

## Cashew Processing Guides

# Number 5

# Guidelines on Food Safety, Traceability and Sustainability in Cashew Processing



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# Guidelines on Food Safety, Traceability and Sustainability in Cashew Processing

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A Competitive Cashew initiative publication in cooperation with



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# Preface

The Competitive Cashew initiative (GIZ/ComCashew) - formerly African Cashew initiative (ACi) - conducted a comprehensive study on raw cashew nut processing equipment (ACi, 2011), through consultation with cashew industry investors worldwide. The study revealed areas of concern related to raw cashew nut processing. The main questions posed by cashew processors and potential investors who wanted to set up businesses in Africa evolved around raw cashew nut processing, equipment types and food safety.

In response, GIZ/ComCashew has published a series of five (5) cashew processing guides to provide useful information and practical materials to the industry, notably to new processors entering the raw cashew nut processing business in Africa and existing processors who plan to upgrade or expand their cashew processing factories.

Cashew kernels and by-products are marketed for human consumption. Therefore, processors must comply with international food safety standards in cashew processing. Investors should be aware of the requirements for international food safety standards and develop the capacity to comply with international food safety standards.

The purpose of this Cashew Processing Guide Number 5: *Guidelines on Food Safety, Traceability and Sustainability in Cashew Processing* is to provide information on current international food safety management systems. This is to create awareness of the international food safety standards for cashew products and the organizations responsible for coordinating and monitoring compliance with these standards.

This guidebook will also serve as a resource and reference material for new investors in the raw cashew nut processing business.

# Acknowledgements

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1. **Cashew Stakeholders:** This guidebook is built on our shared learning over the years
  - African Cashew Alliance
  - Association National des Transformateurs d’Anacarde du Burkina Faso
  - Cashew Club
  - Cashew Industry Association and Processors in Ghana
  - Conseil du Coton et d’Anacarde de la Côte d’Ivoire
  - Conseil National des Transformateurs de Cajou du Benin
  - Groupement des Industriels du Cajou de la Côte d’Ivoire
  - Et. La Lumière Ministère d’Agriculture de la Côte d’Ivoire
  - Ministère d’Agriculture, Elevage et Pêche du Benin
  - Ministère d’Agriculture, et des Aménagement Hydraulique and la Direction Générale pour la Promotion de l’Economie Rurale du Burkina Faso
  - Ministère du Commerce, l’Industrie et de l’Artisanat du Burkina Faso
  - Ministère de l’Industrie et des Mines de la Côte d’Ivoire
  - Ministry of Food and Agriculture of Ghana
  - Ministry of Trade and Industry of Ghana
  - Technoserve
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# 1. Introduction

Cashew kernels and some by-products are marketed for human consumption. Therefore these products must comply with established standards for food safety and product quality in international cashew trade. Consumers demand information on product origin and sustainability.

Incidences of food-related poisoning occur every year around the world, causing a great deal of harm to consumers with few resulting in deaths. Some incidences have been recorded in the United States and European markets from nut consumption. For example; from 2008 to 2009, salmonella food poisoning in peanut butter resulted in 714 reported sick cases, and was linked to 9 deaths across the U.S. (Multistate Outbreak of Salmonella Typhimurium Infections Linked to Peanut Butter, 2008). The owner of the producing company, alongside others, was convicted of conspiracy and other charges by a federal jury in Albany, Georgia. Similarly, the Salmonella in peanut butter incident back in 2006 which made 628 people sick in 47 states in the US led to the closure of some manufacturing facilities with a fine of US \$ 11.2 million, the largest food safety fine ever at the time.

In June 2015, contamination of packaged cashew kernels resulted in a recall of 450 packages of cashew kernels because of the fear of a salmonella poisoning outbreak. A routine test by the Food and Drug Administration of the USA (FDA) revealed salmonella contamination and ordered the recall (US Food and Drug Administration, 2015). The potential for food poisoning from cashew consumption also exists in Africa, however, data on food poisoning incidences are currently lacking.

According to international kernel buyers, the largest food safety risk in cashews is foreign material. Dangerous materials including glass, nails and metals are sometimes found in packaged cashew kernels. Such incidences and contaminations can be avoided, if cashew processors strictly comply with international food safety standards.

This guidebook highlights international food safety standards demanded by the global cashew kernel market.

## 2. Food Safety Management Systems (FSMS)

Cashew processors should implement food safety management protocols, in addition to the basic food regulations and acceptable workplace practices. Furthermore, contingency plans must be established for effective crisis management in the occurrence of food poisoning outbreaks or product recalls. A well designed Food Safety Management System (FSMS), with appropriate control measures, helps to comply with food hygiene regulations and ensures that the finished products are safe for consumption.

The site: <http://www.mygfsi.com/schemes-certification/recognised-schemes.html> lists out all the certification options for cashew kernel. The scope should be filtered to “Processing of stable ambient products”. There is also the Global markets program, which is for new/smaller businesses and covers the basics. In all options, processors can choose the EU/NOP standard or both, depending on markets.

Examples of current international Food Safety Management System (FSMS) that are applicable to cashew processing are HACCP, ISO 22000, BRC and the ACA Seal. These systems are described below.

### 2.1 HACCP (Hazard Analysis Critical Control Point)

Hazard Analysis Critical Control Point (HACCP) is a food safety management system applied to all sections of the food industry. HACCP is a minimum requirement for cashew processing factories and thus should be implemented by every cashew processor. In the European Union (EU) and USA, compliance with HACCP is mandatory for all processed foods. Processors should ensure that certifying bodies have third party verification system and are accredited or recognized by the Global Food Safety initiative – GFSI.



HACCP is built on a platform that can be integrated into any food quality management system. It helps to detect potential hazards from contamination in the processing process and enables, application of necessary controls. The adoption of the HACCP system increases customer confidence and reduces the risk of product recalls.

For more information about HACCP, visit [www.fda.gov/Food/GuidanceRegulation/HACCP](http://www.fda.gov/Food/GuidanceRegulation/HACCP).

A case study on HACCP certification by Usibras Ghana is presented in Box 1.

## Box 1: Case Study Usibras, Ghana

The road to certification is long and tedious, but it pays off with increased customer trust and satisfaction. In fact, customers often request the HACCP certificate as a prerequisite for doing business. HACCP certification not only ensures adherence to food safety and reduces raw material, packaging and product losses, but also increases the possibilities for entering new markets.

Usibras Ghana is HACCP certified by the Ghana Standards Authority (GSA) and are to receive the Food and Drugs Authority (FDA) certification. In order to become HACCP certified, Usibras developed a HACCP plan which includes for example:

- Hazard analysis worksheets
- Pre-requisite programs
- Documented verification activities
- Process flow charts
- Standard Operation Procedures (SOP's)
- Product recall procedures
- Training procedures and plans
- Product descriptions and labeling
- HACCP management team

The HACCP system monitors food safety by identifying, reducing and possibly eliminating physical, chemical and biological hazards in the processing process.

Physical hazards are recognized by gravity machines that remove stone and glass, a metal detector to remove metallic pieces and X-ray machines that eliminate any other physical hazard that might have escaped the gravity machines and metal detectors.

For biological hazards, Usibras has identified Critical Control Points, Operational Prerequisite Programs and Standard Operation Procedure for hand washing, cleaning and disinfecting food contact surfaces to control bacterial contamination. Food contact surfaces are, for example, disinfected with ethanol (94.6%) on a daily basis before work starts.

As a control for chemical contamination, Usibras uses only food grade chemicals such as food grade detergents and grease. Drops of phenolphthalein are used to verify, if the food crates are free of any caustic soda (NaOH).

**Some HACCP certifying agencies based in Africa include:**

<b>Country</b>	<b>Organisation</b>	<b>Address</b>	<b>Remarks</b>
Africa-wide	SGS Limited	<a href="http://www.sgs.co.ke/en/Office-Directory">http://www.sgs.co.ke/en/Office-Directory</a>	Training, Auditing, Certification
Burkina Faso	Cabinet CISM	Cism 01 BP 1554 Ouagadougou 01 <a href="http://www.cismceri.com">www.cismceri.com</a> <a href="mailto:info@cismcerti.com">info@cismcerti.com</a> +226 25 41 89 43 / +226 70 39 69 20	Training, Certification
Burkina Faso	Cabinet SODIA Qualité	<a href="http://www.sodia.burkinapmepmi.com">www.sodia.burkinapmepmi.com</a> <a href="mailto:sodiaqualite@burkinapmepmi.com">sodiaqualite@burkinapmepmi.com</a> <a href="mailto:fatimsegda@gmail.com">fatimsegda@gmail.com</a> +226 25 37 13 84 / +226 70230465	Training, Certification
Burkina Faso	CISM - Certification International System de Management	Avenue Houari Boumediene - Quartier Koulouba, Ouagadougou 04 BP 8337 +226 25 41 89 43 <a href="mailto:info@cismcerti.com">info@cismcerti.com</a> <a href="http://www.cismcerti.com">http://www.cismcerti.com</a>	Training, Auditing, Certification
Burkina Faso	Ecocert	<a href="http://www.ecocert.com">www.ecocert.com</a> <a href="mailto:abdoulaziz.yanogo@ecocert.com">abdoulaziz.yanogo@ecocert.com</a> <a href="mailto:office.burkinafaso@ecocert.com">office.burkinafaso@ecocert.com</a> +226 25 33 19 70 / +226 25 40 98 24	Auditing, Certification
Côte d'Ivoire	Intertek West Africa Sarl	<a href="mailto:Info.africa@intertek.com">Info.africa@intertek.com</a> +225 21 21 44 25/6	Training, Auditing, Certification
Côte d'Ivoire	Ingénierie Conseil Audit Formation - ICAF	<a href="mailto:icaf@icaf-ci.com">icaf@icaf-ci.com</a> +225 22 52 23 85 +225 07 53 22 02	Training, Auditing, Coaching, Quality control
Ghana	Ghana Standards Authority	<a href="http://www.gsa.gov.gh">www.gsa.gov.gh</a> <a href="mailto:eadetola@gsb.gov.gh">eadetola@gsb.gov.gh</a> +233 302 501939	Certification

Country	Organisation	Address	Remarks
Ghana	Intertek Ghana Ltd	Info.africa@intertek.com Info.ghana@intertek.com +233 303 935305 / +233 540 104908	Training, Auditing, Certification
Ghana	Meridian Agricultural Services	Aaron.ampofo1@gmail.com +233500209573 +233244561416	Training, Auditing, Certification
Kenya	OCA East Africa	Info.africa@intertek.com +254 412 224 645	Training, Auditing, Certification
Madagascar	Ecocert	Office.madagascar@ecocert.com +261 20 22 54 864	Auditing, Certification
South Africa	Ecocert	office.southafrica@ecocert.com www.southafrica.ecocert.com	Auditing, Certification
Tanzania	Tanzania Ascent.	P.O. Box – 6628, Plot No. 522, Mwai Kibaki Road, Nyati Street, Dar Es Salam, Tanzania. info@ascentworld.com +255 22780125 / +255 783375520 / +255 777887204	Training, Certification

## 2.2 International Organization for Standardization ISO 22000

The ISO 22000 family of International Standards is established to address food safety management issues. The current internationally accepted ISO standard for cashew processing is the ISO 22000. This standard helps organizations to identify and control food safety hazards along the food chain. This standard prescribes that all hazards that may occur in the food chain, as well as hazards that may be introduced, due to the type of processing and facilities used, are identified and assessed before the product reaches the consumers. The ISO 22000 standard can be applied independently of other management systems or integrated with existing management system requirements. The compliance with this ISO 22000 standard leads to high consumer confidence.



Further information on this standard can be obtained from [www.iso.org](http://www.iso.org).



**Some ISO 22000 certifying agencies based in Africa include:**

Country	Organisation	Address	Remarks
Africa-wide	Bureau Veritas Group	<a href="http://www.bureauveritas.com/home/worldwide-locations">http://www.bureauveritas.com/home/worldwide-locations</a>	Training, Auditing, Certification
Africa-wide	SGS Limited	<a href="http://www.sgs.co.ke/en/Office-Directory">http://www.sgs.co.ke/en/Office-Directory</a>	Training, Auditing, Certification
Benin	Agence Béninoise de Normalisation et de Gestion de la Qualité	Immeuble Trinité Quartier Avleketedondji, 1ère Von à droite Après le Carrefour Caboma 02 BP 1101, BJ-Cotonou +229 21 31 04 49 cebenorbenin@yahoo.fr	Certification
Burkina Faso	Altitude Ac	14 BP 151 Ouagadougou kabre_edit@yahoo.fr +226 25373932 / +226 70122172	Certification
Burkina Faso	Cabinet CISM	Cism 01 BP 1554 Ouagadougou 01 <a href="http://www.cismceri.com">www.cismceri.com</a> <a href="mailto:info@cismcerti.com">info@cismcerti.com</a> +226 25 41 89 43 / +226 70 39 69 20	Training, Certification
Burkina Faso	Cabinet SODIA Qualité	<a href="http://www.sodia.burkinapmepmi.com">www.sodia.burkinapmepmi.com</a> <a href="mailto:sodiaqualite@burkinapmepmi.com">sodiaqualite@burkinapmepmi.com</a> <a href="mailto:fatimsegda@gmail.com">fatimsegda@gmail.com</a> +226 25 37 13 84 / +226 70230465	Training, Certification
Burkina Faso	CISM - Certification International System de Management	04 BP 8337 Avenue Houari Boumediene - Quartier Koulouba, Ouagadougou +226 25 41 89 43 <a href="mailto:info@cismcerti.com">info@cismcerti.com</a> <a href="http://www.cismcerti.com/">http://www.cismcerti.com/</a>	Training, Auditing, Certification

Country	Organisation	Address	Remarks
Côte d'Ivoire	Intertek West Africa Sarl	Info.africa@intertek.com +225 21 21 44 25/6	Training, Auditing, Certification
Ghana	Ghana Standards Authority	www.gsa.gov.gh eadetola@gsb.gov.gh +233 302 501939	Certification
Ghana	Intertek Ghana Ltd	Info.africa@intertek.com Info.ghana@intertek.com +233 303 935305 / +233 540 104908	Training, Auditing, Certification
Kenya	OCA East Africa	Info.africa@intertek.com +254 412 224 645	Training, Auditing, Certification
Tanzania	ACM Tanzania	PO Box 10085, Dar es Salaam, Tanzania +255 763 989909 / +255 763989909 acmafrica@gmail.com	Training, Certification
Tanzania	Tanzania Ascent.	P.O. Box – 6628, Plot No. 522, Mwai Kibaki Road, Nyati Street, Dar Es Salam, Tanzania. info@ascentworld.com +255 22780125 / +255 783375520 / +255 777887204	Training, Certification
Tanzania	Tanzania Bureau of Standards	Tanzania Bureau of Standards Ubungo Area, Morogoro Road / Sam Nujoma Road, P O Box 9524 Dar es Salaam, TANZANIA. +255 22 245 0298 / +255 22 245 0206 / +255 22 245 0949 info@tbs.go.tz	Training, Certification

## 2.3 The British Retail Consortium (BRC)

Cashew processors who export products to the United Kingdom and other international markets, are required to comply with the British Retail Consortium (BRC) standards. Therefore, processors need to integrate the BRC into their FSMS quality management system. The BRC standard is a rigorous and detailed program, developed on a risk-based approach and a clear step-by-step path that is easy to follow. Compliance with this standard guarantees customer confidence about responsible supply chain management, resulting in sustained customer relations. BRC certified cashew kernels can be advertised with the brand logo. Such products are also listed in the BRC worldwide directory.



For more information about the BRC, visit [www.brcglobalstandards.com](http://www.brcglobalstandards.com)

A case study on BRC certification by Olam in Côte d'Ivoire is presented in Box 2.

### Box 2: Case Study Olam, Côte d'Ivoire

Food safety certification means third-party verification of products, processes or systems in the food supply chain to meet accepted food safety standards. It is different from supplier declarations, laboratory test reports or inspection body reports. Food safety certification is based on test results, inspections and audits. BRC certification ensures food safety through the adoption of Quality Management Systems (QMS) and Good Manufacturing Practices (GMP) at every step of the food processing processes.

There are two levels of certification. Product certification attests that food products are fit for consumption and comply with the safety, quality, and operational standards that are requested by the market. Organizational certification proves that food manufacturer's quality, environmental responsibility and management system conforms to relevant standards. Standards for management systems evaluate organizational processes to make products or deliver services, rather than inspecting the actual products or services. In order to receive BRC certification, the factory site must ensure the following prerequisites:

- Management review
- Senior Management Involvement
- Management of incident, product withdrawal & recall
- Maintenance program
- Cleaning & Sanitizing Program

- Pest Control
- Allergen controls
- Process to prevent cross contamination
- Waste Disposal
- Transportation agreements
- Purchase agreements
- Traceability
- CCP Plan
- Staff training
- Personal Hygiene requirements
- External Audit
- Internal Audit
- Gap analysis for internal audit points

Apart from BRC certification, Olam also received Organic certification for USDA NOP & EU, the Kosher Certificate and Fairtrade certification. In order to adhere to these standards, Olam identified critical control points to measure and analyze hazards.

At the first arrival in the factory, all incoming raw material is inspected for foreign matter, kernel outturn ratio (KOR), humidity and nut count. The packaging process is monitored against the EU commission regulation No 10/2011 on plastic materials and articles intended to come into contact with food and No 1895/2005 on the restriction of use of certain epoxy derivatives in materials and articles intended to come into contact with food. Thus, all products are stored and transported in food grade plastic containers to avoid cross contamination. The finished cashew kernel adheres to AFI specifications. Generally, certification increases consumers' and buyers' confidence as products and systems are thoroughly evaluated against accepted national and international industry standards by a competent third body. Olam has been certified through SGS.

**Some BRC certifying agencies based in Africa include:**

Country	Organisation	Address	Remarks
Africa-wide	Bureau Veritas Group	<a href="http://www.bureauveritas.com/home/worldwide-locations">http://www.bureauveritas.com/home/worldwide-locations</a>	Training, Auditing, Certification
Africa-wide	SGS Limited	<a href="http://www.sgs.co.ke/en/Office-Directory">http://www.sgs.co.ke/en/Office-Directory</a>	Training, Auditing, Certification
Burkina Faso	Ecocert	<a href="http://www.ecocert.com">www.ecocert.com</a> abdoulaziz.yanogo@ecocert.com office.burkinafaso@ecocert.com +226 25 33 19 70 / +226 25 40 98 24	Audit, Certification
Côte d'Ivoire	Ingénierie Conseil Audit Formation - ICAF	<a href="mailto:icaf@icaf-ci.com">icaf@icaf-ci.com</a> +225 22 52 23 85 +225 07 53 22 02	Training, Auditing, Coaching, Quality control
Ghana	SCS Global services	<a href="http://www.scsglobalservices.com/africa">www.scsglobalservices.com/africa</a> <a href="mailto:RBonsi@scsglobalservices.com">RBonsi@scsglobalservices.com</a> +233 54 180 7849	Audit, Certification
Madagascar	Ecocert	<a href="mailto:Office.madagascar@ecocert.com">Office.madagascar@ecocert.com</a> +261 20 22 54 864	Audit, Certification
South Africa	Ecocert	<a href="mailto:office.southafrica@ecocert.com">office.southafrica@ecocert.com</a> <a href="http://www.southafrica.ecocert.com">www.southafrica.ecocert.com</a>	Audit, Certification

## 2.4 The ACA Quality and Sustainable Seal

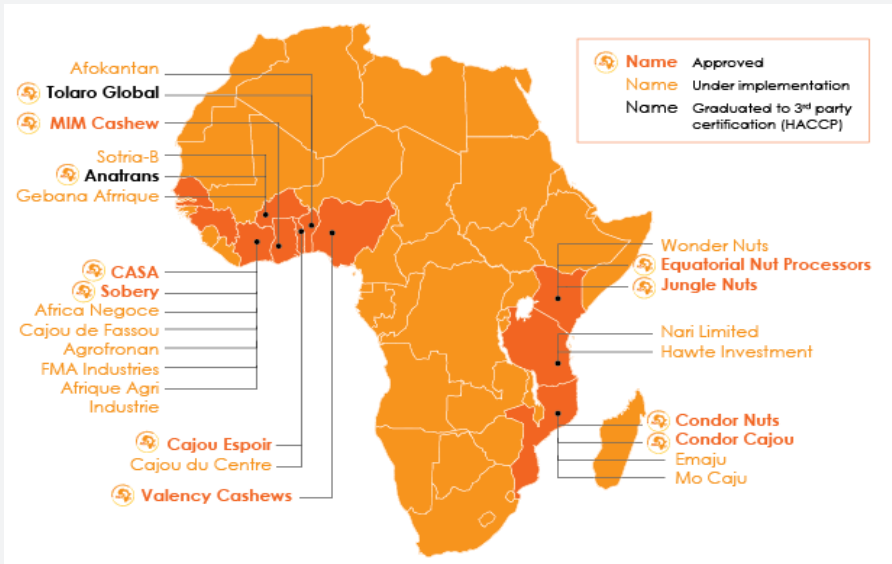
The ACA Seal certification program was created in 2012 with the intention of improving and standardising the quality, safety, and social components of cashew processing in Africa. The program is based on 14 food safety procedures and a social responsibility aspect. The services for every participating processor include a 3-5-day visit to their cashew processing facility to perform a gap analysis study. After this study, the strengths and weakness of the processing factory are identified and a training manual is developed. A second field trip is organised during which supervisors, line managers, and factory managers are trained in-depth on best practices for productivity, food safety and quality assurance. The ACA team then schedules an audit date for each factory. The food safety certification is in 3 parts:

- Field visit for Gap/Initial assessment
- Training on the ACA Seal and closure of gaps identified
- ACA Seal documentation audit and Social Responsibility audit (child and prison labor; sexual harassment; physical abuse, discrimination based on gender, race, or sexual orientation; and fair wages)

There are currently 9 ACA Seal-approved factories and 14 processors receiving food safety technical assistance under the Seal program. The ACA Seal standard is in the process of being reviewed and updated to include climate change mitigation and sustainability aspects. Further steps are being explored to register it as a GFSI (Global Food Safety Initiative) recognised standard such as BRC and ISO.

The proposed name of the updated standard is the ACA Seal<sup>⊕</sup>. The mitigation measures and adaptations adopted in the ACA Seal <sup>⊕</sup> include:

- Protection and improvement of existing construction against effects of climate change
- Development and adoption of energy saving technologies
- Adoption of clean and renewable energy usage
- Reduction of the use of natural resources and emphasis on the reuse and recycling of industrial by-products



- Reduction of wastes generated and processing of wastes to produce energy. In 2018, 271 people have been trained in food safety, quality, and the ACA Seal standard and seal implementation assistance provided to 35 processors across East and West Africa.

For further information about the ACA seal, visit: [www.africancashewalliance.com](http://www.africancashewalliance.com).

To obtain the ACA Quality and Sustainability Seal, please contact the below address:

Email: [info@africancashewalliance.com](mailto:info@africancashewalliance.com) or [damoh@africancashewalliance.com](mailto:damoh@africancashewalliance.com)

Telephone: +233 302 78 16 08



## 3. Export Requirements

The term *Export Requirements* used in this guide book describes the specifications and standards which cashew processors must comply with to export cashew products. Export requirements are grouped into legislative, trade and niche requirements (CBI Market Information 2015; Fitzpatrick J. 2014).

### 3.1 Legislative Requirements

These are the requirements defined by the laws of the exporting and importing countries. Legal requirements are mandatory for exporting cashew products. They are non-negotiable. Legislative requirements are similar in many countries. However, enforcement of these laws varies from country to country. It is important to research the requirements of each target market and to establish compliance procedures.

Examples of legislative requirements in Africa are:

- Côte d'Ivoire: NI 165-2013
- Ghana: GIS 212:2013

An example of legislative requirements for exports to the USA *The Food Safety Modernization Act* is presented in Box 3.

#### Box 3: The Food Safety Modernization Act

The Food Safety Modernization Act (FSMA) was enacted in 2011 by the Food & Drug Administration (FDA) to ensure that U.S. food supply is safe. The FSMA is shifting the focus from responding to food contamination to preventing it.

FDA has a new public health mandate to establish standards for the adoption of modern food safety prevention practices by those who grow, process, transport, and store food. Thus, FDA has new mandates, authorities and monitoring tools to ensure that those practices are being carried out by the food industry on a consistent, on-going basis.

What is the Food Safety Modernization Act about?

- Creating a new food safety system
- Creating a new system of import oversight

- Broadening the prevention mandate and accountability
- Emphasizing partnerships
- Emphasizing farm-to-fork responsibility
- Developing broader alliances

What are the main themes of this legislation?

- Comprehensive preventive controls
  - Produce safety standards
- Inspections compliance, and response
  - Mandated inspection frequency
  - More and new inspections, preventive controls
  - New tools
  - Mandatory recall
  - Expanded records access
  - Expanded administrative detention
  - Suspension of registration
  - Enhanced product tracing
  - Third-party laboratory testing
- Import safety - most groundbreaking shift
  - Importers must ensure that their foreign suppliers have adequate preventive controls in place
  - FDA can rely on third parties to certify that foreign food facilities meet U.S. requirements
  - FDA can require mandatory certification for high-risk foods
  - Voluntary Qualified Importer Program as expedited review by FDA
  - FDA can deny entry, if access for inspection is rejected
  - FDA requires food from abroad to be as safe as domestic food
- Enhanced partnership - vital to success
  - Reliance on inspections by other agencies that meet standards
  - State/local and international capacity building
  - Improve foodborne illness surveillance
  - National agriculture and food defense strategy

- Consortium of laboratory networks
- Easier to find recall information.

What does the enactment of the FSMA mean for cashew processors and exporters?

As a cashew processor and exporter, you should focus on:

- Putting in place preventive controls such as HACCP to ensure safety of cashews
- Putting in place Good Manufacturing Practices (GMP) to regulate and assure hygiene and safety of processed cashew.
- Those who transport the cashew should use sanitary transportation practices to ensure product safety. The shipping label for the package should show that the product is intended for export.
- Up-to-date record-keeping to facilitate product recall, tracing and third-party verification. This protects the processor/exporter in case any problem arises along the supply chain.
- Processors must ensure that certifying bodies have a third-party verification system and are accredited or recognized by the Global Food Safety initiative – GFSI
- Processors exporting to the US must ensure that the certifying bodies they work with meet US requirements.

### 3.2 Trade Requirements

Trade requirements are non-legal, but demanded by buyers to maintain product quality standards and to satisfy customer demands. Such requirements are negotiable. A clear understanding of any trade requirements contribute to successful business transactions. The main issues covered in trade requirements are: contract fidelity, packaging, documentation, traceability, quality certification and shelf life.

Trade requirements vary from buyer to buyer. Processors should obtain information on trade requirements from each buyer to deliver the desired quality and to negotiate for a better price. The most common requirements that are negotiated include:

- 1) Shipment position and time
- 2) Price
- 3) Quality specifications

- 4) Packaging specifications
- 5) Full traceability

### 3.3 Niche Requirements

Niche requirements create more business opportunities for cashew processors. Social and environmental standards are examples of niche requirements. These are additional negotiable requirements in the cashew processing process and practices that improve business relationships and sustainability.

Processors should conduct research (in consultation with potential buyers) on the various standards or certifications that are necessary to access target markets. The expansion of cashew processing in Africa demands compliance with niche requirements for cashew kernel exports.

Certification regimes that offer various benefits to processors include:

- 1) Organic
- 2) Fairtrade
- 3) Ethical Trade Initiative
- 4) Business Social Compliance Initiative

#### 3.3.1 Organic



Organic certification is a niche requirement for cashew kernels. In order to market cashew products as ‘organic’, both producers and processors must comply with regulations for organic certification. Organic certification requirements are a set of production standards for growing, storing, processing, packaging and shipping of cashew kernels. However, organic certified kernels have a minor share in the cashew kernel market.

For further information about Organic Certification, visit:

USA-USDA: <http://www.usda.gov/wps/portal/usda/usdahome?contentid=organic-agriculture.html>

European union: [http://ec.europa.eu/agriculture/organic/organic-farming/what-is-organic-farming/organic-certification/index\\_en.htm](http://ec.europa.eu/agriculture/organic/organic-farming/what-is-organic-farming/organic-certification/index_en.htm)<http://ec.europa.eu/agriculture/>

[organic/organic-farming/what-is-organic-farming/organic-certification/index\\_en.htm](http://organic/organic-farming/what-is-organic-farming/organic-certification/index_en.htm) /  
and

[http://ec.europa.eu/agriculture/organic/consumer-trust/index\\_en.htm](http://ec.europa.eu/agriculture/organic/consumer-trust/index_en.htm)

<http://www.ifoam.bio/>

### Some Organic certifying agencies based in Africa include:

Country	Organisation	Address	Remarks
Burkina Faso	Cabinet CISM	Cism 01 BP 1554 Ouagadougou 01 <a href="http://www.cismceri.com">www.cismceri.com</a> <a href="mailto:info@cismcerti.com">info@cismcerti.com</a> +226 25 41 89 43 / +226 70 39 69 20	Training, Certification
Burkina Faso	Cabinet SODIA Qualité	<a href="http://www.sodia.burkinapmepmi.com">www.sodia.burkinapmepmi.com</a> <a href="mailto:sodiaqualite@burkinapmepmi.com">sodiaqualite@burkinapmepmi.com</a> <a href="mailto:fatimsegda@gmail.com">fatimsegda@gmail.com</a> +226 25 37 13 84 / +226 70230465	Training, Certification
Burkina Faso	Ecocert	<a href="http://www.ecocert.com">www.ecocert.com</a> <a href="mailto:abdoulaziz.yanogo@ecocert.com">abdoulaziz.yanogo@ecocert.com</a> <a href="mailto:office.burkinafaso@ecocert.com">office.burkinafaso@ecocert.com</a> +226 25 33 19 70 / +226 25 40 98 24	Audit, Certification
Ghana	SGS-Ghana Ltd	<a href="http://www.sgs-ghana.com/en/Agriculture-Food/Food/Transportation-Logistics-and-Trade/Food-Certification/Organic-Certification.aspx">http://www.sgs-ghana.com/en/Agriculture-Food/Food/Transportation-Logistics-and-Trade/Food-Certification/Organic-Certification.aspx</a> <a href="mailto:EvelynIngrid_Keelson@sgs.com">EvelynIngrid_Keelson@sgs.com</a> +233 302 77 39 94 +233 302 77 39 95	Training, Auditing, Certification
Ghana	Meridian Agricultural Services	<a href="mailto:Aaron.ampofa1@gmail.com">Aaron.ampofa1@gmail.com</a> +233500209573 +233244561416	Training, certification preparation, coaching
Madagascar	Ecocert	<a href="mailto:office.madagascar@ecocert.com">office.madagascar@ecocert.com</a> +261 20 22 54 864	Audit, Certification
South Africa	Ecocert	<a href="mailto:office.southafrica@ecocert.com">office.southafrica@ecocert.com</a> <a href="http://www.southafrica.ecocert.com">www.southafrica.ecocert.com</a>	Audit, Certification

### 3.3.2 Fair Trade

Processors may consider Fairtrade certification when exporting cashew kernels. The aim of Fairtrade certification is to help producers adopt better trading conditions and to promote sustainability of their businesses in developing countries (Flo-Cert 2012). The Fairtrade movement advocates for better prices for cashew growers as well as higher social and environmental standards. Fairtrade focuses attention on commodities or products that are exported from developing countries to developed countries. It promotes equity in international trading partnerships through dialogue, transparency and mutual respect.



For further information about Fairtrade, visit [www.fairtrade.net](http://www.fairtrade.net)

#### Some Fair Trade certifying agencies based in Africa include:

Country	Organisation	Address	Remarks
Burkina Faso	Cabinet CISM	Cism 01 BP 1554 Ouagadougou 01 www.cismceri.com info@cismcerti.com +226 25 41 89 43 / +226 70 39 69 20	Training, Certification
Burkina Faso	Ecocert Burkina Faso	www.ecocert.com abdoulaziz.yanogo@ecocert.com office.burkinafaso@ecocert.com +226 25 33 19 70/+226 25 40 98 24	Audit, Certification
Ghana	Meridian Agricultural Services	Aaron.ampofo1@gmail.com +233500209573 +233244561416	Training, certification preparation, coaching
South Africa	FLOCERT South Africa	www.flocert.net Africa@flocert.net +27 21 671 0289	Training, Certification

A case study on FairTrade and Organic certification by Gebana Afrique in Burkina Faso is presented in Box 4.

#### Box 4: Cashew study, Gebana Afrique, Burkina Faso

At the heart of Gebana Afrique's mission lies a better life for farmers of high quality products. FairTrade and Organic certification is one way to valorize the products of small family farmers. Certification helps to establish sustainable and trusting business relationships between farmers, Gebana Afrique and their customers. The certification guarantees that requirements of high standards are fulfilled. There is a strong demand on the international market for certified products.

FairTrade and Organic certification means that Gebana Afrique sources and processes their products with respect for products, people and the environment. Certification is a way to position Gebana products on the market. It provides an opportunity to sell to high end and niche markets. However, Organic and FairTrade certification also means a lot of paper work. It involves regular and continuous documentations of our procedures, processes and actions, as well as annual audits. Every activity from farm to shelf is monitored, for example:

- Planting of the trees
- Harvesting
- Non-use of pesticides/herbicides
- Post-Harvest management of the nuts
- Transportation from the farm to the factory
- Packaging and storage of the product
- Adherence to labor, food safety and environmental standards
- Full traceability from farm to shelf

On the production side, the farmers have to implement all standards for FairTrade and Organic certifications. Thus, Gebana Afrique has established linkage programs with farmers to provide training on Good Agricultural Practices, cooperative management, group sales, and compliance with the FairTrade and Organic standards. The farmers are supported by Gebana Afrique staff with the documentation of procedures. FairTrade and Organic certification also ensures full traceability from farm to the final consumer of the products. Every year Gebana pays FairTrade premiums to farmers. The premium is paid by customers who purchase the FairTrade certified cashews.



On the processing side, employees are trained on hygiene and food safety issues, such as regular hand washing. Food safety standards are also directly implemented throughout the processing process to ensure conformity with certification standards. For example, all raw materials must be transported in clean trucks from the farm to the factory to ensure that no contamination of the product takes place. Specifically for organic certification, the product cannot be mixed with non-organic products to guarantee a fully organic product. Gebana Afrique must also be conscious of the type of packaging material used. For example, we have to ensure that cartons are not transported in the same truck with chemicals or treated with inorganic insecticide. An internal control and monitoring system with checklists ensures that all processes respect the organic standards.

Gebana Afrique is certified by FLO Cert in Bonn, Germany and ECOCERT. The EU organic certifier, ECOCERT is accredited by the European Union

### 3.3.3 The Business Social Compliance Initiative (BSCI)

The Business Social Compliance Initiative is a leading supply chain management system that drives social and environmental sustainability on farms and factories. BSCI is a service available to all companies and associations that are committed to improving working conditions along the global supply chain. BSCI aims at protecting worker rights and benefits, in line with local and international labour standards. Companies and associations can only participate in BSCI after becoming members of the Foreign Trade Association (FTA). Currently in Africa, fruits and vegetables are already BSCI certified. It is likely that retailers will demand BSCI certification for cashew in the near future. Retailers and consumers in the USA and Europe want to know where, how and under which circumstances the product is made. Consumers demand products that are made in a socially responsible manner and with care for the environment.

For more information about BSCI, visit [www.bsci-intl.org](http://www.bsci-intl.org).



### Some BSCI certifying agencies based in Africa include:

Organisation	Country	Address	Remarks
Tanzania Ascent.	Tanzania	P. O. Box – 6628, Plot No. 522, Mwai Kibaki Road, Nyati Street, Dar Es Salam, Tanzania. info@ascentworld.com +255 22780125, +255 783375520, +255 777887204	Training and Certification

#### 3.3.4 The Ethical Trading Initiative

The Ethical Trading Initiative (ETI) promotes respect for worker rights by ensuring that all workers are free from exploitation and discrimination and that they enjoy freedom, security and equity in the workplace. ETI encourages companies and associations to take responsibility for improving working conditions. All member companies have to adopt the ETI Base Code of Labour Practice, based on the International Labour Organization (ILO) standards. Currently in Africa, fruits and vegetables are already ETI certified. It is likely that retailers

will demand ETI certification for cashew in the near future, because ethical and social certification is becoming more increasingly important for consumers and retailers.

For more information about ETI, visit [www.ethicaltrade.org](http://www.ethicaltrade.org)



## 4. Traceability

Under EU law (European Commission 2007), traceability is to track any food product through all stages of production, processing and distribution. Traceability is a risk-management tool that enables retailers to withdraw or recall products that have been identified as unsafe for consumption.

When contaminated products have been identified, it is important for national authorities or food companies to be able to trace the contaminated products to their origin. Thus sources of contamination in the supply chain can easily be identified and managed, to prevent harm to consumers. Through traceability, information on contaminated products can be communicated to the public, thereby creating awareness and minimizing harm to consumers.

Traceability in the cashew industry is a legal requirement in the European market (European Commission, 2007). In the cashew industry, traceability involves the documentation of reliable information about the origin of raw cashew nuts purchased for processing, the processing process and the destination of the finished product. Two traceability systems are available to track cashew nuts and kernel along the value chain: SAP and 3S.



For more information about SAP – Rural Sourcing Management, visit: [http://africancashewinitiative.org//imglib/downloads/140606\\_SAP-ACi%20Factsheet.pdf](http://africancashewinitiative.org//imglib/downloads/140606_SAP-ACi%20Factsheet.pdf)



For more information about 3S – Securing Sustainable Supply, visit: <http://www.supply3s.com/about-3s/>

Video about 3S:

<https://www.youtube.com/watch?v=7MKBd9Lqe0w>

## 5. Sustainability

In cashew processing, sustainability refers to identifying market needs based on long-term prospects for establishing a competitive cashew business. To achieve sustainability, processors should adopt the following measures when setting up raw cashew nut processing factories in Africa.

### *Planning and set up:*

- 1) Develop a comprehensive business plan
- 2) Take advice from existing processors
- 3) Locate your factory within close proximity of RCN supply
- 4) Develop an equipment procurement strategy<sup>1</sup>and operational plan
- 5) Choose the appropriate scale for your business vision
- 6) Develop a realistic budget plan for funding the construction of buildings, as well as purchase of equipment and RCN supplies

### *Management:*

- 1) Employ qualified and experienced managers
- 2) Employ technical experts to maintain and service equipment
- 3) Organize regular on-the-job training for staff
- 4) Research and understand RCN procurement
- 5) Develop a sustainable RCN procurement strategy
- 6) Develop a sustainable supply linkage strategy, especially to create relationships with producers and kernel buyers
- 7) Think long-term when developing your business strategy

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<sup>1</sup> Cashew Processing Guide Number 4: Guidelines for Choosing Raw Cashew Nut Processing Equipment

*Risk Management:*

- 1) Assess your business risks and competitors
- 2) Establish appropriate safety systems in the factory and implement suitable insurance policies
- 3) Incorporate occupational health and safety measures in business planning
- 4) Understand how market dynamics impact your business and develop strategies to mitigate potential risks

Environmental and business sustainability are major segments that contribute to sustainable cashew processing.

## **5.1 Environmental Protection and Sustainability**

In cashew processing, business activities should be non-polluting, conserve energy and natural resources. Furthermore, cashew processing should be economically efficient and safe for workers, communities as well as consumers. Processors should therefore act responsibly by developing strategies to protect and conserve the resource environment in which they work. In cashew processing, waste is generated from cashew shells, contaminated water, and emissions from the machinery. Processors must efficiently manage these waste products to minimize environmental pollution, harm to workers and the community. To achieve environmental protection and sustainability, the following strategies should be adopted:

- 1) Conduct an environmental impact assessment before building the factory
- 2) Develop, implement and monitor a waste management strategy
- 3) Comply with national and international regulations for environmental protection and sustainability
- 4) Develop recycling strategy as part of waste management strategy for cashew shell, waste water and emissions
- 5) Locate the factory in an industrial area
- 6) Purchase and install energy efficient and user-friendly processing equipment

## 5.2 Business Sustainability

In cashew processing, business sustainability is responding to market requirements in an effective and efficient manner in order to become or remain competitive. Business profitability and viability sustains cashew processors in business. To achieve business sustainability, processors need to be innovative and efficient in managing their cashew processing businesses.

The following strategies can be adopted to achieve business sustainability:

### *Sales & Marketing:*

1. Build a robust and efficient system to respond to buyer requirements
2. Ensure compliance with legal and food safety requirements
3. Identify requirements of target markets which can be satisfied
4. Develop a market entry strategy and market networks
5. Develop market information systems
6. Understand the power relations within your market networks

### *Market Access & Information:*

1. Adopt an efficient system to access information on suppliers, equipment, markets, technological development, as well as standards and regulations
2. Actively conduct research on market information for a good understanding of the kernels and RCN markets
3. Develop a market information network around your cashew business

## Recommended Reading

These references provide further information for sustainable and competitive raw cashew nut processing.

- Cashew Processing Guide Number 1: Guidebook on the Cashew Processing Process
- Cashew Processing Guide Number 2: Opportunities and Challenges in Raw Cashew Nut Processing
- Cashew Processing Guide Number 3: Guide to Raw Cashew Nut Processing Equipment
- Cashew Processing Guide Number 4: Guidelines for Choosing Raw Cashew Nut Processing Equipment
- Summary Equipment Study Report, African Cashew initiative/Jim Fitzpatrick 2011; [www.comcashew.org](http://www.comcashew.org)
- Competitiveness of African Cashew Sector, African Cashew initiative/Jim Fitzpatrick 2010; [www.comcashew.org](http://www.comcashew.org)

## References

Barret, H. R., Browne, A. W., Harris, P. J. C., & Cadoret, K. (2001). Smallholder Farmers and Organic Certification: Accessing the EU Market from the Developing World, *Biological Agriculture & Horticulture: An International Journal for Sustainable Production Systems*, 19:2, 183-199.

CBI market information (2015). "Compliance with european buyer requirements for West African cashew nut kernels" available at <http://cbi.eu> Accessed: 19.06.2015

European Commission (2007). Food Traceability; available at [http://ec.europa.eu/food/food/foodlaw/traceability/factsheet\\_trace\\_2007\\_en.pdf](http://ec.europa.eu/food/food/foodlaw/traceability/factsheet_trace_2007_en.pdf) Accessed on: 15.05.2015

European Commission (2007). "The General Food Law"; available at [http://ec.europa.eu/food/food/foodlaw/index\\_en.htm](http://ec.europa.eu/food/food/foodlaw/index_en.htm). Accessed on: 15.05.2015

FLO-CERT, (2012). What is certification? Fairtrade Labelling Organization- Certification. Available at: <http://www.flo-cert.net/flo-cert/certification.html> Accessed on: 12.05.2015.

Fitzpatrick, J. (2011) African Cashew Initiative (ACi) summary of the study "Cashew Nut Processing Equipment Study" is available at <http://aci.africancashewalliance.com/eng/downloads.html>. Accessed on: 8.02.2015

Fitzpatrick, J. (2014): 'Requirements to Export Cashew Kernels for EU and the USA Markets', in: *Cashew Handbook 2014 – Global Perspective*. – pp: 89-91. Online available at <http://www.cashewinfo.com/cashewhandbook2014.pdf>

Multistate Outbreak of Salmonella Typhimurium Infections Linked to Peanut Butter, 2008-2009 (FINAL UPDATE). (2008). Retrieved November 24, 2016, from <http://www.cdc.gov/salmonella/2009/peanut-butter-2008-2009.html>

US Food and Drug Administration (2015). Cashew kernel Recalls, retrieved from: <http://www.fda.gov/Safety/Recalls/ucm449073.htm>



## Glossary of Raw Cashew Nut Processing Terms

**Calibration of raw cashew nuts:** Grouping the raw cashew nuts into various sizes (based on the diameter of the nuts) to facilitate shelling and reduce breakage during processing.

**Cashew Nut Shell Liquid (CNSL):** Caustic liquid found in the cashew shell.

**Cashew processing lines:** A complete set of equipment required for RCN processing.

**Conventional:** Cashew kernels produced and processed without organic or fair-trade certification.

**Drum roast:** Method of heat treatment of raw cashew nuts by use of direct heating of raw cashew nuts in a drum.

**Food safety:** Handling, preparation and storage of food in ways that prevent foodborne illness. It includes a number of routines that should be followed to avoid potentially severe health hazards.

**Grading:** Classification of the kernels based on colour, shape (whole/broken) and size. Grading is done manually or with machines.

**HACCP:** Hazard Analysis and Critical Control Points – Factory safety system.

**Hand cracking:** Shelling (separation of kernel from shell) raw cashew nut manually using small hand shelling machine.

**Heat treatment:** Application of direct heat, hot oil or steam to the cashew nuts in preparation for breaking of the shells. Heat treatment makes it easier to remove the shells.

**Kernel:** Consumer product obtained after processing of raw cashew nut is the kernel. The kernel is the edible part of the raw cashew nut.

**Kernels Outturn:** The weight of kernels obtained during processing of a given quantity of RCN, usually expressed as a percentage.

**Oil bath:** Method of heat treatment using hot CNSL bath to extract CNSL of raw cashew nuts to make them brittle.

**Outturn (in RCN trade):** Weight of kernels in pounds per 80kg bag of in-shell nuts. Outturn (in RCN trade) is not the same as kernels outturn as the cutting test does not establish breakage, grades and processing losses.

**Oven drying & humidification of kernels:** Application of heat to kernels, followed by subjecting the kernels to humid conditions. While drying reduces the moisture levels of the kernels and brings about contraction of the testa, humidification increases the moisture levels and leads to expansion of the testa. This process facilitates the removal of the testa without breaking the kernels. The process is also described “thermal shock”.

**Peeling:** Removal of the testa from the kernels. The objective is to obtain the kernels whole and intact. Peeling is done either by peeling machines or by hand, using small knives.

**Quality standards:** A set of criteria on the requirements, specifications, guidelines or characteristics to ensure that materials, products, processes and services are fit for their purpose.

**RCN:** Raw Cashew Nuts – also known as in-shell nuts. These are dried raw cashew nuts with the shell still intact.

**Shell:** Outer coat of the raw cashew nut before shelling.

**Shelling:** Removal of the cashew kernel from its shell or separation of the kernel from its shell. This is achieved through cracking or cutting to expose the kernel with testa for separation.

**Testa:** Inner skin surrounding the cashew kernel after the shell has been removed. The testa lies between the shell and the white kernel. During processing, the testa is removed after having been rendered brittle or soft by heat treatment.

**Vacuum packing:** Method required by buyers for packaging cashew kernels. The process involves a vacuum and back flushing with a combination of carbon dioxide and nitrogen to prolong the shelf life of the kernels.

**Warehousing:** Storing the raw cashew nuts procured for processing. It ensures the continuous supply of raw nuts throughout the year.

**Yield in processing:** Mass of kernels in grams per kilogramme of in-shell nuts (%)

**Yield per hectare or tree:** Gross weight of cashew nuts per tree or per hectare

## Acronyms / Abbreviations

ACA	African Cashew Alliance
ACi	African Cashew initiative
AFI	Association of Food Industries, USA
BMGF	Bill & Melinda Gates Foundation
BRC	British Retailers Consortium
BSCI	Business Social Compliance Initiative
CNSL	Cashew Nut Shell Liquid
GIZ/ComCashew	Competitive Cashew initiative
ETI	Ethical Trading Initiative
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
FAOSTAT	Food and Agriculture Organization Statistics
FDA	Food and Drug Administration
FSMA	Food Safety Modernization Act
FSMS	Food Safety Management System
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (German International Cooperation)
GFSI	Global Food Safety initiative
GMP	Good Manufacturing Practices
HACCP	Hazard Analysis & Critical Control Point
ISO	International Organization for Standardization
NGO	Non-Governmental Organization
RCN	Raw Cashew Nut
TNS	TechnoServe
UNECE	United Nations Economic Commission for Europe
US/USA	United States of America
USDA	United States Department for Agriculture
w/w	Weight by weight





## The Competitive Cashew initiative (GIZ/ComCashew)

The Competitive Cashew initiative, formerly African Cashew initiative (GIZ/ACi) presents a new and innovative model of broad-based multi-stakeholder partnership in development cooperation. GIZ/ComCashew is a private-public partnership programme under the implementation of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, with funding from the German Federal Ministry for Economic Cooperation and Development (BMZ) as well as Cooperation Partners from the private and public sector.

GIZ/ComCashew's main objective is to increase the competitiveness of African cashew smallholders, processors and other actors along the value chain to achieve a lasting reduction of poverty in the project countries Benin, Burkina Faso, Côte d'Ivoire, Ghana and Mozambique. GIZ/ComCashew aims at ensuring that by 2020, each of the 580,000 cashew farmers trained will earn an average additional annual family income of at least US\$600.

Beyond increasing farmers' direct income, the initiative aims at improving cashew-processing capacity in Africa, developing sustainable supply chain linkages and supporting a better organization and coordination of the cashew sector. GIZ/ComCashew also strengthens initiatives in the cashew sector and responds to questions regarding investment and processing.

It is time to accumulate and share the valuable experience and knowledge gained in the cashew sector from farm to fork with policy makers, industry as well as potential investors in the cashew sector in Africa.

The *Guidelines on Food Safety, Traceability and Sustainability in Cashew Processing* is a practical guide for new investors and existing processors in the raw cashew nut processing business.

It provides valuable information on the following:

- Food Safety Management Systems
- Export requirements
- Traceability
- Environmental and Business Sustainability

This Guidebook aims to create awareness of the international standards and organizations responsible for coordinating international food standards. It also introduces potential investors to international cashew quality standards required by cashew buyers.

## Other Titles in this Series

- **Cashew Processing Guide Number 1:** Guidebook on the Cashew Processing Process
- **Cashew Processing Guide Number 2:** Opportunities and Challenges in Raw Cashew Nut Processing
- **Cashew Processing Guide Number 3:** Guide to Raw Cashew Nut Processing Equipment
- **Cashew Processing Guide Number 4:** Guidelines for Choosing Raw Cashew Nut Processing Equipment

