

PROJECT: STDF/PG/343

ENHANCE THE COMPLIANCE, PRODUCTIVE CAPACITIES AND COMPETITIVENESS OF THE CINNAMON VALUE CHAIN IN SRI LANKA

FINAL REPORT

FINAL VERSION

31TH OCTOBER 2016

TABLE OF CONTENTS

1. EXECUTIVE SUMMARY	6
2. BACKGROUND	7
3. PROJECT GOAL	10
4. PROJECT IMPLEMENTATION AND MANAGEMENT	11
5. PROJECT OBJECTIVES, OUTPUTS & ACTIVITIES	11
5.1. Output 1: Compliance capacity of the Cinnamon value chain improvemer food hygiene and safety	nt in terms of 12
5.1.2. Output 2: The image and branding of the cinnamon exports from improvement in the export markets through the PCC certification mark launch	m Sri Lanka 29
6. FINANCIAL OVERVIEW	33
7. OVERALL PROJECT RESULTS AND LESSONS LEARNED	35
7.1 Enhanced global market position for Ceylon cinnamon	35
7.2 Established institutional capacity to sustainably support Ceylon cinnamon a safety compliance	octors in food 36
7.3 Developed a Training Framework with food safety components	37
7.4 Compliance capacities through GMP upgrade and promotion	37
8. RECOMMENDATIONS	38
8.1. Specific recommendations to the project	38
8.2. Broader recommendations	39
9. LOGICAL FRAMEWORK	40
10. FINANCIAL REPORT	42
11. LIST OF DOCUMENTS DEVELOPED UNDER THE PROJECT (ANNEXES)	42

PROJECT INFORMATION

Title

Enhance the compliance, productive capacities and competitiveness of the cinnamon value chain in Sri Lanka

Implementing Agency

United Nations Industrial Development Organization

Partners

Cinnamon Training Academy
Food and Agriculture Organization of the United Nations
IndExpo Ltd.
Ministry of Primary Industries, Sri Lanka
The Spice Council
UNIDO

Start Date

July 2012

End Date

October 2016

Beneficiary

Sri Lanka

Budget

STDF: US\$ 680,809.25

UNIDO: US\$ 177,254.04 (EUR-USD exchange rate based on 31 Oct 2016/project closure

date)

Stakeholder contribution: US\$ 756,738.35 (USD-LKR exchange rate based on 31 Oct

2016/project closure date)

Total project value: US\$ 1,614,801.64

LIST OF ABBREVIATIONS

Allied products Natural extracts, herbs, etc.

C Continental grade

DEA Department of Export Agriculture of Sri Lanka

EC **European Community**

EDB Export Development Board of Sri Lanka

GOSL Government of Sri Lanka

GIZ or GTZ German Development Cooperation

GMP Good Manufacturing Practices

Ha Hectare (approximately 1/ 2.5 acres)

HACCP Hazardous Analytical Critical Control Point HS Harmonized Community Description and

CodingSystem

ITI Industry Technology Institute

Sri Lanka Rupee **LKR** Μ Mexican grade

MRL Maximum Residue Level

NITAC National Industrial Training Advisory Committee

NAITA National Apprentice and Industrial Training

Authority

NCS National Competency Standards NCE National Chamber of Exporters Spices, fruits, vegetables, etc.

Non-traditional export

crops

NVQS

National Vocational Qualification System

NVQ National Vocational Qualification

PCC Pure Ceylon Cinnamon

R&D Research and development SLSI Sri Lanka Standards Institute SPS Sanitary and phyto-sanitary

STDF Standard and Trade Development Facility Т Tonnes (metric tonnes in United States)

TBT Technical barriers to trade

TSC The Spice Council

TVEC Tertiary and Vocational Education Commission

UNIDO United Nations Industrial Development

Organisation

US\$ United State Dollar

United States Agency for International Development USAID

Volunteers for Economic Growth Alliance **VEGA**

Vocational Training Authority VTA

WTO World Trade Organization

1. EXECUTIVE SUMMARY

Sri Lanka, the "Spice Island", has always been renowned for its spices. Among the many that it grows and exports, Ceylon cinnamon (*Cinnamomum zeylanicum Blume*) – also called "true cinnamon" – is one of the oldest and most well-known. However, the sector has been facing some challenges due to non-compliances related to stricter food safety standards as well as supply side constraints. Furthermore, lack of skilled labour for cinnamon processing and the recent adverse weather conditions for harvest caused by climate change add to the challenge of growing good quality cinnamon. With regard to the compliances to sanitary and phytosanitary (SPS) measures, the country's cinnamon export to the European Community (EC) and North America was suspended for a short period in the past as the maximum residue level (MRL) of sulphur dioxide exceeded the permissible amount. Simultaneously, enterprises engaged in the cinnamon industry believe that the main reason for this loss of competitiveness is due to its higher price compared to a substitute product-cassia and the lack of skilled labour.

Despite of the expeditious intervention at international level by the Government of Sri Lanka (GOSL) on the trade suspension, the Spice Council of Sri Lanka (TSC) has simultaneously recognized the need of strengthen the Ceylon cinnamon sector, to address the challenges faced by the industry. Consequently, they approached the Standards and Trade Development Facilitation (STDF) and the United Nations Industrial Development Organization (UNIDO) in order to formulate an intervention for the sector. The project aimed to enhance the competitiveness of the Ceylon cinnamon value chain and reinforce its position thus facing the stiff competition at the global trade. As a direct impact or immediate objective, the project supported the industry to enhance its quality and food safety compliance (SPS) in order to meet with the conformity requirements of the high-end markets, including the EC and North America.

As a response, the STDF and UNIDO developed a SPS capacity building project based on UNIDO's value chain development approach. During the formulation, the Cinnamon Training Academy, established in June 2006, was identified as a key stakeholder of the cinnamon industry and consequently selected as a beneficiary of the project to deliver sector related services. At the same time, the Government of Sri Lanka (GOSL) has reassured its endorsement to the Ceylon cinnamon sector and envisaged the goal of becoming a billion-dollar industry after its upgrade. To facilitate this vision, the GOSL has also provided financial assistance to construct a CTA training center in Galle district thus allowing it to become a nationally recognized training center. The project has developed a nationally recognized competence-based training programm which is delivered by the CTA e for practitioners and job-seekers. In an effort to revitalize the global market position of Cevlon cinnamon, the GOSL unveiled a new logo under the brand name "Pure Ceylon Cinnamon" (PCC) to distinguish the country's cinnamon products from others. The STDF-UNIDO-TSC project also aimed to promote internationally recognized food safety practices among cinnamon processors through the Good Manufacturing Practice (GMP) certification, which was piloted through the technical and financial support of six cinnamon processing centers. Although this number might imply a limited intervention, factory owners and management were reluctant to engage and the project has shifted to pilot and showcase among a selected factories. By the end of the project, a targeted awareness-raising public relations (PR) campaign was also conducted at country level thus disseminating information about (1) the activities of the CTA to acquire a pool of future trainees; (2) the importance of complying with food safety and hygiene standards for cinnamon factories through GMP and the NVQ training for workers; and (3) about the opportunities in the local cinnamon sector for a future career.

When it comes to the lessons-learnt and recommendations, working together with committed counterparts, such as TSC and CTA, will ensure that the national and sectorial activities commenced during the project will be properly followed up. In case of the project, this will contribute to the efforts of GI registration and also the delivery of the training framework. However, it is important to mention that the direct endorsement of the GOSL is strongly recommended to further promote the aforementioned training framework and food safety certification within the cinnamon sector. This engagement and constant dialogue between the public and private sector will in turn contribute to the "one million new jobs" and "cinnamon becoming a billion dollar industry" policy targets. Closer cooperation among national authorities is also required to cut potential costs and overlaps. CTA, as the accredited training center for the industry, has successfully cooperated with National Apprentice and Industrial Training Authority (NAITA) under various joint programs and it can utilize the network of this training institutes. With regard to future SPS capacity building initiatives, it is highly recommended to apply the value chain development approach to upgrade obsolete practices in food safety and coordinate joint efforts established under a public-private partnership.

2. BACKGROUND

The records on cinnamon from Sri Lanka (Ceylon) date back to ancient times, when the hieroglyphic record of Queen Hatshepsut mentioned the spice, or when Genghis Khan and other Mongol dynasties have traded cinnamon through the Silk Route. In more recent history it was the Arabs followed by the Europeans, namely Portuguese, Dutch, and Spanish, who were attracted to the irresistible and distinctive aroma and flavour of the Ceylon cinnamon, and established a network of international trade, which lasts to date.

Cinnamon is mainly grown in the southern parts of the country (in Galle and Matara districts, and marginally in Hambantota district), but recently the crop has been extended to central and inland areas (Ratnapura and Badulla districts). In the last couple of years, the total cultivated land of cinnamon extended to 29,415 hectare (ha) (source: DEA, 2010) while the annual production is little over 15,000 tons out of which 13,000 tons (source: DEA, 2010) is being exported.

Sri Lanka is the world's largest "true" cinnamon producer and exporter. However, its global share in cinnamon exports, particularly in Europe and North America, was gradually diminishing due to sanitary and phytosanitary (SPS) related non-compliances stipulated as well as the raising supply of a cheaper substitute from the Far East, called cassia (*Cinnamomum cassia*). As a result, Sri Lanka has lost about 50% of its global cinnamon trade in the past 10 years, despite holding 90% share of the international markets for the "true" cinnamon. In other words, for each year during this decade, Sri Lanka has lost 5% of its global trade share in cinnamon. Ironically, Sri Lanka is still dominating a rapidly shrinking market, however, it was unable to exploit its opportunities mainly because of the abovementioned reasons.

Table 1. Annual turnover of Ceylon cinnamon exports US\$ MN

Description	2011	2012	2013	2014	2015
Cinnamon primary	128.9	129.5	132.4	132.3	131.0

Cinnamon oils (Leaf +Bark)		5.7 (3.7+2.0)	6.2 (3.7+2.5	7.5 (3.7+3.8)	8.3(5.1+3. 2)
. 20,)	(011 - 210))	(317 : 313)	- /
Total	136.6	135.2	138.6	139.8	139.3

In 2004, Sri Lanka's Ceylon cinnamon produce exported to the European Communities have exceeded the maximum level of sulphur dioxide (SO₂) allowed at the time and as a result, the European Spice Association (ESA) was of the view that it is not possible to import cinnamon from Sri Lanka to the European Communities under the existing circumstances, following the technical regulation related to the import of foodstuffs written in the European Parliament and Council Directive No. 95/2/EC and its subsequent amendments. Sulphur dioxide is used for fumigation purposes against fungus and insects and it also allows the Ceylon cinnamon to have its unique colour compared to other types of cinnamons. Thanks to the quick follow up by the GOSL in the Codex Committee on Food Additives and Contaminants, 29th Session of the Codex Alimentarius Commission adopted a new maximum level of use of 150mg/kg for sulphites (including sulphur dioxide) among "herbs and spices" of the Codex General Standard for Food Additives (GFSA). The whole procedure was followed by the Committee on Sanitary and Phytosanitary Measures of the World Trade Organization (WTO) and documented under documents number G/SPS/GEN/597, G/SPS/W/187 and G/SPS/GEN/716. After six years of ban, Commission Directive No. 2010/69/EU of 23 October 2010, amending the formerly applied Directive 95/2/EC, authorized the use of SO₂ exceptionally in cinnamon at a maximum level adopted by the Codex. In terms of trade disputes, this example showcases the immediate intervention by the Codex and the WTO in order to settle trade disputes between countries.

Over a decade, the stakeholders of the cinnamon sector have been concerned with constantly diminishing workers at plantations for crop stand maintenance and peeling of cinnamon. Traditionally, these crop management tasks were carried out by a particular cast of the population, which was considered of lower social status. This social stigma and the physically intensive work conditions had made many of these people give up this line of work and shift to other industries like tourism. Urbanization and migration to the Middle East further contributed to the aforementioned phenomenon. As an overall consequence, there was about a 40% deficit in the total workforce requirements for cinnamon peeling and plantation maintenance by 2006 based on the analysis of the Spice Council.

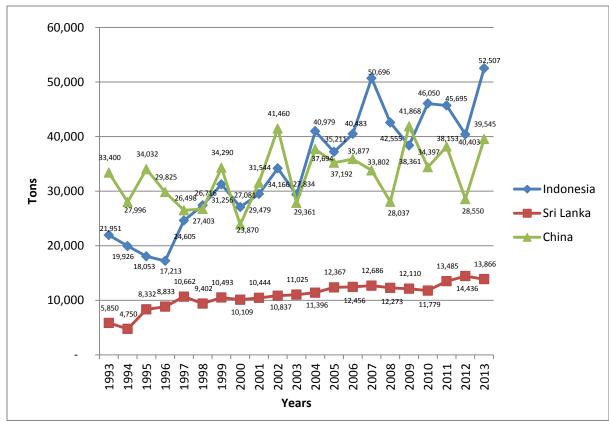


Figure 1: Global top 3 cinnamon exporting countries

Source: FAOStat

Because of this labour scarcity and recent unfavourable weather condition, only 25% of the plantations are being harvested in full cycle, meaning twice a year, while a balance of 75% is either harvested only once per annum or not at all. This harvest-free period may sometimes extend to two or three years. Due to this issue, the total harvest loss incurred per annum is about 20%. The escalating concerns on quality degradation and evermore stringent conformity standards for food products in the international markets had alarmed and motivated the industry stakeholders, particularly TSC members to find an immediate and effective solution for this issue. They assumed that unless such action is implemented soon, Sri Lanka's cinnamon industry would inevitably face a grave future in international trade.

As a result of these concerns, TSC has been spearheading an extensive effort of building

up a streamlined and institutionalized training framework and function for manufacturing cinnamon, conforming to SPS related standards. They have also envisioned this framework to accomplish by a national excellence and conform to national vocational qualification (NVQ) system. In parallel, TSC has been giving focus to several other key issues affecting the value chain, such as inefficiencies in the supply chains related to the smallholders, skills and knowledge gap in baling and sorting, lack of coordination and strategic focus of the value addition sector of the cinnamon industry, and lack of information about the producers and other value chain actors.

A value chain analysis conducted under the preparatory phase of this project¹ has highlighted three core issues when it comes to the local cinnamon sector's competitiveness and growth: (i) scarcity of skilled labour and migration of cinnamon peelers causing the need of approximately 30,000 peelers; (ii) non-existence of a local institutionalized system to assure market conformity standards; and (iii) insufficient research and development (R&D) mechanism resulting in a lack of supply. The effects were consequential and branched up to result in insufficient volumes reaching the end market, inability to meet the quality and food safety requirements of high-end markets, such as Europe and North America; and obsolete technologies for product development, packaging and productivity increase.

3. PROJECT GOAL

Based on the aforementioned value chain analysis and consultative process with the industry and other stakeholders, the project set the aims:

- to increase the compliance capacity of the cinnamon value chain by improving food safety practices and branding Ceylon cinnamon through the integration of Pure Ceylon Certification certification system;
- to strengthen the entire Ceylon cinnamon value chain which can counters the tough competition at the global market and consolidate the lost market share; and
- to support the industry to capture the expanding market share of the market for value added cinnamon products from Sri Lanka.

The project also focused on providing technical assistance to the Export Development Board of Sri Lanka (EDB)'s and Ceylon cinnamon sector's joint initiative, namely the Pure Ceylon Cinnamon (PCC) certification mark. Particular consideration was given to ensure that the EDB's organization structure, as a designated organ by the GOSL, and its strategy receive the needed guidance and framework development. This contributes to the effective implementation of recommendations given by the project through the PCC certification mark's conformity assessment analysis. Furthermore, the project aimed to support the GOSL and the industry in their effort to acquire Geographical Indication (GI) for Ceylon cinnamon.

In addition, the project envisaged establishing an accredited training framework in line with national vocational policy and regulations. The training framework is focused on enhancing food safety and hygienic practices in which all value chain actors take responsibility for overall food safety. It also envisaged the enhancement of industry skills as well as the increase of competent workforce, thus meeting with the labour demand of the cinnamon processing industry. To upscale the delivery of the training framework, the project has ensured institutional capacity building through the support of the establishment of the Cinnamon Training Academy. Furthermore, the project facilitated

_

¹ See: http://www.standardsfacility.org/PPG-343

that the CTA act as a fully equipped nationally recognized modern training institute for the enhanced international trade of Ceylon cinnamon. At enterprise level, the project aimed to promote food safety and hygiene certification among cinnamon processing centers thus facilitating their product compliance with the requirements of export markets.

4. PROJECT IMPLEMENTATION AND MANAGEMENT

TSC requested UNIDO to take the lead in implementing, supervising and assuring the project outcomes indicated in the project document.

Based on the project steering committee (PSC) as outlined in project document, the aforementioned body was established for the period of the project. This platform served the project as a decisions-making body at the policy / governance level. Furthermore, it was also facilitated disseminate information about the development of project activities among the project stakeholders. The PSC comprised of the Ministry of Industry and Commerce, Sri Lanka; UNIDO, Vienna; STDF, Geneva; TSC representatives from Ministry of Minor Export Crops, National Planning Department, subordinated to the Ministry of Finance, and EDB.

At the operational level, the project team was composed by a Project Manager in UNIDO, supported by the Expert on Project Management, the National Project Coordinator (NPC) and the Financial and Administrative Coordinator. The project team in the field included the NPC and the Financial and Administrative Coordinator at the end of the project, as the project team went through a transformation in mid-2014. Despite of the reduced size of the project management team, most of the planned project activities were implemented and finalized by the end of the project. The project has ensured this through continuous monthly, in case of major events weekly, conference calls with the participation of the counterpart, Expert on Project Management and UNIDO project team in the field.

With regard to the inter-agency cooperation under the project, FAO has proposed a roadmap for the development and sustainability of a Geographical Indication (GI) scheme on Ceylon cinnamon, thus allowing the realization of this initiative on a long-term basis.

In terms of project implementation and monitoring, the project team has developed a detailed action plan through a consultative process with its counterparts, which elaborated on each activity and task in a quantitative and qualitative manner. This has accelerated the project implementation and assisted the project team in following up with multiple activities at the same time. As a secondary outcome, the action plan has improved process reporting and monitoring for STDF, by quantifying the development stage of each activity in an understandable format.

5. PROJECT OBJECTIVES, OUTPUTS & ACTIVITIES

The higher level impact or overall objectives of the proposed project is to support the Ceylon cinnamon industry stakeholders in improving their competitiveness and compliances against food safety requirements thus successfully facing with a stiff competition in the global trade and restraining the market deprivation. Furthermore, the project attempted to support the weak value added segment by supporting the increase

of value added cinnamon from Sri Lanka.

The direct impact or immediate objectives of the proposed project is to support the industry in enhancing quality and food safety practices and as a result, meet with conformity requirements of European and North American as well as other high-end markets. Originally, the project aimed to facilitate the application of adequate technology and value addition, however, this component was not implemented as it has not received financial support from the donor community. Furthermore, the project aimed to tackle the social stigma related to the cinnamon peeling profession thus also covering the labour shortage of the industry.

5.1. Output 1: Compliance capacity of the Cinnamon value chain improvement in terms of food hygiene and safety

Output 1.1 Capacity to deliver food hygiene and safety training strengthened along the cinnamon value chain (Institutions, producers, growers and workforce)

5.1.1 Training Framework Development

The project has created a training programme on building capacity on food safety and hygiene practices along the cinnamon value chain. Accordingly, the project in coordination with a national vocational institutional network, including the National Apprentice and Industrial Training Authority (NAITA) and the Tertiary and Vocational Education Commission (TVEC), as well as industry related stakeholders, set up a pioneering competency based training framework. This framework comprised of National Competency Standards (NCS), curriculum, assessment resources, lessons plan/teaching aids, short video clips supporting the class room training (see annex 3-11 for the developed documentation). All individuals who successfully undergo the training outlined by the NCS, receive a National Vocational Qualification (NVQ) certification in either cinnamon factory or field operation accredited and registered by TVEC. These two levels contain training and certification for factory officers, processors, field officers and harvester.

After the completion of the training and certification development, the project originally targeted to train up to 600 people, who already worked or later expected to be gainfully employed in the industry through the new certificate. However, more than a thousand people have participated on awareness raising and training on food safety and hygiene practices by the end of the project. Two essential circumstances lay behind the organization of the two aforementioned modules from the developed training framework: (1) the CTA had not received the necessary training facility registration by TVEC until the last phase of the project which did not allow the organization of training events before that; and (2) there was limited knowledge on the existence of the training framework by the industry in some part of the country.

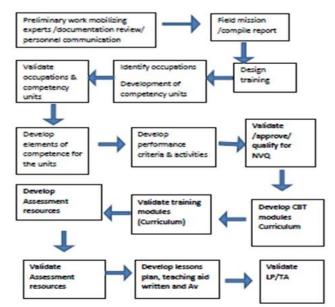
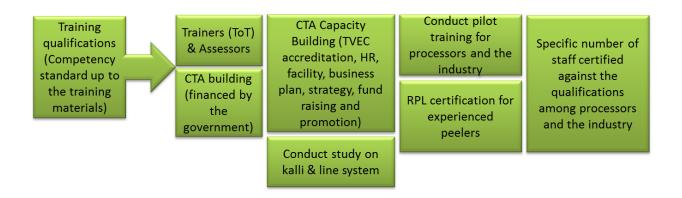


Figure 2. Process chart for the national competency standards (NCS) development



Conduct pilot training for processors and the industry

Conduct training for the staff of 6 pre-selected centers – by CTA
 Cooperation with VTA to CTA qualifications (MoU – pilot –review – update) with no financial investment from the project except for minimal support to the CTA trainers

Figure 3. Block diagram of training framework

To test the developed training framework, it is reported that since June 2016 Matara district alone completed around 20 training programs covering over 1000 individuals engaged in cinnamon growing and processing. Out of the participants attended programs the NAITA has received 296 application for EBT (133) and RPL (163) certification programs. The NAITA reports indicated 49 applicants were already processed for EBT while others are in the process of evaluating for necessary documentation as per the NAITA criteria for NVQ. Further to this, the aforementioned programs have given opportunity to CTA to establish a good work relationship with NAITA thus acquiring and compiling all technical, financial, logistical involvement as a learning experience for future CTA programs.

Table 2. Training programmes delivered by the STDF-UNIDO-TFC project

PROGRAMME	DATE	VENUE	FEMALE	MALE
GMP Awareness Programme	21.0 3.2016	Galle	16	38
Enterprise Based Training	07.04.2016	Matara, Parapamulla	-	36
Enterprise Based Training	05.05.2016	Matara, Kiriweldeniya	-	25
Enterprise Based Training	05.05.2016	Matara, Seenipella	2	28
Enterprise Based Training	05.05.2016	Matara, Seenipella	1	23
Enterprise Based Training	30.05.2016	Matara, Mulatiyana	4	18
Enterprise Based Training	05.07.2016	Matara, Mulatiyana	11	32
EBT - Promotion Programme	15.07.2016	Matara, Meepavita	5	11
Enterprise Based Training	15.07.2016	Matara, Meepavita	32	17
Enterprise Based Training	19.05.2016	Matara, Mulatiyana	4	11
Enterprise Based Training	02.08.2016 & 03.08.2016	Matara, Deyyandara	32	29
Enterprise Based Training	15.08.2016 & 16.08.2016	Matara, Bamunugama East	10	64
Enterprise Based Training	18.08.2016 & 19.08.2016	Matara, Batadola	3	39
Enterprise Based Training	29.08.2016 & 30.08.2016	Matara, Devalagama East	19	55
Enterprise Based Training	01.09.2016 & 02.09.2016	Matara, Devalagama East, Radawela East and West	31	50
Enterprise Based Training	07.09.2016 & 08.09.2016	Matara, Baragama East	16	50
Enterprise Based Training	14.09.2016 & 15.09.2016	Matara, Baragama East	23	57
Enterprise Based Training	21.09.2016 & 22.09.2016	Matara, Baragama South	5	39
Enterprise Based Training	26.09.2016 & 27.09.2016	Matara, Makandura cluster 1	45	19
Enterprise Based Training -	28.09.2016 & 29.09.2016	Matara, Makandura	95	42

5.1.2 Cinnamon Training Academy

In the first phase of the project, the ownership of the NVQ training remained open. The counterpart showed leadership by fundraising among stakeholders and at the GOSL for the construction of a training facility for the CTA in Galle district.² Since it became possible for CTA to conduct these trainings in the future, the SC of the project has agreed to provide institutional capacity building for the institute through the training of its staff, establishment of a demonstration plantation and purchasing equipment for the training facility. By the end of the project, the registration of the CTA as a NVQ-level training provider was successfully carried out and it received a national level accreditation at TVEC for its training function as the training infrastructure was fully in place, including a model plantation for the demonstration of cinnamon harvesting (see picture 2). This will also enable CTA to deliver standardized training and award nationally recognized certificates locally.



Image 1. Cinnamon Training Academy in Kosgoda



Image 2. The model plantation at CTA, Kosgoda

NAITA has also extended its cooperation to work with CTA and promote the competency-based training (CBT), enterprise-based training (EBT), and recognize prior learning (RPL) programs on Cinnamon Field and Factory Operations. CTA, as a newly established entity, is still in the process of gaining experiences through promotion and implementation of the NVQ training events. Further collaboration with NAITA established under the project was an ideal opportunity for the organization of training sessions, also being essential for the financial sustainability of CTA.

15

² Financial contribution by stakeholders, such as cinnamon industry or the GOSL, are outlined in chapter 6 of this report.

Towards the end of the project, the CTA was well guided in planning and implementing CBT, EBT and RPL through programs conducted at its premises, plantation companies and NAITA facilities. Few NGOs, such as the World University Services Council (WUSC), Berendina, have approached CTA for possible support for training activities on cinnamon clusters.

To ensure CTA's sustainability, additional supporting studies and strategic documents were developed which included a five-year strategic plan for its successful operation (annex 21). This document has also outlined the Vision and Mission of CTA which are as follows:

Vision: "To be the center of excellence in providing training and to become the global knowledge hub for Cinnamon."

Mission: "To develop the technical and managerial competencies of all key participants in cinnamon value chain and thereby deliver and exceptional value to all key stakeholders."

The project has also developed a business plan (annex 22) upon the request of the TSC, thus identifying the financial bottlenecks during the beginning of its operation and ensuring its financial sustainability.

The support to the CTA has also contained an on-the-job training to its CTA coordinator by the project, during which CTA personnel gained experience on the proper organization of the training programme. As per the request of CTA and TSC, the project in collaboration with NAITA also developed and organized a training schedule.

To accommodate a professional online and local appearance for the CTA, a subcontracted company has developed corporate materials for online and printed correspondence. At the moment, CTA has a professional online presence with a new website (cinnamonacademy.lk) and a promotion video on the activities of CTA and the NVQs. Thanks to the constant follow-up of the TSC and CTA, CTA has received external contributions from GOSL and the private sector as indicated in the Financial Overview chapter. As an outcome, CTA has its own training center in Kosgoda, Galle district, containing a training facility and community building with a kitchen at the moment. After the closure of the project, the GOSL has taken steps to transfer additional LKR 50 million indicated in its 2016 National Budget which will allow the CTA to build an additional training facility and hostel on its territory. The latter will be especially essential for conduction of training programs to people, coming from a far distance.

The project has also developed a bankable project, focusing on the expansion of CTA's service portfolio to consulting, product testing and research and development (see Annex 27). Another project document was developed to upscale best practices in which CTA would play an essential role due to the conduction of the NVQ training. CTA and TSC have expressed a strong interest to follow up with the government and their representatives at the permanent mission level in order to support fund-raising for these possible projects.

Based on the request of the counterpart, a feasibility report on a bought tree factory (see Annex 30), as a future service of CTA, was also conducted to submit as a potential plan to the GOSL for funding. The bought tree factory would also improve traceability of processed products, create stable income for 40 cinnamon processors and ensure the financial sustainability of CTA.

5.1.3 Public relations and marketing

Originally, the project has planned to support the participation of a cinnamon industry delegation on the ANUGA Food Fair in Germany in October 2015, which is considered the world largest food and beverage fair. However, the participation on this event was postponed for an undefined date since the TSC preferred to present the Ceylon cinnamon on the fair after acquiring the Geographical Indication (GI). Initiating similar outcome like the ANUGA Food Fair, there were three main events where the Ceylon cinnamon and the latest project achievements for Ceylon cinnamon were showcased to the public:

- 1. July 2015 TSC presented the Ceylon cinnamon sector and the project on 5th Global Review of Aid for Trade in Geneva;
- 2. June 2016 UNIDO and the representative of TSC and CTA presented the project during the event "Spicing-Up Development Assistance" organized by STDF in Geneva (see Image 3);
- 3. September 2016 WTO Forum Stand on the project with Ceylon cinnamon value added products (see Image 4).



Image 3. Spicing-up Development Assistance event in Geneva



Image 4. Exhibition of Ceylon cinnamon produce during the 2016 WTO Public Forum

As an outcome of the event "Spicing-Up Development Assistance", several multinational companies showed interest to learn more about the latest developments in Sri Lanka.

STDF and UNIDO have conducted several meetings with them and learnt about their expectations related to the traceability of primary and value added products, such as cinnamon oil. The project has also conducted a mini value chain analysis on the cinnamon oil industry in order to share valid information on the sector (see annex 31).

The project had utilized the funds previously allocated for the ANUGA Food Fair and conducted a small-scale awareness raising PR and marketing campaign. As an example for the developed materials, such as a poster on the CTA see picture 5 or for the developed logo of the Cinnamon Training Academy see picture 6. The campaign has promoted three main messages to the public: (1) CTA as an accredited training provider of NVQ training in Sri Lanka; (2) the importance of GMP for cinnamon processing centers; and (3) abolishment of social stigma on cinnamon workers thus covering labour shortage. The project aimed to ensure that the aforementioned messages are disseminated through various channels, including the printed and online media as well as local television channels. Image 7 illustrates the occasions when the TSC and the UNIDO NPC participated in a well-known Sri Lankan morning talk show to promote the CTA and the project outcomes. The project has been promoted through media articles, TV news highlights, ministerial news highlights, TV programs/interviews, etc. As part of the PR campaign, 56 articles were published about 6 topics in the editorial value of LKR 7 million and in the advertisement value of LKR 2.3 million, and in addition the stakeholders also participated in three talk shows. Based on the news articles CTA has received many inquiries for conduction of the NVQ training, technical advice/consultancy plantation management, GMP facilitation, cinnamon processing practices demonstration and refresher courses.



Image 5. Poster developed for the Cinnamon Training Academy



Image 6. Logo of the Cinnamon Training Academy



Image 7. TV interview with the counterpart and UNIDO National Project Coordinator

When it came to the PR campaign, the project has had press releases and advertorial articles published in local newspapers and their affiliated websites. Three press releases were created in consultation with CTA officials and with their inputs on mutually agreed topics.

Table 3. The press releases published on the project as part of the PR campaign

Topic	Publication	Circulation
Cinnamon Training Academy, the new twig of Ceylon	Daily FT	8.39 (000)
Cinnamon	The Island	35.7 (000)
	Dinamina	141.6 (000)
	Daily Mirror	80.7 (000)
Increased export potentials for Ceylon Cinnamon	Daily Mirror	80.7 (000)
	Daily News	97.3 (000)
	The Nation	1.94 (000)
	Sunday Leader	71.2 (000)
Cinnamon Trading Academy (CTA) to spearhead Ceylon	Ceylon Today	13.17 (000)
Cinnamon to Meet International Hygienic and Quality	Daily News	97.3 (000)
Standards	Daily Mirror	80.7 (000)
	Daily FT	8.39 (000)

Two advertorial articles were created in consultation with CTA officials and with their inputs on mutually agreed topics and placed as PR articles.

Table 4. The advertorial articles published on the project as part of the PR campaign

Topic	Publication	Circulation
Ceylon Cinnamon – How It Can Change Lives In Sri Lanka	Ceylon Today	13.17 (000)
	The Island	35.7 (000)
	Daily Mirror	80.7 (000)
	Daily News	97.3 (000)
	Sunday Times	245.79 (000)
Cinnamon Training Academy Pathway to a Future Career	Daily Mirror	80.7 (000)
	Ceylon Today	13.17 (000)
	Daily FT	8.39 (000)
	Daily News	97.3 (000)

Changing the social perception on cinnamon peelers was also a target of this campaign. By creating a positive message around the cinnamon industry, a number of youths and ladies may consider cinnamon sector as a possible career path which, unlike in the past, can provide a gainful and dignified vocation opportunity. Thereby, the project planned to integrate this theme in the PR campaign and simultaneously organize events at a grassroots level thus commencing a dialogue with small and medium-sized processors.

5.1.4 Supporting studies on the Cinnamon value chain

With regard to the supporting studies, the project has developed additional reports, assessment and plans in order to contribute to the sustainable and inclusive development of the cinnamon value chain and CTA, as an important player in the implementation of these initiatives. Based on the recommendation of the Independent UNIDO Country Evaluation, the project reviewed the benefits and risks related to the promotion of the 'line' (more industrialized) system against the traditional so called 'kalli' (or gang) system (see Annex 23). In the conclusion/recommendation part of the report, the strengths and weaknesses of both systems (see Table 5) were outlined, agreeing that line system would have to be further developed before its promotion to avoid negative impact on family based enterprises. In brief, the Kalli system has dominated the industry and it is highlighted in the report that there are many issues pertaining to the loss of income for plantation owners in the long-run, depending on the yield and share of output. The report proposes the benefits of line working system where more women will be attracted but it also indicates the fact that Kalli system is frequently practiced by family business. Line system could be an ideal option for improving the value chain from multiple aspects through modernized industry practices currently emerging slowly but steadily.

Furthermore, the project has developed two reports to create a master plan (see Annex 24) and a related action plan (see Annex 25) for the value chain from socio-economic, environmental, value addition, productivity and other aspects. To address the main challenges related to the successful realization of these plans, the project developed three bankable project documents with the following titles:

- 1. Facilitating the establishment of a sustainable infrastructure for the Ceylon cinnamon industry (see annex 26)
- 2. Providing support to the Cinnamon Training Academy (CTA) to become a "Centre of Excellence (see annex 27)

3. Introducing an integrated climate change mitigating, resource-efficient concept for cinnamon production centres in Sri Lanka (see annex 28)

Table 5. Strengths and weaknesses of Kalli and Line system

Kalli system			
Strengths	Weaknesses		
High volumes of produce	Long working hours		
Highly skilled workers	Basic and unhygienic working environment		
Able to produce all grades	Lower food safety standards		
Peelers feel independent and flexible	Harvesting easy sticks		
High income received shortly after peeling	Difficult to monitor and control quality		
Judges the stick when harvesting and is able to produce high quality	Peeling might be stopped or interrupted due to other activities		
Family peels together, children learn and everyone is looked after	High season not enough peelers are available Reliability (advances)		
Value of sold cinnamon is shared equally	Low recognition within the industry		
	Stigma towards the industry still existing but decreasing		
	No motivation of producing high grades		
	System of blame and cheating throughout the supply		
	chain		

L	ine system
Strengths	Weaknesses
Regulated working hours and income	Lower volumes per month – better volumes per year
Good and hygienic working environment	Less skilled work force
High food safety standards	Wastage and production of lower grades due to
Easy to monitor and control the quality	unskilled workers
Constant supply of cinnamon	Decreased efficiency if line workers are lazy/ low skilled
More free time with the family	Staff has fixed working hours, less flexible (peelers
Continuous processing without interruption	viewpoint)
Higher margins for the producer given lower	Monthly salaries and not immediate cash (peelers
labor costs	viewpoint)
Recognition and empowerment of the peeler	Harvesters and peelers are not the same person,
Potential of including kalli peelers under	peelers can face difficulties in peeling the supplied
certain circumstances	sticks based on harvesters low skills
Positive attitude towards the factory, number	No motivation to produce high grades
of female workers who are waiting to join	Only peelers are rewarded with incentives, other
	processors receive less salary per day

The project in cooperation with the TSC and CTA has developed several concept papers based on the request of the counterpart (see Annex 12-15). These concept papers support the CTA in its efforts to mobilize further funds at the GOSL and other donors. The following documents were developed during the implementation of the project to support the aforementioned initiatives:

- Concept paper to develop a bought tree factory
- Concept paper Testing and Product Development Facility
- Concept paper for GIZ SME Programme
- Concept paper Plantation productivity improvement without cost

5.1.5 Implementation & monitoring table of Output 1.1

Even though it was indicated in the original project document, the project was not able to cover the mechanization component as it was planned. Despite of this, the counterpart proceeded with this activity through establishment of partnership with universities in Japan. Additionally, the CTA has expedited this matter to the Prime Minister's delegation, visiting Japan during early 2016 and aranging meeting with a

particular professor of the University of Japan.

Table 6 summarizes all activities and tasks performed under this output based on the action plan outlined in chapter 4. At the end of the projects, the indicators/targets determined under this output can be considered as accomplished since the project has made successful progress proven by establishing and accrediting the CBT and conducting EBT and RPL training programs in one of the major cinnamon producing district, Matara. On the other hand, CTA is legally allowed and technically capable to conduct the NVQ training programme.

 Table 6: Activities and results of project output 1.1

Output / Activity	Indicator / Target:	Actual performance: (% complete) ³	Comments (results and challenges faced)
Output 1.1: Capacity to deliver food hygiene and safety training strengthened	Indicator 1: Percentage of staff/females/new comers qualified and trained in the value chain	100%	The project trained and/or provided awareness to more than 1000 individuals.
along the cinnamon value chain	value chain	100%	Accreditation for 2 schemes:
(Institutions, producers, growers and workforce)	Indicator 2: No. of training qualifications/sch emes developed		NVQ level 3: Factory Operation (1. Factory Officer, Processor)
workiorecy	and receive accreditation	100%	NVQ level 4: Field Operation (Field officer, Harvester Training of Trainers:
	Indicator 3: No. of trainers qualified and made available as local trainers	100%	Part 1: 13 male and 1 female Part 2: 6 male and 1 female
	Indicator 4: No. of qualifications accredited by TVEC	100%	2 qualifications, 4 occupations were accredited by TVEC and registered as an accredited training center for Cinnamon Factory & field operations NVQ courses.
	Indicator 5: The training centre incooperated and operational (Cinnamon Training Academy – CTA)		CTA staff was trained. Strategic and business plan for CTA was validated. Procurement process of equipment for CTA was finalized, also allowing the establishment of a

 $^{^{3}}$ A percentage calculated based on the delivered tasks indicated in the detailed action plan for project implementation.

			demonstration plantation
			for trainees.
			Awareness and fund raising event were conducted for the CTA.
Activity 1.1.1: Develop food safety and hygiene Training qualifications / courses,	Target 1: Develop National Competency Standards.	100%	National standards validated and accredited. Document available in Sinhala, Tamil and English.
resource materials, and personnel qualification schemes	Target : 2 Develop training Curriculum	100%	Training curriculum developed and available in Sinhala, Tamil and English.
	Target: 3 Develop trainer guide and learner guide.	100%	Trainer guide and learner guide developed and validated document in Sinhala.& English
	Target 4: Development of assessment resources	100%	Assessment resources accredited available in Sinhala, Tamil and English.
	Target 5: recruitment and training of assessors.	100%	Trained and registered 7 assessors with TVEC. Available online for reference.
	Target 6: Develop RPL certification program	100%	In collaboration with NAITA assessed more than 100 individuals from various provinces and awarded 63 NVQ certificates for those qualified on 3 & 4 competency levels. CTA in coordination with NAITA continue the
	Target 7: Develop lessons plan & instruction aids (Written)	95%	program promoting in other cinnamon growing areas.
			The document validated and copies delivered to trainers & assessors for training purposes.
	Target 8: Develop lessons plan and teaching aids on AV	100%	Field operation level: available only in Sinhalese (due to sudden illness of Tamil translator)
			Factory operation level: available in Tamil and

	I		<u> </u>
Activity 1.1.2: Train the trainers to deliver the food hygiene and safety trainings	Target 1: Implement TOT	100%	The audio-visual materials cover all 13 units as per the competence standards were developed in Sinhalese thus completing the task. 12 trainers registered and recruited for CBT. EBT training and RPL awareness programs gave them the opportunity to acquire experiences for future CBT.
Activity 1.1.3: Pilot food safety and hygiene training qualifications/co urses at all levels of the value chain.	Target 1: Pilot training, NVQ	80%	Workforce of supported GMP centers was trained under CTA. The trainers and CTA gained experience on implementing CBT, EBT for industry individuals.
	Target 2: Promote CTA training	100%	The project extended its support to develop corporate visibility for CTA promotion while linking CTA to NAITA.
	Target 3: EBT for plantations & factories.	100%	While continuing with plantations for EBT, the project in coordination with NAITA explored opportunity to implement EBT/RPL successfully. It covered more than 250 individuals qualifying for EBT and RPL programs so far and the programme remains ongoing.
Activity 1.1.4: Accredit food safety and hygiene Training qualifications/co urses under TVEC and NVQ levels obtained.	Target 1: CTA's institutional capacity building Target 2: Develop a strategic and business plan for	100%	The logo, initial website and information leaflet on CTA were delivered. The project supported the strengthening of these areas through the assistance of a well-known PR and marketing company.
	CTA Target 3:ANUGA	39% (7/18)	Strategic and business plan was developed and validated by CTA members.

	fair as promotion activity	Cancelled	
	Target 4:Register & accredit CTA	100%	PR and marketing campaign on CTA and Ceylon cinnamon proposed as alternate activity. Furthermore, cinnamon products were promoted during the WTO Public forum 2016.
			CTA was registered under the no. P04/0170 and accredited as a training center by TVEC.
Activity 1.1.5: Implement promotional campaign along the supply chain.	Target 1:Promote partnership / fund raising	100%	Two fund raising events have taken place. The first event was in Kosgoda with participation 20 invitees. The second fund-raising event held in Colombo has gathered 145
	Target 2: Develop a program to promote line peeling system	100%	participants. Project has conducted a comparative study on kalli and line system based on the suggestion of an independent evaluator. The project concluded that the promotion of line system shall be done through GMP and kalli system cannot be quickly eliminated as it also provides income to small family business.
Activity 1.1.6: Follow up on the government contribution and construction of the center.	Target: Expedite CTA construction & procurement process.	100%	The first phase of the CTA construction work was completed and GOSL allocated funds for the second phase in its 2016 Annual Budget. The CTA was equipped with the needed training equipment.



Image 8. Competency based training activity at the premises of CTA in Kosgoda

Output 1.2 Compliance capacities of the cinnamon processors enhanced through certification according to national and international standards

5.1.1.6 Enhanced compliance capacities of cinnamon factories against GMP

The ability to supply demanded scales complying with buyer's product specification based on food safety and hygiene standards was a major hurdle for the industry. Supporting the cinnamon processors to enhance their production compliance capacities through applicable certification will enable the products to meet the high-end conformity requirements of the European and North American markets and simultaneously mitigate risks, such as custom confiscation. In the past, some factories have also faced with insolvency as their delivered product did not comply with the requirements of the purchaser when it came to product's grade and quality.

Originally, the project aimed to support the upgrade of a larger number of cinnamon processing centers based on the requirements of GMP certification, however, factory owners were reluctant to engage in the upgrade as they did not see the added value of the food safety certifications. Consequently, the project had to reshape its approach and decided to showcase best practices to the industry through piloting with processing centers. Six companies were identified through the support of the CTA and TSC, where IndExpo Ltd. has also conducted a preliminary audit to envisage the needed changes based on GMP. Afterwards, UNIDO provided technical guidance to each center through the assistance of its local GMP expert. By the end of the project, all six companies have received the GMP certification based on the final audit conducted by the Sri Lankan Standards Institute (SLSI).

As a conclusion of the pilot GMP program, an awareness program was conducted for the industry where around 50 executives from companies and institutions involved in Cinnamon growing, processing and exporting participated (picture 10). Following this event, the project also initiated action to promote the GMP activity in the field. A successful program was organized at the Secretariat Office of Galle district on which around 60 individuals from the industry, DEA, EDB, and small producer clusters were represented (Image 9). For this program, experts of accredited certification bodies from Control Union, SLSI, and SGS, accepted the invitation of the project and presented the importance of GMP certification in Ceylon cinnamon production. In addition, the CTA has also organized an awareness event at its premises in Kosgoda, where Control Union highlighted the importance of GMP for Ceylon Cinnamon.

The project has utilized multiple channels to change the negative approach of the

industry towards GMP certification, including awareness sessions at grassroots level and PR campaigns at the national level. During the awareness raising PR campaign, the project has also promoted the necessity of receiving GMP certification in order to acquire the PCC certification mark. Being informed on the need of GMP certification, CTA was also approached by some factory owners to receive guidance how to upgrade their production based on GMP certification.

With the support of the local GMP expert, the project has also developed a booklet for cinnamon factories in English and Sinhalese (see the cover page of the booklet on picture 11 and the whole document as annex 18), which can provide them guidance on the requirements of GMP. It also provides information on the practical aspects of developing, implementing, and maintaining GMP within a cinnamon processing facility, thus allowing the dissemination of required knowledge for factory owners and operators considering the upgrade of their center against GMP. This booklet was also utilized by SLSI during the GMP standard development, which ensures its validity for the cinnamon processing centers in the future. The development of a nationally accredited GMP standard for Ceylon cinnamon was recommended by the expert who reviewed the conformity assessment scheme of the PCC certification mark (see annex 29).

5.1.1.7 Implementation & monitoring table of Output 1.2

Table 7: Activities and results of project output 1.2

Table 7: Activities and	results of project output	1.2	
Output 1.2: Compliance capacities of the cinnamon processors enhanced through certification according to national and international standards	Indicator: Number of cinnamon processors obtained certification	100%	All 6 centers received the GMP certification.
Activity 1.2.1: Support cinnamon processors to achieve GMP certification	Target 1: Upgrade physical infrastructure Target 2: Support GMP certification process Target 3: Technical expertise to develop GMP	100% 100% 100%	It was observed that the companies awarded the GMP certificates have made changes in their processing systems with more organized working arrangements.
Activity 1.2.2: Improve cinnamon growing & processing techniques to meet GMP standard requirements.	Target: Create demand for GMP within the Cinnamon value chain	100%	Awareness, competency training events, promotional workshops organized by CTA, NAITA and representations from certification bodies. They promoted GMP in line with training framework and traceability aspects on Ceylon cinnamon. Furthermore, a Booklet on GMP system for Ceylon cinnamon developed

and published for dissemination.
Awareness raising PR campaign also addressed the need of GMP for local cinnamon processing centers.



Image 9. GMP promotion event in Galle



Image 10. Handing over GMP certifications to upgraded centers

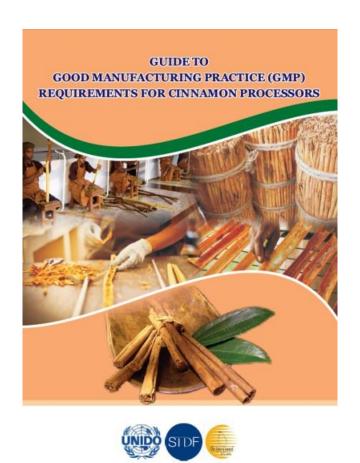


Image 11. GMP brochure developed by the GMP expert

5.1.2. Output 2: The image and branding of the cinnamon exports from Sri Lanka improvement in the export markets through the PCC certification mark launch

To regain its deserved market share, the project has provided assistance through multiple reports and guidelines, covering the needed steps to realize long-term market opportunities.

Output 2.1 Pure Ceylon Cinnamon certification mark supported in its design and pilot stage with the training qualifications and GMP certification as key elements of the mark

5.1.2.1 Enhanced conformity assessment scheme of the PCC certification mark

During the preliminary stage, the government launched the PCC certification mark (see Image 12) in order to improve the image of its cinnamon exports in global markets and brand its products through a unified image. The PCC as a national identity with the lion logo is promoted through the apex national export development body - the EDB. By the end of project, it was originally expected that the export share of cinnamon with the PCC certification mark would increase, and that simultaneously the off-shore buyers would develop a satisfactory opinion about the cinnamon supplied under the certification mark.

To ensure the compliance of the PCC certification mark with international product certification standards, the project offered its support to EDB in reviewing the conformity assessment scheme of the certification mark. EDB was reluctant to accept this offer until

the final stage of the project which limited the follow up capacity of the project after the conduction of analysis. With regard to this analysis, an international expert has visited Sri Lanka (see Image 13) and conducted this work on PCC certification mark following the ISO/IEC 17067:2013 Conformity Assessment - Fundamentals of product certification and guidelines for product certification schemes which is intended for use by all with an interest in product certification, and especially by certification scheme owners (annex 28). The report highlighted important observations related to traceability, scheme governance and operation, and the establishment of a nationally accredited GMP standard for the Ceylon cinnamon sector. As the report stated: "the 'brand' therefore had to stand upon the principles of product safety, product quality, provenance, traceability and authenticity and all were equally important... It is recommended these criteria should be the framework for the policy and scope review and these should be considered as priority by the EDB." After the validation of the analysis, EDB indicated that they will follow up with the recommendations through their annual action plan.

The counterpart of the project has also ensured its constant follow up with EDB. At the end of the project, EDB has also commenced a LKR 150 million PR campaign, promoting Ceylon cinnamon and black pepper in export markets.



Image 12. The logo of the PCC certification mark



Image 13. Visit of the international expert on product certification

5.1.2.2 Implementation & monitoring table of Output 2.1

Table 9: Activities and results of project output 2.1

C J. Activities and	results of project t	output 2.1	
Output 2.1: The national mark supported in its design and pilot stage with the training qualifications and GMP certification as key elements of the mark.	Indicator: No. of training qualifications integrated in the Pure Ceylon Cinnamon (PCC) certification mark	90%	It was proposed to EDB that the NCS is an integrated requirement of PCC certification mark
Activity 2.1.1: Develop policy level criteria integrating the training qualifications to the PCC certification mark.	Target: Recognize GMP as an pre- shipment element	95%	Road map developed by project expert. TSC in coordination with SLSI promote the development of a nationally accredited GMP standard for its integration into PCC mark.
Activity 2.1.2: Integrate food safety and hygiene Training qualifications/co urses (as a requirement) as part the national Pure Ceylon Cinnamon (PCC) certification mark.	Target: PCC integration	95%	Expert report on PCC and the roadmap for sustainable operation system was presented and validated. EDB is moving forward with their annual work plans but progress observed to be slow.

Output 2.2 The Pure Ceylon Cinnamon (PCC) certification mark is supported and upgraded as Geographical Indication (GI)

5.1.2.3 Implementation & monitoring table of Output 2.1

The registration of the "Pure Ceylon Cinnamon" certification mark as a GI provides Ceylon cinnamon a high-end intellectual property protection in the EU markets. Even though this was not achieved during the project, all support was ensured in order to realize this important step for the sector. Once Sri Lanka obtains the GI, this will provide an acknowledgement and value for Ceylon cinnamon for its intrinsic qualities and long standing reputation. Moreover, the GI will enable true cinnamon to be protected against deceptive products from local and foreign markets. It also gives Ceylon cinnamon a marketing and promotional value in the global market. The local quality control will also ensure that all producers are adhering to national and international requirements and standards in quality and food safety. As GI will mean a new area for the country as well as for the cinnamon industry, all stakeholders are keen on contributing and participating in the process of obtaining a GI. Being aware of this endeavour, the project has also offered its support to the GOSL in the first stage of this long process.

Although it is originally highlighted under the project document, the implementation of GI was mandated by the GOSL to EDB. At the preliminary stage, the project in cooperation with FAO has developed a guiding report on the acquisition process (annex 19). This document has also provided four key recommendations to achieve the goals of implementation of strategy during the lifetime of the STDF-UNIDO-TSC project through a roadmap (see figure 4):

- 1. Fill the knowledge gaps about Geographical Indications of the key-stakeholders.
- 2. Decide on an appropriate governance structure, which should be created, as part of the TSC, such as a dedicated working group inside the TSC, chaired by the president of the TSC, where all parties (especially the 10 top-exporters) are around the table to decide on the key technical points.
- 3. Decide (in this group) on the appropriate level of registration for the Geographical Indication "Ceylon Cinnamon" (countries, international agreements, European Union), and the related legal tools.
- 4. Initiate an awareness campaign addressed to all actors in the supply chain (from producers to exporters) to inform them about the Geographical Indication process, and then conduct a participatory process to make everyone concerned by the geographical indication and its consequences in terms of quality management, controls and certification implications.

The report also addressed the different options with the existing gaps for realization of the GI.

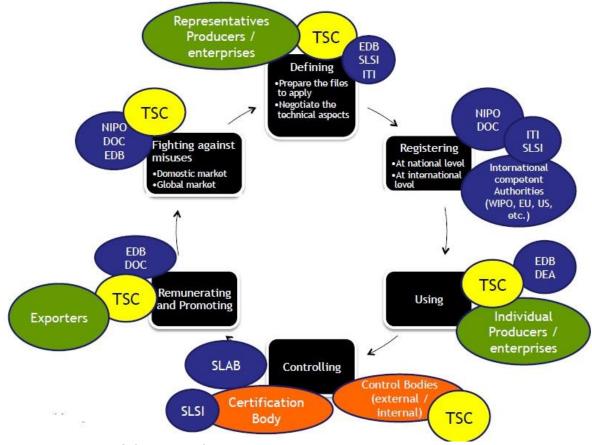


Figure 4. Structure of the GI roadmap

Although the project strived to reach the objective of obtaining GI by its end, unfortunately, multiple factors have delayed the process of gathering needed documents for formulation of the needed technical dossier and submitting application to the European authorities. Experts in the field of conformity assessment have recommended the analysis on the conformity assessment scheme of the PCC certification mark, which also affected the GI implementation. Because EDB has only decided to accept the recommendation of the project by its end, it was not possible to provide extended assistance in the implementation of the needed activities. Despite of that, the project stakeholders maintained communication among each other beyond the closure of the project to expedite the GI application and the full implementation of the PCC certification mark. In addition, the Cabinet of GOSL made decision on amending the Intellectual Property Act of 2003 to enable 'Ceylon cinnamon' to obtain GI locally, and be included in a GI register⁴. After the approval of Parliament, a local GI register should be established by the National Intellectual Property Office (NIPO) to enable the registration of Ceylon cinnamon in the local register.

Table 10: Activities and results of project output 2.1

Output 2.2: The PCC mark is supported and upgraded as GI	Indicator: Pure Ceylon cinnamon registered as GI in a number of countries	75%	EDB is still in the process towards obtaining the GI. TSC/CTA coordinated with EDB to support the development of technical dossier. However, further assistance was not requested by EDB at the current stage. The draft dossier developed together with a lawyer contracted by EDB.
Activity 2.2.1: Conduct assessment on the pilot PCC implementation.	Target: Develop an operational manual for PCC certification mark	100%	UNIDO expert completed the analysis and delivered the report on PCC scheme.
Activity 2.2.2: Provide support on submissions and policy development to the stakeholders.	Target: Support expedite the GI application process	50%	EDB continues to work with stakeholders and international experts to proceed with the GI application process.

6. FINANCIAL OVERVIEW

The table below provides a financial overview on the project based on the different grants.

_

⁴ During the period of the project, this was the status. Recently, the Cabinet has approved the GI register but this is still pending on the parliament.

Table 11. Financial overview of the project

. abic 1.	. I manetal (overview of the project				
		Outputs	Planned budget	Expenses	Remaining available	Expendit ure rate %
	Output 1.1	Capacity to deliver food hygiene and safety training strengthened along the cinnamon value chain (Institutions, producers, growers and workforce).	\$303,500.00	\$289,623.98	\$13,876.02	95.43%
STDF	Output 1.2	Compliance capacities of the cinnamon processors enhanced through certification according to national and international standards.	\$109,500.00	\$106,919.00	\$2,581.00	97.64%
	Output 2.2	The PCC certification mark is supported and upgraded as Geographic Indicator (GI)	\$46,000.00	\$43,866.52	\$2,133.48	95.36%
	Output 51.1	Project operation	\$171,000.00	\$167,455.80	\$3,544.20	97.93%
		Sub-total	\$630,000.00	\$607,865.30	\$22,134.70	96.49%
		Support costs	\$75,600.00	\$72,943.95	\$2,656.05	96.49%
		Total	\$705,600.00	\$680,809.25	\$24,790.75	96.49%
					Ī	,
UNIDO	Output 2.1	The national Pure Ceylon Cinnamon (PCC) certification mark supported in its design and pilot stage with the training qualifications and GMP certification as key elements of the certification mark.	€ 96,782.24	€ 96,574.40	€ 207.84	99.79%
	Output 4.1	Inception report	€ 22,845.15	€ 22,845.15	€ 0.00	100.00%
	Output 51.1	Project operation	€ 41,172.61	€ 41,172.61	€ 0.00	100.00%
		Total	€ 160,800.00	€ 160,592.16	€ 207.84	99.87%

Note: This is not an official financial statement, only an extraction of the financial statement as of project closure.

The CTA Ltd through TSC has successfully negotiated and secured the support of GOSL through the provision of LKR 28.5 million to complete the construction of stage one of the academy. The National Budget 2016 of GOSL has allocated LKR 50 million for CTA

stage two constructions and forming a cinnamon authority. In addition, further support was promised for research and development on Ceylon cinnamon thus increasing its competitiveness and influencing the export of more value-added products.

Table 12: Summary of contributions by project sponsors

Description	Sponsored by	Contributio n	Status
СТА	GOSL	LKR 28.5 million	Stage one completed
construction	СТА	LKR 2.4 million	Additional work under stage one
Training framework, procurements, CTA promotion, GMP/ PCC/GI, integration	STDF/UNID O	US\$ 830,000	Project is finished
Purchase of Land	СТА	LKR 30 million	Owned by CTA
CTA construction stage 2	GOSL	LKR 50 million	In the stage of distribution

7. OVERALL PROJECT RESULTS AND LESSONS LEARNED

As a result of the project activities, a sustainable scheme was developed to focus on SPS issues within the Ceylon cinnamon value chain. This includes the establishment of a nationally accredited training framework for industry practitioners, institutional capacity building of an organization for future guidance of the industry as well as application of food safety certification. Furthermore, the project supported the government in its endeavour related to the recognition and promotion of Ceylon cinnamon world-wide through technical reports on the conformity assessment scheme for PCC mark and future acquisition of Geographical Indication (GI). A local PR and marketing campaign has also successfully promoted three essential messages of the project: (1) CTA as an accredited training provider of NVQ training in Sri Lanka; (2) the importance of GMP for cinnamon processing centers; and (3) abolishment of social stigma on cinnamon workers thus covering labour shortage. As part of the PR campaign, 56 articles were published about six topics in the editorial value of LKR 7 million and in the advertisement value of LKR 2.3 million, and in addition the stakeholders also participated in three talk shows.

7.1 Enhanced global market position for Ceylon cinnamon

To achieve this long-term goal for the Ceylon cinnamon, the project has created a general understanding among local stakeholders, including the GOSL and the industry, on the procedure to acquire GI. Afterwards the project in cooperation with FAO developed a guiding document called "Geographical Indication for Pure Ceylon Cinnamon Roadmap" (annex 19). The GI would provide a global recognition for the Ceylon cinnamon and position it as a high value-added product compared to the current competitions, or cassia. Even though the project has offered its assistance during the preparatory phase for the GI application process, the GOSL has proceeded with an external law firm.

In October 2011, the GOSL has launched the Pure Ceylon Cinnamon (PCC) certification mark under the leadership of the EDB. The experts developed an understanding that the PCC certification mark might not comply with international best practices in product certification. Thereby, the conduction of analysis became essential, providing recommendation to the EDB how PCC certification mark can comply with the ISO/IEC 17067:2013 standard. By the end of the project, EDB has not commenced the implementation of the recommended changes yet but it indicated that it will include those in its annual work plan.

STDF in collaboration with UNIDO has also promoted the developments in the Ceylon cinnamon value chain in various global fora, including (1) WTO's 5th Global Aid for Trade in Geneva, (2) 2016 WTO Public Forum, and finally; (3) a special event in Geneva called "Spicing-up Development Assistance." As a result of these events, the international community, including the private sector, was exposed to the recent developments and uniqueness of Ceylon cinnamon value chain. Several multinational companies, considering t source their products from Sri Lanka, have also approached STDF to acquire more information on the project impact.

The project has also developed supporting studies for the Ceylon cinnamon industry and provided recommendation for improvement in traceability, global branding and marketing as well as productive capacities. Experts also observed that the Ceylon cinnamon manufacturers face disrupted production due to climate change which should be addressed in order to ensure high volume production. To tackle all the aforementioned matters in the future, the project has developed three bankable projects for the sustainable development and prosperity of the Ceylon cinnamon.

7.2 Established institutional capacity to sustainably support Ceylon cinnamon actors in food safety compliance

As an institutional capacity building activity for the industry, the project has equipped and technically assisted the CTA as the selected training body for the NVQ training, in order to ensure its sustainable operation. Subsequently, the CTA is legally recognized training institute by TVEC and prepared to conduct the accredited national vocational qualifications (NVQs). Furthermore, the project has also supported the development of a plantation model where the trainers can showcase how the cinnamon should be planted and harvested.

The project has also created guiding corporate documents for CTA, including a business (annex 22) as well as a five-year strategic plan (annex 21). The latter document has envisaged essential actions which can assist the CTA in its goal to become a center of excellence for the Ceylon cinnamon industry. The project has also supported the CTA to commence additional activities related to its future business portfolio, such as consulting services in productive capacities for the industry or research activities through partnerships with local universities.

The project has also assisted in the daily operation of CTA through various activities, such as the training of its staff, applications for governmental funds and in the organization of various events, such as its Grand Opening (see Image 14) as well as fund and awareness raising events. Furthermore, the project has designed CTA's training schedule, thus facilitating the continuation of diverse programs, initial income-generation and publicity. At the end of the project, a major goal was reached by making the CTA ready for the launching of its unassisted operation. To generate some income for its operational expenses, the Board of Directors of CTA has decided to issue shares.



Picture 14. Grand Opening of CTA

7.3 Developed a Training Framework with food safety components

Cinnamon peeling vocation, as one of the main value-adding factors to Ceylon cinnamon products, was not properly recognized and benchmarked for the sector before. Thereby, the project aimed to create the first nationally accredited certification for any agro-based product in the country, constituting the most fundamental theoretical knowledge and practical competences related to the occupations of harvesters, processors, field officer and factory officer. The goals to eternize this profession were manifold; such as (1) to cover the skilled labour shortage caused by migration and urbanization; (2) to tackle social stigma through official recognition by nationally accredited certification; (3) to standardize and improve harvest and production techniques; and (4) to ensure compliance of Ceylon cinnamon products with SPS measures through integration of best practices in food safety. The project has laid the basis for these goals by successfully finalizing the NVQs and receiving accreditation from the relevant authorities. The NVQs Level 3 and 4 required the development of a wide range of documents, such as competency standards, curricula, assessments, training materials, including books and audio-video materials. Most of these documents are available in the three official languages of Sri Lanka, Sinhalese, Tamil and English.

The project has also trained and registered fourteen trainers and seven assessors certified by the Tertiary and Vocational Education Commission (TVEC) / University of Vocational Technology (UNIVOTEC) who can provide the trainings through the Academy. The project in consultation with National Apprentice and Industrial Training Authority (NAITA) and Department of Export Agriculture (DEA) designed and planned an apprenticeship training program or also called recognize prior learning (RPL), and an Competency Based Training (CBT) programme which commenced before the end of the project, however, remained ongoing due to its length. CTA in cooperation with the project has initiated action to organize a CBT program by training applicants from companies participated in the pilot scale GMP center development program. During the lifespan of the project, 1037 people, 354 women and 684 men, have participated in the awareness session and/or training on food safety and hygiene practices.

7.4 Compliance capacities through GMP upgrade and promotion

Compliance capacities of six cinnamon processing centers were upgraded based on an

internationally recognized food safety and hygiene certification, the Good Manufacturing Practice (GMP). During the preparatory phase for the certification audit conducted later by Sri Lanka Standards Institute (SLSI), the project has provided technical guidance to each factory. Through this piloting, the project demonstrated the necessity of risk mitigation for enhanced trade and public health through the application of food safety certification among the industry practitioners. Furthermore, the project also organized awareness raising events on GMP at grassroots and corporate level thus triggering a dialogue with factory owners. The public relations (PR) campaign has also focused on the benefits of GMP, using the story of six factories as an example.

The project understood the need of developing a guiding booklet on GMP for Ceylon cinnamon (see annex 18) in order to facilitate the support of those cinnamon processing centers which decide to go for the GMP certification after the project closure. Later, the technical content of this booklet was utilized by the Sri Lanka Standards Institute (SLSI) during the development of GMP standard for Ceylon cinnamon. The essentiality of developing this standard was raised by the project during the review of PCC certification mark's conformity assessment scheme.

8. RECOMMENDATIONS

8.1. Specific recommendations to the project

Recommendation 1: Encourage CTA to continue its efforts for becoming a Center of Excellence thus improving SPS compliance along the value chain

CTA, as the designated and responsible entity for all NVQ training related functions, must follow up with this activity through coordination with public and private institutions for sustainable operations. Employment of an eligible CTA Coordinator and further CTA staff to cover the operation of the Academy is essential for its future.

It is recommended to build strategic partnerships with other organs to commence the diversification of its service portfolio based on the defined scope under the validated strategic plan. As an example, approaching universities and food science and technology institutes will allow CTA to conduct studies on the cinnamon value chain and create best practices for increased production.

Considering the outcome of the pilot GMP program, CTA shall develop and establish a mechanism to promote GMP. CTA should collaborate and coordinate actions with EDB, DEA, NAITA, TVEC, Vocational Training Authority (VTA), UNIVOTEC and industry experts for the sustainable development of the Academy as well as the dissemination of best practices on the GMP upgrade.

The NAITA-CTA joint programs have proven to be successful and based on this, the project supported the conduction of a concept paper as well as discussion with NAITA on which CTA also participated. As an outcome of this meeting, NAITA has requested the submission of a request letter for further cooperation between the two institutes. The project has assisted in the drafting of this letter and as a follow-up, it is recommended that the CTA establishes link with NAITA as a way forward for sustainable training implementation.

Recommendation 2: Private sector collaboration to ensure transparent

traceability along the value chain

It is recommended to TSC to continue its support of the Cinnamon Training Academy and promote its services at governmental level as well as among industry stakeholders. TSC/CTA need to devote more personnel resources to expedite and complete the task of development/accreditation of Ceylon cinnamon GMP standards and establish a single certificate system for Ceylon cinnamon export that guarantee traceability through PCC lion logo.

Recommendation 3: Constant public sector support and engagement to achieve targets marked out for the Ceylon cinnamon value chain

The public sector needs to consider best practices and results of the STDF-UNIDO-TSC project to unify efforts for upscaling purposes, thus also contributing to its policies called "one million new jobs" and "cinnamon becoming a billion dollar industry". As Ceylon cinnamon is one of the most labour intensive agri-value chain in Sri Lanka, next to tee and cocoa, it has high potentials in export markets due to its added value e.g. in health. For this reason, the promotion of Ceylon cinnamon, nationally as well as globally, should be continued to achieve the goals of the industry and the GOSL.

It would be also recommended to develop studies on product certification in relation to internationally accepted food safety and hygiene standards to comprehend the needs for product certification. This would allow avoiding the duplication of efforts and saving resources, like in case of the PCC certification mark and the development of technical dossier for Geographical Indication (GI).

8.2. Broader recommendations

Recommendation 4: Future application of UNIDO's value chain development approach to implement SPS capacity building initiatives

This project showcased that one of the most adequate ways to implement a SPS capacity building project for an agro-sector is through UNIDO's value chain development approach which allows tackling food safety and hygiene related challenges in a systematic manner based on the establishment of a public private partnership (PPP) platform.

Recommendation 5: Upscale activities for the Ceylon cinnamon sector based on best practices

For the formulation of an upscale project in productive capacities, there is a need to revise the outcomes and lessons-learnt of this intervention, and utilize the developed training framework as well as GMP standard for Ceylon cinnamon country-wide. Even though, the GOSL has already commenced a global marketing campaign for Ceylon cinnamon, it would be important to support this endeavour with the right messages, like the health benefits of the true cinnamon compared to its competitors. Due to its longer production time and higher labour costs, Ceylon cinnamon should be positioned as a high value added product in order to create prosperity also for small and medium producers. This would also contribute to the change of mind-sets at grassroots level and convince small and medium producers to comply with the food safety and hygiene standards as they would be able to sell their produce for a higher price.

9. LOGICAL FRAMEWORK

	Revised Logical Framework					
RBM Code (Main)	Results Chain (Intervention Logic)	Indicators	Sources of Verification (Project Monitoring Mechanism)	Risk/ Assumptions		
Higher Level Impact (Overall Objectives)	Competitiveness of the Sri Lanka cinnamon industry value chain enhanced to face the stiff competition at the global trade and restrain the market position	Volume of the Ceylon Cinnamon exports Baseline: 13,000 tons (2011) Percentage of Ceylon cinnamon in the world true cinnamon market Baseline: 90% (2011)	World trade statistics available at FAO Statistics at EDB Desk research	The economic and political conditions in the domestic and global context, affecting the attribution gap of achieving this expected result would be favourable.		
Outcome 1	Compliance capacity of the Cinnamon value chain improved in terms of food hygiene and safety	Number of processing units comply with food hygiene and safety standards. Baseline: 28 (2011) Percentage of employees leaving the sector (Social impact) Baseline: to be identified during the employee M&E cycle 2013	Tracer studies Monthly, bi-annual, and annual progress reports Social impact survey with a baseline to see attitudinal changes Supply chain based survey on quality and standards conformity of workforce, with a baseline	Social attitude for changes would favour the image building of the cinnamon peeling Cinnamon growers, traders, and other stakeholders show interest to enrol or sponsor employees or non-employees to enrol for training.		
Output 1.1	Capacity to deliver food hygiene and safety training strengthened along the cinnamon value chain (Institutions, producers, growers and workforce)	Percentage of staff / females / new comers qualified and trained in the value chain. Baseline: Zero Target: Up to 200 trained	Article of Association and Memorandum of Articles Certificate of incorporation and public notices	All stakeholders concerned reach consensus and agreement. The incorporation process takes place		
		No. of training qualifications / schemes developed and receive accreditation Baseline: Zero Target: Up to 5 No. of trainers qualified and made available as local trainers. Baseline: Zero Target: Up to 20 No. of qualifications accredited by TVEC. Baseline: Zero Target: Up to 3 The training centre incooperated and operational Baseline: Zero Target: in-cooperated and operational		without any unwanted bureaucratic delays.		
Activity 1.1.1 Activity	Develop food safety and hygiene Train	ing qualifications / courses, resource	e materials, and personnel q	ualification schemes.		
1.1.2	Train trainers to deliver the food hygie	ne and safety trainings.				
Activity 1.1.3	Pilot food safety and hygiene Training	qualifications/courses at all levels of	the value chain.			

Activity 1.1.4	Accredit food safety and hygiene Training qualifications/courses under TVEC and NVQ levels obtained.				
Activity 1.1.5	Implement promotional campaign along the supply chain.				
Activity 1.1.6	Integrate food safety and hygiene Training qualifications/courses (as a requirement) as part the national Pure Ceylon Cinnamon mark (PCC).				
Activity 1.2.1	Follow up on the government contribu	tion and construction of the center.			
Output 1.2	Compliance capacities of the cinnamon processors enhanced through certification according to national and international standards	Number of cinnamon processors obtained certification Baseline: 13. Target: Up to 18	Baseline survey databases and updates EDB and DEA statistics List of clients of certification bodies Monthly, bi-annual, annual progress reports	No defaults in certification practices. Availability of skilled workforce to comply the demand	
Activity 1.2.1	Support cinnamon processors to achie	ve GMP certification as a part of the	national Pure Ceylon Cinnan	non mark.	
Activity 1.2.2	Improve cinnamon processing technique	ues to meet GMP standard requirem	ients.		
Outcome 2	The image and branding of the cinnamon exports from Sri Lanka improved in the export markets through launching the PCC certification mark	Level of recognition of the PCC mark at international level (buyer perception survey) Baseline: Zero Target: Buyer perception	Statistics at Sri Lanka Custom's Department Statistics at EDB Opinion surveys at trade fairs or online Monthly, bi-annual, annual progress reports	Global recession would not become worse and affect the world trading The policy of EU and USA on Sri Lanka would not become worse and no trade	
				embargos will put up against the country	
Output 2.1	The national PCC mark supported in its design and pilot stage with the training qualifications and GMP certification as key elements of the mark	No. of training qualifications integrated in the PCC mark Baseline: to be identified following the first buyer survey cycle in 2013	Monthly, bi-annual, annual progress reports Mid-term and end of project evaluation mission reports	No undue administrative delays take place. Interest and willingness of all key stakeholders.	
Activity 2.1.1	Develop policy level criteria integrating	the training qualifications to the PC	C mark.		
Activity 2.1.2	Support producers to obtain GMP certification as a criterion of the PCC mark.				
Output 2.2	The PCC mark is supported and upgraded as GI	PPC registered as GI in a number of countries Baseline: Zero Target: Up to 2	Event reports EDB's reports and data Opinion surveys Monthly, bi-annual, annual progress reports Mid-term and end of project evaluation mission reports	Global recession would not become worse and affect the world trading A positive interest of exporters remained in entering to European and North American markets.	
Activity 2.2.1	Develop and implement awareness an	d capacity building programs.			
Activity 2.2.2	Provide support on submissions and po	licy development to the stakeholde	rs.		

10. FINANCIAL REPORT

Financial report to be provided through a financial statement after the financial closure of the project.

11. LIST OF DOCUMENTS DEVELOPED UNDER THE PROJECT (ANNEXES)

- 1. Inception report Enhancing the Compliance, Productive Capacities and Competitiveness of the Cinnamon Value Chain in Sri Lanka
- 2. Project Document
- 3. National Competency Standards for Cinnamon Field Operations (trilingual)
- 4. Assessment resources for cinnamon field operations (trilingual)
- 5. Assessment resources for cinnamon factory operation (trilingual)
- 6. Curriculum for cinnamon field operations (trilingual)
- 7. Curriculum for cinnamon factory operations (trilingual)
- 8. Lessons Plan and Training Material for cinnamon field operations (bilingual)
- 9. Lessons Plan and Training Material for cinnamon factory operations (bilingual)
- 10. Trainer Guide and leaner Guide for cinnamon field operations (trilingual)
- 11. Training Guide and Leaner guide for cinnamon Factory Operations (trilingual)
- 12. Concept Paper to develop a Bought Tree factory
- 13. Concept Paper Testing and Product Development facility
- 14. Concept Paper for GIZ SME Programme
- 15. Concept Paper Plantation productivity improvement without cost
- 16. Report on Personal Certification –ANSI
- 17. Final report on GMP workshop
- 18. GMP Booklet (English and Sinhala)
- 19. Geographical Indication for Pure Ceylon Cinnamon Roadmap
- 20. Mechanization of Cinnamon Processing Proposal
- 21. Strategic Plan developed by E&Y
- 22. Business Plan of the Cinnamon Training Academy in Kosgoda
- 23. Line and Kalli system study

- 24. Study and Master Plan for the Ceylon Cinnamon Value Chain in Sri Lanka
- 25. Action Plan for the Ceylon Cinnamon Value Chain in Sri Lanka
- 26. Facilitating the establishment of a sustainable infrastructure for the Ceylon cinnamon industry
- 27. Facilitating support to the Cinnamon Training Academy (CTA) to become a "Centre of Excellence"
- 28. Facilitating the development and implementation of an integrated climate change mitigating, resource-efficient concept for cinnamon production centres in Sri Lanka
- 29. Assessment of Pure Ceylon Cinnamon Scheme
- 30. Feasibility Report on Bought Tree Factory
- 31. Mini value chain analysis on Ceylon cinnamon oil