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

**Source**: IDM, 25.7.2018

**Source**: Guardian, 2.3.2016
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
- First Gathering Point/ Mill
- Processing unit/ Refinery
- Manufacturer of final products
- Non certified farmers and traders / agents
  - Smallholders
  - Sub-agent
  - Trader / agent
  - Suppliers unknown?

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

### Supply Chain Mapping

### Delivery Documentation

<table>
<thead>
<tr>
<th>Tour ID</th>
<th>Total delivered (kg)</th>
<th>Farmer name</th>
<th>Delivered/farmer (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5.400</td>
<td>Farmer 1</td>
<td>2.500</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Farmer 2</td>
<td>2.900</td>
</tr>
<tr>
<td>2</td>
<td>3.800</td>
<td>Farmer 3</td>
<td>2.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Farmer 4</td>
<td>1.800</td>
</tr>
</tbody>
</table>

### Yield Projection

Starting point: Names of all farmers and / or locations of all sourcing areas
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)
## 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 / prioritization of farmers and related corrective actions and focused smallholder development improvement programs.

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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 deficiencies
   - Identifies groups with high yields who could act as a role model and provide learnings and knowledge transfer to their peers
   - Will allow to unmask fraudsters and exclude them from the supplier list

Source: Euler et al. 2016
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!