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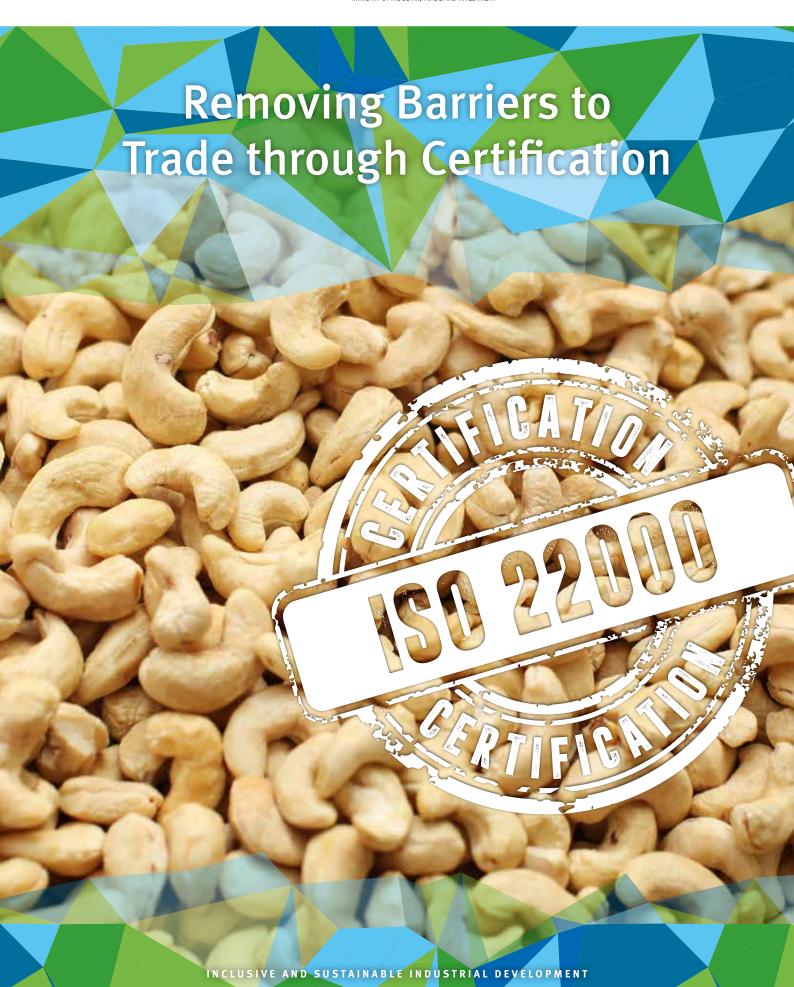
United Nations Inter-Agency Cluster on Trade and Productive Capacity

UNOPS, UNCTAD, ITC, UNIDO, ILO



Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra Federal Department of Economic Affairs, Education and Research EAER State Secretariat for Economic Affairs SECO

UNITED REPUBLIC OF TANZANIA
MINISTRY OF INDUSTRY, TRADE AND INVESTMEN







About UNIDO

UNIDO is the specialized agency of the United Nations that promotes industrial development for poverty reduction, inclusive globalization and environmental sustainability.

The mandate of the United Nations Industrial Development Organization (UNIDO) is to promote and accelerate inclusive and sustainable industrial development (ISID) in developing countries and economies in transition. The organization draws on four mutually reinforcing categories of services: technical cooperation, analytical and policy advisory services, standard setting and compliance, and a convening function for knowledge transfer and networking.

UNIDO's vision is a world where economic development is inclusive and sustainable and economic progress is equitable.

What are Food Safety Management Systems?

Food Safety Management Systems serve to prove that an organization has the ability to produce, prepare and store food in a controlled and safe manner, avoiding the organization product recalls or foodborne illness outbreaks that could result in important economic losses. ISO 22000 is a Food Safety Management Systems Certification scheme designed to prevent or eliminate food safety hazards or bring them to an acceptable level.

Why implement ISO 22000?

According to the World Health Organization, in 2010 there were 600 million foodborne illnesses and 420,000 deaths caused by 31 foodborne-hazards, being the most frequent causes of the illness norovirus and Food safety issues have resulted in thousands of deaths and billions in monetary losses. Aflatoxin-contaminated maize in Kenya resulted in 317 cases of hepatic failure and 125 deaths; in China, milk adulterated

2010

600 MILLION FOOD-BORNE ILLNESSES

420 NN DEATHS

CAUSED BY

FOODBORNE-HAZARDS

Campylobacter spp, a virus and a bacteria responsible for causing acute gastroenteritis and diarrhea, respectively, and easily spread by the touch of an infected person while preparing or manufacturing food products.

KENYA

AFLATOXIN-CONTAMINATED MAIZE

RESULTED IN

317 CASES OF HEPATIC FAILURE

125 DEATHS

with melamine caused the hospitalisation of 51,900 children and the death of 6 infants due to kidney damage.

Furthermore, if a company is willing to export its products, not only they need to comply with domestic standards used in its

CHINA

MILK ADULTERATED WITH MELAMINE

CAUSED

51 900 CHILDREN IN HOSPITAL

DEATHS DUE TO KIDNEY DAMAGE

country, but they also need to meet the requirements of the ever more stringent standards implemented in the EU and the USA to assure that the products exported are unadulterated and safe to be consumed by any human being.

Who needs **ISO 22000?**

ISO 22000 aims at managing safety in any organization in the food chain, whether it is a primary producer, a food manufacturer, a transport company or a retailer, assuring the compliance and safety of the products from the farm to the fork.



How does a company achieve ISO 22000 certification?





Farmer, manufacturer, transporter, packager, retailer takes the decision to get ISO 22000 certified.



The organization plans, designs, documents and implements a comprehensive system of food safety management. The key elements of a FSMS are: Good Practices/ Pre Requisite Programs, Hazard Analysis and critical control points (HACCP), Management Element / System, Statutory and regulatory requirements, and Communication.





The organization implements the processes to meet the requirements of the standard, which can include preparation of documents, training of the staff, purchase of equipment, and modification or construction of facilities, according to the available budget and the scope of certification desired.





The process to complete the implementation of a FSMS in an organization can take from three to nine months.





If the auditor considers that the organization complies with the requirements of the standard, the organization is granted the certification.





Once the system is in place, a licensed Certification body is contacted to perform a Certification Audit.

About the project

The Tanzania trade sector development programme: "Market value chains relating to horticultural products for responsible tourism market access project" is jointly implemented by the UN Inter-Agency Cluster for Trade and Productive Capacity: United Nations Industrial Development Organisation (UNIDO), the International Labour Organisation (ILO), International Trade Centre (ICT), United Nations Conference on Trade and Development (UNCTAD), United Nations Office for Project Services (UNOPS) in collaboration with government counterparts and is funded by the Government of Switzerland's Secretariat for Economic Affairs (SECO).



The SECO cluster programme is aimed to improve the livelihoods of Tanzanians through greater adoption of market access value chains for agroproducts and responsible tourism criteria based on the local context for tourism markets. To do so, the programme is supporting horticultural producers to increase their productive capacity for supply of high-value agroproducts including organic produce. This is achieved through enhancement of quality management systems of selected agro-processors, including Sanitary and Phytosanitary Measures (SPS), Good Manufacturing Practices (GMP) and compliances with relevant food safety, social and environmental standards in order to access lucrative domestic and international markets. In parallel, the programme is focusing on development and strengthening of linkages between horticultural producers and processors with key partners in the tourism sector, including hotels and supermarkets. In the last three years, UNIDO has identified and supported three Tanzanian Food Companies

in successful upgrading of their industrial performance and competitiveness, promoting interlinkages, building marketing, sales and merchandizing capacities, and implementation of Food Safety and Management Systems allowing certification against ISO 22000. As a result, these companies established substantial and trustworthy business relationships with suitable project partner hotels, numerous restaurants and supermarkets.

These positive results can now be used by the private sector alongside policy level decision makers to bring about systemic market system change for the benefit of Tanzanians.

Natureripe Kilimanjaro Ltd.

The challenge

By 2016 only three employees of Natureripe had received basic training on HACCP, hygiene and awareness of Food Safety and just one HACCP plan existed for cashew nuts and cashew snacks; the staff of the company was not aware about the existence of any international standard that

would serve to demonstrate that the food produced by them was free from any contaminant; some of the employees that had been originally trained had left the company; and most importantly, the significance of washing hands, covering their hair or removing jewelry before entering the production area, was not properly emphasized.

As a result of this, the products did not have the expected quality and complaints were received almost every month from the supermarkets.

THE SOLUTION

GETTING ISO 22000 CERTIFIED

In June 2016 the company engaged in the process of implementing ISO 22000, following a series of steps:

STEP 1



Six managers and twelve employees from the production area received training and awareness on HACCP and internal audits.

STEP 2



The staff conducted HACCP studies to identify food safety hazards in the production process

STEP 3



Documents for Prerequisite Programme (PRP) procedures and for the basis of the Operational Prerequisite Programme (OPRPs) were written.

The company invested an important amount of money in equipment, infrastructure, documentation and training for the staff. A building to start

with the manufacture of new products like mango juice was constructed in the Mkuranga District, 50 km from Dar es Salaam, and machinery and

sealing and testing equipment were purchased to increase the production and improve the quality of the products.

The results

With an established food safety management system in place, including better hygiene practices, the quality of the products is assured and the number of rejections has decreased significantly. As a result of the increase in quality, the demand of the products has also increased.

The company expects to have less losses, more acceptance by the local consumers, higher sales and the possibility to access international markets once they obtain the ISO 22000 certification. Now, a person in charge of the FSMS will have to be recruited to continue with the

The difference in the food safety culture in the company is notorious. The workers give now the right importance to basic things like washing their hands before going into the production area, not wearing jewelry or covering their hair. The managers are also following the food safety rules, motivating the employees with the example"

MS. IOHARI. ACCOUNTANT OF NATURE RIPE.

improvements and ensure the completion of the process.

The preparations for Natureripe to obtain the ISO 22000 certification have not yet ended. But the most important has been done; the foundations have been laid out and the people, the processes, the documentation and the products are ready.

THE COMPANY

2000 ESTABLISHED

24 FIXED EMPLOYEES

2 CASUAL EMPLOYEES

PRODUCTS

- cashew nuts
- cashew snacks
- > peanut butter
- > mango-based sauces
- > mango pickles





Masasi Food Industries Ltd.

The challenge

In 2015 only a few production lines at Masasi followed good manufacturing practices (GMP), the working capital was inadequate and there was no traceability system for the fruits and vegetables used as raw materials. Although best quality practices were followed by the workers during the production process, complaints were received from the consumers

from time to time and the test reports issued by the Tanzania Bureau of Standards after the collection of market samples demonstrated that there was still room for improvement.

To assure constant sales, few links with low rank supermarkets were established. The company was enduring competition from manufacturers and importers of lower quality products sold at cheaper prices. Not being aware of the importance of quality, consumers tended to be influenced by lower prices. In addition, the lack of trust by the tourism industry on local products meant that star hotels and foreign owned restaurants would not accept any product unless they were ISO 22000 certified.

THE SOLUTION

GETTING ISO 22000 CERTIFIED

In 2016, the company accepted the challenge to implement ISO 22000, which included the following tasks:

TASK 1



A food safety team composed of managers and supervisors from the different departments was formed with the team leader being a senior manager.

TASK 5



Technicians were trained on the best practice methods of preventive maintenance of factory machinery and equipment.

TASK 2



Awareness meetings about ISO 22000 were held with all the staff of the company.

TASK 6



All the documents for Prerequisite Programme (PRP) procedures were reviewed and Operational Prerequisite Programmes (OPRPs) were drafted. TASK 3



Personnel of the production area was trained on HACCP.

TASK 7 😤 🦰

Internal audits were carried out and corrective actions were developed.

TASK 4



HACCP studies were conducted to identify food safety hazards in the processes covering fruits and vegetables, drinking water and plastic moulding & blowing.

The costs incurred related to the FSMS implementation included training for employees, technical support and purchase of equipment, amounting to approximately TZS 12.0 Mln (US\$5,500.00).



The results

The managers implemented food safety measures, corrected the nonconformities found by the expert and worked every day to achieve their goal. The workers were aware of the importance of **Good Manufacturing Practices** and their behaviour and confidence while performing their everyday tasks improved. A Tanzanian manager for sales and marketing was recruited to implement a business plan, based on the enhanced quality of the products.

Thanks to the commitment of the food safety teams following the procedures and instructions in the production area, the food safety incidents have drastically Before the project started I must admit, we knew very little about the ISO 22000 Certification (...) already we are seeing some improvements in the way we approach our tasks; documentation has improved, production efficiency is rising, we can also see sales revenues start to increase since June, 2016. We are hoping by the end of year 1 with ISO 22000 Certificate in hand, the position of the Company will turn around into huge profits"

MR. CHARLES ZACHARIA

BUSINESS STRATEGIST OF MASASI FOOD INDUSTRIES.

decreased, less time is wasted and the production of products like tomato puree has increased by up to 12%. The feedback received from customers is very positive. The efforts have quickly translated into a slow but steady growth in sales.

THE COMPANY

INCORPORATED ON 18.06.2007

COMMERCIAL **OPERATIONS STARTED IN**

PERMANENT EMPLOYEES

CASUAL EMPLOYEES

PRODUCTS

- > tomato ketchup
- > tomato sauce
- > chili sauce
- > mixed fruit jam
- > pineapple jam
- > mango juice
- > still drinking water
- > tomato paste.





Darsh Industries Ltd.

The challenge

In 2016 Darsh Industries had seven HACCP studies conducted for tomato based products, jams, vinegars, powder products, spices, peanut butter and honey. Because of this and thanks to the high quality and the good reputation of the products, Darsh had never sought the

need for an additional label on their packaging. Plus, they were not aware of the requirements needed to get the certification.

But for international markets the reputation or sales of a product were not enough. If Darsh wanted to expand its market,

quality needed to be proven. With an increased incidence of foodborne illnesses, a growing awareness in the consumers about quality and a real wish to demonstrate to Tanzania and to the world the high value of their products, Darsh had to take a

THE SOLUTION

GETTING ISO 22000 CERTIFIED

In 2016 Darsh committed to the process of implementing ISO 22000 with the following activities:

Darsh appointed a food safety team;

STEP 5

STEP 2



A gap analysis and executed:

an assessment of the situation of the company were

Additional HACCP studies were conducted to identify food safety hazards for each product;

STEP 6



Support was provided for the drafting of food safety documents for **Prerequisite Programme** (PRP) procedures and for Operational **Prerequisite** Programmes (OPRPs);

STEP 3



Awareness sessions about FSMS were provided to managers, supervisors and technical workers in the company;

Internal audits were carried out and corrective actions were developed.

step forward.



Detailed training on ISO Standard requirements was given to the Food Safety Team covering Standard requirements and detailed understanding of HACCP Principles:

The results

In January 2017, Darsh Industries was awarded the ISO 22000 certificate.



The practical training delivered to the workers and the food safety team on good manufacturing practices helped reduce the number of food safety incidents, hence saving time and money by avoiding the presence of physical, chemical and microbiological contaminants.

The increased attention to detail in the production area and the feeling of belonging to a team, where every person contributes to quality, has helped minimize losses and food wastage and increased productivity. Furthermore, with the implementation of a traceability system, if a product is rejected because

of contamination that might constitute a risk for the health of the consumers, it is possible to determine the causes of the problem by going back to the raw material or the manufacturing of that same product, preventing



The awareness received by the supervisors and managers was a turning point in the process of accreditation. Without the commitment of the company the expert alone cannot undertake such responsibility"

future issues.

MR. BALASAHEB GAVANE

DIRECTOR DARSH INDUSTRIES LTD.



THE COMPANY

FOUNDED IN

PERMANENT AND **TEMPORARY STAFF**

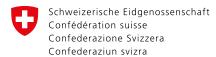
INTERNATIONAL EXPERTS

PRODUCTS

- > Tomato sauce
- tomato ketchup
- Chilli ketchup
- tomato paste
- tomato Juice
- > chilli sauce
- jams and marmalade
- **Pickles & Chutneys**
- > vinegar
- **Rose syrup**
- powder products
- spices
- peanut butter
- honey







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