

Foreword

The Philippines has very good potential for diversified, competitive and sustainable cacao industry with its basic strengths that include: available and highly suitable land areas such as mono-cropped coconut farms; cacao varieties that are at par, if not the best with the world collections; cost-efficient technology and verified practical farming practices; and, the continuously growing demand for quality cacao beans both for domestic and foreign markets.

Though the country is yet a small player in the global cacao industry, we have established linkages and attuned cacao production development direction towards the needs of the growing world market for cacao. In the last decade, there have been raising concerns on environmental damage, depleted resources, exploitation of child labor, endangered species, food safety and global warming. These issues are urging stakeholders to take sustainability into account due to both rising concerns of national and international regulations and a growing attention of end-consumers on the source, safety, quality and ethics that go into producing the food they eat and the products they buy. These concerns have shifted the traditional way of raw materials sourcing in the manufacturing and operation of most firms in the world to become more concerned with guaranteeing the economic, social and environmental sustainability of operations.

This growing concern could be addressed with employing traceability mechanisms that can serve as an ethical approach that provides certain consumers with food products and sufficient information about these products. This trend further ascertains the importance of traceability in identifying the relationship between sustainability and performance, where traceability is identified as one of the key elements in the performance for reaching sustainability.

A Technical Working Group (TWG) was created through Special Order No. 76 Series of 2013 to develop the draft Guidance Document. The TWG represented the relevant agencies of the Department of Agriculture (DA), the National Codex Organization (NCO) and non-profit organizations. Public consultations were conducted in Dipolog, Cebu, Davao and the National Capital Region (NCR), which represented the major hubs of cacao production and trade. Comments and recommendations were solicited from the relevant government agencies, academe, private sector and non-government organizations. Therefore, this Guidance Document is the final output of the public-private sector collaboration between and among the TWG and the relevant stakeholders who participated in the public consultations.

1. Introduction

In international trade, new legal requirements mostly from developed countries on traceability have recently been implemented and importing countries have placed increasing pressure on exporting countries to comply with traceability requirements. For example, European Commission (EC) Regulation No. 178/2002/EC or the General Food Law requires traceability to be established at all stages of the food chain from food production, processing and distribution. Similarly, the Bio Terrorism Act of the United States particularly Section 306 requires that all exporters register with the Food and Drug Administration (FDA), give notice prior to product arrival in the United States, and establish and maintain records of operations. The Country of Origin Labeling (COOL) program also requires that the country of origin should be indicated on the product's label for a number of agricultural products. COOL will have impacts on traceability requirements of the United States of America towards its supplier countries. The recently enacted US Food and Drug Administration's (USFDA) Food Safety Modernization Act under Section 806 specified as one of the eligibility requirements for the voluntary qualified importer program "traceability of articles of food, temperature controls and sourcing practices of the importer."

In the Philippines, there is currently no general legal requirement for the establishment of traceability system. Some sanitary and phytosanitary (SPS) technical regulations have limited traceability requirements. Traceability requirements are incorporated in national codes of practice (i.e. Good Agricultural Practices) but certifications for these codes are voluntary in nature. Traceability system requirements are complied only when required by the importing countries.

While the Philippines has been exporting cacao beans to the US and other markets, there is currently no established traceability system. Establishment of a traceability system should therefore be looked at a market access or market demand point of view. This document is therefore developed to provide a general overview on the principles, guidelines and procedures for establishing a traceability system in order for the Philippine cacao bean industry to comply with the importing country requirements. Likewise, this document will assist in complying with national food safety and quality standards and certification systems.

2. Scope and Use

This document elaborates a set of principles, guidelines and procedures to implement a traceability system for Philippine cacao beans. It can be applied to individual farms, farmer cooperatives, consolidators, fermentation and drying centers along the cacao food chain.

This document is intended to be flexible to allow cacao players to achieve its identified objectives. Primarily, a traceability system is a technical tool that will assist an organization in determining the history and location of the cacao beans produced or its relevant components. It is a tool to facilitate trade on the basis of accurate product description of cacao beans produced in the Philippines. Likewise, it is also a tool to protect consumers against deceptive marketing practices and food-borne hazards associated with cacao beans. However, it is insufficient to achieve a food safety objective and does not in itself improve food safety outcome unless combined with appropriate measures and requirements.

This document should be read in conjunction with the Codex Principles for Traceability/Product Tracing as a Tool within a Food Inspection and Certification System (CAC/GL 6-2006), the ISO Traceability in the Food and Feed Chain – General Principles and Basic Requirements for System Design and Implementation (ISO 22005:2007) and the Philippine National Standard: Code of

Practice for Philippine Cacao Beans (PNS/BAFPS 104:2011), where appropriate. Several widely available guidelines and handbooks on traceability may also be used.

3. Definitions

For the purpose of this document, the following terms are operationally defined:

Batch – set of units of a product, which have been produced and/or processed or packaged under similar circumstances.

Batch code- a unique code assigned to a batch.

Batch identification – process of assigning a unique code to a batch.

Crop Diary- recorded information that relates to cacao farm establishment and rehabilitation, cacao farm maintenance, soil management and fertilization.

Crop Scouting Sheet - recorded information that relates to integrated pest management and crop protection.

Data -recorded information.

Farm code- a code assigned to a farmer for identification purposes.

Flow of materials – movement of any materials at any point in the food chain.

Food chain – sequence of the stages and operations involved in the production, processing, distribution and handling of food, from primary production to consumption.

Internal audit – self-audit of the established traceability system by the farmer or farmer cooperative.

Internal traceability – traceability between the received unit (or raw material unit) and the sold unit (or product unit) at the food operator level.

Location – place of production, processing, distribution, storage and handling from primary production to consumption.

One-step-back traceability – ability to identify the supplier of the units they have received.

One-step-forward traceability – ability to identify the buyer of the units they have sold.

Organization – group of people and facilities with an arrangement of responsibilities, authorities and relationships.

Philippine cacao beans – cacao beans produced/grown in the Philippines that have been fermented and dried.

Plot/Parcel – a defined area of cacao trees with uniform or similar cultural management practices (including integrated pest management and crop protection application).

Process – set of interrelated or interacting activities, which transforms inputs into outputs.

Product – result of a process.

Recall – procedure to withdraw food from the market where the food has left the immediate control of the initial food business and where product may have reached the consumer.

Traceability/product tracing – the ability to follow the movement of a food through specified stage(s) of production, processing and distribution.

Tracing (backward tracing) - the ability to take a final product and identify what raw materials were used to produce the product.

Tracking (forward tracking) – the ability to take a single raw material (e.g. seed) and track its use through the production operation.

Traceability system – totality of data and operations that is capable of maintaining desired information about a product and its component through all or part of its production and utilization chain.

Withdrawal – procedure to withdraw food from the market where the food has left the immediate control of that initial food business.

4. Principles, Objectives, Design of a Traceability System

4.1 General

The traceability system should be able to document the history of the Philippine cacao beans and/or locate the cacao beans in the food chain. Traceability is needed to control crisis situations and in enabling withdrawals, deliver precise information to consumers and competent authorities, for safety of consumers and operations, for information acquisition of authorities, and to prevent unnecessary big market disturbances. Benefits of implementing a traceability system in the cacao chain include improving the cacao supply chain management, facilitates trace back of the Philippine cacao beans based on food safety and quality attributes, differentiates and markets Philippine cacao beans with subtle or undetectable quality attributes, lowers the cost of distribution systems, reduces recall expenses, minimizes the spread of contagious diseases, and opens new markets.

4.2 Principles

The traceability system should be:

- Verifiable
- Applied consistently and equitably
- Results-oriented
- Cost effective
- Practical to apply

- Compliant with any applicable regulations or policy
- Compliant with defined accuracy requirements

4.3 Objectives

It is necessary to identify the specific objectives to be achieved, taking into consideration the principles identified. Examples are the following:

- Support food safety and/or quality objectives;
- Meet customer specification;
- Determine history or origin of the cacao beans;
- Facilitate withdrawal and/or recall of the cacao beans;
- Identify the responsible organizations in the cacao chain; and
- Facilitate the verification of specific information about the cacao beans;
- Communicate information to relevant stakeholders and consumers;
- Fulfill any local, regional, national or international regulations or policies, as applicable; and
- Improve the effectiveness, productivity and profitability of the organization

4.4 Design

The traceability system may apply to all or specified stages of the cacao chain as appropriate to the identified objectives. It should be able to at least identify at any specific stage of the cacao chain from where the Philippine cacao beans came from (one step back) and where it went (one step forward). The objectives, scope and procedures should be transparent and made available to the buyer, when needed.

In designing the traceability system, the following should be included:

- 4.4.1 Objectives - see Section 4.3 for the examples
- 4.4.2 Regulatory and policy requirements relevant to traceability - *i.e.* Philippine National Standard (PNS) for Cacao Beans, Code of Practice for Philippine Cacao Beans, Good Agricultural Practices, exporting country's requirements (US and EU)
- 4.4.3 Product - *i.e.* Philippine cacao beans
- 4.4.4 Position in the cacao chain - *i.e.* identify supplier (cacao farmers) and customer (cacao bean buyers)
- 4.4.5 Flow of materials - *i.e.* documented process flow
- 4.4.6 Information requirements - *i.e.* information obtained from the cacao farmer or consolidator, information collected from the fermentation and drying facility and information to be provided to the Philippine cacao bean buyers
- 4.4.7 Procedures - *i.e.* document flow of materials and related information, including document retention and verification to include product definition, lot definition and identification, documentation of flow of materials, and information including media for recordkeeping like forms or logbooks
- 4.4.8 Documentation - minimum appropriate documentation are the description of the relevant steps in the cacao chain, description of the responsibilities for the management of the traceability data, written or recorded information documenting the traceability activities, flows and results of the traceability verification and audits, documentation addressing action taken to manage non-conformity related to the established traceability system and document retention times

- 4.4.9 Cacao chain coordination – coordination of the traceability design elements indicated above with other organizations

5. Guidelines for the Establishment of a Traceability System

The organization shall demonstrate commitment to the implementation of a traceability system by assigning management responsibilities and providing resources. Following the design and development of a traceability system, the organization shall implement the following steps using appropriate tools to trace, record and communicate information:

- 5.1 Traceability plan – to include all the identified elements indicated in Section 4.4
- 5.2 Responsibilities – communicate tasks and responsibilities to its personnel
- 5.3 Training plan – develop and implement a training plan for all affected personnel
- 5.4 Monitoring – establish a monitoring scheme
- 5.5 Key performance indicators – establish key performance indicators to measure the effectiveness of the system
- 5.6 Internal audits – conduct internal audits at planned intervals, to assess the effectiveness of the system to meet established objectives
- 5.7 Review – review the traceability system at appropriate intervals through the following: traceability test results, traceability audit findings, changes to product or processes, traceability-related information provided by other organizations, corrective actions related to traceability, new or amended regulations affecting traceability and new statistical evaluation methods

6. Procedures for the Establishment of a Traceability System

6.1 Farm Level Procedures

- 6.1.1 Describe the raw materials and the finished product you want to include in the traceability system (*with reference to Section 4.4.3*).

Example: *Raw material – cacao seedlings* *Finished product – wet cacao beans*

- 6.1.2 Determine objectives and target regulatory requirements (or other standards) and company policy which is met by the proposed traceability system (*with reference to Sections 4.4.1 and 4.4.2*)

Example: *Fulfill international requirements on traceability (US and EU) and/or existing Philippine national standards/technical regulations or comply with the GAP certification system requirements*

6.1.3 Draw a flowchart of the process (*with reference to Section 4.4.5*).

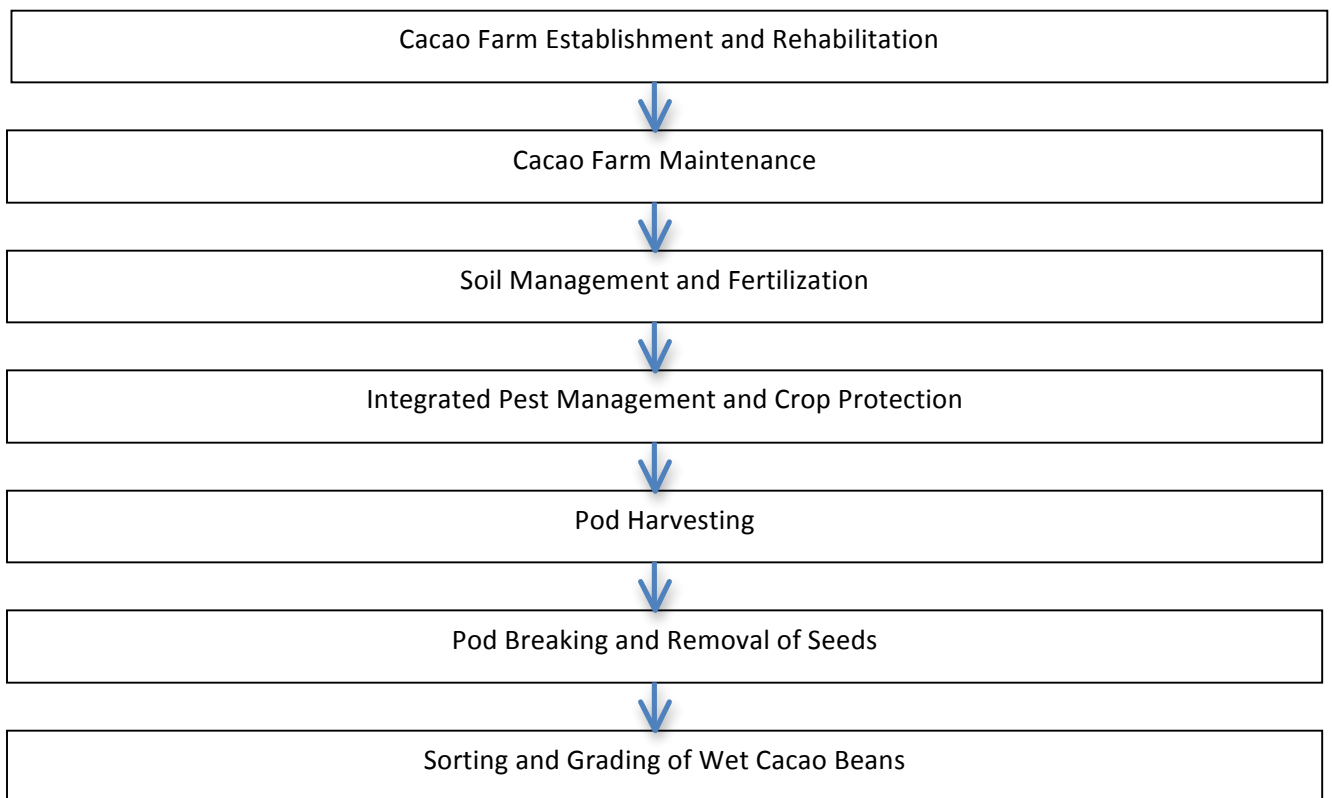


Figure 1: Sample Process Flow @ Cacao Farm Level.

6.1.4 Identifying each step and the documents/records/sheets currently used in each step (with reference to Sections 4.4.7 and 4.4.8)

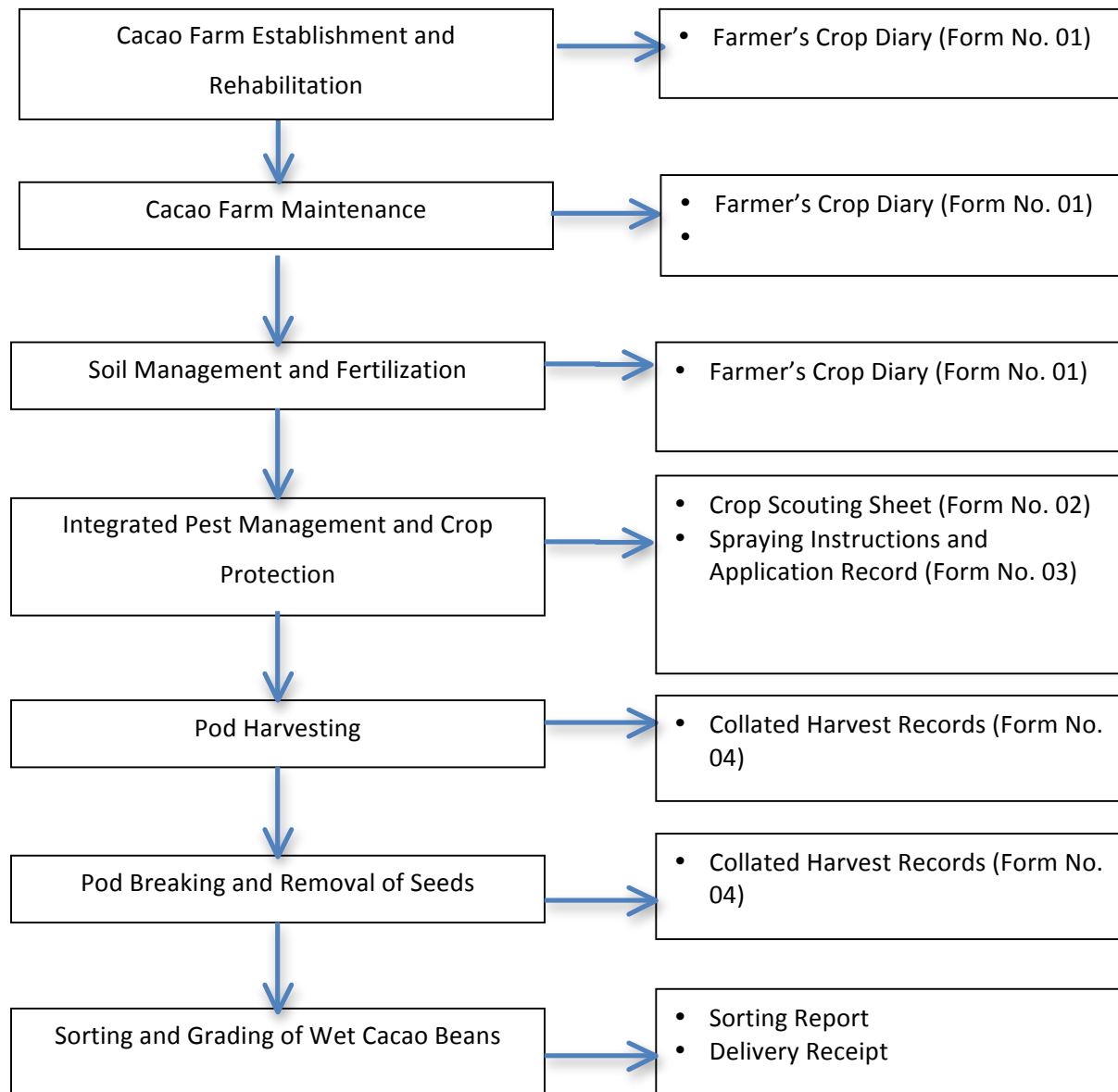


Figure 2. Sample Philippine Cacao Beans Flow Chart and Traceability Records (Cacao Farm Level).

Depending on the readiness of the cacao farmers, the following minimum farm records may be used:

1. Farmer's Crop Diary (Form No. 01);
2. Crop Scouting Sheet (Form No. 02);
3. Pesticide Spray Instruction and Application Records (Form No. 03); and
4. Collated Harvest and Delivery Records (Form No.04).

Form No. 01

Farmer's Crop Diary

Crop Diary No: _____

Farm Code: _____

Please record all activities carried out on ALL CROPS on the farm

Day & Date	Plot/ Parcel No.	Crop	Activity Carried Out	No of Stems/ Trees	Materials Used	Materials Source	Amount Used	Work Done by	Comments (man hours etc.)

Reference: Graffham, Andrew John, PhD. 2011. Tools and Options for Traceability of Banana and Mango. A Final Report under the European Union (EU) Trade Related Technical Assistance Project 2.

Form No. 02

Crop Scouting Sheet

Crop Diary No: _____ Farmer Code: _____ Date: _____
 Crop: _____ Plant Week: _____ Plot/Parcel No.: _____ No. Stems/Trees: _____

Plot/ Parcel No. Problem	1	2	3	4	5	6	7	8	9	10

Comments: _____

Request for Confirmation of Problem(s) or Pesticide Treatment:

Signed: _____ (Farmer) Date: _____

Action Recommended: No Action Spray treatment: Job Sheet No.: _____ Other Action: _____

Extension Officer/Farmer Name: _____ Signed: _____ Date: _____

Reference: Graffham, Andrew John, PhD. 2011. Tools and Options for Traceability of Banana and Mango. A Final Report under the European Union (EU) Trade Related Technical Assistance Project 2.

Form No. 03**Pesticide Spraying Instructions and Application Records**

Farmer: _____

Farm Code: _____

Crop: _____

Crop Diary No: _____

Plant Week: _____

Field No: _____

Target Pest(s): _____

Reason for Spraying: Planned prophylactic Meteorological Scouting

Area/Size of Plot/Parcel to be Sprayed: _____

Equipment to use: Knapsack Others: _____ (power sprayers, etc.)

Nozzle type: _____ Nozzle output required: _____

Chemicals/Botanicals to Use: List in order of addition to the spray tank

Chemical Name/ Botanical	Active Ingredient	Mandatory Label Application (Rate)	Number of Tanks to Use	Amount per Liter per Tank	Harvest Interval
1.					
2.					
3.					
4.					

Mixing instructions : Apply as Single Chemical Apply as a Tank Mix

Authorized by: _____

Date: _____

Farmer: _____

To be completed by the Spray Man after spraying

Name of Spray Man: _____

Total Chemicals/Botanicals used:

Chemical 1: _____

Chemical 2: _____

Chemical 3: _____

Chemical 4: _____

Botanical Spray 1: _____

Botanical Spray 2: _____

Knapsack Used: No. _____

No. of Tanks Used: _____

Signed: Spray Man: _____

Farmer: _____

Date of Job Completion: _____

Date of Next Harvest: _____

Reference: Graffham, Andrew John, PhD. 2011. Tools and Options for Traceability of Banana and Mango. A Final Report under the European Union (EU) Trade Related Technical Assistance Project 2.

Form No. 04

Collated Harvest and Delivery Records

Farmer: _____ Farm Code: _____

Crop: _____

Crop Diary No.: _____

Date Delivered	Plot/ Parcel No.	No. of Trees Harvested	Harvest Date	Receiving Report Form No. *	Net Weight Delivered	Receiving Officer	Comments
Total Yield							

* code number to be given by the farmer cooperative/consolidators/fermentation and drying centers

Net Yield per Tree: _____

Reference: Graffham, Andrew John, PhD. 2011. Tools and Options for Traceability of Banana and Mango. A Final Report under the European Union (EU) Trade Related Technical Assistance Project 2.

6.1.5 Determine what data should be collected from your suppliers, kept and shared with your customers (*with reference to Sections 4.4.4 and 4.4.6*).

Table 1. Data to be Collected, Kept and Shared at the Farm Level.

Data to Collected by the Cacao Farm	Data to Keep (Record and Maintain) by the Cacao Farm	Data to Share with the Consolidator/Fermentation and Drying Center
<p style="text-align: center;"><u>From the Cacao Farm's Immediate Suppliers</u></p> <ol style="list-style-type: none"> 1. Their Identity 2. Product/Material Sourced <p style="text-align: center;"><u>From the Consolidators/Fermentation and Drying Centers</u></p> <ol style="list-style-type: none"> 1. Their Identity 2. Their Address 	<ol style="list-style-type: none"> 1. Farmer's Crop Diary (Form No. 01) 2. Crop Scouting Sheet (Form No. 02) 3. Pesticide Spray Instruction and Application Records (Form No. 03) 4. Collated Harvest and Delivery Records (Form No. 04) 	<p style="text-align: center;"><u>With the Farm's Immediate Suppliers</u></p> <p style="text-align: center;">None</p> <p style="text-align: center;"><u>With the Consolidators/Fermentation and Drying Centers</u></p> <ol style="list-style-type: none"> 1. Farm Identity and Address 2. Quantity (and Units of Measure) of Each Batch

6.1.6 Determine a procedure to assign a batch identifier (*with reference to Section 4.4.7*).

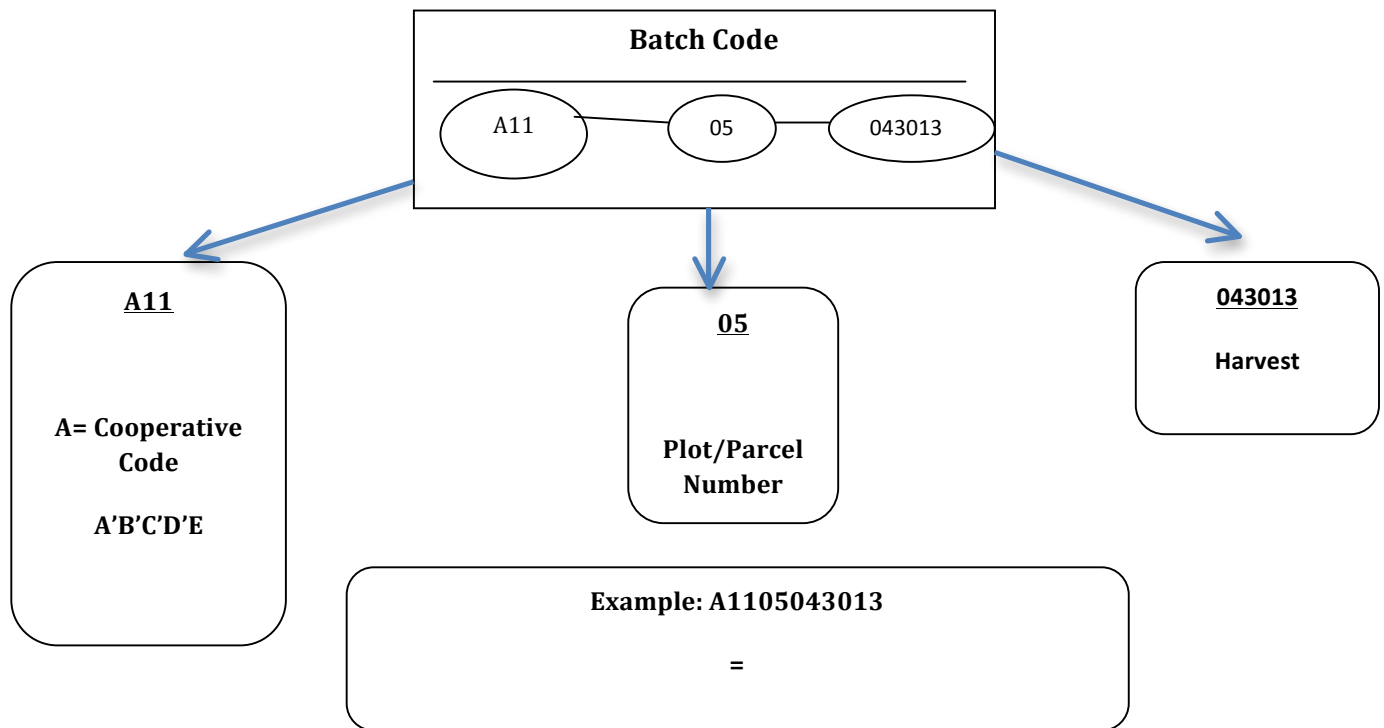


Figure 3: Proposed Procedure for Farmer's Batch Code.

The minimum requirement under the EC Regulation for fresh produce requires exporters to follow Good Agricultural Practices (GAP), which ensures food safety. This includes not harvesting crops before carrying out pesticide residue analysis. Traceable unit in cacao should be from one production unit (one plot/parcel) in one (1) farm and is called a batch. Each batch is given a certain code called a Batch Code. This batch can be traced or tracked.

At the farmer's level, a management system should be implemented for each single plot, which includes:

- Authorities and responsibilities
- Crop control methods
- Spraying program control (before harvest)
- Analysis of results for pesticide residues before harvest

For small cacao farms, the following data should be submitted to the cooperative/consolidator/fermentation or drying center:

- Farmer name
- Farm code
- Cooperative name and code (if applicable)
- Date of harvest
- Weight delivered
- Batch code

6.1.7 Be sure that internal traceability is also considered: the primary product batch identifier should be linked to any changes that may have taken place in the cacao cooperative/consolidators/fermentation and drying center (*with reference to Section 4.4.9*).

Example: The batch code at the farm level should be reflected in the receiving report of the consolidators/fermentation and drying center and should be linked with the processes such as fermentation, drying, sorting, grading and packing

6.1.8 Link any relevant food safety data to incoming materials and finished products (*with reference to Section 4.4.9*).

Example: pesticide residue and Ochratoxin A (OTA) analysis of the fermented and dried cacao beans should be linked to the raw material (wet beans source)

6.1.9 Determine the protocol for data retrieval (where data is stored, how long it is retained and who has access to the information, etc.,*with reference to Section 4.4.7*).

Example: Farm records (Farmer's Crop Diary, Crop Scouting Sheet, Pesticide Spray Instruction and Application Records and Collated Harvest and Delivery Records) should be kept at the farmer's/owner's residence for at least 6 months or the shelf-life of the product plus six (6) months

6.1.10 Assign responsibilities within the farm organization for the various parts of the traceability system (*with reference to Section 4.4.8*).

Example: The farmer/owner should have the main responsibility in the management of his farm's traceability. With the presence of an operation's manager and other agricultural workers, the farmer/owner may delegate responsibilities in farm recording and ensuring batch codes are properly established.

6.1.11 Develop a training program for cacao farmers (*with reference to Section 4.4.8*).

Example: Training programs on traceability should be in conjunction with trainings related to food safety and quality such as Good Agricultural Practices or GAP (PNS/BAFPS 49:2007/2011), which is currently being expanded to GAP for Crops and Code of Practice for Cacao Beans (PNS: BAFPS 104:2011) since traceability is one of the requirements of these codes of practice. Training should cover an overview of the principles and concepts of traceability, assigning of codes for batch identification, the use of traceability forms

and other traceability tools, farm recordkeeping, etc. Furthermore, training should be conducted on a farmer cooperative level.

6.2 Cacao Cooperative/Consolidators/Fermentation and Drying Centers Procedures

6.2.1 Describe the raw materials and the finish product you want to include to traceability system (*with reference to Section 4.4.3*).

Example: Raw material: Wet cacao beans taken out of pods within 16 hours

Finished Product: Fully fermented and properly dried cacao beans

6.2.1 Determine objectives and target regulatory requirements (or other standards) and company policy which is met by the proposed traceability system (*with reference to Sections 4.4.1 and 4.4.2*).

Example: Fulfill international requirements on traceability (US and EU) and/or existing Philippine national standards/technical regulations or comply with certification system requirements

6.2.3 Draw a flowchart of the process (*with reference to Section 4.4.5*).

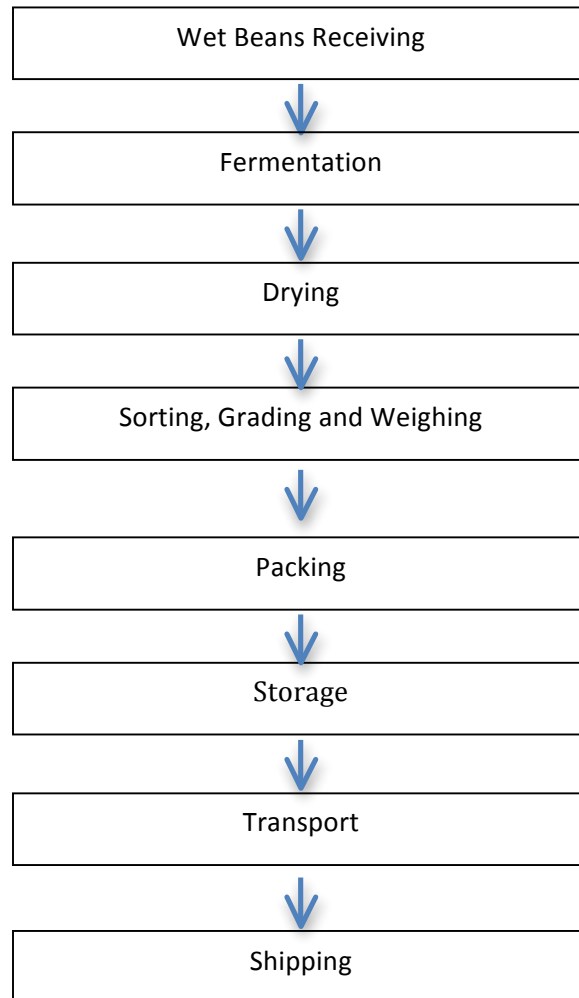


Figure 4. Sample Process Flowchart @ Cacao Cooperative/Consolidator/ Fermentation and Drying Centers Level.

6.2.4 Identifying each step and the documents/records/sheets currently used in each step (with reference to Sections 4.4.7 and 4.4.8)

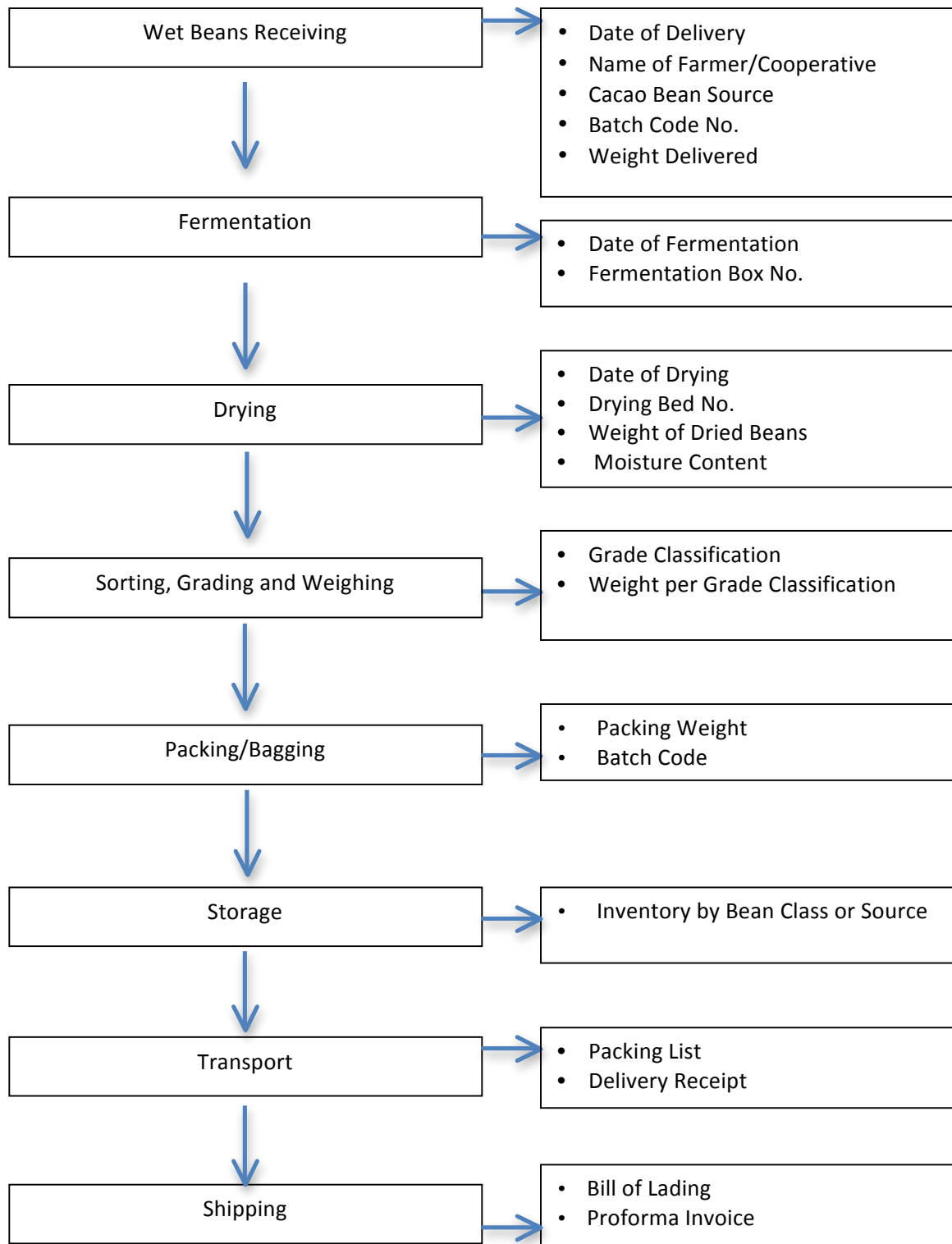


Figure 5. Sample Philippine Cacao Beans Flowchart and Traceability Records.

The following examples of cacao cooperative/consolidators/ fermentation and drying center traceability forms may be used:

1. Receiving Report (Form No. 05); and
2. Philippine Cacao Beans Production Report (Form No.06).

6.2.5 Determine what data should be collected from your suppliers, kept and shared with your customers (*with reference to Sections 4.4.4 and 4.4.6*).

Table 2. Data to Collect, Keep and Share @ the Cacao Cooperative/ Consolidator/ Fermentation and Drying Centers Level

Data to Collect from the Cacao Farms	Data to Keep, Record and Maintain (Cooperative/ Consolidator/Fermentation and Drying Centers)	Data to Share (Cacao Beans Buyer)
<ol style="list-style-type: none"> 1. Name of Farmer/Farm 2. Farmer Code 3. Farm Location 4. Harvest Date 5. Weight Delivered 	<ol style="list-style-type: none"> 1. Receiving Report (Form No. 05) 2. Cacao Beans Production Report (Form No. 06) 	<ol style="list-style-type: none"> 1. Product Description 2. Grade Classification 3. Batch Code Number 4. Weight 5. Sender Identifier 6. Shipment Identifier (as indicated in the Bill of Lading and Proforma Invoice)

6.2.6 Determine a procedure to assign a lot identifier that can be linked to lot identifiers of incoming wet beans (*with reference to Section 4.4.7*).

Example: Proposed Procedure for Cacao Cooperative's Code

Step 1: Establish grouping of farmers per cooperative/association (identified as group A,B,C,D, etc.).

<i>Name of Cooperative</i>	<i>Proposed Alpha Code</i>
Balacan Multi-Purpose Cooperative	A
Farmer's Development Cooperative	B
Panipasan Marketing Cooperative	C
Lower Sirib Multi-Purpose Cooperative	D
Sirib Multi-Purpose Cooperative	E
Subasta Multi-Purpose Cooperative	F
UNICARBAI Multi-Purpose Cooperative	G

Form No. 05

Control No. _____

Receiving Report

Name of Cooperative/Association/Consolidator/Fermentation and Drying Center:

Location: _____

Name	Farmer Batch Code	Weight	Proceeds	Amount Paid to Farmers	Consolidator Share	Capital Build-Up/ General Fund	Coop/ Association Income	Remarks

Prepared by:

Noted by:

Operations Manager

Step 2: Establish numbering system for each farmer belonging to each cooperative (identified as farmer 01, 02, 03, etc.)

Example: Panipasan Multi-Purpose Cooperative: C

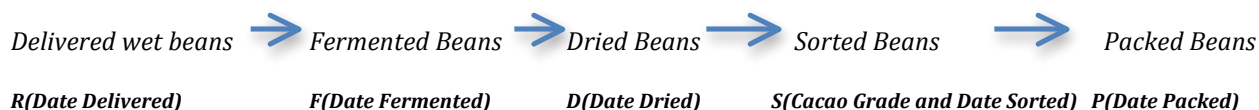
Code No.	Name	Address	Contact Number	No. of Cacao Bearing Trees	Area (ha)
01	Rabaya, Felipe R.	Panipasan, Marilog, Davao City			
02	Mitchao, Dan D.	-do-			
03	Darato, Vicente R.	-do-			
04	Arellano, Mario C.	-do-			
05	Villanos, Pedro N.	-do-			

Step 3: Establish coding system for harvest dates/date of production (e.g. 043013 for 30 April 2013 harvest date)

Example: Proposed Code: C01043013 - represents Mr. Felipe Rabaya from Panipasan Multi-Purpose Cooperative, which harvested his cacao beans last 30 April 2013.

6.2.7 Be sure that internal traceability is also considered: the finished product lot identifier should be linked to any changes that may have taken place in your facility (*with reference to Section 4.4.9*).

Example: Establish code to relate the following stages of cacao beans:



6.2.8 Link any relevant food safety data to incoming materials and finished products (*with reference to Section 4.4.9*).

Example: moisture content, microbiological and chemical (heavy metals, Ochratoxin A, etc.) analysis of the final product (cacao beans) should be linked to the raw material (wet beans source)

6.2.9 Determine the protocol for data retrieval (where data is stored, how long it is retained and who has access to the information, etc., *with reference to Section 4.4.7*).

Table 3. Records Management Database

Type of Data	No. of Years to be Retained	Record Custodian	Record Location
Delivery/Receiving Records	2 years	Administrative Clerk	Office

Note: In general, records should be kept for the period of the product shelf-life plus six (6) months i.e. 1 year and 3 months to 1 year and 6 months

- 6.2.10 Assign responsibilities within the organization for the various parts of the traceability system (*with reference to Section 4.4.8*).

Example: The Cooperative President/Manager may be designated as the Team Leader with the Operations Manager and Administrative Clerks as members of the Traceability Team.

- 6.2.11 Develop a training program for these individuals (*with reference to Section 4.4.8*)

Example: Training programs on traceability should be in conjunction with trainings related to food safety and quality such as Good Agricultural Practices or GAP (PNS/BAFPS 49:2007/2011), which is currently being expanded to GAP for Crops and Code of Practice for Cacao Beans (PNS: BAFPS 104:2011) since traceability is one of the requirements of these codes of practice. Training on traceability may cover the following topics:

- Traceability Definition;
- Traceability System Principles, Objectives, General Design Considerations and Characteristics;
- Elements of Identification;
- Traceability and Trade;
- Basic Concepts of Linkage of Information;
- Implementation of a Traceability System – assigning of codes for lot identification, traceability forms and other traceability tools, recordkeeping

- 6.2.12 Use the traceability decision tree as a validation method to review your traceability system in order to resolve the discrepancies, if any (*with reference to Section 4.4.8*).

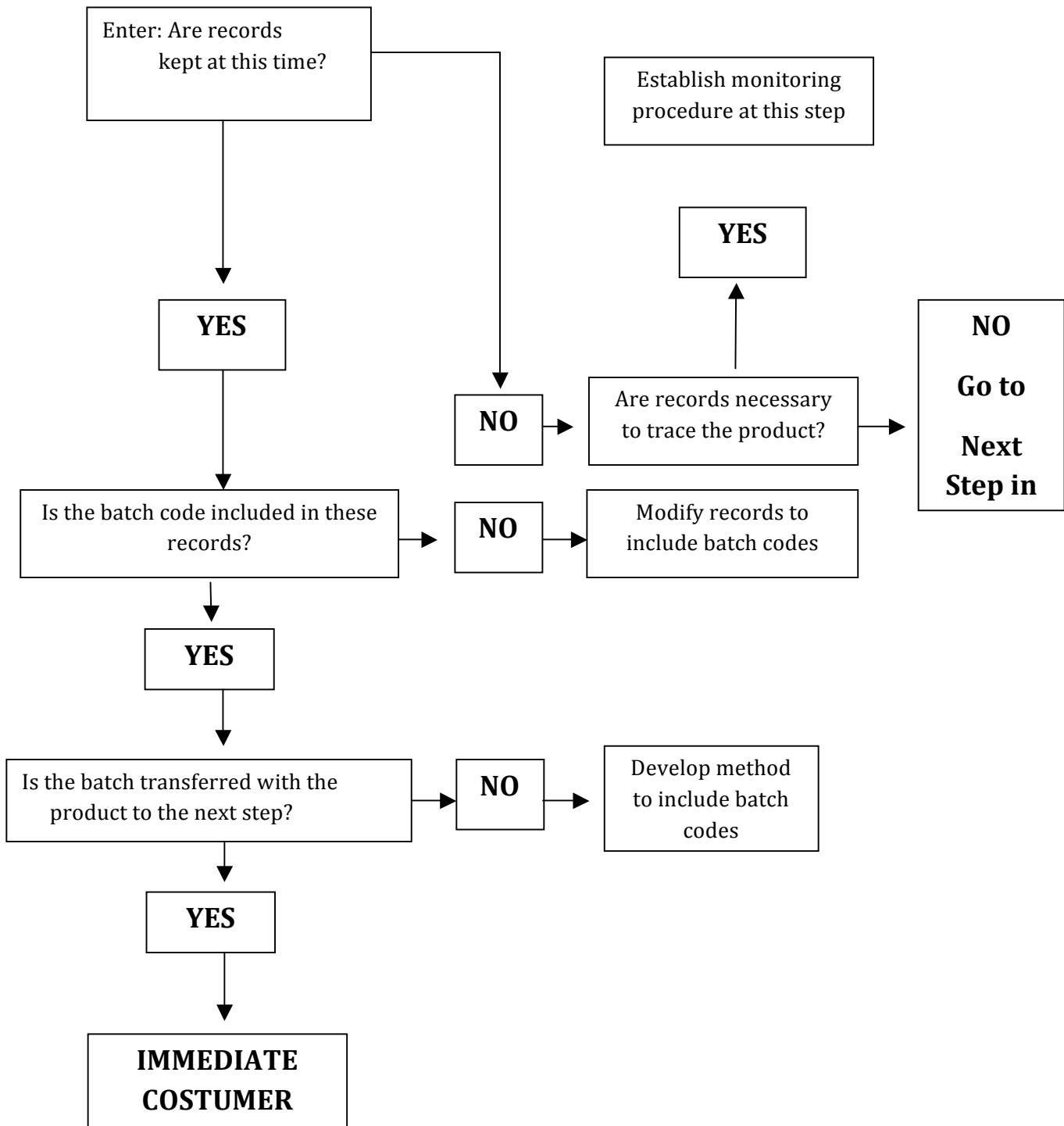


Figure 6. Traceability Decision Tree (Food and Agriculture Organization, FAO, 2009).

6.2.13 Use the audit checklist as a verification method of the traceability system both now and after any changes in your traceability system to see how well the system is working, and if it is improved (*with reference to Section 4.4.8*).

Table 4. Basic Traceability And Product Recall System Checklist (FAO, 2009).

Traceability and Product Identification
<p>Product Code Identification</p> <ul style="list-style-type: none"> ✓ Raw material have certificate of origin. All raw materials are of known origin and approved in the country of production and importing country ✓ Raw materials, work in process and final products have a consistent coding system ✓ Batch code is known, visible and documented for product in every step from entry of a raw materials until dispatch ✓ Units/batches can be easily traced and tracked at any given time through the established documentation and record keeping system ✓ Waste is segregated and identified and isolated from safe product ✓ Rejected product/ product under inspection is segregated from approved product ✓ Each packaged food has permanent, legible code marks or lot numbers on the packages. This coding system and labeling complies with legal and customer requirements ✓ The code identifies the establishment, the day, month and year in which the food was produced ✓ Code marks are used and the exact meaning of the code are available
Recalls
<p>Procedure</p> <ul style="list-style-type: none"> - Time written procedure includes: <ul style="list-style-type: none"> ✓ The person or persons responsible for handling recalls ✓ The roles and responsibilities for coordination and implementation of a recall ✓ Methods to identify, locate and control recalled product ✓ A requirement to investigate other products that may be affected by the hazard and should be included in the recall ✓ Procedure for monitoring the effectiveness of the recall (e.g. effectiveness check to the appropriate level of distribution specified in the recall notice ✓ The amount of product produced, in inventory and distributed ✓ Name, size, code, or lot numbers of food recalled, area of distribution of product ✓ Reason for the recall <p>Recall Capacity</p> <ul style="list-style-type: none"> - The manufacturer is capable of producing accurate information on a timely basis to verify that all affected product can be rapidly identified and removed from the market place - This can be demonstrated by the manufacturer as follows: <ul style="list-style-type: none"> ✓ Records of customer names, addresses and telephone numbers are available for the lot tested ✓ Periodic testing to verify the capability of the procedure to rapidly identify and control a code lot of potentially affected product and reconcile the amount of product produced, in inventory, and distribution. Any deficiencies in the recall procedure are identified and corrected.

6.2.14 Recording the results and assessing corrective actions

Table 5. Record of Results and Corrective Actions Taken (adopted from FAO, 2009).

Traceability Parameters	Yes/ Complied	No/Not Complied	Corrective Action/s Taken	Remarks
<i>Product Code Identification</i>				
1. Raw material have certificate of origin. All raw materials are of known origin and approved in the country of production and importing country				
2. Raw materials, work in process and final products have a consistent coding system				
3. Batch code is known, visible and documented for product in every step from entry of a raw materials until dispatch				
4. Units/batches can be easily traced and tracked at any given time through the established documentation and record keeping system				
5. Waste is segregated and identified and isolated from safe product				
6. Rejected product/ product under inspection is segregated from approved product				
7. Each packaged food has permanent, legible code marks or lot numbers on the packages. This coding system and labeling complies with legal and customer requirements				
8. The code identifies the establishment, the day, month and year in which the food was produced				
9. Code marks are used and the exact meaning of the code are available				
<i>Recall Procedure</i>				
10. The person or persons responsible for handling recalls				
11. The roles and responsibilities for coordination and implementation of a recall				
12. Methods to identify, locate and				

control recalled product				
13. A requirement to investigate other products that may be affected by the hazard and should be included in the recall				
14. Procedure for monitoring the effectiveness of the recall (e.g. effectiveness check to the appropriate level of distribution specified in the recall notice				
15. The amount of product produced, in inventory and distributed				
16. Name, size, code, or lot numbers of food recalled, area of distribution of product				
17. Reason for the recall				
<i>Recall Capacity</i>				
18. Records of customer names, addresses and telephone numbers are available for the lot tested.				
19. Periodic testing to verify the capability of the procedure to rapidly identify and control a code lot of potentially affected product and reconcile the amount of product produced, in inventory, and distribution. Any deficiencies in the recall procedure are identified and corrected.				

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Department of Agriculture (DA)

Bureau of Agriculture and Fisheries Product Standards (BAFPS)

**Committee on Commercial Crops - Cacao Industry Development Sub-Committee of the
National Agriculture and Fishery Council (NAFC)**

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