Implementing farm-to-fork traceability in Tanzania

Esbeth van Dyk
CSIR Centre for Logistics
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Structure

• Why traceability?
• Legislation
• Tanzania project
• Recordkeeping in coffee supply chain
Why traceability?
“Little Miss Muffet couldn’t eat curds and whey because of the high-fat content. She couldn’t eat fruit because of pesticides. She couldn’t eat eggs because of the cholesterol. To make a long story short, she ate the spider.”
Why traceability?

• Concerns for safety of consumers
  – Phytosanitary issues
  – Residues of crop protection products
  – Bio-terrorism

• Retailer requirements
  – EurepGAP, BRC

• EU Food Law

• US Bioterrorism Act
Traceability definition (1)

“ability to trace and follow a food, feed, food-producing animal or substance intended to be or expected to be incorporated into a food or feed in all stages of production, processing or distribution”

Regulation (EC) No 178/2002
Traceability definition (2)

“verifiable method of identification of fields, growers, locations and produce in all packaging and transport/storage configurations at all stages of the supply chain”

FPT Guidelines
Tracking Supports Logistic Control

From farm to fork
In future with Batch or Lot Identification
Tracing
Retraces the journey, events & conditions 
by reference to relevant data and records

From fork to farm

In future with
Batch or Lot
Recall
Legislation
EU Food Law

Regulation (EC) 178/2002, article 18 states that:

“the traceability of food … shall be established *at all stages* of production, processing and distribution.”

Came into effect on 1 January 2005
Article 14 – Food safety requirements

• Where any food which is unsafe is part of a batch, lot or consignment of food of the same class or description, it shall be presumed that all the food in that batch, lot or consignment is also unsafe, unless following a detailed assessment there is no evidence that the batch, lot or consignment is unsafe.
Article 18 – Traceability

- Food ... business operators shall be able to identify ... from whom they have been supplied / other businesses to which their products have been supplied ... (and) have in place systems & procedures which allow for this information to be made available ... on demand
Regulation (EC) No 178/2002

Article 18 – Traceability

• Food … shall be adequately labelled or identified to facilitate its traceability, through relevant documentation or information in accordance with … requirements …
Regulation (EC) No 178/2002

Article 19 - Responsibilities

• … it shall immediately initiate procedures to withdraw the food in question …

• … and shall participate in contributing to the safety of the food by passing on relevant information necessary to trace a food …

• Food business operators shall collaborate with the competent authorities …
US Bio-Terrorism Act

• Prescribes the “requirements regarding the establishment and maintenance, for not longer than two years, of records by persons (excluding farms and restaurants) who manufacture, process, pack, transport, distribute, receive, hold, or import food.”

• Recordkeeping took effect on 7 Feb 2005

• Compliance 12 – 24 months later depending on size of company

• Records must be available as soon as possible, not exceeding 24 hours from receipt of official request
EU Food Contact Materials

• Regulation (EC) 1935/2004
• Came into effect on 3 December 2004
• Article 17 (traceability) shall apply from 27 October 2006
• Objective – to ensure that food contact materials do not endanger human health or bring about unacceptable change in composition of foodstuffs
Traceability Requirement

One step back  One step forward
Traceability Requirement

One step back  One step forward

Internal Traceability
Traceability Requirement

One step back  One step forward

This is referred to as “chain traceability”
Tanzania project
Tanzania project

- DANIDA funded (Danish government)
- Business Sector Programme Support II
- 4 components: Improved access to markets
- 3 sub-components: product quality improvement, incl. farm-to-fork traceability
- Focus on main food exports: lake fish & seafood, coffee, tea, cashew nuts
- 3 year duration
## Volumes and values exported

<table>
<thead>
<tr>
<th>Product</th>
<th>Volume (Tons)</th>
<th>Value (US $ Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Traditional exports</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coffee</td>
<td>61 690</td>
<td>36 369</td>
</tr>
<tr>
<td>Cotton</td>
<td>81 890</td>
<td>33 300</td>
</tr>
<tr>
<td>Cashew nuts</td>
<td>188 360</td>
<td>75 871</td>
</tr>
<tr>
<td>Tobacco</td>
<td>24 920</td>
<td>24 152</td>
</tr>
<tr>
<td>Tea</td>
<td>22 020</td>
<td>24 305</td>
</tr>
<tr>
<td>Sisal</td>
<td>8 910</td>
<td>12 836</td>
</tr>
<tr>
<td>Cloves</td>
<td>-</td>
<td>1 244</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td>387 790</td>
<td>208 077</td>
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<tr>
<td><strong>Non-traditional exports</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufactures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish and crustaceans</td>
<td></td>
<td>??</td>
</tr>
<tr>
<td>Minerals</td>
<td></td>
<td>55.85</td>
</tr>
<tr>
<td>Petroleum products</td>
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<td>15.79</td>
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<tr>
<td>Other products</td>
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<td>133.01</td>
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<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td>327.45</td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td></td>
<td>763.76</td>
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</tbody>
</table>
Recordkeeping in Coffee Supply Chain
Coffee supply chain

- Producers
  - Primary Society
  - Private Buyer

- Transport
  - Union

- Coffee Curing
  - Coffee Auction

- Road / Rail Transport
  - Local Processing

- Port of Discharge
- Importer/ Roaster
- Port of Loading
- Vessel
Coffee producer

COFFEE CHERRY PICKING → PULPING → FERMENTING (Mucilage removal) → WASHING

STORAGE

DRYING
Coffee cherries
Coffee trees interplanted with bananas
Super-sized snail
Receiving coffee at primary society
Farmer registration form

- Name of farmer / company / estate
- Registration number and Code number
- Name of primary society / group
- Name of region, district, ward and village
- Acreage and number of trees under coffee
- Average yield
- Signature of farmer and authority
- Date
Primary society registration form

- Name of society / private buyer / group
- Registration number and Code number
- Location of society / warehouse
- List of villages with acreage and number of trees for each village
- Number of farmers / members
- Average quantity of coffee collected in 1 season
- Signature of primary society / private buyer / group and authority
- Date
Produce control sheet

- Date
- Name of farmer / member
- Registration number and Code number of farmer / member
- Society name and code number
- Village
- Quantity and Quality (grade)
- Receipt number and bag number
- Signatures (farmer, society)
Coffee curing facility

- CONDITIONING
- HULLING
- GRAVITY SEPARATION (DENSITY)
- SORTING / HAND PICKING (REJECTS)
- FILLING BAGS
- BULKING
- STORAGE
- FILLING BAGS
- AUCTION
- CATALOGUE PREPARATION
- PRE-AUCTION BULKING
- TCB

TCB
Coffee curing processing chart
Samples of coffee received
Additional information:

- Registration number and Code number of primary society
- Batch number
- Condition / cleanliness / cover of truck at loading (comment) – signed by primary society
- Condition / cleanliness / cover of truck at delivery (comment) – signed by clerk
- Name of clerk (who takes coffee to warehouse)
Bags of coffee received – in store
Huller – removing husks
Grader - grading according to size
Catador – grading according to weight
Filling temporary bags after grading
Coffee curing statement

• Name of society
• Registration number and Code number
• Season and Date
• Outturn number and Liquor number
• List of batches mixed
  – receipt number, number of bags, weight etc
• Production results
  – grade, number of bags, weight, etc
Coffee liquoring
Coffee tasting
Bulking instruction

- Date
- Grade
- Bulking instruction number
- List of Outturn numbers and Liquor numbers
- Owner, number of bags and weight
- Mark for resulting bags
- Final number of bags
Bulking number, grade and owner
Cured coffee waiting for auction
Coffee disposal instruction

- Name of exporter and warehouse
- Season and Date
- List of Auction and Lot numbers with corresponding Outturn and Liquor numbers
- Grade, number of bags and weight
- Shipping marks for resulting bags
- Final number of bags
Hand sorting of coffee bought at auction
Hand sorting
Filling bags after post-auction bulking
Bag shows “shipping marks”
Samples of export consignments
Info captured on sample
Next steps

- Redesign documents
- Send draft documents to coffee working group for comment
- Pilot implementation of documents
- Mock recall
- Modifications if needed
Thank you!

fevandyk@csir.co.za
021 888 2614 / 083 681 9598