Implementing farm-to-fork traceability in Tanzania

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August 2005



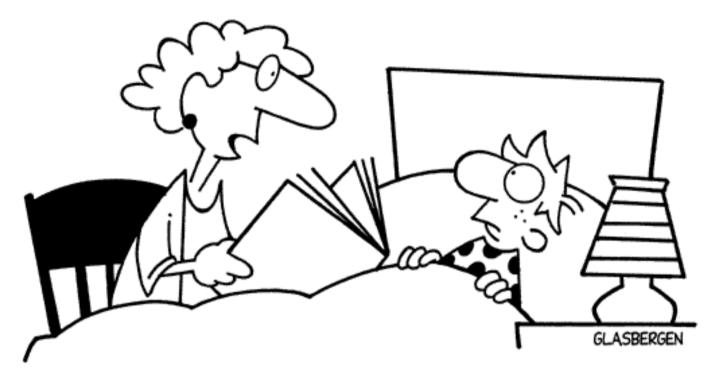
Structure

- 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

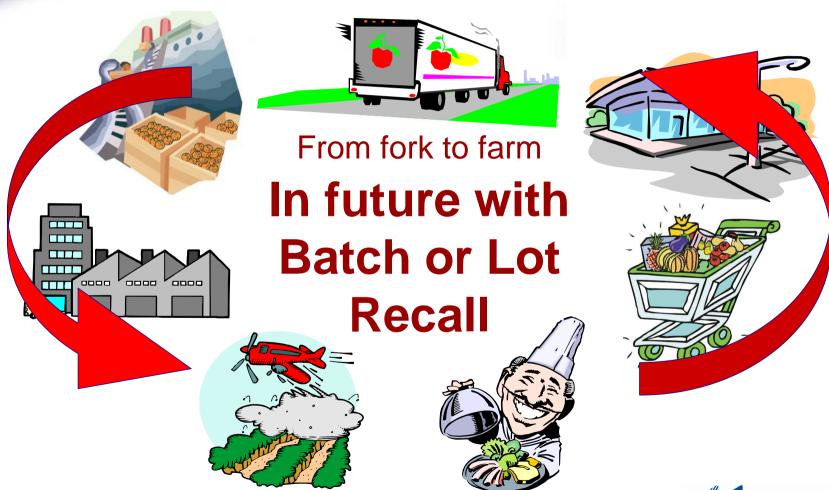
In future with Batch or Lot Identification





Tracing

Retraces the journey, events & conditions by reference to relevant data and records









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



<u>Article 18 – Traceability</u>

• 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



<u>Article 18 – Traceability</u>

 Food ... shall be adequately labelled or identified to facilitate its traceability, through relevant documentation or information in accordance with ... requirements ...



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

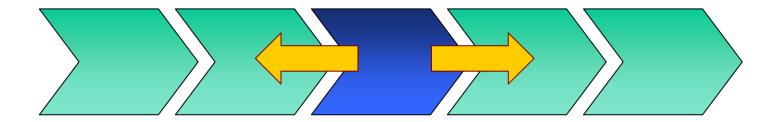
- Regulation (EC) 1935/2004
- Came into effect on 3 December 2004
- Article 17 (traceability) shall apply from 27 October 2006
- Objective to ensure that food contact materials do not endanger human health or bring about unacceptable change in composition of foodstuffs



Traceability Requirement

One step back

One step forward

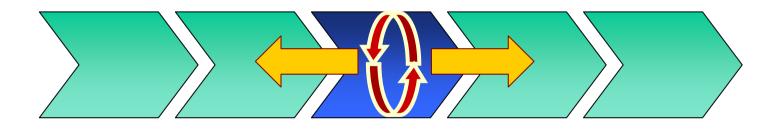




Traceability Requirement

One step back

One step forward



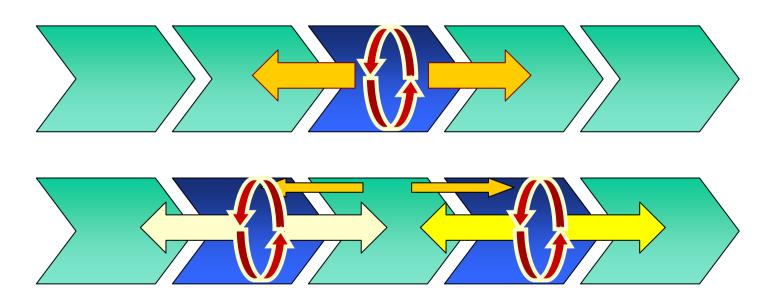
Internal Traceability



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

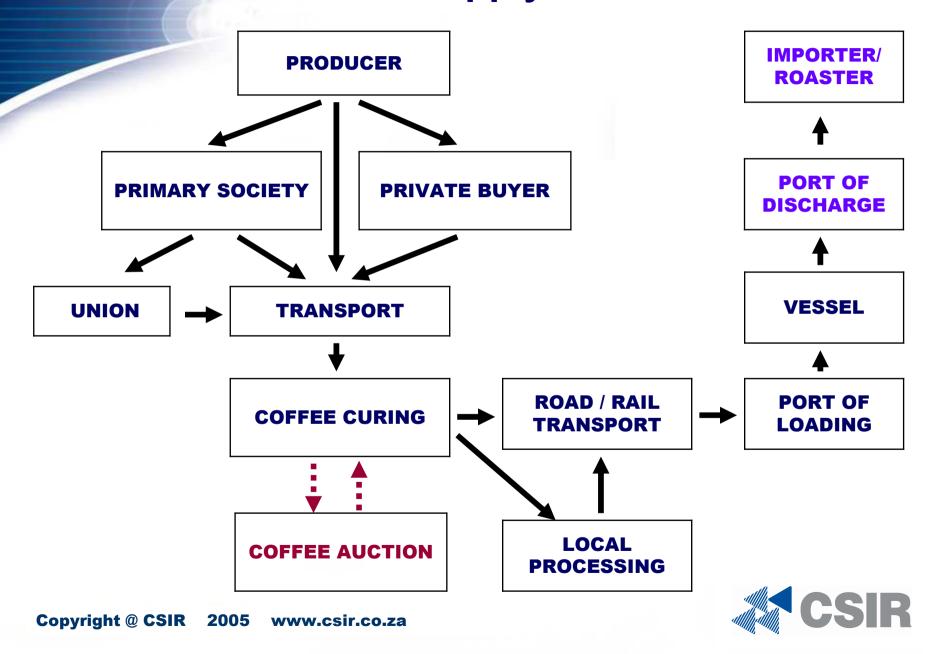
Product	Volume (Tons)		Value (US \$ Million)	
Traditional exports	1996	2002	1996	2002
Coffee	61 690	36 369	136.11	35.22
Cotton	81 890	33 300	125.33	28.66
Cashew nuts	188 360	75 871	97.77	46.59
Tobacco	24 920	24 152	49.24	55.52
Tea	22 020	24 305	22.54	29.64
Sisal	8 910	12 836	5.32	6.55
Cloves	-	1 244	-	3.96
Sub-total	387 790	208 077	436.31	206.14
Non-traditional exports				
Manufactures			122.80	65.90
Fish and crustaceans			??	114.15
Minerals			55.85	383.76
Petroleum products			15.79	0.00
Other products			133.01	132.67
Sub-total			327.45	696.48
Grand total			763.76	902.62



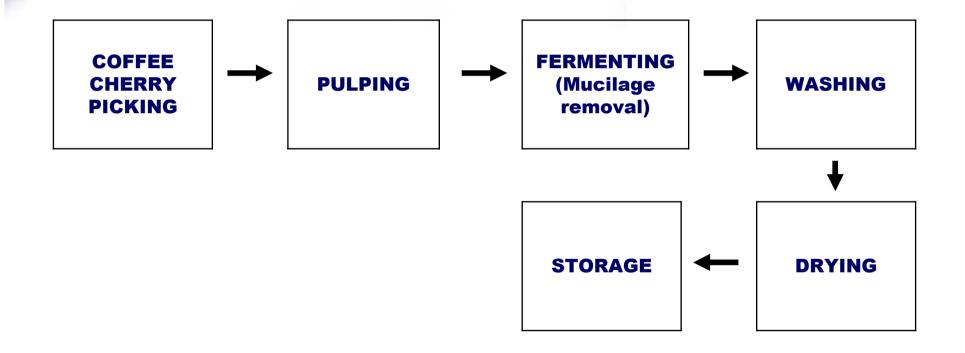
Recordkeeping in Coffee Supply Chain



Coffee supply chain



Coffee producer





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

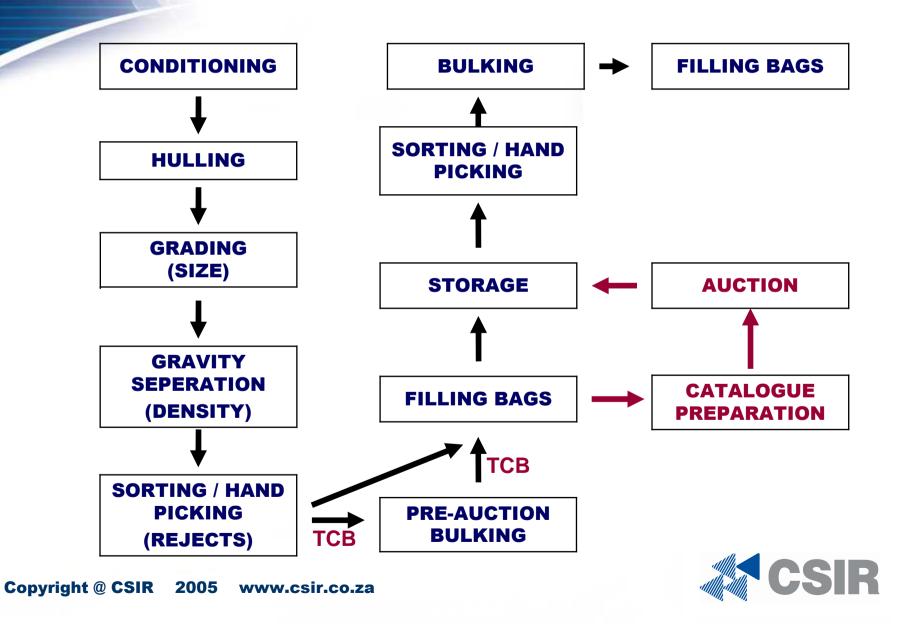


Produce control sheet

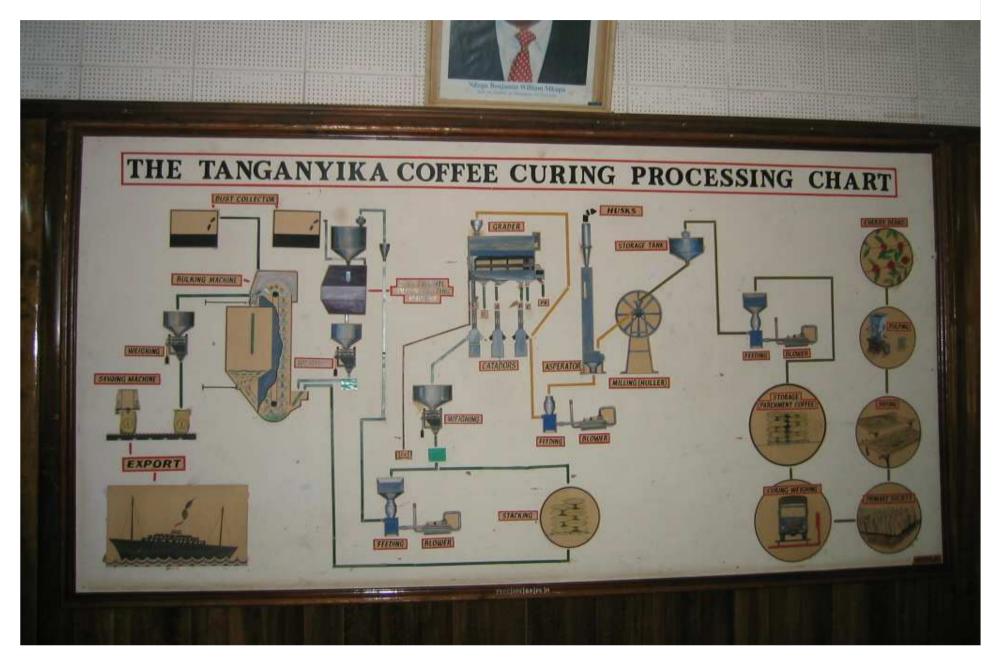
- Date
- Name of farmer / member
- Registration number and Code number of farmer / member
- Society name and code number
- Village
- Quantity and Quality (grade)
- Receipt number and bag number
- Signatures (farmer, society)



Coffee curing facility



Coffee curing processing chart



Samples of coffee received



Delivery note & Coffee receipt

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

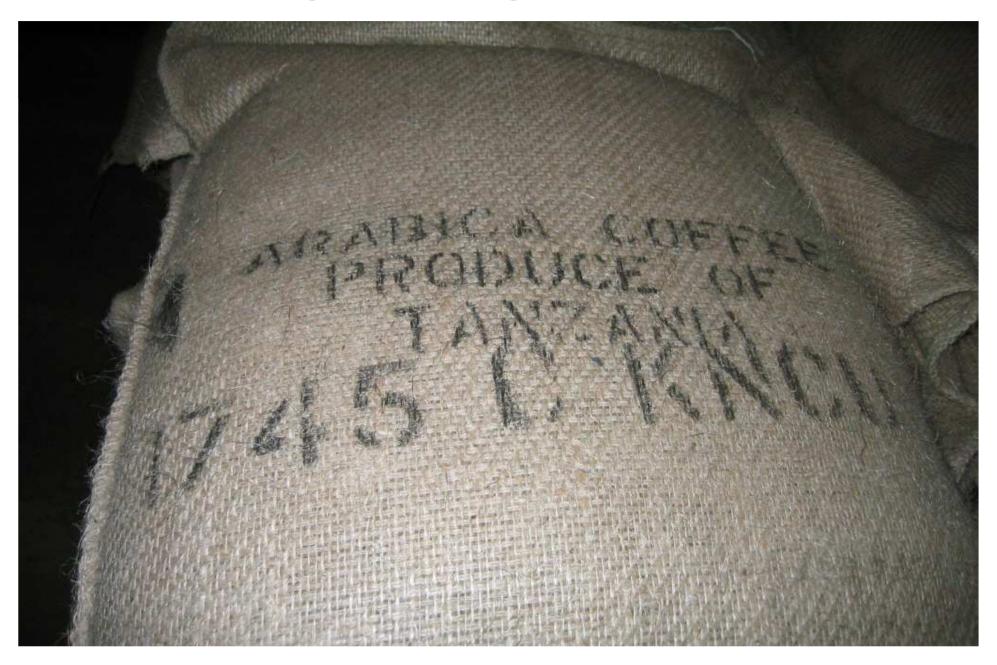


Bulking instruction

- 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



