Implementing Traceability Solutions for Smallholders

ISCC System GmbH
ISCC Global Sustainability Conference, Brussels, 14 February 2019

What is traceability good for?

Traceability: Is the ability to trace back and provide information about sustainability of products and parties involved in a supply chain

➡️ **With a credible traceability system in place news like this should belong to the past**

Illegal Deforestation Monitor ⊘IDM

Monitoring illegal conversion of forests for agribusiness

"Zero deforestation" supply chains tainted by illegal palm oil from Sumatra, as demand exceeds supply of clean produce

Wednesday, July 25th, 2018

An investigation in Sumatra has exposed, again, that major palm oil traders are sourcing palm oil produced illegally in the island's heavily threatened and biologically valuable protected areas.

The supply chain investigation, by the NGO coalition Eyes on the Forest, found that the four major Indonesian palm oil traders – Golden Agri Resources, Musim Mas, Royal Golden Eagle and Wilmar – were buying produce from mills sourcing, in turn, from the Tesso Nilo and Bukit Tiga Puluh landscapes.

Palm oil from these areas is flowing into the supply chains of leading consumer goods firms with so-called "zero deforestation" commitments, including Mars, Nestle and Unilever.
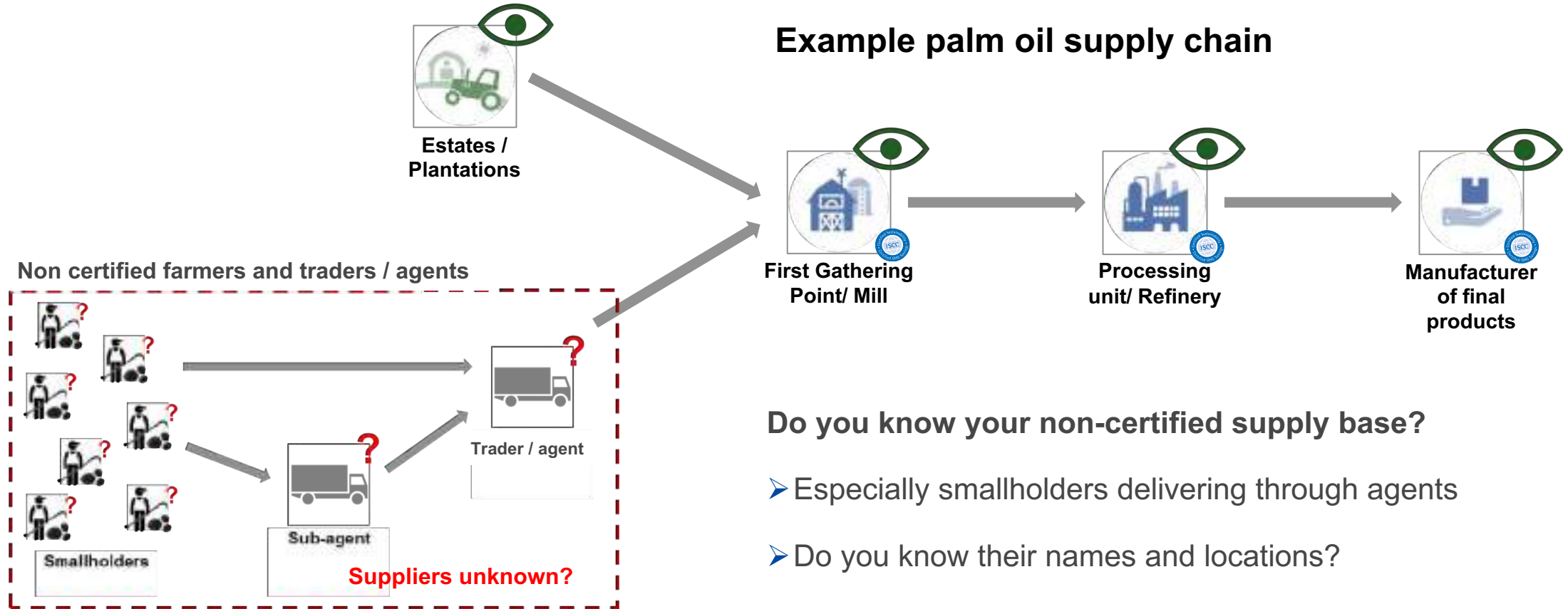
Source: IDM, 25.7.2018

Nestlé admits slave labour risk on Brazil coffee plantations

Nestlé and Jacobs Douwe Egberts say beans from Brazilian plantations using slave labour may have ended up in their coffee

Source: Guardian, 2.3.2016

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Is this an issue for ISCC certified units?

➡️ **It depends: Do you know your entire supply base and not only the certified one?**

Example palm oil supply chain

Estates / Plantations

Non certified farmers and traders / agents

Smallholders

Sub-agent

Trader / agent

Suppliers unknown?

First Gathering Point/ Mill

Processing unit/ Refinery

Manufacturer of final products
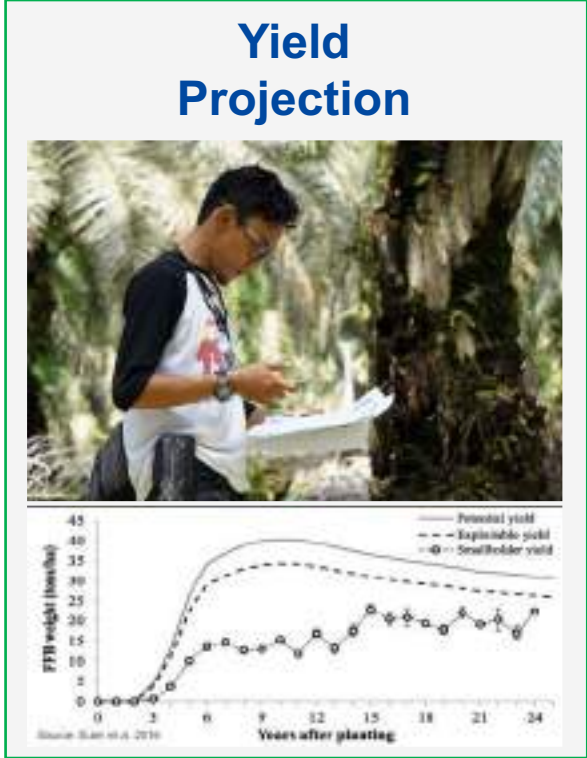
Do you know your non-certified supply base?

➢ Especially smallholders delivering through agents

➢ Do you know their names and locations?

➢ Are you aware of their sustainability risks (legality, deforestation, etc.)

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A credible traceability system consists of three pillars and will help to mitigate risks and improve performance

Supply Chain Mapping
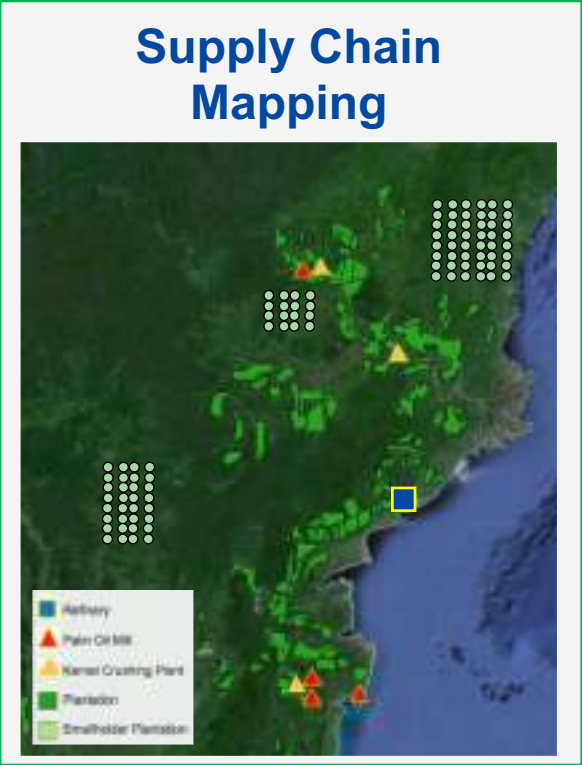
Delivery Documentation

Tour ID	Total delivered (kg)	Farmer name	Delivered/ farmer (kg)
1	5.400	Farmer 1	2.500
		Farmer 2	2.900
2	3.800	Farmer 3	2.000
		Farmer 4	1.800

Yield Projection

Starting point: Names of all farmers and / or locations of all sourcing areas

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Supply Chain Mapping

Legend:
- Refinery
- Palm Oil Mill
- Kernel Crushing Plant
- Plantation
- Smallholder Plantation

Supply Chain Mapping can already provide reliable information about risks and yields

Mapping levels and implications

1. Locations of sourcing areas
2. One point coordinates of individual farmers location
3. Polygons of individual farmers fields

➢ One point coordinates allow a rough estimate whether close to or within no-go or deforested areas

➢ The one point coordinate may not be identical with the field or smallholder may own more than one field

➢ Polygons allow assessment regarding no-go-areas, deforestation and other risks

➢ Polygons allow first yield plausibility checks and reduce fraud risks (e.g. smallholder acting as agent for others, who then may source out of illegal origins)
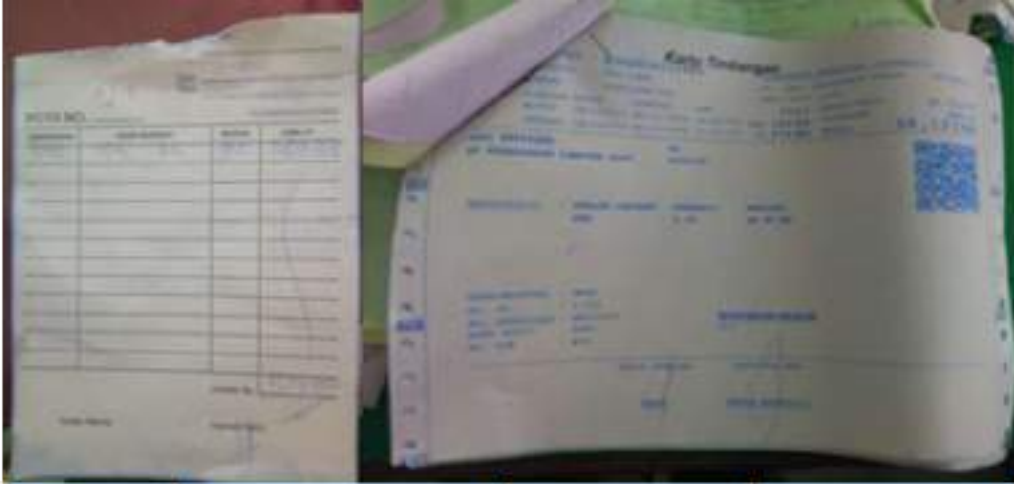
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Delivery Documentation

Delivery Documentation provides already full traceability

Documentation levels and implications

1. Delivery slips for every batch from individual farmers are available upstream but not at the First Gathering Point (FGP) / mill

2. Delivery slips for every batch from individual farmers are available at the FGP / mill

3. Information on batches from individual farmers is available on a database for the entire upstream supply chain

➢ Farmer batch information allows further yield plausibility checks

➢ Allows grouping / priorization of farmers and related corrective actions and focused smallholder development improvement programs

Source: Euler et al. 2016

Yield Projection
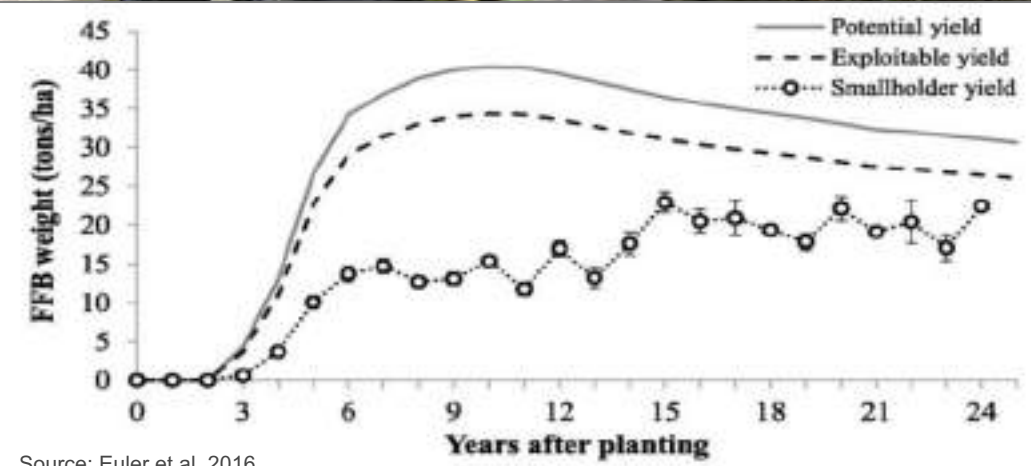
Implementing Yield Projection will increase quality and income

Yield Projection levels and implications

1. Yield projection based on standard field sizes and yields
2. Yield projection based on polygons, regional yield averages and yield influencing factors
3. Yield projection conducted on-site based on the detailed assessment of a sample

➢ Allows to design a customized yield improvement program directly related to deficencies

➢ Identifies groups with high yields who could act as a role model and provide learnings and knowledge tranfer to their peers

➢ Will allow to unmask fraudsters and exclude them from the supplier list

ISH Field App

App · Database

Tracking App

App · Traceability Dashboard

Implementation of a credible traceability system can already be facilitated by GRAS mobile apps

Straight forward implementation

1. **ISH Field App**
   a) Map smallholder field outlines
   b) Collect basic smallholder data and other data if required
   c) Upload data to database
   d) Check automatically the field outlines against deforestation and protected areas

2. **Tracking App**
   a) Trace back raw materials back to smallholder level
   b) Identify the amount of delivered raw material per smallholder
   c) Monitor and analyze volumes of raw materials

➢ **Helps verifying sustainably produced feedstocks**

Many thanks for your attention!

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