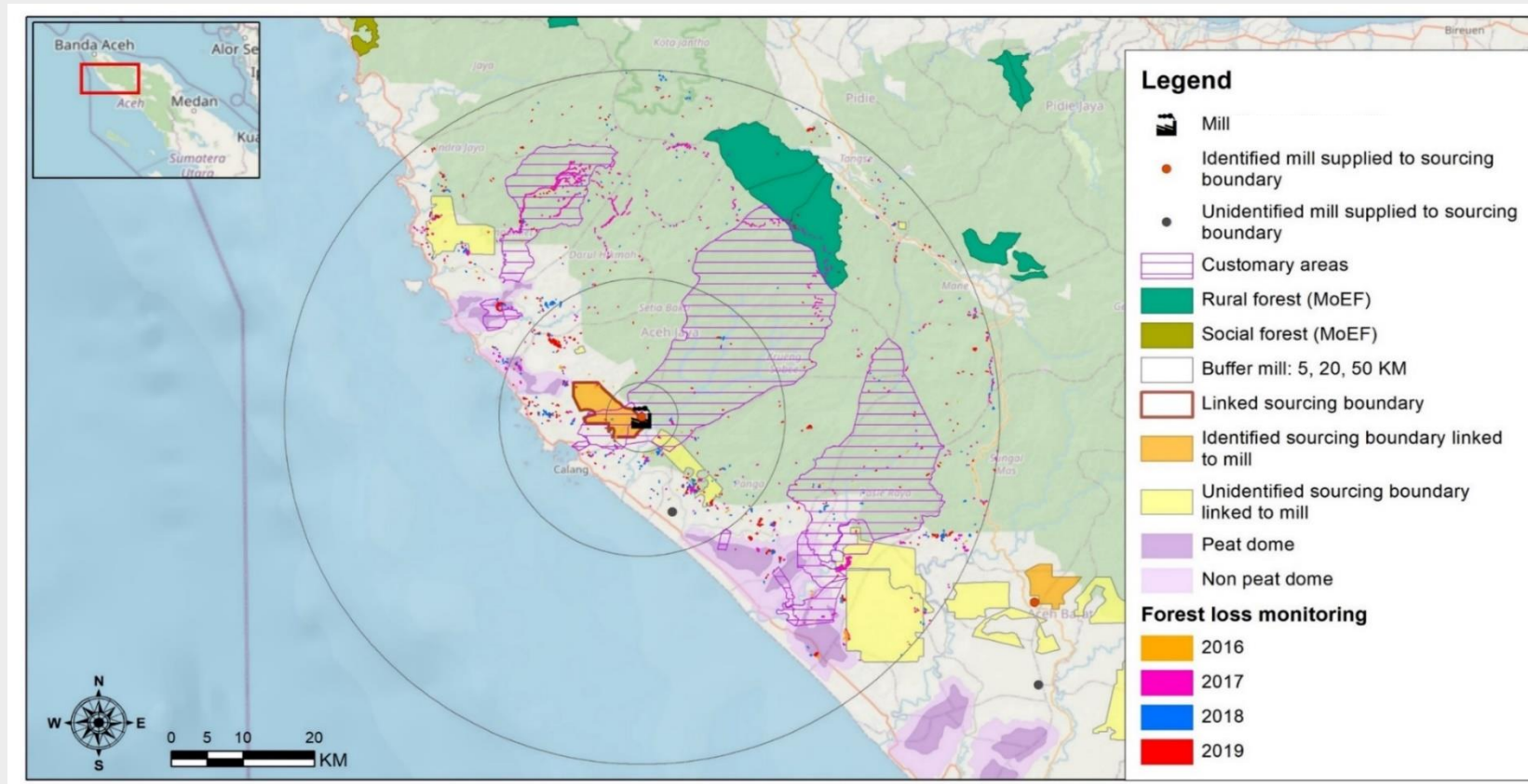


- **Findings:**
Two unverified sourcing boundaries overlap with over 2,000ha of customary land identified by BRWA.
- **Limitations:**
We need for more complete mapping of customary forest areas, as well as information on usage rights within these areas, land rights issues and community-companies conflicts.

Digging into the data: Example 1

From overlaying the different data sets, we can see forest area, peatland, and customary land at risk of deforestation within sourcing radius of the mill.

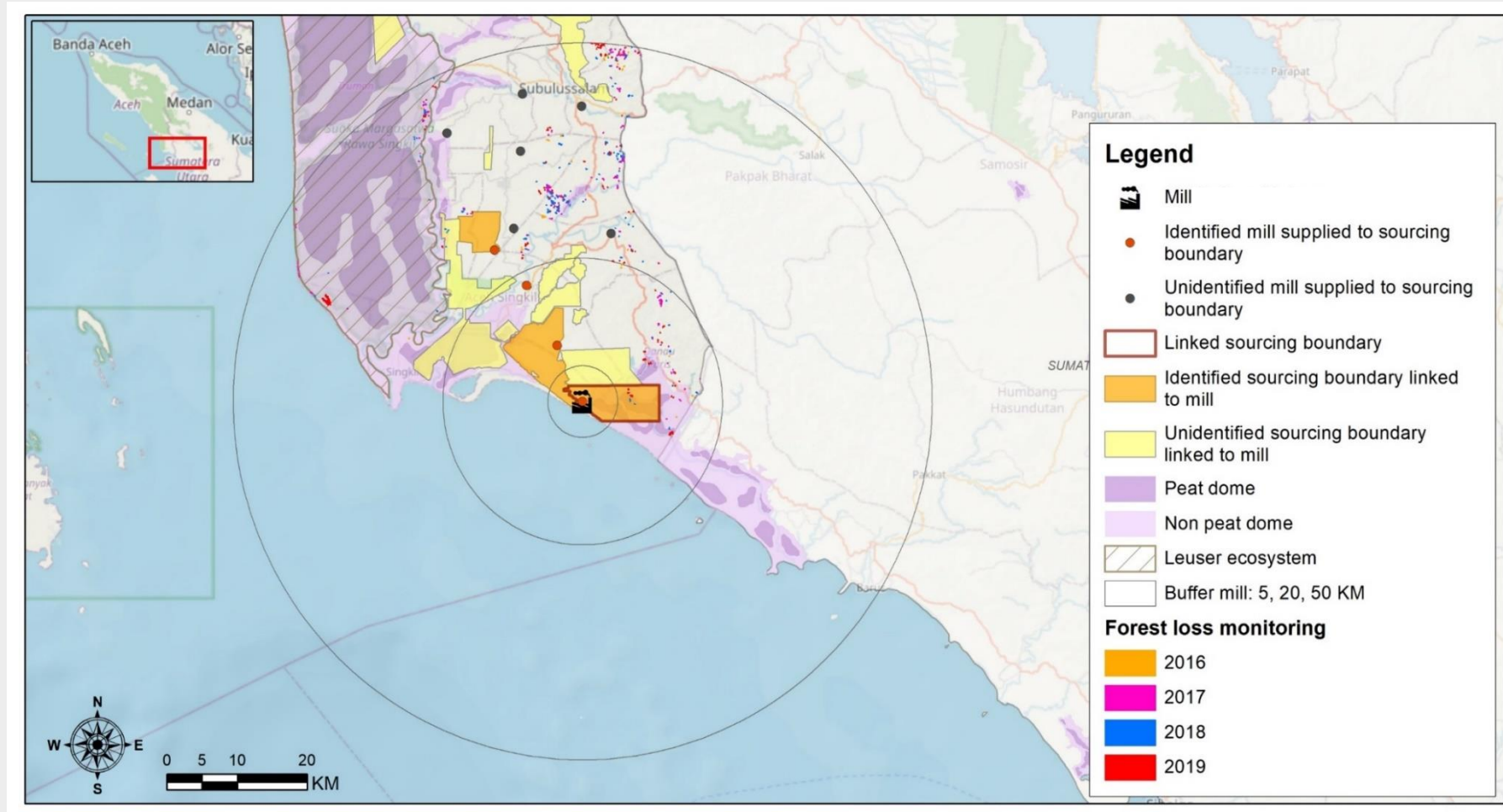
We will engage with the mill to check whether the unidentified sourcing boundaries are linked to the mill, confirm where the mill is sourcing from. We will also clarify the situation with customary land with the community (land rights and land use planning).



Digging into the data: Example 2

We see a few deforestation alerts on peatlands that are outside of concessions but close to them.

We will engage the mill to verify whether it sources from these peatland areas.





Our interventions to date and next steps

Up to 2020, our focus has been on addressing deforestation in our palm oil supply chain.

Mill interventions in Aceh have focused on those that have missing data to confirm their sourcing areas and following up on mills already taking steps to ensure they are not linked to deforestation.

We are now going beyond this and are building a Forest Positive strategy. This means we want to buy not only from suppliers who are not deforesting but who are also actively conserving and restoring forests while promoting sustainable livelihoods and respecting human rights.

We're planning to use the lessons learned from this Forest Footprint exercise in the development of this strategy, particularly on the question of how to engage at a landscape and supply chain level to support producers and other key stakeholders to proactively protect forests, peatlands, and human rights. This will be part of the work we need to do to achieve zero net emissions by 2050.

Appendix – Data sets used

For the purpose of this Forest Footprint exercise the following data sets were used:

- Forest cover (2001, 2016 and 2020) & monitoring (2016-2019): Starling
- Forest zones: Ministry of Environment and Forests – Gol (<https://tinyurl.com/yy26na5q>)
- Slopes and altitude analysis: SRTM 30 – USGS (via <https://tinyurl.com/srtm30>)
- Leuser ecosystem area (Aceh): Endorsement by Ministry of Forestry No. 190/Kpts-II/2001 and Leuser ecosystem area (Sumatera Utara): Endorsement by Ministry of Forestry No. 10193/Kpts-II/2002
- Customary areas: BRWA (<https://brwa.or.id>)
- Community and social forest, peat ecological function: MoEF – Gol (<https://tinyurl.com/yblu2snd>)
- Nestlé supply chain data (mills, Traceability to Plantation, refineries), declared by suppliers in 2019
- Additional license boundary data derived from GFW, Greenpeace, RSPO and website declaration of suppliers



